

A303 Amesbury to Berwick Down

TR010025

Deadline 9
8.55 – Comments on any further information received by
the ExA and received to Deadline 8

APFP Regulation 5(2)(q)

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The Infrastructure Planning (Examination Procedure) Rules 2010

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Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

A303 Amesbury to Berwick Down

Development Consent Order 20[**]

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1 Introduction

1.1 Purpose of Report

1.1.1 This report provides Highways England's responses to representations by Interested Parties (IPs) submitted at Deadline 8.

1.2 Structure of this document

- 1.2.1 This report is structured by Interested Party. It presents matters they have raised from their representations and the associated responses from Highways England. The Table of Contents provides the complete listing of the representations received and included in this report.
- 1.2.2 The matters raised and responded to in this report are from:
 - Comments on the Applicant's Comments on information received at deadline 6, submitted at deadline 7 [REP7-021];
 - Comments on the draft DAMS submitted at deadline 7 [REP7-020];
 - Comments on the OEMP [AS-086] and the OEMP Annex A.4 [REP7-024];
 - Comments on the draft DCO [AS-096];
 - Written Summaries of Oral Submissions submitted at deadline 7 by Interested Parties;
 - Additional submissions.
- 1.2.3 As stated in item 1.2.4 in REP8-003, late deadline 7 submissions of comments published on the Planning Inspectorate's website on and after 28th August 2019 have also been addressed within this report.
- 1.2.4 Late deadline 8 submissions of comments published on the Planning Inspectorate's website on and after 20th September 2019 will not be addressed within this report.

1.3 The Examination Library

1.3.1 References set out in square brackets (e.g. [APP-010]) are to documents catalogued in the Examination Library. The Examination Library can be viewed at the following link:

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010025/TR010025-000484-Stonehenge%20-%20Examination%20Library%20Template.pdf

1.3.2 The Examination Library will be updated at regular intervals as the Examination progresses.



2 Amesbury Abbey Group Limited (AS-099)

2.1	Additional Submission	
	Matter Raised	Highways England's Response
2.1.1	Section 26 Amesbury Abbey Group Limited (REP2-048 to REP2-051 and AS-036) Para 26.1 Key issue that cumulative effects for Amesbury Abbey have not yet been considered. The Highways England response is (para26.1.3) that Amesbury Abbey is not anticipated to experience cumulative or combined impacts and therefore was not identified specifically within chapter 15. There is a basic difference between the Highways Agency's belief that Amesbury Abbey (AA), Amesbury Abbey Registered Park and Garden (RPG) and the heritage assets in the park will not be affected and the owners of Amesbury Abbey's belief that the Abbey, the park and its heritage assets will be seriously affected by the construction works and the operation of the flyover. Amesbury Abbey RPG is not only relevant in its own capacity but also as the setting for AA. HE accept that "The park was designed as the secluded surrounding of the Benedictine abbey of Amesbury and subsequently of the private house that replaced it and noise, or the absence of noise, is a significant feature of its setting". Consequently noise will affect the significance of this asset in its capacity as the setting of AA as well as harming its own significance. The potential cumulative impacts are considered within the zone of influence, Amesbury Abbey is within the zone of influence for cultural heritage, construction and operation, landscape and visual impact, biodiversity, potentially noise and vibration, road drainage and water	Highways England maintains its position as stated in the response to key issue 26.1.1 in the Deadline 3 Comments on Written Representations [REP3-013] that all of the receptors identified as part of the EIA were considered in respect of their potential to experience cumulative and combined effects. The findings of this assessment are reported in Chapter 15 of the Environmental Statement: Assessment of cumulative effects [APP-053]. Amesbury Abbey is not anticipated to experience cumulative or combined impacts and was therefore not identified specifically within Chapter 15. Chapter 15 does include the combined impact of noise and visual to recreational users in Lords Walk, which covers the eastern part of the RPG, for the construction phase. However, there would not be significant adverse cumulative or in-combination effects in operation as neither significant noise or visual effects were predicted, nor significant effects to cultural heritage, as stated in response to key issue 26.1.2 in the Deadline 3 Comments on Written Representations [REP3-013] and ES Appendix 6.9 — Cultural Heritage Setting Assessment [APP-218], and the overall combined effect of those effects is also not predicted to result in significant effects. To minimise the operational traffic noise impact of the Scheme in the Amesbury area, 1.8m high noise barriers on the north and south sides of the flyover are included in the design, as secured by reference D-NOI2 in the OEMP [REP8-006], the final version of which is submitted at deadline 9. In addition, a thin surfacing system, which results in lower levels of noise generation than a standard hot rolled asphalt surface is proposed, as secured by reference D-NOI1 in the OEMP.



environment and people and communities. HE accepts that there will be aural and visual effects during the construction phase and that during the operational phase there would be an increase in noise across the majority of the RPG. They accept that the RPG will suffer a change in character of traffic noise as the braking and accelerating would still occur at the approaches to the roundabout under the flyover. And in addition to that will be the increased noise of traffic at a high level on the flyover.

In my previous representations (3.5.19). I have expressed why adverse impacts will be experienced by AA and RPG in relation to cultural heritage, construction and operation, landscape and visual impact, water environment, noise and vibration and people and communities and consequently do not see why the cumulative impact of these significant impacts on High Value assets should not be considered and taken into account.

2.1.2 Para 26.2

The Countess Flyover will cause substantial harm to AA and AARPG and consequently the proposed development must be wholly exceptional.

HE refer to the ES appendix 6.9 – Cultural Heritage Setting Assessment (APP-218) and refers to part 3.4.10 of this document which concludes that there would be an impact on the northern boundary and the eastern boundary of AARPG as a result of the scheme however that impact would not extend far in to the RPG due to screening provided by the dense vegetation that covers the majority of the northern part of the asset.

We disagree with the above statement as already stated in our previous representations and in particular in the Planting Notes (copy attached) the screening is not dense and has gaps which will allow the flyover and traffic clearly to be seen. Please see the photographs and figures which show the current lack of density of vegetation.

In addition the flyover will extend above the vegetation and be clearly seen from the RPG which should be viewed as an impact on not only

Highways England maintains its position as stated in response to key issue 26.2.1 in the Deadline 3 Comments on Written Representations [REP3-013] that the Countess flyover will not cause substantial harm to Amesbury Abbey or the Amesbury Abbey Registered Park and Garden. See also the Applicant's response to Written Question CH.2.8 [REP6-022].

The screening to Amesbury Abbey is dense and this was observed during the Accompanied Site Visits. In winter, there are views of the existing road and views of the Scheme would be seen in this context, remaining largely filtered by the existing vegetation. Therefore, the Scheme is considered not to result in significant effects. The flyover will not extend above the vegetation. Please refer to the figures submitted at deadline 8 [REP8-023 to REP8-026] which demonstrate the height of the flyover is below the vegetation bordering Bowles Hatches, which is between the most elevated part of the flyover and the RPG.



the RPG but also on the RPG as the setting for AA which in itself should have protection.

Consequently we also disagree that the settings of the majority of assets within the park would be unchanged as a result of the scheme the understanding and appreciation of the assets will be harmed as their setting is harmed.

2.1.3 Para 26.2.13

In response to our criticism that AA and AARPG had not been considered and the only asset considered was Vespians Camp, Highways England have referred to a document Cultural Heritage APP-044, in this there is a factual description of the heritage assets in RPG and reference to AA itself. It points out that Amesbury Abbey RPG is all the land immediately south of the scheme for 1km up to the Countess Roundabout, and paragraphs 6.6.106 and 107 recite the facts of which heritage assets are in the RPG.

Paragraph 6.8.5b iv states that they will minimise the visual intrusion of the scheme by reusing the existing carriageway, however this is slightly disingenuous as it will do little to minimise the visual intrusion of the flyover.

Paragraph 6.9.20 states that considerable activity will occur in the Countess Roundabout area however there are relatively few heritage assets and those that are present are in the AA RPG and are well screened.

We do not agree, with there is clear visibility between the A303 and the RPG.

References are made to the Outline Management Plan the references refer to the use of best practicable means in respect of noise etc, it suggests if noise insulation is unsuccessful then offer temporary accommodation. This will not be relevant to the harm caused to heritage assets, other references relate to work outside core hours, and to a noise and vibration management plan which states if the scheme exceeds trigger levels in BS5228 for more than

As stated in the response to paragraph 2.1.1 above, significant temporary adverse effects from noise during construction are not anticipated at Amesbury Abbey. It is agreed that noise insulation and temporary re-housing are only applicable to the occupants of the various buildings at Amesbury House. However, during construction, all sensitive receptors will benefit from the range of mitigation measures to control noise which are contained within the Outline Environmental Management Plan (OEMP) [REP8-006], the final version of which is submitted at deadline 9 (PW-NOI1, PW-NOI3, PW-NOI5, PW-NOI6, MW-NOI1, MW-NOI3, MW-NOI4 and MW-NOI6). The implementation of Best Practicable Means (BPM) will minimise noise from construction activities at both the Amesbury Abbey buildings and the RPG, this is secured by PW-NOI1 and MW-NOI1 of the OEMP.

There is not clear visibility between the RPG and the A303. With reference to Figure 1 of the Nicholas Pearson report [AS-036], it is an over statement to suggest the blue lorry is partially visible. The existing vegetation provides a large degree of screening to the lorry and whilst the Scheme would be in a more elevated position, it would be screened by the existing tree canopies. Views beneath the canopies would be of the existing A303, as per the existing view.

The proposed planting areas are not too narrow to be planted, with species indicated on the Environmental Masterplan and associated sections [APP-059]. Planting can be implemented across angled (sloping) ground, as is evident by the extent of trees and shrubs across the slopes of Vespasian's Camp. The size of the planting areas will be enough and the sections provided in the Nicholas Pearson report are all titled "illustrative" and with views towards the Scheme annotated as "approximate" and as stated above,



10 days out of 15 or 14 days in a six month period consider noise insulation works and temporary housing.

These measures will not assist in preventing the damage to the setting of Amesbury Abbey and damage to the RPG and the setting of the heritage assets within it.

They also make reference to the landscaping proposed for the flyover embankments which would be secured through requirement 8 of the draft development consent order. If you turn to the Highways England engineering section drawings TRO10025-27 you will see that the area available for planting on the flyover embankments is a minimal tapered area, slightly less wide than one lane of the road. If you then refer to our drawing produced by Nicholas Pearson Associates ref NPA11083-401 which is a section at chainage 11500, you will see that the embankment planting area is shown at an angle and it will be too narrow to support any large trees or landscaping and will just be adequate for low-level shrub planting details of which have not been put forward or agreed.

References again made by HE to the setting assessment carried out in environmental statement appendix 6.9 where there is an acceptance of an impact on the Northern Boundary and part of the Eastern Boundary of AARPG. Then the subjective judgment is made that the impact would not extend far into the RPG due to screening and consequently no further assessment of any harm is carried out. It at all stops with that subjective judgement which with which we disagree and the comments made above apply.

the Scheme would be screened by the existing tree canopies, whilst the views that are of the road related to the existing A303.

In terms of the setting assessment and assessment of harm, please see the response to paragraph 2.1.2 above, and the previous written submissions referred to within that response.

2.1.4

Paras 26.3

There is an agreed need to have a12 month survey of the water table at Blick Mead and in the RPG. This has not been completed and only Autumn to Spring has been completed. I query whether without the results there is adequate information of the environmental effects of the scheme to allow the determination of the application for the Development Consent Order.

Highways England did not agree to a minimum of 12 months monitoring (paragraph 60.3.2 of Deadline 3 submission Comments on Written Representations [REP3-013]).

A more precautionary approach than using data collected over 12 months has been used to assess effects. As stated at paragraph 26.3.8 of REP3-013 'a twelve-month period is commonly used to define a hydrological baseline because it covers the seasonal lows and highs'. However, 'there is no guarantee that conditions recorded over a typical twelve months will be



Despite their statement that Autumn to Spring results give them the extremes of the water table this Is not logical, surely the extremes will be a comparison of the results of winter and summer survey. On this basis the fact that they predict no significant environmental effects carries little weight within this significant baseline information. The same concern relates to the spring in AARPG.

representative of extremes. Therefore, the effects of the Scheme were assessed under a wider range of conditions than those likely to be experienced in a single year and include data from the drought of 1976 and floods of 2014.'

Monitoring of surface water and groundwater is ongoing at Blick Mead and the ongoing groundwater recording and monitoring [AS-015], as requested by stakeholders, reports results which are consistent with the findings of the Tiered Assessment presented in Annex 3 of Appendix 11.4 - Groundwater Risk Assessment [APP-282] and the ES.

Regarding the comment that extremes should be based on a comparison of winter and summer water levels, this is not the case for groundwater levels in the chalk aquifer. There is generally a peak in groundwater levels in spring (usually March to April) and a low point in autumn (usually from mid-October to late November), This is typical of the hydrological year as shown in the Environment Agency Water Situation reports (see chalk hydrographs on page 11 of the following website:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831102/Water_situation_August_2019.pdf).

2.1.5 Para 26.4

The fact that light won't spill into AARPG is not the only effect, the roundabout and flyover will still be highly visible when lit in what is currently an area of dark skies and will be visible from a long distance and through foliage as a result of its illumination.

In relation to the Scheme's Zone of Theoretical Visibility HE refer to Figure 7.9 APP-087 it is clear from the key to this diagram that this is taking into account the visibility of traffic on the A303 at a height of 4.5m above the carriageway.

Consequently it is not an assessment of the views from land to the flyover nor of traffic on the flyover just on the existing A303.

Despite admitting that the flyover will be visible from AARPG they have not included it as a visual receptor in the Schedule of Visual Effects, only Bowles Hatches has been included and consequently

The flyover will not be lit. The roundabout is already lit and the Scheme proposes to replace this existing lighting with a more modern lighting to reduce lighting spill, as set out in Chapter 2 [APP-040] paragraph 2.3.51. Countess roundabout is not an area of dark skies, as there is already lighting present, as well as light sources from vehicles and residential properties, as illustrated on [APP-128], Dark Skies, which illustrates the roundabout as a greater area of night lighting.

The roundabout will not be visible to any greater degree than it presently is, as there are no changes to the location of the roundabout. The flyover will be visible at close range, but the combination of vegetation and rising landform will limit its visibility and it will not be visible from a long distance. There is no illumination to the flyover and acoustic screens would prevent light passing through them in respect of the headlights on the flyover.

Figure 7.9 [APP-087] states clearly within the key to the diagram that the modelling is based on vehicles on the proposed A303 and therefore the modelling has included them on the flyover. The Zone of Theoretical Visibility



the landscape impact effect on AARPG has not ben taken into account.

Paras 26.4.25 and 26.4.26 refer to the conclusion following field work on the impact on the AARPG of the flyover that view s were limited by the extent of vegetation which is not the same as saying that the flyover will not be visible over and above the vegetation nor through it.

They then go on to say that they only created montages for public views, surely it is essential to judge the landscape impact on the most sensitive receptors to at least find out what the inter visibility will be between these high value and significant heritage assets and the flyover. How can the impact be said to have been assessed without this?

There is no clear representation of the flyover anywhere in the application documents. HE refer to para 26.4.27 to an image of the flyover in the DAS APP-295 figure 6.18, this is an aerial view and gives no idea of what the flyover will look liked from the AARPG or anywhere else other than the air.

They also refer to the drawing at sheet 12 of 13 APP-017 this is clearly annotated in the notes "The design and location of the structure is shown here for illustrative purposes only" and as I reported to the Examination it was made clear to me at the Accompanied Site Visit by a HE officer that the height and design of the flyover were not yet known so it is hard to see how its landscape impact can be assessed.

Paras 26.4.34-26.4.37 discuss the effects that HE have accepted will occur to Local Landscape Character Areas LLCA21 and LLCA22 which cover the AARPG as significant adverse effects during construction and year one however by year 15 they judge that this will cease to be significant due to existing vegetation being in leaf. The vegetation will be in leaf every year however it is not for Amesbury Abbey Group to Limited to carry out planting and you will see from our Planting Notes that the current vegetation does not provide a screen as it is not high enough to screen the flyover and

(ZTV) then illustrates where the vehicles on the proposed A303 may be visible from in relation to a person's height across the surrounding landscape and therefore it does account for land from which the flyover may be visible. As set out at ISH3 item 4iv [REP4-031], the ZTV is part of the baseline analysis, it is not part of the assessment process.

The landscape impact to the AARPG has been taken into account with the assessment of landscape effects for the local landscape character areas (LLCA) which cover the Abbey grounds (LLCA 21 and 22) as set out in the Schedule of Landscape Effects [APP-227].

The landscape and visual impact assessment is not reliant on photomontages to undertake its assessment. The photomontages are produced to assist in the understanding of the Scheme, but the assessment is based on the DCO drawings for approval. Similarly, photomontages have been produced for a select number of receptors following agreement with Wiltshire Council to their location. The impact to receptors is judged by the baseline reviews and field work and therefore the impact has been properly assessed.

The flyover has been represented in a number of photomontages [APP-145 and APP-146] in addition to the DAS [APP-295 figure 6.18].

The height of the flyover is known by the Engineering Section Drawings and the Limits of Deviation (as set out in and secured by the DCO [REP8-004]) which provide the assessment parameters for the landscape and visual assessment.

The Planting Notes demonstrate that there are views of the existing A303 and any views of the Scheme would be seen in this context, such that new planting is not considered to be required as there would not be residual significant effects.

The location and height of the flyover are established by the engineering section drawings and the limits of deviation. Therefore, the flyover will not be larger than shown in these documents. In terms of the design and appearance of the Countess flyover, the OEMP [REP8-006] includes various relevant provisions. The design vision at 4.2.11 provides "The design for the Countess flyover (including the proposed acoustic screen) and its associated landscaping should provide an elegant and restrained structure which minimises its mass and visual presence." The OEMP also includes



also there is a gap which will allow clear view as and this will not fill naturally without management and planting. Our wish clearly is that the Development Consent Order be refused however if it is to be granted then we would ask that HE pay for the planting and management suggestions to be carried out to provide as good a screen as possible as HE do not have sufficient land to carry out effective screening planting.

Sheet 9 of APP-010 does show minimum heights for the clearance space however it is also annotated to be for illustrative purposes only, nowhere is there a description of the materials to be used etc and the design and size of the flyover is not limited and consequently is highly likely to be larger than shown.

obligations to consult the Stakeholder Design Consultation Group on the appearance of the flyover, and in addition, OEMP requirement PW-PW207 provides: "The new flyover above Countess roundabout to make use of space reserved when the junction was originally constructed. The design to comprise two single-span bridges with earthworks embankments rather than an open viaduct along with adequate space for new planting (including on the acoustic screen, where practicable and safe to do so) to soften and screen the flyover, acoustic screen and vehicles".

2.1.6 Para 26.S

HE have accepted temporary significant adverse visual effects on 19 closest properties and temporary significant adverse noise effects during construction on 19 closest properties excluding the Mews and the Abbey where they conclude that a significant adverse effect is not anticipated, but it has not been assessed. Also it is accepted that her will be a significant adverse effect to the LLCA 21 and 22 during construction and for LLCA during 14 years of operation which includes the Mews and AA and the RPG.

The Applicant has not accepted significant visual effects on nineteen properties. There is a confusion in the comments between landscape and visual effects. The effects to LLCA 21 and 22 are to the landscape character, not views from these residents. There would not be residual effects to the LLCA21 and LLCA 22.

In terms of the Abbey, it was considered during the initial field work, but as its main building orientation is west to east, rather than north to south, i.e. not orientated towards the A303, and that the northern façade of the building is lower in height than the west and east elevations, with intervening buildings and vegetation between the north façade and the A303, it was assessed that there would not be significant effects.

The Applicant has not accepted significant construction noise effects on nineteen properties. Nineteen properties were selected in the ES for the assessment of construction noise levels as being representative of the closest identified potentially sensitive receptors to the works. Significant adverse construction noise effects were not predicted at all nineteen.

As detailed in response to paragraph 2.1.1 above, significant adverse effects from noise during construction are not predicted at Amesbury Abbey.



3 Wiltshire Council (REP8-027 to REP8-029).

3.1	3.1 Comments on (Rev 3) Draft Detailed Archaeological Mitigation Strategy [REP7-020]	
	Matter Raised	Highways England's Response
3.1.1	The Council is pleased to see the further development of the (Rev 3) draft Detailed Archaeological Mitigation Strategy (DAMS) [REP7-020] submitted to the ExA at Deadline 7.	The Applicant notes with thanks Wiltshire Council's comments regarding the Detailed Archaeological Mitigation Strategy (DAMS) that it is the Council's view that 'the final version as submitted to the Examination to be a Certified document under the DCO will be fit for purpose.' The Applicant also
	2.2 The Council, in its role as local authority and statutory consultee, has already commented on the Outline Archaeological Mitigation Strategy (OAMS), the precursor to the draft DAMS, submitted with the draft DCO as well as all previous versions of the draft	welcomes the comments by Wiltshire Council with regards to the Top Soil Sampling Strategy and in particular Wiltshire Council's view that 'as far as the Council is concerned, the DAMS does adequately include a robust approach to mitigating topsoil archaeology.'
DAMS. 2.3 The DAMS is a crucial strategy in the DCO application, which when approved, will provide the requisite rationale for a as submitted at deadline 9. As submitted	The Applicant has engaged with Wiltshire Council following the submission of the deadline 8 DAMS [REP8-008] in order to respond to Wiltshire Council's comments and concerns with regards to the mitigation strategy in the DAMS as submitted at deadline 9. A comments log will be provided to Wiltshire Council outlining the Applicant's response to each comment.	
	is content with the direction of development and that the final version as submitted to the Examination to be a Certified	
	mitigation is required, and before it can be considered final and approved by the Council. The Council expects to be fully engaged in the further development of this document into a final	
	2.6 Areas of the document that the Council wants to see enhanced and amended are set out below.	



	Top Soil Sampling Approach	
	2.7 The Council welcomes that additional details that have been added in section 5.23 following from additional analysis of the samples from the evaluation phase of work. The Council are satisfied that the approach set out in this version of the DAMS provides a logical way forward for further assessment and mitigation of artefacts in the topsoil, and a strong basis on which to base the further area by area detail that will be incorporated into the Site Specific Written Schemes of Investigation (SSWSIs) in due course.	
	2.8 The Council also wishes to add that in respect to mitigation of artefacts in the topsoil, there has been misunderstanding in relation to previous work in the WHS. The Council is not aware of any standard practice of curators insisting on 100% topsoil sieving of excavation sites within the WHS or elsewhere in the county. The Council has never requested this approach and is not aware that other curatorial bodies have either. A small number of academic led excavations have chosen to 100% sieve selected areas of their excavation sites for the retrieval of artefacts from the topsoil. This is a case by case decision and is not considered standard practice. As far as the Council is concerned, the DAMS does adequately include a robust approach to mitigating topsoil archaeology.	
3.1.2	Sampling Approach to Excavation of Features 2.9 The level of sampling of features referred to in section 6.3 needs further refinement. A minimum percentage of sampling for all likely feature types should be set out in the DAMS.	The Applicant notes Wiltshire Council's comments and states that minimum percentage samples are set out for each feature type in section 6.3 of the DAMS [REP8-008; see paragraphs 6.3.40-6.3.51], unless they are of a more complex nature (e.g. buried ground surfaces, floor surfaces, hearths, structures, structured deposits), where an appropriate sampling strategy will be agreed at an on-site monitoring meeting with Wiltshire Council.



3.1.3	Public Archaeology and Community Engagement 2.10 The Council welcomes the further development of the document and the additional information provided which aims to deliver a legacy from the archaeological investigations undertaken for the Scheme. The key section the Council consider are missing now is one on implementation and approval. The final version of the DAMS needs to include an Action Plan for delivery of the strategy and an agreed timetable. 2.11 There needs to be confirmation of which organisation(s) will approve and sign off on the delivery of the actions.	The Applicant notes Wiltshire Council's comments. A PACE Action Plan was submitted as part of Appendix E to the DAMS at deadline 8 [REP8-008]. Regarding implementation, approvals and timetable see Highways England's response in its Comments on any further information requested by the Examining Authority and received at deadline 5 and 6 [REP7-021; item 3.3.11] where it stated that the PACE strategy will start to be implemented in advance of the Preliminary Works phase. The PACE Strategy is part of Highways England's legacy and benefits programme and will be developed, implemented and approved by the Applicant.
3.1.4	 Deposition of Tunnel Arisings at Parsonage Down East 2.12 The Scheme proposes to deposit the arisings from the tunnel boring within this section of the landscape outside the WHS and creation of a chalk grassland habitat. The archaeological mitigation proposed for this area is a combination of excavation and preservation in situ of known archaeological remains. 2.13 The current strategy set out in the Deadline 7 draft DAMS is for areas of fill more than 2 metres deep, there will be archaeological excavation in advance. In areas proposed for fill less than 2 metres deep, any archaeological remains will be preserved under fill. This also applies to other areas of the Scheme. 2.14 Having assessed all the additional information provided since the last version of the draft DAMS, it is the Council's considered view that where the deposition of tunnel arisings is going to be more than 1 metre deep, the areas beneath should be subject to excavation rather than preservation in situ. This effectively means the 1 metre contour line is the division between the preservation and the excavation areas. It is the Council's 	The Applicant can confirm that the deadline 8 version of the DAMS [REP8-008; paragraph 6.2.4] included the provision for archaeological excavation of areas where the deposition of tunnel arisings is going to be more than 1 metre deep, rather than preservation in situ, following consultation with Wiltshire Council. With regards to Wiltshire Council's request that LiDAR Survey be included as a technique in the DAMS for Parsonage Down, this has been included in the deadline 8 version of the DAMS [REP8-008; paragraph 5.3.35 and section 6.8 as well as in relevant Site Specific Action Areas in Appendix D of the DAMS]. With regards to Wiltshire Council's request that 'more detailed geophysical surveys' are needed at Parsonage Down, the Applicant disagrees with this as the area has already been subject to detailed magnetometer survey and the use of GPR survey or resistivity survey would not add further to the detailed dataset already collected.



	understanding that this will be reflected in the next iteration of the DAMS. 2.15 Before any deposition take place on this area, further detailed LiDAR survey and more detailed geophysical survey should be undertaken as part of the mitigation strategy (the LiDAR needs to be included as a technique in the DAMS).	
3.1.5	Mitigation of Main Road Line Outside the WHS 2.16 The Council notes that its previous advice has been considered and all of the road line outside of the WHS (including junctions and slip roads) will be subject to archaeological mitigation and is now included in Appendix D, fieldwork action areas.	The Applicant notes Wiltshire Council's comments.
3.1.6	 Detailed Mitigation Measures by Scheme Area 2.17 The Council needs to assess, agree and approve the detail contained in Appendix D, preservation areas, and Appendix E, proposed archaeological fieldwork areas. 2.18 The Council notes that Figure 12 does not show that the whole of the bed of the existing A303 is going to be monitored as expected. 2.19 Whilst most of the mitigation work will take place in the Preliminary Works phase, the Council notes that Section 5.1.7 refers to some potential overlap with the Main Works phase. There needs to be a mechanism for managing any overlap, especially if different archaeological contractors are employed for each phase. Wiltshire Council would like some input into the documentation and tender process in terms of selecting appropriate archaeological contractors as referred to in 5.1.9. 	The DAMS, now agreed with Wiltshire Council (including Appendix D), is submitted at deadline 9. The Applicant notes Wiltshire Council's comment regarding 'that Figure 12 does not show that the whole of the bed of the existing A303 is going to be monitored'. The Applicant has updated Figure 12 of the DAMS as submitted at deadline 8 [REP8-008] and the action areas as set out in Appendix D, to reflect this comment following consultation with Wiltshire Council. The Applicant notes Wiltshire Council's comment that 'there needs to be a mechanism for managing any overlap, especially if different archaeological contractors are employed for each phase' with regards to the Preliminary Works and the Main Works. The Applicant would refer the Examining Authority to paragraph 5.1.12 of the DAMS [REP8-008] which already sets out a mechanism for managing the transition between the two phases or work from an archaeological perspective. As noted in the Applicant's Comments on any further information requested by the ExA and received to deadline 5 and 6 [REP7-021, item 3.3.9], "Regarding the tendering process, documentation, and selection of archaeological contractors, this is a matter for Highways England, and involvement from Wiltshire Council is not considered appropriate or justified. The archaeological contractors will be required to comply with the terms of



		the DAMS and the plans and statements sitting under it, which Wiltshire Council will have been consulted on or will have approved."
3.1.7	Consultation, Approvals of Documents by Wiltshire Council and Appeals	The Applicant has updated the DAMS at deadline 8 to include a validation period [REP8-008; paragraphs 8.6.2-8.6.4].
	2.20 The Council is concerned about the wording of the consultation and approval process set out in sections 8.5 and 8.6. Please see comments previously submitted regarding amendments to section 8.6 (previously section 8.5) to introduce a validation check for all documents submitted to the Council for approval and associated minor amendments [REP7-044].	Wiltshire Council's comments on the consultation process are noted and are dealt with below in paragraphs 3.2.2, 3.2.4 and 3.2.7.
	2.21 With regard to the new section 8.5, the Council notes that the consultation provisions are as those stipulated within PW-G1 of the OEMP. The Council's comments on the consultation mechanisms are set out in paragraphs 3.4 to 3.6 and 3.9 below.	
3.1.8	Tunnel Restriction Area 2.22 The Council would want to see the wording of section 5.2.9 amended. It is unreasonable to expect the data to be put on the HER in 10 days. 28 days is more acceptable, with a validation period initially to ensure the Council has been given the appropriate data. Secondly, the Council does not think it is the HER's responsibility to inform people wishing to do work that there are restrictions. This is the responsibility of the landowners.	The Applicant notes Wiltshire Council's comments regarding the Tunnel Restriction Area (Tunnel Protection Zone) and notes that the DAMS as submitted at deadline 8 [REP8-008; paragraph 5.2.12] has been updated to address Wiltshire Council's concerns.
3.1.9	Conclusion	See paragraph 3.1.4 above with regards Parsonage Down.
	2.23 In summary, the Council is content with the direction of development of the DAMS and is satisfied with the extent of mitigation set out (except for the additional mitigation advised above for Parsonage Down East). There are some further details to agree but the Council is confident that by the end of	The Applicant welcomes Wiltshire Council's positive comments that it 'is confident that by the end of the Examination period, the DAMS will be a document that is fit for purpose'.



	the Examination period, the DAMS will be a document that is fit for purpose.	
3.2	Comments on (Rev 4) Outline Environmental Ma	nagement Plan [AS-086]
	Matter Raised	Highways England's Response
3.2.1	3.3 The Council considers that a small amendment is required to paragraph 1.1.10 (f) in order to assist the reader of the document. It is proposed that "Table 3.2a" and "Table 3.2b" be inserted before "PW-G1" and "MW-G7" respectively. Paragraph 1.1.10 (f) would therefore read: "set out at Table 3.2a PW-G1, in respect of the preliminary works and Table 3.2b MW-G7, in respect of the main works."	This sentence was edited within the deadline 8 OEMP submission [REP8-006] and the references to PW-G1 and MW-G7 were removed, the proposed amendment is therefore no longer applicable.
3.2.2	3.4 With respect to PW-G1, the Council considers that the definition "("Consultee(s)")" should be placed following the word "consultees" and not following "relevant document". The text would therefore state: "must provide the Consultation Material to the consultees ("Consultee(s)") specified in this table 3.2a as required to be consulted in relation to the relevant document ("Consultee(s)") for comment". Similarly, further down this section, "(Revised Consultation Document)" should follow "amended document" not "The Authority". For clarity, this would now read: "The preliminary works contractor must submit any amended document ("Revised Consultation Material") to The Authority ("Revised Consultation Material") alongside the summary report".	This text was moved from PW-G1 to section 1.4 within the deadline 8 OEMP submission [REP8-006]. The amendments as proposed were made to sections 1.4.4 and 1.4.8 respectively.



3.2.3	3.5 Additionally, the Council considers that a validation check should be incorporated into the consultation procedure outlined in PW-G1. Upon receipt of the Consultation Material, Consultees should be given 5 business days to acknowledge receipt of the material and to validate the information received to ensure that it is sufficient. Only after this initial validation period should the consultation period commence.	Highways England notes this comment and has extended the consultee response time by five business days (from ten to fifteen) from the receipt of preliminary works consultation material (refer to section 1.4.5 of the deadline 8 OEMP [REP8-006]). Consultees can use this time as a validation check, should they so wish.
3.2.4	3.6 Furthermore, in PW-G1 the Council considers that Consultees must be able to comment on the Revised Consultation Material in respect of all amendments made and should not be limited to how their previous comments have been addressed. The rationale for this is other parties' amendments could affect something that was previously agreeable to a consultee and thus make it now unacceptable. Consequently, Consultees should be afforded 10 business days to review the Revised Consultation Material instead of the 5 business days currently proposed.	Highways England notes this comment. The OEMP has been revised to allow for consultees to be able comment on any changes made to the draft versions of documents previously commented on by them (refer to section 1.5.9 of the deadline 8 OEMP [REP8-006]). Amendment has also been made so that consultees will have ten business days review/ provide comment on the revised consultation material (refer to section 1.4.10 of the deadline 8 OEMP [REP8-006].
3.2.5	3.7 The Council queries the meaning of the term "sensitive heritage receptors" in PW-G6 and considers that a definition would be helpful here.	Highways England notes this comment. The OEMP has been updated at PW-G6 and MW-29 to identify what is meant by 'sensitive heritage receptors' in this instance: 'Lighting shall also be designed, positioned and directed so as not to unnecessarily intrude on adjacent buildings, sensitive heritage receptors (e.g. scheduled monuments; non-designated assets or asset groups that contribute to the OUV of the WHS; listed buildings; registered parks and gardens)'
3.2.6	3.8 The Council queries why the newly inserted text related to the consultation mechanisms has been added into MW-G7 and not MW-G5. The Council considers that MW-G5 may be a more suitable location for this.	This text was removed from MW-G7 to section 1.4 within the deadline 8 OEMP submission [REP8-006] with a new consultation section added in section 1.4 of the document.



3.2.7	3.9 The Council notes that the revisions with regard to the consultation mechanism outlined in PW-G1 have been replicated in MW-G7. Therefore, the changes identified in paragraphs 3.4 to 3.6 above should be incorporated into MW-G7 (or alternative location) as well. However, there appears to be an inconsistency with the timeframes for providing comments on the Consultation Material and Revised Consultation Material. The Council notes that 20 business days is allowed for comments on the Consultation Material and 10 business days afforded for comments on the Revised Consultation Material in MW-G7, compared with the 10 business days and 5 business days respectively in PW-G1. The Council seeks clarity from HE as to the rationale for this discrepancy and asks that the timeframes outlined in MW-G7 are applied consistently for all consultation activities.	There is a difference in consultation timeframes between the preliminary works and main works primarily due to the compressed timeframe in which consultation can take place between the granting of the DCO and the commencement of preliminary works. Additionally, the quantity of consultation material for the preliminary works is significantly less than that for the main works, therefore a shorter timeframe for consultee comment is considered appropriate. Highways England can confirm that the preliminary works consultee response time has been extended from by five business days (from ten to fifteen) from the receipt of consultation material and five business days (from five to ten) form the receipt of revised consultation material (refer to sections 1.4.5 and 1.4.10 respectively of the deadline 8 OEMP [REP8-006]).
3.2.8	3.10 The Council considers that for completeness the Tunnel Ventilation Strategy should be added into the list of plans contained in MW-G7.	The Tunnel Ventilation Strategy refers to the contractor's measures to ensure its workforce protection when working in confined spaces. Protection of workers is a statutory obligation of the contractor and, as such, the strategy is not considered to be on the same level as the plans listed within MW-G7 which are to be approved by the Secretary of State e.g. Heritage Management Plan, Water Management Plan etc. Highways England does therefore not intend to include this within MW-G7.
3.2.9	3.11 With regard to MW-G11, the Council would prefer for the belts and braces safety that this plan is also signed off by other than the project owner (HE). However, should HE still maintain it wishes to be the decision maker in respect of the HEMP, the Council notes that as it will ultimately be the enforcement body for ensuring the project complies with all source document requirements and is a required consultee for the HEMP, the Council would therefore be able to identify to HE any non-compliance issues which it should take cognisant of in their decision making and if HE fail to do so that would not negate the ability for subsequent enforcement action to ensure compliance	Highways England notes this comment and also notes that in respect of the HEMP generally, amendment to the HEMP approvals has been made to allow Wiltshire Council approval of the stage HEMPs and relevant sections of the consolidated HEMP (refer to the deadline 8 OEMP [REP8-006]), as follows: 'Wiltshire Council approval of phase HEMPs and the relevant sections of the consolidated HEMP for those areas that are to be maintained by Wiltshire Council.'



	with the source documents. Therefore, provided the panel agrees with the Council that these do provide sufficient alternative checks, the Council does not oppose HE approving the HEMP.	
3.2.10	3.12 However, as per the Council's previous representations in its Response to Deadline 6 Submissions [REP7-043], the Council considers that it should be consulted on all changes, except for those which correct typographical errors or are done for clarity, not just those that HE deem are material. This should be reflected in the provisions contained within MW-G11 as well.	Highways England notes this comment however remains consistent in its position that consultation on material updates only is appropriate. Highways England is suitably experienced on such projects to be able identify document updates which are deemed to be material.
3.2.11	3.13 The Council also considers that there is significant duplication in the newly amended text in MW-G11 that should be conflated for simplicity and clarity. The relevant sections have been underlined below.	Highways England notes this comment and can confirm that the wording within MW-G11 has been conflated to avoid duplication (refer to the OEMP submitted at deadline 8 [REP8-006]) and should be read alongside section 1.4.
	"Handover Environmental Management Plan (HEMP):	
	During the later stages of the construction phase of the Scheme (or separate construction phase, as relevant, e.g. the Winterbourne Stoke bypass) the main works contractor shall prepare a Handover Environmental Management Plan (HEMP) in consultation with the Environment Agency, Wiltshire Council, Natural England and Historic England on matters related to their functions and with The Authority. This will then be implemented by the body responsible for the long-term management of the operational Scheme. approved by The Authority. The HEMP shall be completed prior to the handover of the phase of the Scheme concerned.	
	The HEMP shall be based on the CEMP and the LEMP at the time and will provide the relevant information on existing and future environmental commitments and objectives that would	



need to be honoured and define on-going actions and risks that need to be managed.

The HEMP will include as built information and other details in a form that can be utilised by the body responsible for long term management and maintenance so that body can prepare environmental management plans for the maintenance of the Scheme for the operational phase.

When submitting the HEMP to the Authority for approval, the main works contractor must include a summary report setting out the consultation undertaken with the relevant stakeholder required and the contractor's response to that consultation.

If any consultation responses are not reflected in the HEMP submitted to the Authority for approval, the summary report must state the contractor's reasons for not including them. The HEMP and the consultation report must be copied to the relevant stakeholder/s. The maintenance authority shall consult with Wiltshire Council, the Environment Agency, Historic England and Natural England on those aspects of the HEMP that are relevant to their functions, if the HEMP is materially updated at any time.

The HEMP shall be completed prior to the handover of the phase of the Scheme concerned. The approved HEMP will then be implemented by the body responsible for the long-term management of the operational Scheme. The HEMP shall be completed prior to the handover of the phase of the Scheme concerned. The maintenance authority shall consult with Wiltshire Council, the Environment Agency, Historic England and Natural England on those aspects of the HEMP that are relevant to their functions, if the HEMP is materially updated at any time. Once all construction phases are complete, the main works contractor



	shall produce a consolidated HEMP, which will then be the main document containing essential environmental information passed to The Authority and the maintenance authority. The maintenance authority (to the extent that this is not Wiltshire Council) shall consult with Wiltshire Council, the Environment Agency, Historic England and Natural England on those aspects of the consolidated HEMP that are relevant to their functions, if the consolidated HEMP is materially updated at any time."	
3.2.12	3.14 The Council notes the amendments to D-LAN5, however considers that the description is still incorrect. The principal issue is that no part of the junction crossings will be on the existing A303 to be de-trunked. The Council suggests that the text is amended to read: "The non- motorised crossing of (i) the realigned A360 and (ii) the new road to be classified as the C507 at the Longbarrow Junction southern roundabout shall be facilitated by Pegasus crossings."	Highways England notes this comment. Item D-LAN5 of the OEMP has been updated to include the amendments as proposed (refer to the OEMP submitted at deadline 8 [REP8-006]).
3.2.13	3.15 With regard to MW-GEO8, the Council considers that this clause needs to be explicit that both Wiltshire Council and the Environment Agency will be provided with the land contamination reports. This is because both agencies have duties and responsibilities under the contaminated land regime contained in the Environmental Protection Act 1990 Part 2(A) and HE will need to ensure their liabilities and duties are discharged.	Highways England notes this comment. To ensure that Wiltshire Council and The Environment Agency are provided within land contamination risk assessments, point j) of item MW-GEO8 was updated at deadline 8 to provide for further liaison with the Council and the EA.
3.2.14	3.16 Following discussion of the Council's need for an additional requirement relating to the Flood Risk Assessment to be incorporated into the dDCO, the Council has agreed with the Environment Agency that it would withdraw this request, provided that the MW-WAT12 was updated in the OEMP. The Council and the EA seek for an additional point e) to be added	Highways England notes this comment. Item MW-WAT12 of the OEMP has been updated to include the proposed wording (refer to the OEMP submitted at deadline 8 [REP8-006]).



	which would state: "e) The plan shall build on the assessment of flood risk and mitigation recommended within the Flood Risk Assessment and its annexes submitted as part of the DCO examination [REP3-008]".	
3.2.15	3.17 In the Council's Response to Deadline 6 Submissions [REP7-043] the Council provided some additional text to be added to MW-WAT13 to capture the Council's warn and inform requirement. Following discussions with the Environment	Highways England notes this comment. Item MW-WAT15of the OEMP has been updated to include provision for the sharing of groundwater data and the handover of assets (boreholes) where relevant (refer to the OEMP submitted at deadline 8 [REP8-006]):
	Agency, the Council and the EA seek for the following wording to be added into MW-WAT13 instead:	'The main works contractor shall, where changes in groundwater levels are predicted to occur as a result of construction activity, which would be
	"Following the post construction groundwater monitoring, Highways England will provide data collected and allow the Environment Agency / Wiltshire Council to adopt the boreholes to inform their groundwater flood warning service.	considered significant using the methodology defined in the groundwater management plan (refer to MW-WAT10), undertake additional site investigations. Water levels at selected observation piezometers will be monitored before, during and after any dewatering associated with the construction of the tunnel. Additional drainage will be provided as mitigation where necessary. Monitoring arrangements (including the sharing of data
	Once further modelling work is completed by Highways England at detailed design stage, meeting the standards for flood map updates, the Environment Agency and Wiltshire Council can utilise this modelling work to update the fluvial, pluvial and groundwater flood map."	and, where relevant, the handover of assets) will be in defined within the Groundwater Management Plan.'
3.2.16	3.18 As previously mentioned [REP7-043], the Council seeks additional wording for MW-WAT14 to specify the overarching design principles relating to design return periods and climate change allowances for detailed design in line with national standards, that are not explicitly stated elsewhere in the Environmental Statement. The Council has amended its proposed additional wording to reflect discussions with HE and to distinguish between road drainage and land drainage systems that are	Highways England notes this comment and refers to item 2.1.38 within the Comments on any further information requested by the ExA and received to deadline 4 and 5 regarding the OEMP [REP6-035]. As further explained at ISH10 [REP8-018] in respect of this matter, Highways England maintains the position that Requirement 10 adequately secures and controls the Scheme's drainage design, based on the Road Drainage Strategy and following the measures in the OEMP, which either incorporates or goes further than the requirements suggested here.



designed to different standards. The revised wording now sought is as follows:

" Highway drainage will be designed:

- (a) In accordance with The Design Manual for Roads and Bridges HD 33/16 and any subsequent design manual amending or replacing that;
- (b) To enable automated control of the tunnel drainage as far as reasonably practicable;
- (c) To enable automated control of all the pollution prevention elements of the tunnel drainage;
- (d) To enable infiltration basins (DTAs) to convey the 1 in 100 year rainfall event plus climate change without causing flooding to any part of the site;
- (e) To manage flows from rainfall in excess of the 1 in 100 year rainfall event plus climate change in routes that minimise the risks to people and property;
- (f) To provide a 30% uplift in peak rainfall intensity to allow for climate change, unless UKCP18 guidance becomes available, in which case new climate change allowances will need to be agreed with Wiltshire Council and the Environment Agency.

Land drainage systems will achieve the following minimum standards:

- (a) Maintain pre-development runoff rates for peak flow and volume post development for the 1, 30 and 100 year rainfall events:
- (b) Convey the 1 in 100 year rainfall event plus climate

The Secretary of State will approve the final design that is appropriate for the Scheme – as such setting parameters now could prevent the most appropriate form of design.



	change without causing flooding to any part of the site; (c) Manage flows from rainfall in excess of the 1 in 100 year rainfall event plus climate change in routes that minimise the risks to people and property; (d) Provide a 40% uplift in peak rainfall intensity to allow for climate change in accordance with Environment Agency guidance, unless UKCP18 guidance becomes available, in which case new climate change allowances will need to be agreed with Wiltshire Council and the Environment Agency."	
	As stated at Issue Specific Hearing 10, the Council considers that this could also be included in a specific design parameters document, to be secured by a DCO Requirement to be approved by the Secretary of State, if the ExA considered this was necessary.	
3.2.17	3.19 With reference to section 4.3 Design Vision, and specifically the Purpose of the Vision, the Council considers that it should be referenced that a key priority of the Stonehenge and Avebury World Heritage Site Management Plan 2015-2021 is to "reduce the dominance and negative impact of roads and traffic and ensure that any improvements to the A303 support this" (page 11, Stonehenge, Avebury and Associated Sites World Heritage Site Management Plan 2015).	Highways England notes this comment. Paragraph 4.2.10 b) of the OEMP has been updated to capture this point (refer to the OEMP submitted at deadline 8 [REP8-006]): 'This should include reducing the dominance and negative impact of roads and traffic on the WHS, delivering non-motorised users (NMU) opportunities, the re-use of the existing A303 and connection to existing byways. The Scheme should acknowledge the potential for future access within the WHS and its wider landscape, e.g. the reconnection of the Avenue.'
3.2.18	3.20 The Council considers that reference should be made within section 4.2.6 a) Respecting and Responding to the Historic Landscape to the World Heritage Site Management Plan vision to "provide a tranquil, rural and ecologically diverse setting" for the WHS and its archaeology.	Highways England notes this comment and highlights that the Scheme does improve the tranquillity and rural nature of the WHS through the construction of the tunnelled and western cutting sections, however, since that cannot be said for every part of the Scheme, unfortunately it cannot be stated as an overall aim.



3.2.19	3.21 Within section 4.2.6 c) High quality and imaginative design, the Council considers that "and green infrastructure" should be added at the end of this point. This additional text should also be included within Annex A.4 Illustrated Examples of Key Design Elements 4.2.6 c) High quality and imaginative design.	Highways England notes this comment. The OEMP submitted at deadline 8 [REP8-006] was updated to include the amendments to paragraph 4.2.6 c) and Annex A.4 as proposed.
3.2.20	3.22 With regard to 4.2.6 e) User experience and safety, the Council considers that a change to the wording "enhance the user experience and become a new point of reference for the World Heritage Site" is required. The Council suggests that the following is instead used, "enhance the driver experience in recognition of the presence of the World Heritage Site". This should cross reference with design principle P-PWS04.	Highways England notes this comment. Paragraph 4.2.6 e) of the OEMP has been updated to capture this point (refer to the OEMP submitted at deadline 8 [REP8-006]): The Scheme should improve the accessibility of the landscape to local communities, visitors and tourists through new recreational routes and crossings of the proposed road. The Scheme should aim to provide enjoyment and excitement for the road user, using materials and design features which engage with their sense of place and history of the landscape, whilst ensuring the road is easy to navigate through safe and secure infrastructure. The tunnel should enhance the user driver experience and become a new point of reference when travelling along recognise the A303 presence of the WHS.
3.2.21	3.23 Following discussions at Issue Specific Hearing 10 and specifically HE's representation that the Council's previously sought amendment to section 3.1.3 of Annex A.3 Outline Soils Management Strategy was unreasonably broad; the Council proposes the following alternative wording instead. "This will be determined on a case-by-case basis, but for the avoidance of doubt will include any excavation or compaction activity (including construction traffic) associated with implementing the authorised development and will be informed by". The Council considers that this would cover those activities that were of concern but not specifically referenced. For clarity, the Council confirms that it	Highways England notes this comment. Para. 3.1.3 of the OEMP has been updated to capture both of these points (refer to the OEMP submitted at deadline 8 [REP8-006]).



	still seeks its previously proposed additional point d) to this section [REP7-043].	
3.3	Comments on (Rev 5) Draft Development Conse	nt Order [AS-096]
	Matter Raised	Highways England's Response
3.3.1	4.3 With regards to the new definition of the term "cycleway", the Council questions why HE persist in using a term which is not defined in highway law, unlike "cycle track", which has an established and understood meaning. However, it is noted that the new	Please see the Applicant's additional submission 'Shared Use Cycle Route Clarification Note' [AS-107] which sets out how the Applicant intends to clarify how non-motorised user provision within highway boundaries is described in the application documentation.
	definition provides for the use of the cycleway by horses, but only being ridden or led. The highway therefore falls between a cycle track and a restricted byway (as defined at s329 of the Highway Act 1980). It would appear that the definition has, to some degree, been contrived so as to avoid issues relating to potential horse riders making use of off-carriageway facilities. It is believed that concern has been expressed at the Issue Specific Hearings about the suitability of a 2.5m wide route being used by both horses and other NMU users.	In summary revision 7 of the draft DCO retains the "cycleway" definition introduced in revision 5 of the DCO, but includes a definition for a "shared use cycle track". The definition for this term follows closely the definition of "cycle track" contained in section 329 Highways Act 1989, except that it provides that a shared use cycle track will always carry a right of way on foot (whereas a "cycle track" is expressed in section 329 Highways Act 1980 as being "with or without a right of way on foot"). Clarificatory amendments have been made to Work Nos. 3A and 3C in Schedule 1 of revision 7 of the draft DCO to refer to the inclusion of a shared use cycle track and cycleway respectively in these works.
3.3.2	4.4 The Council has not had the opportunity at this stage to examine all the drawings to check as to the extent of cycleways proposed in association with the Scheme, and whether there are any other such routes proposed beyond the proposed link between the existing Longbarrow junction and the Visitor Centre, as set out in document [AS-067], and possibly on the proposed C507 (de-trunked A303, Longbarrow – Winterbourne Stoke).	Please see the Applicant's additional submission 'Shared Use Cycle Route Clarification Note' [AS-107]. Should NMC-06 be accepted into the examination, in the form proposed in the Applicant's Consultation Report [REP8-015], the route would be a "shared use cycle track" per the definition noted above (that is to say a right of way on foot or on pedal cycle but no other).



3.3.3	4.5 The Council supports the revised definition of "maintain".	The Applicant notes and welcomes the Council's support.
3.3.4	4.6 In article 15 (1), the Council believes that the added word "may" should be deleted. The clause would therefore read, "The undertaker may for the purposes of the construction, operation or maintenance of the authorised development may enter on-".	The Applicant agrees and has made this amendment in revision 7 of the draft DCO.
3.3.5	4.7 Wiltshire Council supports the changes made to article 49 (1).	The Applicant notes and welcomes the Council's support.
3.3.6	4.8 The Council considers that subject to the exercise of the limits of deviation, clause (1) of Requirement 3 of Schedule 2 should be "in accordance with" rather than "compatible with".	The Applicant made an amendment with the same effect in revision 6 of the DCO [REP8-004]. The Applicant understands that the Council is content the amendment.
3.3.7	4.9 In relation to Requirement 4 (11), the Council considers that the Invasive Non-Native Species Management Plan should be added to the list of plans included here. Furthermore, the Council queries whether the Tunnel Ventilation Strategy is intended to be approved by the Secretary of State or retained by HE for approval. For clarity, the Council does not consider that it is necessary for the Tunnel Ventilation Strategy to be approved by the Secretary of State.	The Invasive Non-Native Species Management Plan was not included in revision 5 of the draft DCO [AS-096] as the corresponding OEMP obligation states that such a plan is only necessary should such species be present in a works area. It follows that such a plan would not be required in all circumstances (if at all). Reflecting on the Council's comments, the Applicant amended requirement 4 to include reference to the Invasive Non-Native Species Management Plan "if required", in revision 6 of the DCO [REP8-005].
		The Invasive Non-Native Species Management Plan was not included in revision 5 of the draft DCO [AS-096] as the corresponding OEMP obligation states that such a plan is only necessary should such species be present in a works area. It follows that such a plan would not be required in all circumstances (if at all). Reflecting on the Council's comments, the Applicant amended requirement 4 to include reference to the Invasive Non-Native Species Management Plan "if required", in revision 6 of the DCO [REP8-005].
		In relation to the Tunnel Ventilation Strategy it is the intention for this to be retained for the Applicant's approval, and the Applicant welcomes the Council's confirmation that it is content with this approach.



3.3.8	4.10 The Council notes the significant amendments to Requirement 4 in Schedule 2. However, the Council considers that the drafting is still confusing. At 4(2) it says "the preliminary works must be carried out in accordance with the preliminary works OEMP" but then at 4(7) it says "each part of the preliminary works must be carried out in accordance with the preliminary works CEMP for that part". The same applies to the main works at 4(1) and 4(12) respectively. The Council considers that 4(7) and 4(12) are correct because the CEMP will be developed from the OEMP and the Scheme should be constructed in accordance with the latest information. The Council considers that 4(1) and 4(2) should be removed due to the apparent contradiction.	The Applicant has discussed this point with the Council and understands the position to now be agreed. The Applicant considers that the drafting is clear. Requirements 4(1) and 4(2) ensure that those parts of the OEMP that are not CEMPs or HEMPs are secured, for example the design principles and process of consultation on detailed design of the scheme set out in section 4 of the OEMP, and the roles of the ALO and others. For CEMPs and HEMPs produced over the life of the project, those will necessarily have to be produced as required by the OEMP and so will comply with it, as will the works or operations that must comply with the CEMP or HEMP.
3.3.9	4.11 Furthermore, the Council considers that Requirement 4 (13) should be amended to reflect the understood cyclical development of the plans i.e. the OEMP(s) would be translated into the CEMP(s), which in turn would be converted into the HEMP(s). Therefore, this clause should be amended as follows: "the CEMPs must be converted into one of more HEMPs, in accordance with the COEMP,".	The Applicant amended requirement 4(13) in revision 6 of the DCO [REP8-005] to address this comment. The Applicant understands that Wiltshire Council is now content with the revised drafting.
3.3.10	4.12 The Council considers that Requirement 8 (3) should be amended to include any walls and fences and should not be limited to noise fences and walls only.	The Applicant made this amendment in revision 6 of the DCO [REP8-005].
3.3.11	4.13 Following confirmation from HE at Issue Specific Hearing 11 that the Council's proposed additional wording to MW-TRA12 was acceptable, subject to its incorporation into the next version of the OEMP, the Council confirms that it would withdraw its	This wording was included in the OEMP submitted at deadline 8 [REP8-006].



3.3.13	4.15 The Council supports the changes made to Schedule 9 Part 7 paragraph 20 as proposed.	The Applicant notes and welcomes the Council's support.
3.3.14	4.16 The Council supports the changes made to Schedule 9 Part 8 paragraph 21 as proposed.	The Applicant notes and welcomes the Council's support.
3.3.15	4.17 The Council notes that the agreed updated Protective Provisions for the protection of drainage authorities should be incorporated into Part 3 of Schedule 11.	The agreed protective provisions were included in revision 6 of the draft DCO [REP8-005].
3.4	Written summary of oral submission	
	Matter Raised	Highways England's Response

The Applicant's Written Oral Submissions for ISH8 [REP8-016] have responded to Wiltshire Councils comments received at deadline 8. An additional point raised in Wiltshire Council's oral submission for ISH8 is detailed below.



3.4.1	1.1 OEMP: Approvals, Agreements and Consultation	1.1.1. Noted.
	 1.1.1 The Council welcomed HE's amendments and confirmed that the Council was supportive of the Secretary of State's approval of the referenced plans. It was confirmed that it would approve the Heritage Management Plan, Site Specific Written Schemes of Investigation and Archaeological Method Statements, in consultation with Historic England. 1.1.2 Wiltshire Council noted the framework in which the HEMP would be produced and indicated that discussions were ongoing with HE to provide sufficient assurance that the Council's concerns could be addressed so that it was acceptable for the HEMP to be approved by HE. If agreement cannot be reached, the Council's position would remain that the HEMP should be subject to the approval of the Secretary of State as well. Discussions are ongoing, and provided sufficient comfort can be achieved, the Council considers that the proposal would be acceptable. 	1.1.2 Please refer to agenda item 4.1 ii of Highways England's written summary of oral submissions [REP8-016] which explains that as per the OEMP, MW-G11, the HEMP shall be based on the CEMP and the LEMP. The HEMP must then be implemented by the body responsible for the long-term management of the operational Scheme. Under the proposed mechanism to be adopted for approvals, the HEMP will need to be based on a CEMP and LEMP which have been independently approved by the Secretary of State and are therefore not based on documents approved internally by Highways England. There is therefore a significant level of independent oversight of the HEMP and a separate approval mechanism is not necessary. It is also noted that the OEMP was updated at deadline 8 to provide that Wiltshire Council would approve the HEMP for those areas of the Scheme for which it would become responsible. The Applicant can confirm that following further engagement with Wiltshire Council in relation to the approval of the HEMP this has now been agreed.
3.4.2	1.2.1 In relation to the design vision, Council officers attended a workshop recently to refine the wording of the design vision and principles. This remains under discussion between the parties. The Council's position is that the design should look at ways of reducing the environmental impact of the road through vegetation and the design and to soften the visual impact. Council officers are involved in the discussion on the development of the design principles and vision, but do support the landscape led approach to the design vision and principles.	 1.2.1 /1.2.2/1.2.3 The Applicant thanks Wiltshire Council for their attendance at the workshop, and for their support for the landscape led approach to the design and vision principles. 1.2.4 The Applicant can confirm that following further engagement with Wiltshire Council in relation to the design consultation mechanisms this has now been agreed. 1.2.5 The Applicant thanks Wiltshire Council for their support of the proposed arrangement for the approval of detailed design.



	1.2.2 The Council confirmed that the content of the design vision and principles is still under discussion and the Council did not have any specific points to raise at the present time.	
	1.2.3 With regard to the design principles, the Council reiterated that there had been helpful discussions with HE and that the principles themselves were essentially agreed. The discussions are continuing to nail down the precise language of the principles. The Council confirmed that it did not have any specific points to raise at the present time as the discussions were still ongoing.	
	1.2.4 The Council confirmed that there have been discussions on the design consultation mechanisms which are moving in the right direction. One particular issue relates to 4.5.13 and the dispute resolution mechanism, the Council received revised wording yesterday, which it is still reviewing. Therefore, the Council has no specific points to raise, other than the Council considers that the discussions are moving in the right direction but further discussion is required.	
	1.2.5 The Council confirmed that it was content with the proposed arrangement for the approval of detailed design. It considered that as the detailed design would be included within the CEMP, which would be approved by the Secretary of State, this provided the Council with sufficient comfort.	
3.4.3	1.3 DAMS: Part 1	Highways England notes these comments.
	1.3.1 With regard to the tunnel protection zones, the Council confirmed that this had been reflected in Wiltshire Council's Statement of Common Ground with HE. The Council's archaeologist has confirmed that she is happy with how the tunnel protection zones would	



	work in practice, but the Council needs to check how the additional documents that this position has been based on has been reflected and captured within the latest draft of the DAMS and associated DCO documentation. The Council indicated that provided that it was satisfied that this had been sufficiently captured, the Council would be content.	
3.4.4	 1.4 DAMS: Part 2 – Overarching Written Scheme of Investigation (WSI) 1.4.1 As set out in the Council's Deadline 7 response [REP7-044], the Council as lead curator considers that it ought to have the ability to require a cessation of works. It is considered insufficient to simply be consulted on. The Council must also be satisfied that a resumption of works would be in order. The Council considers this could be achieved through an alteration to the wording of paragraph 6.1.21 in the DAMS. 1.4.2 The Council indicated that it was expected that the Council would be given notice of the contractor finding something and sufficient time should be allowed for an enforcement officer to attend the site to make a decision. The Council would discuss with HE to suggest some suitably amended text for the relevant paragraph. 1.4.3 The Council recognised that this would require good communication between the parties, but considers that it would be no different to serving a stop notice under the Planning regime. 	The DAMS, as submitted at deadline 9 [para. 6.1.23], has been updated to reflect Wiltshire Council's comments, including the following statement 'Wiltshire Council may, acting reasonably, and following consultation with the TPA, Archaeological Contractor, ACoW and PW Contractor or MW Contractor (as appropriate) require cessation or resumption of work in the circumstances set out in this paragraph.' The DAMS, as submitted at deadline 9 [para. 6.1.23], has been updated to reflect Wiltshire Council's comments, including the following statement 'Wiltshire Council may, acting reasonably, and following consultation with the TPA, Archaeological Contractor, ACoW and PW Contractor or MW Contractor (as appropriate) require cessation or resumption of work in the circumstances set out in this paragraph.' With regards to unexpected finds, this would be the subject of an onsite monitoring meeting following the discovery, including Wiltshire Council [DAMS as submitted at deadline 9; paragraph 6.1.19].
3.4.5	1.6 DAMS: Communications 1.6.1 The Council does not consider that the current arrangements are acceptable. Firstly, the Council has proposed	Please refer to agenda item 5.5 i of Highways England's written summary of oral submissions [REP8-016] which confirms that the DAMS submitted at deadline 8 has taken on board the comments made by Wiltshire Council with respect to sections 8.5 and 8.6 of the DAMS.



revised wording for clause 8.5.1 within its Deadline 7 submission [REP7- 044]. This would introduce a validation stage, so for when the Council is presented with a pack of information to discharge, it has the opportunity to consider whether there is adequate information to begin that process. The ExA will see that the Council put forward proposed wording within its representation. 1.6.2 Secondly, the Council does not wish for its comments to be limited to their previous comments. The Council considers that it should be able to comment on any amendments during the second review stage as there may be comments by other consultees which have either a direct or indirect bearing on matters that the Council are concerned with. 1.6.3 Finally, the Council would ask for 10 working days at that final stage to comment on the revised document rather than the 5 working days currently proposed. 3.4.6 The Applicant refers Examining Authority to Highways England's responses 1.7 DAMS: Part 3 - Tables, Figure and References in paragraphs 3.1.4 to 3.1.6 above with regards to additional mitigation areas 1.7.1 The Council committed to providing a response within its and actions. written summaries to the ExA's questions in relation to Table 11-3. With regards to Table 11-4, the Applicant has consulted with Wiltshire Council This is provided below. following the submission of the deadline DAMS [REP8-008] and a final 1.7.2 The Council's archaeology team is still reviewing the details version of the DAMS addressing Wiltshire Council's substantive comments is submitted to the Examining Authority at deadline 9. A comments log will be of the mitigation areas and actions (DAMS Appendix D and E). The issued to Wiltshire Council which illustrates how their comments have been Council has asked for additional areas to be covered and anticipates dealt with. that these areas will be included by HE in the DAMS to be submitted at Deadline 8. The Applicant welcomes Wiltshire Council's positive comments that it 'does consider [the DAMS to be] a document that is comprehensive and fit for 1.7.3 With relation to table 11-4, the Council indicated that this was purpose' and with regards to the approach as set out in the DAMS to the a matter still under discussion and that it would update the recovery of artefacts in the topsoil that 'as far as the Council is concerned, the Examination in due course. DAMS does adequately include a robust approach to mitigating topsoil archaeology.' **Post Hearing Note:**



1.7.4 Wiltshire Council wishes to emphasise that although the DAMS is still in development and there is more work to be done by HE in relation to mitigation areas and techniques, and research	The Applicant refers Examining Au in paragraphs 3.14 to 3.17 above and actions.
questions, the Council does consider it a document that is	With regards to Table 11-4, the Ap
comprehensive and fit for purpose.	following the submission of the De
1.7.5 The Council also wishes to add that in respect to mitigation of	version of the DAMS addressing V

- 1.7.5 The Council also wishes to add that in respect to mitigation of artefacts in the topsoil, there has been misunderstanding in relation to previous work in the WHS. The Council is not aware of any standard practice of curators insisting on 100% topsoil sieving of excavation sites within the WHS or elsewhere in the county. The Council has never requested this approach and is not aware that other curatorial bodies have either. A small number of academic led excavations have chosen to 100% sieve selected areas of their excavation sites for the retrieval of artefacts from the topsoil. This is a case by case decision and is not considered standard practice.
- 1.7.6 As far as the Council is concerned, the DAMS does adequately include a robust approach to mitigating topsoil archaeology.

The Applicant refers Examining Authority to Highways England's responses in paragraphs 3.14 to 3.17 above with regards to additional mitigation areas and actions.

With regards to Table 11-4, the Applicant has consulted with Wiltshire Council following the submission of the Deadline 8 DAMS [REP8-008] and a final version of the DAMS addressing Wiltshire Council's substantive comments is submitted to the Examining Authority at deadline 9. With regards to Table 11-4, the Applicant has consulted with Wiltshire Council following the submission of the deadline 8 DAMS [REP8-008] and a final version of the DAMS addressing Wiltshire Council's substantive comments is submitted to the Examining Authority at deadline 9. A comments log will be issued to Wiltshire Council which illustrates how their comments have been dealt with.

The Applicant welcomes Wiltshire Council's positive comments that it 'does consider [the DAMS to be] a document that is comprehensive and fit for purpose' and with regards to the approach as set out in the DAMS to the recovery of artefacts in the topsoil that 'as far as the Council is concerned, the DAMS does adequately include a robust approach to mitigating topsoil archaeology.'

The Applicant notes Wiltshire Council's comments with regards to the fact that it 'is not aware of any standard practice of curators insisting on 100% topsoil sieving of excavation sites within the WHS or elsewhere in the county. The Council has never requested this approach and is not aware that other curatorial bodies have either. A small number of academic led excavations have chosen to 100% sieve selected areas of their excavation sites for the retrieval of artefacts from the topsoil. This is a case by case decision and is not considered standard practice.'

3.4.7

1.8 Blick Mead Hydrology

1.8.1 The Council confirmed that its position in this regard remains as set out in its written representations. The Council considers that it should be consulted on matters related to its functions and should not be limited to its role as lead local flood authority.

Please refer to agenda item 8 iii of Highways England's Written Summary of Oral Submissions [REP8-016] which confirms that Highways England has included changes to the OEMP at deadline 8 to remove the words 'in respect of local lead flood authority' to the reporting criteria column to ensure Wiltshire Council can consider heritage aspects.



	1.8.2 The Council's concern is essentially a mis-match to other parts of the OEMP, where the Council's functions are referred to as a whole, whereas here the Council's role is limited to its role as lead local flood authority, which is narrower than seen elsewhere in the document. The Council wants symmetry in the way in which the Council's role and functions are described. Therefore, the Council considers that it should be referred to in the wider sense of its functions.	
	1.8.3 The Council indicated that if a specific requirement were to be introduced for Blick Mead, the Council agrees that it would be appropriate for the Secretary of State to be the approving body, in consultation with Wiltshire Council in relation to any of the Council's functions. The Council confirmed that it did not have any specific wording for a requirement either, but that it would be very happy to review and consider any wording proposed by HE within their written summary and comment on that.	
3.4.8	 1.9 Landscape Character 1.9.1 The Council stated that HE's outline with respect of the Council's position on highways lighting was correct. The Council had originally suggested an additional requirement, but in its most recent submission, the Council indicated that it would be satisfactory to have a lighting strategy within the OEMP and proposed some wording to that effect. The Council is awaiting a response from HE as to the acceptability of that wording and discussions continue. 	Please refer to agenda item 6 ii of Highways England's Written Summary of Oral Submissions [REP8-016] which explains that a lighting strategy is unnecessary because the Scheme will be largely unlit and the OEMP includes various commitments in this respect and in relation to the lighting that will be provided. At the Issue Specific Hearing on 30 August 2019 it was confirmed that, with the Council's OEMP wording in relation to Tunnel Closures being incorporated at deadline 8 [MW-TRA12], the Council had no further submissions on this point and no lighting requirement was necessary.
3.4.9	1.10Visual 1.10.1 The Council indicated that it would be helpful if an additional visualisation could be prepared from the northern point of the Normanton Barrow group, just to the east of the western section of the Scheme. The Council's request for this additional viewpoint was	Highways England notes these comments; however, the Applicant would wish to clarify that the viewshed [REP7-025] provided shows the theoretical visibility, it does not infer a 'visual impact'. Any consideration of the change to the view and therefore the visual impact would have to be assessed in the



based on the fact that a recent viewshed provided to the Council does show visual impact of the road on that part of the Normanton Barrow group.

1.10.2 The Council committed to providing a plan to show exactly which view point it was requesting within its written summary. However, subsequent to the hearing and following discussions with HE, the Council has now been provided with the view point requested.

context of the impact of the existing A303, which is in closer proximity to the Normanton Down Barrow Group.

The Applicant's Written Oral Submissions for ISH9 [REP8-017] have responded to Wiltshire Councils comments received at deadline 8. An additional point raised in Wiltshire Council's oral submission for ISH9 is detailed below.

3.4.10

2.1 NMC-01: Existing A303 Layby West of Winterbourne Stoke to be De-Trunked

- 2.1.1 The Council confirmed that it supports the proposed change as it is in-line with representations made by the Council. The Council considers that the changes are important to reduce and minimise the risk of abuse by inappropriate activities of the area. The Council indicated that it was content for the area to be grassed and to remain as highway verge, and effectively a non-operational highway.
- 2.1.2 However, it was noted that de-trunking is a process; the Council considers that a decision can be taken on the detailed design and what is intended to go on the land under the provisions of detailed design. Any issues referred to Winterbourne Stoke Parish Council can be dealt with under the provisions of detailed design. The Council does not believe that this needs to affect the principle of de-trunking.

Highways England thanks Wiltshire Council (WC) for its support for the proposed change NMC-01.

Highways England notes the WC comments in respect of de-trunking. It is agreed that any matters in respect of detailed design in relation to the detrunking process can be addressed through the detailed design process within Requirement 3 (Preparation of Detailed Design) of the dDCO [REP8-004].

Highways England's Proposed Changes Consultation Report [REP8-015] also notes in row 4.3.4, WC's comments that they believe that this change is part of an essential change to the Scheme proposals if the risk of abuse of the area now included in the hatching, by inappropriate activities, is to be minimised. The Council stated that they were satisfied that the area can remain as highway verge, and effectively non-operational highway.

Highways England thanks Wiltshire Council (WC) for its support for the proposed change NMC-01.

Highways England notes the WC comments in respect of de-trunking. It is agreed that any matters in respect of detailed design in relation to the detrunking process can be addressed through the detailed design process within Requirement 3 (Preparation of Detailed Design) of the dDCO [REP8-004].



Highways England's Proposed Changes Consultation Report [REP8-015] also notes in row 4.3.4. WC's comments that they believe that this change is part of an essential change to the Scheme proposals if the risk of abuse of the area now included in the hatching, by inappropriate activities, is to be minimised. The Council stated that they were satisfied that the area can remain as highway verge, and effectively non-operational highway. Highways England notes these comments. 3.4.11 Please see Highways England's response to agenda item 3.2 in its written 2.2 NMC-02: Countess Roundabout to be De-Trunked summary of oral submissions report [REP8-017] which explained that 2.2.1 The Council confirmed that it supports proposed change discussions regarding NMC-02 had commenced, with a view to resolving NMC-02 in principle, however the precise boundary between the conflicting historical records regarding highway boundaries and to agree the trunk road and local roads needs to be confirmed. The Council also limits of the extent of de-trunking at Countess Roundabout. These discussions have subsequently concluded, and the boundaries of the indicated that there were points of detail on the plan legends which proposed de-trunking of Countess roundabout (i.e. proposed change NMCrequired resolution. 02) have been agreed between Highways England and the Council. 2.2.2 The Council was asked to include further detail to assist the The outputs of this collaborative approach are reported in Chapter 5 of ExA in its written summary. In the Council's response to HE's Highways England's Proposed Changes Consultation Report [REP8-015]. consultation on the proposed changes to the DCO application, the which includes drawing excerpts (see Figure 5-1) showing the agreed Council made the following points: boundaries of the areas which, subject to the Examining Authority's acceptance of NMC-02, are proposed to be de-trunked. "Whilst the proposed change is in line with the general principle put forward by the Council, there is concern about the detail of the area Please see Highways England's response to agenda item 3.2 in its Written shown hatched black, which excludes verge areas to the north and Summary of Oral Submissions report [REP8-017] which explained that south sides of the junction, which are currently understood to be discussions regarding NMC-02 had commenced, with a view to resolving conflicting historical records regarding highway boundaries and to agree the trunk road (maintained by HE, not Wiltshire Council), and which limits of the extent of de-trunking at Countess Roundabout. These should be de-trunked to become verges to the A345 north-south discussions have subsequently concluded, and the boundaries of the route. proposed de-trunking of Countess roundabout (i.e. proposed change NMC-The highways records held by the Council show that there is 02) have been agreed between Highways England and the Council. significant verge area around all parts of the roundabout. The Council The outputs of this collaborative approach are reported in Chapter 5 of would wish to see the de-trunking hatch markings extend into the Highways England's Proposed Changes Consultation Report [REP8-015], verge to the north side of the eastbound diverge and merge slips. which includes drawing excerpts (see Figure 5-1) showing the agreed and to the south of the westbound diverge and merge slip roads. The boundaries of the areas which, subject to the Examining Authority's Council would be happy to agree the precise boundary between the acceptance of NMC-02, are proposed to be de-trunked.



	strategic roads and the local roads with HE prior to their finalisation of the de-trunking alterations. It is noted that the De-Trunking Plans Key Plan will need to be amended to accommodate a Sheet 03, but there is no need to show in the legend 'Existing A303 to be de-trunked' because this detail will be shown on the individual drawing sheet. The change from before to after drawings for the Key Plan, removing the dashed line requires some explanation, but the Council raises no issue as to how the tunnel section of the Scheme is presented on a Key Plan.	Highways England thanks the Council for its detailed suggestions on amendments likely to be required to the de-trunking plans; those suggested have been noted, as was confirmed in the Proposed Changes Consultation Report [REP8-015].
	The proposed change to the legend, as shown in the consultation document should be changed, for Sheet 03 only, to read 'Existing A303 to be de-trunked (Area C)' rather than the proposed 'Existing A303 to be de-trunked (Area A to B and C)'. The rationale for this is because A to B will occur only on Sheets 01 and 02, and Area C will only be found on Sheet 03."	
	2.2.3 The Council and HE committed to discussing these issues off-line in order to bring these issues to successful resolution.	
3.4.12	2.3 NMC-03: Declassification of Existing Between Winterbourne Stoke and Berwick Down	Highways England thanks Wiltshire Council for their support for this proposed Non-Material Change.
	2.3.1 The Council confirmed that this change had been at the request of the Council, and as such is fully supportive of it.	
3.4.13	2.4 NMC-04: Provision of Turning Head on Old Stonehenge Road	Highways England thanks Wiltshire Council for their support for this proposed Non-Material Change.
	2.4.1 Wiltshire Council confirmed that this change was put forward in line with Council suggestions and therefore the Council was fully supportive of it.	Non-iviaterial Change.



3.4.14

2.5 NMC-06: Amendment to Public Right of Way (PRoW) to Stonehenge Visitor Centre

- 2.5.1 The Council indicated that it was supportive on NMC-06 and that its preference was for Option B due to safety concerns. It was noted that the Option A route would have to be reduced in width to 1.5m in the vicinity of the dew pond. This restricted width is a cause of concern to the Local Highway Authority in road safety terms. The proposed route is intended to be a cycle track, and to accommodate both pedestrians and cyclists. It is likely that cyclists will be reluctant to dismount to allow any opposing pedestrian movement a right of way in this area, which could result in either being displaced onto the potentially wet verge and possibly the live carriageway of the A360. On this basis alone, Option A is not supported.
- 2.5.2 It was noted that a very detailed response for this proposal would be submitted as part of the Council's consultation response to HE on the proposed changes to the DCO application, which would be submitted shortly.
- 2.5.3 The Council will continue discussions with HE and other stakeholders with regard to this proposed change.

An update on discussions relating to proposed change NMC-06 is included in Highways England's Proposed Changes Consultation Report [REP8-015]. Highways England confirmed in that report that Option B was selected as the preferred option for NMC-06.

Highways England's Proposed Changes Consultation Report [REP8-015] at row 4.8.10 explains that Highways England considers that the interface between pedestrians, cyclists and visitor centre traffic can be safely managed. WC's suggestions will be considered, and WC will be consulted during the detailed design of the area.

Since deadline 8, Highways England has continued to seek landowner consents required for the delivery of NMC-06 Option B (for reasons explained in REP8-015]. As this consent has not been forthcoming, Highways England instead proposes a 'substitute solution' which, whilst relying on a different delivery strategy, could still, subject to the Examining Authority's acceptance and the continuance of collaboration with Wiltshire Council, provide an equivalent shared use cycle track as proposed in NMC-06 Option B.

Full details of the substitute solution and related delivery strategy are set out in Chapter 5 of Highways England's deadline 9 submission entitled Proposed Changes Position Statement (including responses to comments on the Proposed Changes Consultation Report (non-statutory)) and in the interests of brevity, are not repeated here. However, Highways England understands that Wiltshire Council is fully aware of, and supports, the proposed strategy for delivering the substitute solution; and Highways England thanks Wiltshire Council for its support in that regard.

3.4.15

2.6 Trail Riders Fellowship's Amendment 1

2.6.1 The Council indicated that it does not support TRF's amendment 1 as the Council considers that it would increase the usage of all byways from motorised vehicles, which would be of detriment to the OUV of the WHS and non-motorised users. The Council also confirmed that it does not support the alternative proposals within amendment 1 as it would be difficult to control oversized vehicles.

As noted in Highways England's post hearing submissions [REP8-017], the design of the Byway 11/restricted byway on the A303 area will be able to be considered with Wiltshire Council as part of SDCG and their role as adopting authority.



2.6.2 The Council also requested clarity on how the proposal to restrict the width of the proposed byway would be managed, regardless of the status of what the proposed byway would be. The Council considers this to be a point of clarification as it found it difficult to visualise what the proposal would look like on the ground and how it would be managed.

2.7 Trail Riders Fellowship's Amendment 2

2.7.1 The Council confirmed that it had no comment to make to add to the discussion with relation to this proposed amendment.

2.8 Trail Riders Fellowship's Amendment 3

2.8.1 The Council confirmed that it was opposed to amendment 3, as it considered that if the door was opened to allow usage by low capacity motorcycles, others would be encouraged to use the route and enforcement would be very difficult in practice given the nature of the route. The Council also indicated that its concerns regarding safe access remain; these are as detailed in the Council's previous submissions and not repeated.

2.9 Trail Riders Fellowship's Amendment 4

- 2.9.1 The Council indicated that in addition to the effects of the proposal on OUV, the Council was concerned that if a full length strip of up to 8ft wide was left for use by motorcycles along the whole length of the former A303 which is currently proposed to be a restricted byway, this would narrow the width available for other users. This route is proposed to be shared with agricultural vehicles so the Council considers that these issues need to be taken into account.
- 2.9.2 The Council confirmed that it does have concerns on the effect of Byway 11 being becoming a cul-de-sac. The Council believes that some users will use this as a car park to access the rest of the rights of way network by other means i.e. on foot or to enable



	them to transport bikes to this area so that they can cycle from Byway 11. Additionally, the Council feels there is the potential to attract people to camp here, which could restrict the width available for car users to turn around. The Council considers that further discussion is required as to whether an engineered turning circle is required.	
3.4.16	2.11 Evidence of Benefits / Need for the Highways England's Proposed Restricted Byway Along the Route of the A303 from Longbarrow to Stonehenge Road	Highways England notes these comments and thanks WC for their support in relation to this proposal.
	2.11.1 1:26:50 The Council indicated that the only present opportunity for non-motorised users to travel west to east and viceversa through the centre of the WHS was to use the motorised traffic restricted C506 from the Stonehenge Visitor Centre to the junction with byway open to all traffic AMES 12, then to use the permissive path between AMES 12 and the existing A303 at Stonehenge Bottom, or alternatively to use the existing A303 itself. The Council considers both options to have disadvantages. The first route does not provide a public right of way over its whole length, as it involves the use of a permissive path, it is also shared with the shuttle buses and service vehicles between the Visitor Centre and AMES 12. The existing A303 itself is not considered to be a safe route for non-motorised users and is little used for that reason. Therefore, the proposed route has significant benefits in providing that east / west linkage.	
	2.11.2 The Council also considers that the provision of this new restricted byway would also meet Wiltshire Council's responsibility within its statutorily required Rights of Way Improvement Plan to consider the present and likely future needs of the public, including those with physical mobility impairments.	



2.11.3 For these reasons, the Council supports this proposal and considers that it does carry benefits.

The Applicant's Written Oral Submissions for ISH10 [REP8-018] have responded to Wiltshire Councils comments received at deadline 8. An additional point raised in Wiltshire Council's Oral Submission for ISH10 is detailed below.

3.4.17

3.1 Drainage Design and Climate Change Allowances

- 3.1.1 The Council confirmed that the climate change allowances had now been agreed between HE, the Environment Agency and Wiltshire Council.
- 3.1.2 With regard to the Council's additional wording to MW-WAT14, the Council confirmed that it still considers that this additional wording is required as it specifies overarching design principles relating to return periods and climate change allowances for detailed design, that are not explicitly stated elsewhere in the Environmental Statement. These would be in-line with national standards.
- 3.1.3 The Council considers that this item links with agenda item 4.2 ii of Issue Specific Hearing 11, which deals with the provision of a specific design parameters document, which would be secured by an additional requirement and approved by the Secretary of State. The type of additional wording that the Council is proposing for this additional commitment in the OEMP, could fit well into such a document, if it were deemed to be required.
- 3.1.4 The Council indicated that this could either be secured by amendments to MW-WAT14 in the OEMP or in a specific design parameters document, if prepared. The Council agreed that ultimately it was not in the Council's gift to demand changes to the documents and were not in a position to force HE to incorporate them but the Council believes that this wording is required to be specified and secured somewhere either within the Order or within

Please see Highways England's response to agenda item 3.1 ii in its Written Summary of Oral Submissions report [REP8-018] which in summary explains that Requirement 10 of the DCO establishes a process for the detailed design of the drainage to be approved by the Secretary of State in consultation with the Environment Agency and Wiltshire Council, and for this to be based on the mitigation measures in the ES, which includes the Road Drainage Strategy [REP2-009]; a document which in any event reflects what is requested by Wiltshire Council.



the tiers of documents beneath it. The Council considered that as the ExA rightly pointed out HE could not be forced to include these revisions, it may give further weight to why the preparation of a specific design parameters document was necessary.

- 3.1.5 The Council originally requested that this was included as an additional Requirement but as part of the development of the draft DCO it was decided that this could be captured within a lower-tier document, the OEMP. If it reverted to being included within the draft DCO, this would go back to the Council's original proposal.
- 3.1.6 The Council agreed with HE's statement that there was detail within the Flood Risk Assessment and the Road Drainage Strategy documents, but there isn't a document that states the overarching principles applied in the design development. The Council considers that this would be a very useful reference document to have for detailed design as it would be a single source of reference for the design approach. This approach has been used in other DCO's for example in the Sparkford to Ilchester DCO those types of design requirements are within DCO documents. The Council is not proposing that this must be in the draft DCO, the Council would be satisfied if it were to be within the OEMP.

3.4.18

3.2 Road Drainage Strategy

- 3.2.1 The Council indicated in relation to agenda item 3.2 i a and b, the Council is content and was happy to defer to the Environment Agency as to the reasons why.
- 3.2.2 The Council indicated that it broadly had nothing to add to what the Environment Agency had already said with regard to 3.2 i b, but considered that there was a link to the discussion on 3.2 i a in relation to the concern on additional requirements and whether it needed to be made clear that the design may need to go beyond those standards already stipulated or not. The Council considers that
- 3.22 Highways England would refer to its response to agenda item 3.2i in its Written Summary of Oral Submission [REP8-018] which explains that it is the Applicant's view that these are all matters of detailed design that will be able to be resolved through the Requirement 10 process. The important point is that the Secretary of State will be determining if the design is appropriate for this Scheme, taking account of the local environmental considerations if this requires more than HD45 provides, then so be it. No statement is therefore required on the face of the DCO, OEMP, or Road Drainage Strategy.
- 3.2.3 Please see Highways England's response to agenda item 3.2ii [REP8-018] which explains that flexibility is needed for detailed design, noting that even manual operation is done remotely. Ms Hunt explained that if the valve was to operate automatically it would work on a variety of different



there is a difference between something being a material consideration and a binding requirement. There should be something that will draw to the contractor's attention that they are not simply bound by the standards contained within the DMRB, or other appropriate standards, and that they may need to go beyond that.

The Council gueried to what extent HE had recognised that what is needed may go beyond the strict standards and whether there was a way to recognise those aspects already captured within the Statements of Common Ground, so that parties did not need to reinvent the wheel when it comes to applying these standards and search back through every document submitted during the course of the Examination. The Council considered this more to be a point of clarity as it felt that all parties wanted to make sure that this was adequate in terms of the management of pollution; it was a matter of how this was recorded as everybody at present seemed to recognise that it may be necessary to go above and beyond what's in the DMRB for example. The Council did not feel that it was necessary to state exactly what was required, instead the recognition should be captured that it may need to go beyond the specified standards. This would assist in alerting the minds of those making the application detail.

3.2.3 With regard to agenda item 3.2 ii, the Council confirmed that it was still its position that controls should be automated. The Council considers automated control to be the most robust form of control, which would limit the response time if a spill incident were to occur. It is also a standard form of control for this type of installation. The Council has had discussions with HE and the Environment Agency, and is in agreement with the Environment Agency when requesting automated controls as it does not rely on human intervention, it can be programmed and it also relates to the previously discussed issue on HD45 regarding the amount of spill volume to be accommodated within the tunnel drainage. The Council considers that there could be

inputs – some of which are complex. The valve would interpret signals from a number of different triggers, including some complex, interpreted data so there is potential that automatic activation from these interpreted signals could be less robust than manual controls, leading to increased activation of the valve, increasing the maintenance burden on the impounding sump. The detailed designer will need the flexibility to optimise the inputs to be sure that they would neither overload the valve nor be less robust than necessary, and as such there should not be a specific direction within the application documentation. Please see further discussion on this point in the Applicant's response to Written Question Fg.2.14 [REP6-028].



less volume of storage provided if the response time was potentially shorter.

- 3.2.4 The Council stated that at the moment there was not a DMRB standard for the control of tunnel drainage, so there is not a fall-back position on standards to refer to. This is why the Council considers that this design parameter should be fixed at this stage. It is also one of the design parameters that the Council proposed for inclusion at MW-WAT14 as outlined during the discussion on agenda item 3.1. The Council is trying to pin down those aspects which it considers is essential during this process, and in the Council's opinion it is inconceivable that there would be a manual mechanism which would be adequate. The Council considers that it would be sensible to make this clear from the outset.
- 3.2.5 The Council indicated that it considered this point was covered within its Statement of Common Ground (SoCG) with HE and that the automated operation of tunnel drainage was agreed. The Council believes that this links to the treatment and quality within the treatment areas and indicated that this had been agreed with HE in the SoCG but where HE did not wish to commit to as a design requirement within the Environmental Statement. The Council stated that if it were specified now, the parties would not need to go over it again at detailed design and potentially have abortive work undertaken at that time. There appears to be a mis-match between what is set out within the SoCG and that set out within the DCO documentation.
- 3.2.6 The Council confirmed that it now appeared to be clear that what was within the SoCG wasn't actually agreed. Whilst discussions would continue with HE on this matter, it may be that it remains unresolved and instead becomes an issue for the ExA to consider.



3.4.19

3.4 Flood Risk Assessment

- 3.4.1 The Council indicated that the peer review actions had now been agreed and the Council is largely satisfied in this regard. The outstanding issue is how this is to be reflected within the documentation as the Council considers that there should be one overarching document which details all the findings of the peer review process and believes that the sensible place to do this would be through an updated Flood Risk Assessment. This would incorporate all items which had been agreed throughout this process. The Council indicated that HE were so far resistant to undertaking this and did not agree that this was required.
- 3.4.2 The Council argued that the Flood Risk Assessment formed part of the Environmental Statement which is referenced in Requirement 10 of the draft DCO and that the drainage design needs to be carried out in accordance with the Environmental Statement and all the mitigation therein. Therefore, the Council considers the Flood Risk Assessment to be a key document that would form the foundation of any future design. The Council indicated that the risk of not capturing this information in an accessible place is that it would get lost. That information is currently contained within numerous submissions to the various deadlines throughout the Examination process and could be difficult to find for any future detailed designer. The Council believes that this should be as available and accessible as possible to avoid any abortive work in the future and to be clear from the outset what is expected.
- 3.4.3 The Council confirmed that it considers updating the Flood Risk Assessment was not necessarily absolutely essential as one could trawl through the various documents exchanged between the parties as part of the approvals process. However, HE have repeated indicated during this Examination there is a need to progress this Scheme in a timely manner. This would be in the public interest in

Please see Highways England's response to item 3.4 i in the Written Summary of Oral Submissions report [REP8-018] which explains that the Applicant has committed in its SoCG with Wiltshire Council to take the points which came out of the peer review process into account as part of the Requirement 10 process. All of the commitments required to form part of the OEMP or the Road Drainage Strategy as part of that peer review are incorporated within the final version of those documents. There is therefore no requirement for points of clarification to be included within the FRA given the actual detailed design will be based on those commitments.



terms of cost, but also to deliver the Scheme quickly. The Council considers that part of the process for obtaining approvals and discharges of requirements in a timely manner is minimising the scope for disagreement, and minimising parties starting from fundamentally different positions when approaching this process. The Council's position is that this would be a lot easier if all of the various submissions were drawn together into one document. The Flood Risk Assessment is part of the Environmental Statement and sets out mitigation measures and the Council considers this could be misleading if the requirements and conditions have been overtaken by discussions since its preparation. The Council indicated that this could be undertaken through either a revised Flood Risk Assessment or an addendum to the original document.

- 3.4.4 Wiltshire Council indicated that the mitigation referred to in the Flood Risk Assessment was the design mitigation that is referenced throughout the document. It explains what design mitigation has been applied for detailed design. The Council committed to providing full details of the design mitigation that had arisen from the peer review within its written summary, such as return periods, confirmation of climate change allowances, critical duration runs utilised in hydraulic modelling. This is all additional information that has been incorporated and demonstrates the design mitigation. The Council considers that this would be relevant to any future detailed designer.
- 3.4.5 The Council considers that the design mitigation details it seeks to be included is contained within the peer review actions. The relevant documents have been attached at Appendix A.
- 3.4.6 The Council confirmed that this was possible to be secured through the OEMP as an addendum as opposed to an addendum to the Flood Risk Assessment.



	 3.4.7 The Council indicated that it will continue discussions with HE once the Council has outlined the specific points in writing and will see whether agreement can be reached on how to address this matter. 3.4.8 With regard to agenda item 3.4 ii, the Council confirmed that since it had now agreed the peer review actions it was satisfied that the NPS NN meets the required policies and demonstrates that flood risk will not be increased elsewhere as a result of the Scheme. 	
3.4.20	3.5.1 The Council indicated that there was a productive discussion taking place with HE in relation to the inclusion of this within the Side Agreement. The discussions are focusing on the precise wording and the extent of the provision, but at present the Council is content that this is being dealt with off-line. 3.5.2 The Council considers that the devil is in the detail but believes that the main hurdle has been overcome i.e. the principle of whether it is appropriate to provide some form of compensation. Discussions are ongoing as to the extent of this provision, but it is considered that agreement can be reached. 3.5.3 The Council recognised that time remaining within the Examination is quite short, and committed to updating the ExA as soon as possible with regard to this issue.	See Highways England's response to item 3.5 of its Written Summary of Oral Submissions report [REP8-018] which confirms that the Applicant accepts the principle that it should pay the costs of Wiltshire Council in respect of their approvals pursuant to the DCO, but it must be limited to that, rather than the costs of the Council's wider statutory duties. This principle is reflected in paragraph 24 of the Protective Provisions and is also reflected in the Side Agreement between the parties which has been finalised.
3.4.21	3.6 Contamination (Including Groundwater Contamination) 3.6.1 The Council indicated that it was broadly satisfied that there were adequate controls in this regard through Requirement 7 in the draft DCO and PW-GEO1, PW-GEO2, MW-GE06, MW-GEO7, MW-GEO8, MW-WAT6 and MW-WAT7 in the OEMP.	3.6.1. Comments noted 3.6.2 Comments noted. 3.6.3. See Highways England's response to item 3.5 of its Written Summary of Oral Submissions report [REP8-018] which explains why the results of these surveys would not be able to be considered as part of the Examination.

3.4.22



3.6.2 The Council confirmed that it was broadly supportive of the Environment Agency's comments in relation to a pre-commencement Requirement in addition and separate to Requirement 7. The Council considers that this is consistent with the general principles of land contamination investigation required for day-to-day planning applications received through the Council's Development Control Services. 3.6.3 The Council noted that HE have been undertaking "Phase 7"	3.6.4. Item MW-GEO8 was amended at deadline 8 to provide clarity on when Wiltshire Council and the EA will be consulted, including in relation to land contamination reports.
land contamination investigations. However, neither the Environment Agency nor Wiltshire Council have seen these reports and the Council indicated that it is keen to review them. The Council queried the status of these reports within the Scheme and associated DCO application.	
3.6.4 With regard to the ExA's query on the adequacy of the OEMP in securing this pre- commencement survey work i.e. revisions to MW-GEO8, the Council can confirm following review subsequent to the hearing that it welcomes this amendment. However, the Council considers that this clause needs to be explicit that both Wiltshire Council and the Environment Agency are provided with the land contamination reports. This is because both agencies have duties and responsibilities under the contaminated land regime contained in the Environmental Protection Act 1990 Part 2(A) and HE will need to ensure they discharge their liabilities and duties.	
 3.7.1 The Council indicated that it did not wish to comment on agenda item 5. i. 3.7.2 With regard to agenda items 5 ii and iii, the Council indicated that it welcomed the changes to MW-COM6. The Council has previously indicated that it would like to see this extended to 	Highways England notes these comments. As stated at the hearing [REP8-18], it is considered that given the scale and nature of the preliminary works, the provisions of PW-WAT1 to PW-WAT3 are sufficient to mitigate the risk to private water supplies.

preliminary works and asked for clarification from HE as to whether



	there would be any threat to private water supplies from the preliminary works. 3.7.3 The Council welcomed clarification from HE that that there	
	would be no impact from the preliminary works and clarified that there were now no residual concerns. The Council also indicated that it was grateful to HE for their commitment to amend the way in which the Council was referred to in order to include its wider functions within the scope of consultation.	
3.4.23	3.8.1 The Council indicated that it did not feel that there was disagreement between HE and Wiltshire Council on this matter. In the past the Council raised concerns before the commitment was made in D-CH32 to use the closed-face tunnelling technique, but this concern mainly was in relation to the two main bores. Since that commitment has been made, the Council has been broadly satisfied, particularly when coupled with the provisions contained in MW-WAT8 to minimise dewatering and obtain the necessary approvals for the discharge of pumped water. 3.8.2 The Council indicated that it had never specified its expectations in relation to the cross- passages, but confirmed that the Council hadn't previously expected that these were to be undertaken using a closed-face tunnelling technique. The Council indicated that upon initial review the presentation slides shown by HE, the technique appeared reasonable and if used, the Council	Highways England notes these comments and notes that item D-CH32 of the OEMP was updated at deadline 9 to provide further clarity on the matter.
	considered the risks in terms of dewatering to be manageable. The Council queried what would happen if another technique was used and suggested that further conversations should take place with HE and the Environment Agency in order to specify the technique to be used. However, the Council's current position was that it would not	



	insist that a closed-face tunnelling technique must be used for the cross-passages.	
3.4.24 3.9 Requirements and OEMP 3.9.1 The Council indicated that it had previously made a number of detail and in some cases minor, but important, points relating to changes sought to the OEMP. Some of those have been taken on board but others haven't and the Council wasn't entirely sure why some of the amendments hadn't been made. The changes requested	3.9.2 – See Highways England's response to item 7 i of its Written Summary of Oral Submissions report [REP8-018] which explains that the Applicant does not consider that this is necessary as it would create an overly bureaucratic approach to matters that may require only minor changes - in the midst of a construction scheme, the contractor will need to be able to effectively deal with minor issues, rather than waiting for stakeholders to agree that they are indeed minor.	
	were as follows. 3.9.2 The latest draft of MW-G7 now includes consultation with	3.9.3 – Highways England can confirm that the proposed amendment to MW-WAT5 has been included within the OEMP submitted at deadline 9.
	Wiltshire Council as requested but it states that consultation will only take place on material updates. The Council queried why the consultation was limited to material changes, as the Council	See Highways England's response to item 7 i of its Written Summary of Oral Submissions report [REP8-018] "Wiltshire Council and the Environment Agency" has been changed in the OEMP submitted at deadline 8.
	considers that it should be consulted on all changes and it was for the Council to determine whether they were material or not.	3.9.4 – Highways England can confirm that this amendment was made to point c) of item MW-WAT10 of the OEMP submitted at deadline 8 [REP8-006].
	3.9.3 In MW-WAT3 states that sufficient time will be made for the Environment Agency to issue permits in accordance with relevant legislation. The Council considers that the following text should be added, "and for applications pursuant to Wiltshire Council's protective provisions in the DCO". This is because surface water management	3.9.5 – Highways England can confirm that references to consultation with Wiltshire Council in its role as Lead Local Flood Authority have been removed from the OEMP submitted at deadline 9 (apart from on reference within item MW-COM6 where this role is relevant).
	is the Council's remit. Additionally, within MW-WAT3, it states that water flows from sites will be limited during construction to existing run-off rates unless otherwise agreed with Wiltshire Council or the	3.9.6 – See Highways England's response to item 7 i of its Written Summary of Oral Submissions report [REP8-018] which confirms that this change has been made to the deadline 8 OEMP.
	Environment Agency. The Council considers this should be "and the Environment Agency". The Council indicated that whilst this was a minor point, it had a different meaning altogether. The Council is responsible for surface water flood risk management and the	3.9.7 – See Highways England's response to item 7 i of its Written Summary of oral submissions report [REP8-018] which confirms that a change has been made at MW-WAT15 at deadline 8 to facilitate the sharing of monitoring data.
	Environment Agency cannot speak on the Council's behalf.	3.9.8 – See Highways England's response to item 7 i of its Written Summary of Oral Submissions report [REP8-018] which explains that the first suggested change by the Council is not agreed. This is because it may be



- 3.9.4 With regard to MW-WAT10, whilst recognised this was a minor point, it states that the groundwater level and water quality monitoring and reporting programme. The Council considers that the word "telemetry" should be included after "monitoring" for completeness and to reflect the discussions on telemetry to date.
- 3.9.5 The Council indicated that it was unclear whether this point had been covered at the hearings last week; it relates again to the scope of the consultation and the limitation to certain Council functions. The Council considers that it shouldn't be limited to the Council in its role as Local Lead Flood Authority as it should extend to other Council functions i.e. public health. The Council wishes for the scope of consultation to be broadened to include other Council functions.
- 3.9.6 On MW-WAT12, it states pursuant to the Environment Agency's protective provisions in the DCO. The Council considers that "pursuant to Wiltshire Council's protective provisions in the DCO" should be added here. This would reflect the Council's flood risk management functions.
- 3.9.7 On MW-WAT13, the Council indicated that this point would affect the Environment Agency as well. The Council is seeking an addition to this with the following wording, "following the post construction ground monitoring, Highways England will provide data collected and allow the Environment Agency or Wiltshire Council to adopt the boreholes to inform the groundwater flood warning service. Once further modelling work is completed by Highways England at detailed design stage, meeting the standards for flood map updates, the Environment Agency and Wiltshire Council can utilise this modelling work to update the fluvial, pluvial and groundwater flood map". This is a requirement around warning and informing and was originally suggested as a requirement in the DCO but has now been suggested for inclusion in the OEMP. The Council indicated this this

that the activity on the land parcel will not affect the soil, and so an arbitrary provision that all activities must be subject to a Soils Handling Strategy is not appropriate. The 'determined on a case by case basis' refers to the details of the method statements, not whether one is required or not. As stated within 3.1.1, 'the Contractor shall prepare a Soil Handling Strategy for each land parcel where there is the potential for the disturbance of soil resources'. This therefore incorporates any activity associated with the authorised development which has the potential to disturb soil and, as such, no amendment is required. Highways England understands that with the change discussed at 3.9.9 below, it is the case that the strategy will apply where it is relevant for it to do so.

- 3.9.9 See Highways England's response to item 7 i of its Written Summary of Oral Submissions report [REP8-018] which explains that at the hearing Mr Turney acknowledged the Council's concern that paragraph 3.1.2 of the SMS should not be a closed list. A change has been made to the SMS at deadline 8 to resolve this issue.
- 3.9.9 See Highways England's response to item 7 i of its Written Summary of Oral Submissions report [REP8-018] which explains that at the hearing Mr Turney acknowledged the Council's concern that paragraph 3.1.2 of the SMS should not be a closed list. A change has been made to the SMS at deadline 8 to resolve this issue.
- 3.9.10 Comment noted.



additional wording was sought as warning and informing was not currently captured within the commitment as it stands.

- 3.9.8 Finally, the Council is seeking a couple of changes on Annex A.3, which the Outline Soil Management Strategy. In 2.1.3, the soil resource plan should identify the drainage characteristics (permeability, conveyance etc.) of each soil horizon. 3.1.2 should include "for the avoidance of doubt, any activity associated with implementing the authorised development" to capture all activities. In 3.1.3, the soil handling strategy must also be informed by "the drainage characteristics of the soil both above and below ground". In 3.1.4, the detailed method statements should also identify the methods to be used to maintain the existing drainage characteristics of each land parcel (infiltration, conveyance etc.) and manage the risk of compaction that may affect the drainage characteristics. Finally, in 3.1.9, it should also emphasize the scheme wide principle that water flows from the site will be limited during construction to existing runoff rates, unless otherwise agreed with Wiltshire Council and the Environment Agency in accordance with relevant legislation. This would align with PW-WAT3 and MW-WAT3 within the OEMP.
- 3.9.9 The Council indicated that it was very grateful for the indication from HE that the majority of its requested changes would be taken on board and reflected in a revised OEMP. Once published, the Council will review to confirm that they are content with the changes made. In relation to Annex A.3, 3.1.2, the Council can understand why HE haven't agreed the Council's requested inclusion following what was said at the Hearing as the proposed amendment may be too broad. The Council is concerned that as drafted, 3.1.2 is a closed list, and there is potential for activities that can affect the soil which are not necessarily covered by the current list. The Council was looking for a catch-all to cover those activities which would not be included within the individual categories. The Council will reflect on this off-line with HE to see whether there is alternative drafting, for



example by reference to excavation or compaction activity (including construction traffic), that could be agreed to address this point.

3.9.10 The Council confirmed that it was still seeking the additional Flood Risk Assessment requirement and had provided proposed wording in the past. The Council considered this would be covered in more detail at the DCO hearing.

The Applicant's Written Oral Submissions for ISH11 [REP8-019] have responded to Wiltshire Councils comments received at deadline 8. An additional point raised in Wiltshire Council's oral submission for ISH11 is detailed below.

3.4.25

4.1 Article 2 – Interpretation

- 4.1.1 The ExA indicated that they wished to consider the latest amendments to Article 2, specifically the addition of a "Cycleway" definition and additions to the definition of "maintain". With regard to the definition of "Cycleway", Wiltshire Council indicated that there had been concern that "Cycle track" was understood in highways legislation, but now understood having reviewed the proposed definition, that "cycleway" was not intended to have the same meaning as "cycle track" due to the inclusion of equestrian rights. The Council needs to satisfy itself that the correct wording is used at the right time as there are numerous references throughout the documentation to "cycle track", "cycleway" and "cyclepath". The Council considers this to be a terminology issue and not a matter of principle.
- 4.1.2 The Council confirmed that it was content with the revised definition of "maintain".
- 4.1.3 With respect to the definition of "commence", the Council acknowledged that certain aspects/ activities should not be included within the definition of "commence" as they would not cause undue concern i.e. bringing materials onto site and the storage of those materials. However, the Council considers that the erection of

- 4.1.1 Please see the Applicant's additional submission 'Shared Use Cycle Route Clarification Note' [AS-107] which sets out how the Applicant intends to clarify how non-motorised user provision within highway boundaries is described in the application documentation.
- 4.1.2 The Applicant notes and welcomes the Council's support.
- 4.1.1 Please see the Applicant's additional submission 'Shared Use Cycle Route Clarification Note' [AS-107] which sets out how the Applicant intends to clarify how non-motorised user provision within highway boundaries is described in the application documentation.
- 4.1.2 The Applicant notes and welcomes the Council's support.
- 4.1.3 The Applicant has made amendments to revision 7 of the draft DCO to address the Council's concerns. Please see the Applicant's deadline 9 submission 'Explanation of Changes to Revision 7 of the DCO and Response to the Examining Authority's Draft DCO' for further details.



	construction plant and equipment should be as it would constitute development and should be subject to appropriate controls. The Council believes that the definition of "preliminary works" should include the erection of plant and equipment on site.	
3.4.26	 4.2 Article 3 – Disapplication of Legislative Provisions 4.2.1 The Council confirmed that protective provisions had now been agreed with HE. It was acknowledged that the ExA had not yet had sight of the agreed version, however it is understood that these will be incorporated into the latest version of the dDCO to be submitted at Deadline 8. Subject to the inclusion of the agreed protective provisions into the dDCO, the Council confirmed that they would now be satisfied. 	The Applicant welcomes the Council's confirmation that it is has consented to the disapplications in article 3 for which it is the consenting authority. The agreed protective provisions were included in revision 6 of the DCO [REP8-005].
3.4.27	4.3 Article 7 – Limits of Deviation 4.3.1 The Council indicated that they were broadly content. At Issue Specific Hearing 10 on 29th August, the Council referenced changes it was seeking to MW-WAT10 to capture the telemetry requirement within point c. It is understood that HE indicated that this would be taken on board and reflected in the next iteration of the OEMP. Subject to these amendments, the Council would be content.	The Applicant has made the requested change to MW-WAT10.
3.4.28	 4.4 Article 13 – Discharge of Water 4.4.1 The Council confirmed that it was no longer seeking the amendments to sub-paragraph (5) as outlined within its Deadline 7 response [REP7-043]. 4.4.2 The Council was, however, still seeking amendments to subparagraph (6) to ensure that nothing in this clause overrides Wiltshire Council's protective provisions, specifically the requirement for applications to be granted by the Council. 	The Applicant agrees that there is no point in principle in dispute. As noted, the Order needs to be read as a whole and there is nothing in article 13 that suggests it would override the protective provisions. As was discussed at the second DCO ISH (see agenda item 3.4(iii) of [REP8-019]), the Applicant is concerned that the introduction of additional wording would create ambiguity where previously there was none. The reason for the reference in article 13(6) to the Environmental Permitting Regulations, is firstly because it mirrors the equivalent provision in the Highways Act 1980 and secondly, the Environmental Permitting Regulations do not form part of the Order and so



	The Council noted HE's response and acknowledged that as a point of principle, it was not the intention for this clause to override or disapply the protective provisions. Therefore, the Council understood the need to read the Order as a whole. However, there is specific provision within the clause for Regulation 12, therefore the Council considered that the protective provisions could equally be stated for clarity. The Council considers that this is a matter for the ExA as to whether the current drafting is sufficiently clear for Order to be read as a whole, but for the avoidance of doubt, the Council would prefer to the amendments sought are included. The Council considers this to be a drafting issue and not a principle disagreement between Wiltshire Council and HE.	there is a need a to clarify the interaction, whereas the Order, when read as a whole, is clear that the protective provisions apply.
3.4.29	 4.5 Article 22 – Compulsory Acquisition of Rights 4.5.1 As indicated by the Council at Issue Specific Hearing 8 on Cultural Heritage, this matter has now been moved to "agreed" in Wiltshire Council's Statement of Common Ground with HE. This was based on the Council's review of supplementary documentation provided by HE, which provided greater clarity and comfort. However, it remains unclear where this additional information has been captured within the dDCO suite of documentation, which the Council considers is necessary. The Council indicated that this was another drafting matter and not a matter of principle. 	The Applicant notes that the DAMS has been updated to reflect the existence of the protections for the tunnel and to require certain steps to be taken to publicise their existence.
3.4.30	 4.6 Requirement 1(1) – Interpretation 4.6.1 The Council confirmed that its concerns in relation to the approval of the CEMPs and definitions have largely been overtaken by recent drafting amendments and acknowledged that there is now greater clarity with regard to the definitions. However, the Council considers that further clarity is required with regard to hierarchy. The 	 4.6.1 – The draft Order was amended at deadline 8 to make clear that the HEMP followed on from the CEMP. The final sub-paragraph of Requirement 4 has now also been amended to remove any potential confusion on this front. 4.6.2 – Please see the Applicant's response above.



	Council understands that the HEMP would be in accordance with the CEMP which would be based on the OEMP, however the current drafting suggests that the HEMP is in accordance with the OEMP. The Council considers that this sequencing issue should be addressed, but subject to that, the Council confirmed that is was broadly satisfied. 4.6.2 Please see the Council's view on the definition of "preliminary works" stated in paragraph above.	
3.4.31	4.7 Requirement 3(1) and (2) – Preparation of Detailed	4.7.1 & 4.7.2 – This change was made in revision 6 of the DCO [REP8-005].
	Design etc. 4.7.1 The Council confirmed that it was still its position that Requirement 3 should require the detailed design to be carried out	4.7.3 – The Applicant welcomes the Council's confirmation that an additional design parameters document is no essential and that the approach to design parameters in the OEMP is an appropriate means of addressing the matter.
	so that it is "in accordance with" rather than "compatible with" the listed plans. The Council considers that "in accordance with" or "in	4.7.4 – Please see response to paragraph 3.2.16 above - this wording has not been included in the DCO.
	strict accordance with" is well recognised and should be used. It is not clear what "compatible with" means and the Council considers	4.7.5 – Please see the Applicant's written summary of the DCO ISH [REP8-019] under agenda item 4.2.
	this to be too wide and uncertain. The Council further confirmed that it was not the intention to preclude the use of the Limits of Deviation, and the wording previously proposed would allow for this. The	4.7.6 – The Applicant agrees, this position is reflected in requirement 3, and welcomes the Council's support.
	Council indicated that it was willing to discuss further with HE if	4.7.1 & 4.7.2 – This change was made in revision 6 of the DCO [REP8-005].
	required, to agree an acceptable form of wording.	4.7.3 – The Applicant welcomes the Council's confirmation that an additional design parameters document is no essential and that the approach to design
	4.7.2 The Council welcomed HE's commitment to amend the wording in the next iteration of the dDCO.	parameters in the OEMP is an appropriate means of addressing the matter.
	4.7.3 With regard to a separate design parameters document, the	4.7.4 – Please see response toparagraph 3.2.16 above - this wording has not been included in the DCO.
	Council clarified that whilst it had previously indicated that it could see benefit in the production of this document, it was not essential. The OEMP has recently been significantly amended, and whilst	4.7.5 – Please see the Applicant's written summary of the DCO ISH [REP8-019] under agenda item 4.2.
	further amendments are required following discussions between the Council, other heritage partners and HE, the Council considers that provided the OEMP contains all of the necessary detail, it would be	4.7.6 – The Applicant agrees, this position is reflected in requirement 3, and welcomes the Council's support.



happy for it to be covered in this way. The Council recognised that the clock was ticking and that time remaining in the Examination was short, and endeavoured to do what it could to conclude discussions as soon as reasonably practicable.

- 4.7.4 The Council also reminded the ExA of the discussion at Issue Specific Hearing 10 on 29th August, specifically with regard to the need to modify MW-WAT14 to include minimum drainage design standards.
- 4.7.5 With respect to the illustrative design and the wording associated with that, the Council confirmed that it endorsed those comments made by Historic England and the National Trust in this regard and had nothing further to add.
- 4.7.6 The Council does not consider it necessary for the Secretary of State (SoS) to approve the detailed design, unless it is significantly outside of that provided for within the OEMP. This is because the OEMP is a certified document and approved by the SoS, furthermore the detailed design would be detailed within the CEMP which is also approved by the SoS. If the detailed design was not in compliance with the OEMP, the CEMP would not be approved without further action. The Council considers that this mechanism as set out above, is sufficient and ensures checks are in place to adequately control the preparation of the detailed design.
- 4.7.7 With regard to the timescales for consultation, the Council agreed that further amendments were required to include a verification mechanism for those documents that will be subject to Wiltshire Council approval. It welcomed HE's indication that further amendments would be put forward in the next iteration. Furthermore, whilst not specifically referenced at the Hearing, the Council wishes to remind the ExA of its concerns regarding the wider timescales for consultation as set out at the Issue Specific Hearing 8 on

4.7.7 – The Applicant has made the further changes in the DAMS submitted at deadline 9 and understands that Wiltshire Council is content with the amendments.



	Cultural Heritage. Please see paragraphs 1.6.2 to 1.6.3 above for further detail.	
3.4.32	4.8 Requirement 4 – Outline Environmental Management Plan 4.8.1 The Council welcomed the significant amendments and particularly the Secretary of State approval of the CEMP and associated management plans. The Council indicated that some fine tuning of points still of concern is required. Firstly, there appears to be two plans within the OEMP which are not specifically referenced within sub paragraph 11, being the Tunnel Ventilation Strategy and the Invasive Non-Native Species Management Plan. The Council requires clarity on what the approval arrangements for these two plans are and queries why for completeness and consistency they are also not included within sub paragraph 11. 4.8.2 The second area of concern is in relation to the HEMP. The Council acknowledges and understands HE's rationale that as the HEMP has to be in accordance with the CEMP, and therefore in accordance with the OEMP, it does not need to be approved by the SoS and could be retained by HE for approval. Whilst the Council is not emphatically opposed to the HEMP being dealt with in this way, further comfort is sought with regard to ongoing obligations for maintenance for those assets which would become the responsibility of the Council. It may be possible to address and alleviate the Council's concerns through the Side Agreement and discussions are continuing in an attempt to find a resolution. If the Council's concerns cannot be satisfactorily addressed in this manner, the Council would revert to its previous position whereby HE should not be the	4.8.1 – The Invasive Non-Native Species Management Plan was not included in revision 5 of the draft DCO [AS-096] as the corresponding OEMP obligation states that such a plan is only necessary should such species be present in a works area. It follows that such a plan would not be required in all circumstances (if at all). Reflecting on the Council's comments, the Applicant amended requirement 4 to include reference to the Invasive Non-Native Species Management Plan "if required", in revision 6 of the DCO [REP8-005]. In relation to the Tunnel Ventilation Strategy it is the intention for this to be retained for the Applicant's approval, and the Applicant welcomes the Council's confirmation that it is content with this approach. 4.8.2 - Highways England notes this comment and also notes. that in respect of the HEMP generally, amendment to the HEMP approvals has been made to allow Wiltshire Council approval of the stage HEMPs and relevant sections of the consolidated HEMP (refer to the deadline 8 OEMP [REP8-006]), as follows: 'Wiltshire Council approval of phase HEMPs and the relevant sections of the consolidated HEMP for those areas that are to be maintained by Wiltshire Council.' 4.8.3 – noted, this is the position in the draft DCO. 4.8.5 – noted, the Applicant has made the requested changes in relation to the HEMP(s) and understands that the Council is content not to pursue the additional requirement. 4.8.6 – noted, the Applicant agrees. 4.8.7 – the Applicant made the requested changes in the version of the OEMP submitted at deadline 8 [REP8-006] and understands that the Council
	approving body of the HEMP, and that it should be the SoS. 4.8.3 The Council confirmed that it was content for the SoS to approve the DAMS, with the exception of the Heritage Management Plan, archaeological Method Statements and Site	is content to withdraw its request for an additional requirement.



Specific Written Schemes of Investigation which would be approved by Wiltshire Council. The Council indicated that whilst in its opinion it would be logical for the Council to approve the DAMS, given that it was a certified document, the Council accepted approval by the SoS.

- 4.8.4 The Council indicated that it had nothing further to add on point agenda item 4.3 iv that had not been said either earlier today or at the hearings held during week commencing 19th August 2019.
- 4.8.5 In response to a specific question from the ExA, the Council confirmed that it would withdraw its request for an additional Requirement related to the CEMP, provided that it's concerns regarding the HEMP were satisfactorily addressed.
- 4.8.6 In respect of agenda item 4.3 vi, the Council confirmed that whilst the design principles and commitments and consultation mechanisms within the OEMP were still being discussed, it was confident that the detailed design for the public rights of way could be dealt with in this way rather than by way of a further specific Requirement. Whilst not specifically referenced at the hearing, the ExA should also be aware that further comfort for the Council in this regard is also provided through the Side Agreement, which is currently being negotiated / finalised.
- 4.8.7 With regard to agenda item 4.3 viii, the Council confirmed that whilst it did not have a vested interest in the lighting at the tunnel portals, it does need to be satisfied that the portal lighting was acceptable. The Council indicated in its Deadline 7 submission [REP7-043] that it would no longer seek an additional Requirement with respect to Highway Lighting provided its suggested amendments to the OEMP were incorporated. Whilst the Council was previously under the impression that HE required minor amendments to the proposed wording, following confirmation from HE at the hearing that the proposed wording was acceptable, the Council confirmed that subject to its inclusion with the next iteration



	of the OEMP, the Council would no longer seek an additional Requirement related to lighting.	
3.4.33	4.9 Requirement 5 – Archaeology4.9.1 The Council confirmed that the current wording was acceptable	The Applicant welcomes the Council's confirmation.
	and that no extra provisions were required.	
3.4.34	4.10 Requirement 8 – Landscaping 4.10.1 The Council confirmed that it was still of the view that reference should be made to 'normal' fences and walls within Requirement 8(3)(b). This is a sensitive area and the Council considers that there are potential implications for all walls and fences and therefore it should not be limited to noise fences and walls only.	The Applicant removed the reference to "noise" in relation to fences and walls in revision 6 of the DCO [REP8-005].
	4.10.2 The Council considers that this would be an appropriate place to deal with walls and fences, as it appears to exclude other types of fences and walls as currently drafted. This would normally be dealt with under a landscaping condition, therefore the Council considers that it would be appropriate to incorporate it here.	
	4.10.3 In response to a specific question from the ExA, the Council confirmed that as per its Deadline 7 response [REP7-043] the Council had withdrawn its request for its previously sought amendments to this Requirement.	
3.4.35	4.11 Requirement 10 – Drainage 4.11.1 Parties reminded the ExA of amendments to this Requirement sought at Issue Specific Hearing 10 held on 29th August. The Council welcomed HE's commitment to amend this Requirement in the next iteration to include "flood risk" and to simplify the reference to Wiltshire Council so that it would now state "planning authority" rather than limit its involvement to specific functions.	The changes requested to requirement 10 were made in revision 6 of the DCO [REP8-005].



3.4.36	 4.12 Requirement 11 – Details of Consultation 4.12.1 The Council confirmed that the drafting of the Requirement was acceptable. 	The Applicant notes and welcomes the Council's confirmation.
3.4.37	4.13 Whether any Additional Requirements are Necessary 4.13.1 The Council confirmed that following earlier agreement by HE to incorporate the Council's proposed changes to the OEMP to address its concerns regarding Traffic Management during Tunnel Closures and Highway Lighting (please see paragraph 4.8.7 above), it would no longer seek these additional Requirements.	 4.13.1 As noted above, the changes requested to the OEMP have been at is understood that the Council is no longer pursuing an additional requirement. 4.13.2 The Applicant's position remains that it considers an additional requirement for traffic monitoring to be unnecessary and unjustified. Notwithstanding that position, the issue of monitoring is addressed in the side agreement being negotiated between the parties, which has now been finalised.
	4.13.2 The Council had also sought an additional Requirement for Traffic Monitoring and Mitigation. Discussions are ongoing with HE which may enable the Council's concerns to be addressed through the Side Agreement rather than as a standalone Requirement. The Council considers these discussions are progressing in a helpful regard and this matter should be capable of resolution in this manner.	 4.13.3 & 4.13.4 As is noted by the Council elsewhere, it is understood that this requirement is no longer requested by the Council, following the amendments made to item MW-WAT12. 4.13.5 and 4.13.6 – noted. 44.13.7 Please see the Applicant's Summary of Oral Submissions at ISH10 [REP8-018] and 11 [REP8-19].
	4.13.3 The Council is still seeking the Flood Risk Assessment additional Requirement and maintains that there is a need for this separate Requirement. The Council considers that Requirement 10 as drafted is a pre-commencement condition, and the Council believes that a compliance requirement is necessary due to the flood risk sensitivity of the area. The Council considers this issue important enough to be elevated to the DCO as a Requirement as it is not expressly stated as far as the Council can see, that the Flood Risk Assessment must be complied with.	
	4.13.4 The Council erroneously indicated at the hearing that its suggested wording was provided within its Deadline 6 responses; the justification for the additional Requirements was stated within its response to DCO.2.66 [REP6-041] but the actual wording being	



sought was detailed within 'Review of 3.1 Draft Development Consent Order dDCO (Rev 2)' [REP4-039]. For ease the Council's requested wording is replicated below:

"Flood Risk Assessment

- (1) Subject to sub-paragraph (2), the authorised development must be carried out in accordance with the flood risk assessment, including the mitigation measures detailed in it, so that no part of the authorised development is predicted to result in any exceedance of the flood levels to properties and land shown in the flood risk assessment.
- (2) Sub-paragraph (1) does not apply in any circumstance where the undertaker proposes to carry out a part of the authorised development other than in accordance with the flood risk assessment and either demonstrates to Wiltshire Council's and the Environment Agency's satisfaction that the part of the authorised development concerned would not result in an exceedance of the flood levels shown in the flood risk assessment or demonstrates that all affected landowners accept the predicted exceedance of the flood levels shown in the flood risk assessment."
- 4.13.5 The Council thanked HE's for its comments, acknowledging that they were made on a without prejudice basis, and commitment to provide some alternative wording within their written submissions. The Council indicated that its specialist officers would review the proposed text to be put forward by HE, however initial thoughts were that this would go a long way to addressing the Council's concerns. The Council reiterated that it considered the Scheme area to have sensitivities that matched the A14 and hence the Council's reasons for asking this matter to be elevated to the DCO.



	 4.13.6 The Council agreed that there would be no need for any corresponding amendments to Part 2, Schedule 2 as this had been overtaken by recent events. 4.13.7 With regard to agenda item 4.9 v., the Council asked the ExA to refer to points made at the Issue Specific Hearing 10 held on 29th August, and specifically changes requested with respect to MW-G7, MW-WAT3, MW-WAT10, MW-WAT12, MW-WAT13 and Annex A.3 the Outline Soils Management Strategy (please see paragraphs 3.9.2 to 3.9.8 above). The Council notes that HE indicated agreement with the vast majority of these at ISH10 and asks the ExA to cross refer. 	
3.4.38	4.14 Amendments to the Draft DCO Consequential to the Proposed Changes to the Application Sought by Various Parties 4.14.1 Whilst not specifically mentioned at the hearing, the Council wishes the ExA to note that within its consultation response on HE's proposed changes to the DCO, the Council highlighted some inconsistencies with respect to the proposed drafting amendments associated with these changes.	4.14.2 & 4.14.3 - Please see the Applicant's additional submission 'Shared Use Cycle Route Clarification Note' [AS-107] which sets out how the Applicant intends to clarify how non-motorised user provision within highway boundaries is described in the application documentation. If NMC-06 is accepted into the examination, the Applicant would amend the reference in Schedule 3 to reflect the intention to create a shared use cycle track which would be useable by cyclists and pedestrians, but not motorised vehicles or equestrians.
	4.14.2 With regard to NMC-06, the Council raised the following concern: "The Council does not understand why the reference at dDCO Schedule 3 Part 1, Reference UA, has been deleted, and not replaced by alternative wording to indicate the proposal to construct a cycle track, partly on the verge of the A360 and partly on land to be acquired. The proposed cycle track link may not be able to sit within the confines of the highway verge along the A360, whose width is generally considered to be between 2.5 and 3m by the Council. The explanatory text in the proposed changes consultation document explains that the route will be provided with a 1m verge between cycle track and A360, the cycle track will be 2.5m wide, and there will	



3.5	be provision of a 0.5m margin between cycle track and field, or other, boundary fences; the total width of land required is therefore 4m (except past the dew pond, where a lesser width would be necessary for either Option A or B). HE are requested to explain the rationale for not replacing Reference UA in the dDCO, to reflect the change in PRoW status." 4.14.3 Furthermore, whilst the Council's consultation response pressed for the inclusion of a "cycle track" definition, since the incorporation of a "cycleway" definition in the latest version of the dDCO, the Council queries which term will be used for NMC-06, if adopted. This is because the Council had understood that HE's intention was that part of the proposed route (Longbarrow to the Visitor Centre) would prohibit the use of equestrians who would be expected to use the A360 carriageway (subject to any future arrangements to be put forward by HE). Equestrian usage is permitted within the current drafting of "cycleway" as defined by HE, but the Council questions the appropriateness of mixing equestrians, cyclists and pedestrian traffic on a relatively narrow (2.5m) right of way. The Council will respond more fully on this point when it has clarity on the NMC-06 proposals, following the submission of HE's follow-up report on consultation feedback.	Questions Responses
	Matter Raised	Highways England's Response
3.5.1	REP7-021 Highways England (p15) Wiltshire Council as the maintenance authority for the surface of the AMES 9A bridleway has no objection to its use for this additional private means of access. However, it does not own the subsoil of the track over which the bridleway passes; therefore, consent will	Highways England welcomes Wiltshire Council's comments on this matter. The Applicant notes that the National Trust has indicated a willingness to agree to access for the affected person's combine harvester.



	also be needed from the owner(s) of the subsoil, which is understood to be the National Trust.	
3.5.2	Ec.2.1 See Wiltshire Council's previous comment submitted at Deadline 7. The proposed mitigation is no longer in contention. The Council is comfortable that both Natural England and the Royal Society for the Protection of Birds (RSPB) are confident that sufficient, available and appropriate plots can be found and that the mitigation has a good likelihood of success. However, following the "People Over Wind" case, the Council does not consider that the proposal can be compliant with EU law until the additional plots on land not owned or controlled by Highways England have been secured by legal agreement, i.e. that certainty beyond reasonable doubt will only be realised when the means for delivering the mitigation has actually been secured and is certain. Although the Council agrees that the proposed mitigation of the additional nesting plots will provide sufficient and appropriate mitigation without the need to rely on enhanced fencing, the Council would respectfully bring the Examining Authority's attention to the above point within the Appropriate Assessment (AA) process, that the Scheme will not be Habitats Regulation Assessment (HRA) compliant until the legal 'hooks' to ensure the mitigation are in place.	Please see the Applicant's response (submitted at deadline 9) to the second question raised by the Examining Authority in its Rule 17 letter, dated 3 September, which deals specifically with this point. The Applicant is proposing that the provision of the stone curlew breeding plots is secured by way of a DCO requirement, to give sufficient certainty as to their delivery.
3.5.3	REP7-021 Highways England (p149) Wiltshire Council supports Option B as set out in the response to the proposed changes to the DCO consultation of August 2019 and continues to work with HE and the English Heritage Trust to achieve an acceptable solution.	Highways England notes these comments and thanks Wiltshire Council for their support of Option B and their willingness to work with Highways England and English Heritage Trust in order to achieve an acceptable solution.
		The current position in relation to NMC-06 Option B is set out in Highways England's deadline 9 submission entitled Proposed Changes Position Statement (including Responses to Comments on the Proposed Changes Consultation Report (non-statutory)). As detailed in this Position Statement, Highways England seeks the Examining Authority's acceptance of a substitute solution closely based on NMC-06 Option B, the delivery of which



		is reliant, in part, on the continued support and involvement of Wiltshire Council.
3.5.4	REP7-021 Highways England (p19) With regard to a separate design parameters document, the Council considers that whilst it had previously indicated that it could see benefit in the production of this document, it was not essential. The OEMP has recently been significantly amended, and whilst further amendments are required following discussions between the Council, other heritage partners and HE, the Council considers that provided the OEMP contains all of the necessary detail, it would be happy for it to be covered in this way. It is hoped that these discussions will conclude as soon as possible.	Highways England thanks Wiltshire Council for their positive comments that the OEMP approval mechanism "is sufficient and ensures checks are in place to adequately control the preparation of the detailed design". It is understood that the wording of section 4 of the OEMP is now fully agreed with Wiltshire Council.
	The Council does not consider it necessary for the Secretary of State (SoS) to approve the detailed design, unless it is significantly outside of that provided for within the OEMP. This is because the OEMP is a certified document and approved by the SoS, furthermore the detailed design would be detailed within the CEMP which will also now be approved by the SoS. If the detailed design was not in compliance with the OEMP, the CEMP would not be approved without further action. The Council considers that this mechanism as set out above, is sufficient and ensures checks are in place to adequately control the preparation of the detailed design.	
3.5.5	REP7-021 Highways England (p21) Wiltshire Council notes HE's response to this question but considers that this issue has moved on following the announcement of the significant amendments to the approval	The Applicant notes and welcomes the support of the Council in the change in approach to requirement 4, which provides for the Council's approval of the Heritage Management, Archaeological Method Statements and Site Specific Written Schemes of Investigation.



	mechanisms for the CEMP and associated management plans as indicated at Issue Specific Hearing 8 on 21st August and within the latest version of the dDCO, which was published on 28th August 2019. The Council confirms that it is supportive of the Secretary of State approving the CEMP and the associated management plans. The Council would approve the Heritage Management Plan, Archaeological Method Statements and Site Specific Written Schemes of Investigation, in consultation with Historic England.	
3.5.6	REP7-021 Highways England (p26) The OEMP has recently been significantly amended, and whilst further amendments are required following discussions between the Council, other heritage partners and HE, the Council considers that the design principles, visions and commitments are going in the right direction and can provide the necessary detail to provide sufficient comfort to the Local Highway Authority. The Council further notes that specific provisions are being included in the Side Agreement, which is currently being finalised, for those assets that will become the responsibility of the Council.	Highways England thanks Wiltshire Council for their positive comments that the OEMP approval mechanism "design principles, visions and commitments are going in the right direction and can provide the necessary detail to provide sufficient comfort to the Local Highway Authority". It is understood that the wording of section 4 of the OEMP is now fully agreed with Wiltshire Council. The Applicant can confirm that the Side Agreement for the assets that will become the responsibility of the Council has now been finalised.
3.5.7	REP7-021 Highways England (p28) The Council welcomes the additional wording in the revised OEMP MW-GEO8 (j).	Highways England notes these comments.
3.5.8	REP7-045 Environment Agency (p22) The revised wording is welcomed by Wiltshire Council.	Highways England notes these comments.



4 Bob Case (AS-101)

4.1	Additional Submissions	
	Matter Raised	Highways England's Response
4.1.1	I have been invited to share my experience of motorcycling as a means of transport for the disabled and less able amongst us. Motorcycling has long been a popular method of transport for the less able. This is due in part to the relative technical ease and economy with which they may be adapted to personal accessibility requirements compared to cars. A small but expert cottage industry exists in the UK to manufacture, supply and fit the components necessary to restore independence to a variety of users with a wide spectrum of disabilities.	Highways England notes Mr Case's concern but does not agree that the Scheme proposal to make the old A303 between Byways 11 and 12 a restricted byway would significantly inconvenience him. Alternative routes are available between the west side of Salisbury Plain and destinations to the south-east, including Andover, Wilton, Salisbury, the fords along the River Bourne and the Roman Road to the east of Old Sarum. These include the following, using Rollestone Cross as the start point for journeys from the west side of Salisbury Plain to Old Sarum (as a waypoint to the Roman Road and the River Bourne):
	These adaptations range from simple mechanical aids, or adapted controls to assist motorcycle operation for people with limited strength and endurance to custom solutions for the limbless, a number of whom have returned to motorcycling following road traffic collisions which were not their fault. The principal organisation supporting such motorcyclists is the National Association for Bikers with a Disability (NABD).	 via B3086, A360, A303, Byway 11 and Woodford Valley - 12.1 miles via Packway, Byways 12 and 11 and Woodford Valley - 12.5 miles via Packway, West Amesbury and Woodford Valley - 14.1 miles via B3086 and A360 - 10.1 miles Access to Larkhill will remain for motorcycles along the existing network of byways open to all traffic on Salisbury Plain, as will access to Byways 11 and 12 for motorcycles. It is only the link between them that is removed, but Mr
	As a lifetime motorcycle rider who suffered a injury early in my adult life, I have endeavoured to maintain an active and varied lifestyle which has incorporated a wide variety of motorcycling activity - as sport, leisure and a normal means of transport.	Case would be able to consider this in planning his route using Byway 12. In the Applicant's Written Summary of Oral Submissions put at the Traffic and Transportation Hearing on August 22 2019 [REP8-017], Mr Taylor QC and Mr Harper (for the Applicant) explained in item 4.7 that the diversion for trail
	Wiltshire born and bred, Salisbury Plain has been a major place for me to enjoy both independence and solitude. In the course of this activity I regularly enjoy travelling Byways 11 and 12 - not just for recreation, but also as part of my commute between the West side of the Plain and Andover, Wilton, Larkhill and other military sites. They	riders (and by inference for any other motorcyclists) does not provide that much of a difference in time if speeds on the route along the A303 are to be low enough to avoid risks to non-motorised users of the restricted byway. They concluded that the impact caused by the Scheme (to motorcyclists using the alternative route) is minimal and there exists a sufficient alternative.



also form a crucial link between my home and the city of Salisbury, the fords along the River Bourne and the stunning Roman Road at Old Sarum.

I would be significantly inconvenienced if the continuity of this route along the A303 were severed.

Highways England also notes that as the Applicant, it carried out an Equalities Impact Assessment for the Scheme [APP-296] which has not identified any concerns arising from the change in respect of disabled users of motorcycles.



5 National Farmers Union (REP8-048)

5.1	Written summary of oral submission	
	Matter Raised	Highways England's Response
The Applicant's Written Oral Submissions for ISH11 [REP8-019] respond to the National Farmers Unions comments received at deadline 8. Additional points raised are detailed below.		
5.1.1	2.1 The NFU thanks HE for including the wording as drafted in the draft DCO at 15(3) the notice required under paragraph (2) must indicate the nature of the survey or investigation that the undertaker intends to carry out. The NFU believes that Article 15 at 15(3) should also state that the notice must indicate the following:	See response to 3.5 (ii) in Highways England's Written Summary of Oral Submissions put at ISH11 regarding the draft Development Consent Order [REP8-019] which noted that changes were made to the OEMP on 20 August 2019 and deadline 8 in this regard.
	 Who will be taking entry The date of entry and for how long The type of equipment if any will be used. 	
	The NFU believes strongly that it is only right that a landowner should know who is coming on to his land, how long they will be on the land for carrying out the survey and the vehicles and equipment that will be brought on to the land.	
5.1.2	2.2 Further to the publication of the Examining Authority's draft DCO on the 3rd September 2019 and the NFU checking the wording in detail of Article 15, the NFU is very concerned that the following is included under Article 15:	The need for Highways England to have the ability to access adjacent land for surveys is set out in:
		The response to Written Question DCO.1.36 [REP2-030];
	• At 15 (1) (b) it is stated that 'the undertaker where reasonable necessary may enter any land which is adjacent to, but outside the Order limits'.	 The Summary of Submissions of the first DCO ISH (see agenda item 3.9 [REP4-029]);
		The response to Written Question DCO.2.22 [REP6-027].
	The NFU after checking the wording of other DCOs believes that this is not normally requested and the DCO will only allow the undertaker	To assist landowners and occupiers in dealing with such an eventuality, further changes have been made to the OEMP at deadline 9 to make clear



	to enter land within the Order limits which is affected by the authorised scheme to carry out any surveys or investigation. Further under Article 2: Interpretation, there is no meaning of the word "adjacent". The NFU sees no reason as to why HE for this scheme should be allowed to undertake surveys and investigation work on land which is adjacent to, but outside of the Order limits. The NFU would like this wording to be deleted.	that, alongside the information previously agreed to be given in article 15 notices within the DCO and OEMP, the ALO will also be required to provide landowners with an explanation of why land outside the Order limits is required (in the context that Article 15 requires such use to be 'reasonably necessary').
5.1.3	2.3 Further at 15 (1) (b) (iii) it is stated that without limitation on the scope of sub-paragraph (i) that the undertaker may investigate the nature of the surface layer, subsoil and groundwater and remove soil and water samples and discharge water from sampling operations on to the land. This wording highlighted in bold above is not normally included in the article covering surveys and investigation in a DCO and as Article 15 is drafted for the A303, the discharge of water from sampling operations on to land could take place within and outside the Order limits. As above under 2.2 the NFU sees no reason as to why HE for this scheme should be allowed to discharge water from sampling operations on to land within and outside of the Order limits. The NFU would like this wording to be deleted.	This power is required in relation to this Scheme, due to the on-going groundwater monitoring and sampling that will take place to inform the detailed design and to reflect the commitments given in the OEMP. The purpose of groundwater quality sampling is to collect a sample that is representative of the aquifer from which the well or borehole draws water. To achieve this, prior to taking a sample of groundwate, r it is good practice to remove the water that is in the borehole, discharge it, and allow the borehole to refill from the aquifer that is being monitored. Typically, three well volumes will be removed. For a borehole that is 50m deep where the water table is 15 metres below ground level this would be around 200 litres of water. To put this into context, 200 litres is the volume of water that would fall over an area of 10 metres by 10 metres if there was 2 mm of rain. This quantity of water would quickly evaporate or infiltrate into the ground and back to the aquifer it came from. As such, this power is considered necessary, and is not disproportionate.
5.1.4	3.0. DCO: Article 29: Temporary Use of Land for Constructing the Authorised Development As requested by the NFU in submission dated 23rd August 2019 the NFU would like the notice which is served by HE to take temporary possession to state how long the temporary occupation will be for and for details on the programme of works to be provided by the contractor.	See response to item 17.1.1 to Highways England's deadline 8 response to the NFU [REP8-013].



4.0 Construction Compounds: At MW – CH4 in the OEMP it does state that the slurry treatment plant and the batching plant have to be located to the west of the existing tall hedgerow at Longbarrow. The NFU would like it made clear which plots of land this refers to and which construction compound this will be. This needs to be made clear in the DCO in the relevant schedules. HE have also referred to 'soil treatment works' and the NFU believes that where these types of works are to take place again should be made clear in the relevant schedules in the DCO. Under Schedule 7 in the draft DCO for the land areas to be taken for compounds it just states 'provide temporary storage, laydown areas and working space'.



6 Andrew Rhind Tutt (REP8-060)

6.1	Written summary of oral submission	
	Matter Raised	Highways England's Response
The Applic		Rhind-Tutt's comments received at deadline 8. Additional points raised are
6.1.1	Agenda Item 9. Any Other Matters I asked that if more than £100m extra costs would make the Stonehenge Tunnel unaffordable in terms of value and cost benefit, how can Highways England seek accurate tenders when there is likely to be significant unforeseen ground conditions.	The ground conditions are well-known as large amounts of investigation had been undertaken over the years and this will continue to be supplemented we move through the tender and design process. This will be available to the tendering contractors for their analysis and used in developing their design. The current estimated cost of the works already contains robust risk.
	It is a known fact in construction contracts that the largest additional costs that often bankrupt contractors is unforeseen ground conditions.	allowances including for ground conditions and will give Highways England certainty of delivery against its approved budget. Once a contractor is appointed, the specific risk of ground conditions will sit with the Contractor as the party best-placed to manage this. As a consequence, the contract sum
	I therefore ask Highways England to demonstrate how they can deliver the scheme within the approved budget, without knowing the extent of ground works and remediation required.	will not be amended for costs associated with ground conditions. Highways England will select contractors who are experienced in delivering complex, large scale projects of this type in similar ground conditions.
6.1.2	At the hearing I asked why the photomontages for the view from the Grade 1 listed Amesbury Abbey gardens, of the proposed Countess flyover alongside the river Avon were not reproduced despite pointing out that they were in error and misleading at the site meeting on 21st May 2019 and new photos were taken.	The new photomontages have been submitted as [REP8-022, REP8-023, REP8-024, REP8-025 and REP8-026]. These cover the view from the grounds of the Abbey and Bowles Hatches.
	The planning inspectorate followed up my question and requested that as the new photo's had been taken, to satisfy the argument Highways England were to produce new photomontages.	



	I would like to know why these have not yet been submitted? And when we expect to see them? It should be noted that this missing photomontage is an important document and will inform the inspectorate and the owners and residents of Amesbury Abbey Private Nursing Home the significant impact this scheme will have on the Grade 1 listed building and grade 2* Abbey parkland. May I also request why the photomontages for the same views from Bowles Hatches have not been submitted yet?	
6.1.3	In addition photomontages 7.102, 7.107 and 7.91 are all in error and require redrawing. 7.102 fails to show the layout for the regular contraflow arrangements and the signage relevant.	These photomontages are not in error. Image 7.102 shows the Scheme in operation and the relevant signage is visible in the image.
6.1.4	What is Highways England's local impact mitigation strategy for any unforeseen damage to the hydrogeology, aquifers and fissures feeding the wider landscape and at what stage would work cease for investigation?	Please see response to paragraphs 5.3.2 to 5.3.4 in [REP7-021] describing the various plans and strategies to protect water resources. Ultimately the Water Management Plan and Groundwater Management Plan required by the OEMP will set out the detailed mitigation measures which will accord to the detailed design of the Scheme.
6.1.5	I would like Highways England to explain why they wrote on 29 th July stating that Blick Mead was dry during June 2019, when clearly this was incorrect and now having seen my video of 14 th June 2019 how they can prove that no changes will take place to the water table in this location.	Please see the previous response to paragraphs 8.1.1 to 8.1.3 in [REP8-013]. Highways England confirms that the feature referred to by Highways England as Blick Mead spring and the feature called ancient spring head at Blick Mead by Professor David Jacques was dry in June 2019. There is a difference in naming convention. This does not affect the conclusions of the assessment at Blick Mead.
		The video submitted as [AS-070] by Andrew C J Rhind-Tutt in June 2014 appears to show an excavation which has encountered the water table, which is exactly what would be expected in a pit dug in an area where groundwater levels are near surface. This video does not change the conceptual model that was presented in the Tiered Assessment (Environmental Statement Appendix 11.4, Annex 3 Blick Mead Tiered Assessment [APP-282]) or the conclusions as set out in paragraph 11.10.1 of the Environmental Statement



		[APP-049], that no likely significant adverse effects are identified for the water environment at Blick Mead.
6.1.6	At the opening hearing on 2 nd April 2019 I asked if the planning inspectorate had been handed a copy of the deeds of Stonehenge dated 31 st December 1915, between Sir Cosmo Antrobus and Cecil Chubb as these contained restrictive covenants relating to the landscape surrounding Stonehenge and preserved the integrity of the Stone Circle. These covenants are in the public interest, have not been extinguished and will require addressing and satisfying before any development works can be undertaken. Highways England's response confused the covenants with the conditions placed on the deed of gift of the stone circle to the Nation in October 1918. Further, Highways England have inferred that they have searched for the deeds without success and therefore deem them missing and consequently unenforceable. This is not the case, the deeds, need to be located and presented to the planning inspectorate with a satisfactory explanation as to how the scheme can be delivered without breaching the covenants. I therefore request that this matter is dealt within a timely manner and in the public interest.	As stated in response to 8.1.1 [REP5-003], in relation to the availability of the 1915 covenants, Highways England is only in a position to reiterate the information already provided in its deadline 1 submission letter [REP1-001], repeated below for ease of reference: 1. Highways England has endeavoured, without success, to locate a copy of the 1915 covenants contained in the transfer of Stonehenge to Sir Cecil Chubb and his wife on 31 December 1915. No documents held at HM Land Registry in respect of land adjoining Stonehenge would appear to reference the 1915 conveyance to the Chubbs; and the land/property comprising Stonehenge itself is not registered. 2. Research revealing the response from English Heritage to a Freedom of Information requests received in 2018 indicates that no title land deed exists. In English Heritage's response the only document referred to in relation to the provenance of Stonehenge as a national monument is the 1918 Deed of Gift from Sir Cecil Chubb and his wife to the Commissioners of Works. 3. Furthermore, whilst there exists a transcript/summary of the 1915 auction notes taken at the time of Sir Cecil's purchase of Stonehenge, the transcript merely notes that, as a condition of the sale, the purchaser (i.e. Sir Cecil) "would be required to(illegible)to the satisfaction of the vendor's solicitors and maintain a fence on the western boundary of(illegible)so as the fence exists at present". The transcript includes no reference to any restriction or restrictive covenant on the use of the land so conveyed.
6.1.7	On a number of occasions I have requested that Highways England arrange a site visit for interested parties to observe the proposed diversionary routes for HGV and other vehicles in the event of regular tunnel closures. I note with utter dismay that this has not been provided and am concerned that the unaccompanied visit that recently took place has not taken into account the unacceptable	The itinerary for each of the accompanied site inspections (ASIs) was published in advance of each ASI [EV-007 and EV-024] giving all interested parties adequate opportunity to contribute to the proposals. The purpose of the work proposed at Rollestone junction (see work no. 5 on Works Plans [APP-008] Sheet 13) is to ensure that the diversion route is



routes that large HGV lorries from Solstice park will have to take if the tunnel is closed Westbound or any barred vehicles that cannot use the tunnel.

I would like Highways England to show a comprehensive map showing all alternative diversionary routes for local HGV traffic.

suitable for HGVs. This is recorded in the Environmental Statement Chapter 2 [APP-040], Paragraph 2.3.63:

"...To enable the free flow of traffic between the B3086 and the Packway, it would be necessary to reconfigure the junction at Rollestone Corner at the north-west corner of the WHS ..."

The unaccompanied site inspection was undertaken by David Richards, a member of the Examining Authority on Tuesday 20th August 2019. A note of this inspection [EV-036] records the route and purpose of the inspection as follows.

The Route:

"16.00pm started at Durrington Roundabout and then drove south along A345 to Countess Roundabout. Joined the A303 at Countess Roundabout and drove west to Longbarrow Roundabout. Drove north on A360 to Airman's Corner and then on B3086 to Rolleston Camp. Then turned east along the Packway, passing through Larkhill, to Bulford on A3028. From Bulford, drove along Double Hedges and returned to Bulford, then south to Solstice Park Junction"

The Purpose:

"observe the diversionary routes for tunnel closures and high loads (as shown in [APP-060]) and understand the effect on settlements along the route."

A map showing the high load route and the tunnel closure diversion route is included in the Environmental Statement at Figure 2.6 [APP-060].



7 ICOMOS UK (REP8-047)

7.1	Written summary of oral submission	
	Matter Raised	Highways England's Response
The Appl detailed b		the points made by ICOMOS UK in REP8-047. Additional points raised are
7.1.1	World Heritage Committee decision 43 COM 7B.95 states clearly that the current Scheme for the A303 tunnel would impact adversely on the OUV of the property. It urged the State Party not to proceed and to explore other options in conformity with Operational Guidelines.	Please see the Applicant's response to comments submitted at deadline 5 [REP5-003] item 10.1.3, and the Applicant's response to comments submitted at deadline 7 [REP8-013] items 6.2.22 and 7.1.4, as well as the Applicant's Written Summary of Oral Submissions made at ISH8 [REP8-016] agenda item 3.2, regarding the decision of the World Heritage Committee.
		In summary, DCMS has explained in its State of Conservation Report submitted to the World Heritage Centre in February 2019 why the proposed Scheme offers an optimal solution both to the transport problems on the A303 and to delivering benefits for the WHS, and has set out why a longer tunnel is not a feasible alternative and cannot therefore be justified (see [REP1-015] and response to Written Question AL.1.29 in [REP2-024]). Highways England continues to work closely with heritage stakeholders and will continue to report to and engage with UNESCO / ICOMOS and the World Heritage Committee through the Department for Digital, Culture, Media and Sport (DCMS).
		With respect to the decision formally adopted by the World Heritage Committee in July 2019, the Applicant made submissions at ISH8 on 21 August 2019 [REP8-016] as to the evidence base before the World Heritage Committee (compared with the far more detailed evidence base before the Examining Authority and Secretary of State) and the approach taken by the World Heritage Committee in its decision making (which reveals an approach not reflective of the UK framework and that appears inconsistent with the ICOMOS Guidance) (see the Applicant's Written Summary submitted at deadline 8 [REP8-016], agenda item 3.2(i)). The Written Summary of the



		Applicant's Submissions also addressed the weight to be given to the World Heritage Committee's decision, stating that it should treated as the views of a consultee, and not determinative. The HIA [APP-195] has assessed the effect of the Scheme on the OUV of the WHS, and it concludes that there would be an overall slight beneficial effect on the OUV of the WHS and that its OUV would be sustained. The Scheme has been developed with consideration to the <i>Operational Guidelines for the Implementation of the World Heritage Convention, WHC 17 / 01</i> (UNESCO 2017).
7.1.2	The World Heritage Committee has requested the State Party to explore other options to ensure that the OUV of the property is not adversely impacted. The Committee has requested the SP to report on the implementation of its decision by 1 St February 2020. ICOMOS-UK considers that the budget should not be a constraining factor in protecting OUV or in exploring further options which might mitigate any unacceptable adverse impact on OUV.	See the Applicant's response in paragraph 7.1.1 above. Both the Applicant and DCMS believe that the Scheme offers an optimal solution both to the transport problems on the A303 and to delivering benefits for the WHS. Other options and alternatives have previously been extensively considered in the Scheme Assessment Report [REP1-023 to REP1-030]; the Technical Appraisal Report [REP1-031 to REP1-038] and in Environmental Statement Chapter 3, Assessment of alternatives [APP-041]. Regarding ICOMOS UK's comment that 'the budget should not be a constraining factor in protecting OUV or in exploring further options which might mitigate any unacceptable adverse impact on OUV', the Applicant refers the Examining Authority to the Applicant's submission, 'Written Summary of Oral Submissions put at Cultural Heritage, Landscape and Visual Effects and Design Hearing on 21 August 2019' [REP8-016; agenda item 3,2, pages 1-8 to 1-9] and the submissions made by Counsel for the Applicant: "Mr Taylor QC explained that in terms of costs being an overriding consideration, the position (as set out clearly in response to first written questions AL.1.29 and AL.1.30 [REP2-024]) is that to extend the tunnel further to the west provides minimal benefit in heritage terms and would increase cost in a very significant way. It is unfair to characterise the analysis as purely a matter of cost, when other benefits and impacts have also been carefully considered." That submission was endorsed by Mr Keith Nichol, Head of Cultural Diplomacy at DCMS, who 'noted that DCMS continues to support the core elements of the application with respect to the impact on the WHS. Mr



		Nicholls [sic] indicated that DCMS disagreed with specific elements of the World Heritage Committee's decision, in particular paragraphs 4 and 5. Mr Nicholls stated that DCMS disagreed that the Scheme should not proceed, and rejected the suggestion in paragraph 5 that the length of the tunnel should be extended. Mr Nicholls agreed with submissions made by Mr Taylor QC that cost is not an overriding consideration, but noted that a fundamental factor for DCMS was value for money to the taxpayer. Mr Nicholls noted that, whilst DCMS had wider obligations including those to the UK taxpayer, the World Heritage Committee was understandably not concerned with the cost to the UK tax payer of a longer tunnel without commensurate benefits.'
7.1.3	There is thus a clear lack of consistency between the approaches suggested for different aspects of the Scheme. Only when convenient it seems that the best or highest standards are accepted by the Applicant. We are thus in a position where it would appear that the Scheme is being designed to meet financial targets with standards set arbitrarily according to what is deemed to be affordable or contribute to affordable outcomes.	See paragraph 7.1.2 above regarding costs and the design. The Scheme has been designed very carefully with regards to the WHS, its OUV and its landscape. It has not been designed, as ICOMOS UK claim, to meet financial targets, or by arbitrarily setting standards to what is affordable. Regarding consistency, each aspect of the design, whether that is sieving the ploughzone for its artefact content, the percentage sampling required for particular archaeological features, minimising vibration or developing the outline design, has been considered carefully by suitable specialists and decisions made in light of the significance of the archaeological remains and in light of the WHS, its OUV and its landscape.
		Appraisal is crucial to ensure decisions are fully informed and based on robust evidence. The appraisal for this Scheme recognises that the appraisals need to go beyond traditional financial analysis, and pick up broader social, environmental and economic effects. The appraisal methods are fully aligned to the Guidance issued by HM Treasury, the Department for Transport and Highways England.
		The HM Treasury Green Book (2018) set outs that the Economic Case should use Social Cost-Benefit Analysis to assess the net value to society (the social value) of a policy intervention. The Green Book emphasises that costs or benefits of options should be valued and monetised where possible in order to provide a common metric. For some costs and benefits there may be no market price, or the market price may not fully reflect societal costs or benefits. In these cases, the Green Book summarises the main techniques



that can be used. In line with the relevant guidance, the most appropriate technique was used to assess each aspect of the scheme and is consistently applied across all options.
The approach is based on guidance issued by HM Treasury, Department for Transport and the Department for Environment. It has been undertaken in a robust manner and subjected to checks. Throughout the appraisal the most appropriate way to capture the impacts and make sure they are fully accounted for in the appraisal process has been used.



8 Trail Riders Fellowship (REP8-055 and REP8-063)

8.1	Additional Submission	
	Matter Raised	Highways England's Response
8.1.1	It is said by HE that Amendment 2 would be "contrary to public policy"3 since it would "create a novel and unprecedented class of way; one that can be used by motorcycles together with other excepted motor vehicles but no other." With respect to HE this submission is overstated and misconceived. There are a great many	Highways England notes that this comment in its deadline 4a submission was made in respect of Wiltshire Council's previously suggested related changes, however the point is equally true of TRF's Amendment 2:
		Firstly, Highways England does not seek to suggest that BOATs in general are against public policy.
highways in England which are BOATs4 as a matter of law because they accommodate <i>some</i> vehicular use and as such are neither footpaths nor bridleways, even though they do not carry rights of way for all vehicular traffic. An obvious example would be a narrow unsealed BOAT in the countryside with a width or height restriction. On HE's view, such a BOAT would conflict with public policy. HE are wrong on this point, among others.	Secondly, Highways England's concern is that the TRF amendment would classify the highway as a BOAT, but then separately through a TRO actually make it such that it was not a byway open to all traffic; instead some forms of traffic would in fact be explicitly prohibited. This creates a contradiction in terms and an inconsistency within the same statutory instrument that is the DCO – it is this inconsistency that is against public policy as set out in the deadline 4a submission.	
8.1.2	No alternative is proposed and HE's position is that such small-bore machines should use alternative routes. These routes are not adequate. The time that it will take for such vehicles to use the alternative route suggested by HE means that the alternative is not a genuine alternative. These machines can only travel at speeds of up to 28mph. As Mr Kind explained at ISH 9 this is a <i>maximum</i> speed. The <i>average</i> speed will be significantly lower due to acceleration and deceleration times. HE has failed to factor this into their assessment of the satisfactoriness of the alternative. In addition these routes are busy, fast and dangerous (particularly for users of 50cc machines) and in no realistic sense of the word can they be regarded as convenient alternatives to the	At ISH9 [REP8-017], the Applicant set out its views on the potential journey times for the alternative routes for <50cc motorcycles from the starting point of Byway 11 and noted that either the journey time could in fact be shorter, or if not shorter, there was not was a large amount of difference in time between the routes. The TRF has not provided any evidence to demonstrate that the alternatives are not adequate, instead making qualitative statements in the hearing when it is the TRF that are seeking to prove that there is a necessity for their change to be made. The Applicant also notes that there is no statutory test relevant to DCO proposals (including under section 136 of the Planning Act 2008) which



	ability to use the old A303 to travel the short distance between the Countess and Longbarrow Roundabouts.	requires any alternative route to be 'convenient' either generally, or for specific users. This should also be seen in the context that such users will still be able to access the surrounding byway network through Byway 12, so users would be able to change their routing prior to their arrival to Stonehenge to access the WHS through that Byway 12 rather than Byway 11.
8.1.3	On the spectrum of materiality, there are some changes to a DCO that are so far- reaching that there simply is no power for them to be made whether during the examination process or after the event once the DCO has been made, because in effect the Scheme would be so different that the application, consultation and examination process was rendered otiose. The TRF does not understand anybody's case to be that the provision of a B11-B12 link for motorcycles would be a change of this order of magnitude such that it would be <i>ultra vires</i> for the ExA to make it.	Highways England maintains its position that TRF's changes could be considered material, and that it is for TRF to conclusively prove that it is not. However, whether the change is material or not, it is still the case that, in order for a change to be safely included within a DCO, full consideration of that change needs to be shown to have taken place, in order to avoid any invocation by interested parties of a failure of the <i>Wheatcroft</i> principle having been met. It is not that non-consideration of that change renders the consultation and examination process for the Scheme otiose, but means that a DCO inclusive of that change without such consideration could be seen as flawed, as that element had not been properly considered. As the Applicant has consistently set out, in order for that change to have been properly considered, the impacts of the change need to be fully understood, and TRF has not produced any evidence to allow that full understanding to be developed. Highways England's position on the changes proposed has always been that they are not required to make the Scheme acceptable in planning terms, and would, in some cases, result in unacceptable adverse impacts of their own. Highways England has been very clear in its previous submission of the procedural steps that are required of the TRF, in terms of consultation to be undertaken, and matters to be considered/evidenced before their change can be made. Those requirements have not been complied with to date by the TRF.



0.4.4		
8.1.4	The TRF's proposed amendments have <i>already</i> been consulted on in the lead up to ISH 9. The results of that consultation were that ISH 9 took place and all interested parties were able to provide their views on the proposed amendments to the ExA. This requirement is plainly satisfied. It may be thought that it is somewhat ironic for HE to suggest, at an ISH dealing specifically with the TRF's proposed amendments at which all known interested parties were present and were able to make submissions to the ExA, that a further round of public consultation needs to take place on the TRF's proposed amendments.	It appears that TRF are suggesting that the Examination process in and of itself 'counts' as a consultation process. One only has to look at the consultation that Highways England was required to carry out in respect of its own non-material changes to see that this is clearly not the case. Highways England notes that TRF refer to 'all known interested parties', when one of the points of a consultation process is to ensure that all potential interested parties are aware of what is proposed, not just those that are 'known', e.g. through the site and newspaper notices. There has therefore been no consultation on TRF's proposals.
8.1.5	The retention of the ability to ride motorcycles along 400m of the old A303 is not considered to have a material impact on the local community (to the extent that there is such a community in the vicinity of this stretch of road). The level of public interest in the proposed amendment, such as it is, has been expressed in the context of ISH 9.	Defining a 'local community' as just that which is adjacent to the stretch of road is again misconceived - a 'community' is not simply just those in the immediate confines of a proposal. Given the level of interest that this 'small' change (in TRF's words) has had from those who are involved in the Examination process and in the context of previous controversial public inquiries on PRoW issues in this location, it appears likely that making more people aware of it through a consultation process would have garnered even more public interest.
8.1.6	The TRF do not consider that there is any evidence whatsoever to suggest that the findings of the Environmental Statement ("ES") would need to be revisited in the event that the TRF's amendments were supported. The ES would only need to be revisited if the amendments would be likely to give rise to a Significant Environmental Effect ("SEE") that has not already been assessed in the ES. Nothing in the current ES indicates that this would be the case. Indeed, the highest that HE put their case is that: "Reintroduction of a link for motorised vehicles between AMES 11 and AMES 12, along the old A303, could reduce the beneficial impact currently assessed, potentially to the extent	Highways England suggests that in this context, the guidance issued by the Department for Communities and Local Government (as it then was) 'Planning Act 2008: Guidance on changes to development consent orders' (December 2015) is relevant. Whilst this guidance applies to made development consent orders, it is relevant to the interpretation of the materiality of changes in this respect. That guidance explains, at paragraph 12, that "a change should be treated as material if it would require an updated Environmental Statement (from that at the time the original Development Consent Order was made) to take account of new, or materially different, likely significant effects on the environment." It is therefore not correct that the test is whether the change would be likely to give rise to a Significant Environmental Effect, but whether there would be new, or materially different, likely significant effects.



that some of the significant effects identified in the ES would no longer be significant."6

In other words HE do not say that the TRF amendments would cause any new SEEs that the ES has not yet already assessed. Rather they say that the amendments "could" cause some (unspecifiied) matters which had previously been regarded as SEEs to no longer be SEEs. In other words the effect of this (even if accepted) would be to reduce the number of SEEs that ought to have been assessed in the ES rather than to introduce any new and unassessed SEEs. On that basis there is no need to revisit the ES.

Furthermore, it should be noted that the ES does <u>not</u> indicate that the use of B11 and B12 (which are able to be used by motorcycles <u>as</u> <u>well as 4WVs</u>) in the WHS cause any SEEs. B12 in particular enables motorcycles and 4WVs to pass within 250m of the Stones which is closer than the proposed BOAT link. If the ES did not consider that the use of 'de-linked' B11 and B12 would give rise to any SEEs, then it is impossible to see any reason why the use of 'linked' B11 and B12 would give rise to SEEs, particularly given that the TRF's proposed amendments are only to facilitate motorcycle (and not 4WV) use.

The fact that there could be a reduction in the beneficial impacts reported in the ES would mean a modification to the results - whilst these may not be new; they certainly would be different.

Given that the ExA and SoS need to weigh both the benefits and costs of the Scheme (see e.g. para 4.3 of the NPSNN), any change to those benefits, particularly in the sensitive area of the WHS, does mean that any potential change to that balance needs the opportunity to be considered by the public, stakeholders and the WHS in a full manner.

This has not been considered by TRF, and the acceptability of such a change needs to be seen in that context.

8.1.7

There is a qualitative dimension to this matter which is that PROWs which connect to and link with other PROWs are simply subjectively more fun to walk or ride or cycle on (i.e. they offer a higher degree of recreational amenity) than ones which do not since one always knows that there will come a time when it will be necessary to 'turn back' and go back the way you came.

The best evidence of the benefit of, and need for, the B11-B12 link is the evidence of the TRF members who regularly use the BOATs for recreational trail riding. Such members have provided written evidence comprising a number of User Evidence Forms, the TRF's written submissions to the ExA and the various TRF members' compelling oral presentations to the ExA.

TRF suggests that the omission of the Byway 11 and 12 link is a 'major shortcoming' but in the same submission acknowledges that there is an average of one user a day of that link (noting again that this needs to be seen in the context of Byway 12 still continuing to be fully accessible).

The impact of that loss of a link to that one user a day needs to be set against the benefit of the Scheme as a whole without that link, and conversely the 'benefit' to that one user a day with the link needs to be set against the loss of the overall benefits of the Scheme.

Whilst Highways England recognises that there would be a qualitative change to that one user a day from this Scheme impact, TRF has not sought to truly



	On the other hand it does not appear that HE have engaged to any acceptable degree with the significant amenity and benefit provided by, and facilitated by, the B11-B12 link. Their surveys of motorcyclists' use of B11 and B12 came late in the day; indeed the results of these surveys are still being processed. The TRF submit that HE do not have a clear or an adequate understanding of the true extent of the adverse effect on trial riding in the area the extinguishment of the B11-B12 link would have. Certainly, it lies ill in HE's mouth to suggest that the link would not be a benefit or is not needed. The TRF have made good its case that the link is needed. Its omission from the Scheme and the Order is a major shortcoming and not, as suggested by HE, a trivial one that can be outweighed by the benefits of the Scheme as a whole.	quantify how that could be measured – it is not enough simply to say that they would have a 'less fun' journey, which is in itself a subjective question.
8.1.8	Riding trail motorcycles on BOATs in the countryside is a recreational activity that many disabled individuals indulge in. A number of TRF's members suffer from various types of disability and therefore have protected characteristics under the Equality Act 2010. For some of these individuals using a motorcycle is the most effective, if not the only, way of accessing the countryside. This is an important part of the context of HE's failure to provide for a link between B11 and B12 since it means that some disabled motorcyclists will need to use the fast busy A roads to go between B11 and B12. The safety concerns the TRF has are dealt with under Agenda Item 4.9. It is submitted that the lack of a B11- B12 link could disproportionately affect disabled motorcyclists.	If a disabled member of the public using a motorbike found him or herself in a situation where they had arrived at Byway 11 and realised that they would have to travel instead to the bottom of Byway 12, the only 'A road' that would be required to be utilised would be a short distance of the A360. Notwithstanding this, no evidence has been put forward by the TRF to suggest that disabled users of motorcycles would be 'disproportionately' affected - any effect would apply to motorcyclist users in a 'global' sense, not just disabled users. Highways England also notes that as the applicant it carried out an Equalities Impact Assessment for the Scheme [APP-296] which has not identified any concerns arising from the change in respect of disabled users of motorcycles.
8.1.9	This is, it must be remembered, not a location where motorcycles would be travelling at high speeds. The TRF Code of Conduct indicates that riders should not travel more than 25mph on byways. This is not a location where that speed	Highways England notes that the TRF Code of Conduct has no legal force and is not enforceable.



	(or anything like it) would be reached. Motorcycles would need to commence from a stationary (or nearly stationary) position at each of the junctions (i.e. the B11/old A303 and the B12/old A303) before using the link. Motorcyclists exploring the countryside using BOATs do not, and do not need to, travel quickly.	
8.1.10	There can be no doubt whatsoever that for these reasons the suggestion by HE that there is an alternative means of travelling between B11 and B12 should carry little weight. These routes are neither safe nor convenient and in any event they certainly do not preserve the amenity of the ability to link B11 and B12 – something that does not seem to have been considered by HE at any point. The ability to connect B11 and B12 is not a simple A-to-B matter. The qualitative dimension is more significant.	As noted above, there is no statutory test that requires an alternative to be as 'convenient' as the route it replaces in the Planning Act 2008 context [see also REP8-014]. Furthermore, the Applicant notes that in EIA terms, assessments of effects on Non-Motorised Users, as seen in Chapter 13 of the ES [APP-051], in accordance with DMRB Volume 11, Section 3, Part 8 Pedestrians, Cyclists, Equestrians and Community and associated Interim Advice Notes, focuses on impact of severance of existing routes and the resulting changes in journey lengths and times and local travel patterns (see para 13.3.15 of the ES) rather than the qualitative aspects. In respect of amenity, para 13.3.42 of the ES sets out that the assessment, specifically with regards to NMUs, considered changes in the quality and condition of footpaths, changes in quality of the landscape and signage and crossing provision. No significant effect was identified in respect of AMES 11/12 users under either assessment.
8.1.11	Section 136(1) of the Planning Act 2008 ("the 2008 Act") Section 136(1) of the 2008 Act is a simple and straightforward provision which is in these terms: "136 Public rights of way (1) An order granting development consent may extinguish a public right of way over land only if the Secretary of State is satisfied that—	Highways England made a number of submissions with regard to section 136 in [REP8-017] which are not repeated here save to say that, as explained in those previous submissions, in respect of section 119 of the Highways Act 1980, the TRF here are seeking to import different meaning into statutory terms of what is meant by 'required'; albeit in this case, section 116 of the 1980 Act and s.59 of the 2000 Act.



- (a) an alternative right of way has been or will be provided, or
- (b) the provision of an alternative right of way is not required."

The effect of s. 136(1) is that it is unlawful for a DCO to extinguish a right of way over land unless either one of the conditions in subparas (a) or (b) are satisfied.

The ability for motorcycles to travel along the 400m stretch of A303(T) between B11 and B12 is very obviously a "right of way over land". It is proposed to be extinguished by the draft Order. Accordingly the draft Order will be unlawful unless the ExA are satisfied either:

- a. that an alternative right of way has been or will be provided, or
- b. that the provision of an alternative right of way is not required.

In this case there is no question that condition (a) above is satisfied. The draft Order does not make provision for an alternative right of way and no such alternative right of way "has been" provided. Accordingly the legality of the Order as a whole turns on meeting condition (b).

In order for condition (b) to be met the ExA need to be satisfied that "the provision of an alternative right of way is not required." The TRF's previous written submissions have explained that this means, in effect, "not required for the reasonable convenience or amenity of users of the extinguished right of way." This tallies with the position under s. 116 of the 1980 Act and also with

s. 59 of the Countryside and Rights of Way Act 2000 which provides as follows.

"59.— Effect of Part I on powers to stop up or divert highways.

(1) This section applies to any power to stop up or divert a highway of any description or to make or

Again, this seeks to impart an additional test into the words of the Act where there is no context to do so (which is different from the consideration of 'public right of way' discussed below).

Notwithstanding this position, Highways England would argue that an alternative route that is perhaps a less good qualitative experience and which has little or no quantitative difference (i.e. journey time) does not create a requirement for a further alternative to be provided by the Scheme, particularly given that that alternative would, in itself, result in adverse impacts or reduce the beneficial effects of the Scheme.



confirm an order authorising the stopping up or diversion of a highway of any description; and in the following provisions of this section—

- (a) "the relevant authority" means the person exercising the power, and
- (b) "the existing highway" means the highway to be stopped up or diverted.
- (2) Where the relevant authority is required (expressly or by implication) to consider—
 - (a) whether the existing highway is unnecessary, or is needed for public use,
 - (b) whether an alternative highway should be provided, or
 - (c) whether any public right of way should be reserved,

the relevant authority, in considering that question, is not to regard the fact that any land is access land in respect of which the right conferred by section 2(1) is exercisable as reducing the need for the existing highway, for the provision of an alternative highway or for the reservation of a public right of way."

In particular s. 59(2)(a) refers to "unnecessary for public use" and the reference to access land in s. 59(2) makes it clear that the focus of the enquiry, in exercising powers to which s. 59 applies (which includes the ExA's power to make the Order) is on the relative ease and convenience of the public's ability to use a right of way.

Of course s. 136(1) does not require alternative provision of extinguished rights of way where the extinguishment would not have a material effect on the convenience or amenity users of the way.



Examples would be stopping up a few metres of length of highway at the end of a cul-de-sac or stopping up a width of a footpath where sufficient was left to enable its full use by the public. It is inconceivable that the 2008 Act provides a licence to applicants to stop up rights of way over land, in the absence of alternative provision, if the effect would be to adversely affect the way's convenience and amenity for the public. 8.1.12 The applicant has, it appears, two arguments concerning s. 136(1) This is a fundamental misconception of Highways England's submissions at both of which are wholly devoid of merit. The clear implication is the hearing and which are expressed in its REP8-017 submission and are not that HE has no answer to this point and are, in effect, promoting a repeated here, save to say that the suggested argument for section 136(1)(b) DCO which would be unlawful if made. was not one made by Mr Taylor QC for the first time at the hearing. These submissions simply added more context to the points made by Highways The first (raised only for the first time in his oral submissions at England through its answers to Written Questions [REP2-036], Written ISH 9 by Mr Taylor QC without being trailed in any of HE's written Representations [REP3-013], ISH6 [REP4-034] and at deadline 4a [REP4amaterial) is that s. 136(1) does *not* apply to *vehicular* rights of way 001] and make clear that section 136 is quite clearly passed by this Scheme. over land. The basis is said to be that no matter how it is read. s. 136(2)(c) refers to a "right of way not enjoyable by vehicular However, in respect of the point of how section 136(1) should be read in traffic". The TRF find this submission very difficult to understand. terms of the meaning of 'public right of way', Highways England notes not Section 136(2) contains a set of conditions whose fulfilment only the Pepper v Hart reference mentioned in REP8-017 which provides engages "the following provisions of this section", i.e. ss(3)-(7). It context to the meaning, but also the rules of statutory interpretation (as has no effect on ss(1). Indeed the fact that special provision is discussed, for examples at chapters 18 20 of Craies on Legislation); in made in ss(3)-(7) emphasises that ss(1) is concerned with all rights particular that: of way over land. If were not then it would not have been necessary

- in general there is a presumption that a word used in different parts of provisions of this section". an Act will bear the same meaning in each place (see e.g. R v Falmouth and Truro Port Health Authority Ex p. South West Water Ltd The second is that it is said that s. 136(1)(b) is satisfied where, in [2000] 3 All E.R. 306, 337, CA per Pill LJ where in respect of the effect, the provision of an alternative right of way is not required in Public Health Act 1936, the judge stated 'that while section 259(1)(b) order to secure the goals of the underlying Scheme. This has a different statutory origin. I cannot accept that the draftsman interpretation of s. 136(1)(b) is problematic. This is because NSIP intended it to bear a completely different meaning in two paragraphs of development is, by definition, of a scale that means it will rarely (if the same subsection': ever) be necessary to secure the alternative provision of an
 - where an expression is defined in relation to one section of an Act but not in relation to another, it will be sometimes, but not always, appropriate to draw an inference from the absence of definition in the

for ss(2) to make special provision in respect of ""the following

extinguished right of way in order to deliver or secure the goal of

the scheme. If the goal of the NSIP scheme is something other

than to secure the alternative provision of the right of way, then



	this will always be met and is pointless. This interpretation cannot be right.	second place (see e.g. <i>Derby Specialist Fabrication Ltd v Burton</i> [2001] 2 All E.R. 840 EAT where the court declined to assume that the express inclusion of constructive dismissal in one context prevented an implied inclusion in another, quite similar, context;
		 where the plain meaning is in doubt, the courts will start the process of construction by attempting to discover, from the provisions enacted, the broad purpose of the legislation, where a particular reading would advance the purpose identified, the courts will be prepared to adopt that reading (see e.g. An Informer v a Chief Constable [2012] EWCA Civ. 197 - "Construction of a phrase in a statute does not simply involve transposing a dictionary definition of each word. The phrase has to be construed according to its context and the underlying purpose of the provision'.
		In the context of subsections (2) - (7), the Pepper v Hart note, and the absence of any indication to the contrary, these rules of interpretation support the position that the term public right of way should be taken to not include vehicular rights.
		There is therefore no question that the Development Consent Order would be unlawful if made, in the form proposed by Highways England.
8.1.13	It is important not to view para. 5.185 of the NPS in isolation from the context in which it sits. Paragraph 5.185 itself sits within a series of paragraphs dealing with 'mitigation', namely paras 5.179 – 5.185. These in turn form part of the section in the NPS dealing with "Land use including open green space, green infrastructure	As set out in the Case for the Scheme [APP-294], one of the key benefits of the Scheme is the improved accessibility to the WHS that is created by the multiple PRoW interventions undertaken by the Scheme, including the creation of a restricted byway on the line of the existing A303 and the four Green Bridges.
	and Green Belt" in paras 5.162 – 5.185. All of these paragraphs are relevant to the matter in hand. Paragraph 5.162 begins by stating that:	It is quite clear that the Scheme is in compliance with these NPS paragraphs and the needs of pedestrians, cyclists, equestrian and disabled users have been taken into account through measures that provide mitigation and
	"5.162 Access to high quality open spaces and the countryside and opportunities for sport and recreation can be a means of providing necessary mitigation and/or compensation	enhancement to the PRoW and green infrastructure network, including in relation to use, character, attractiveness and convenience.
	requirements."	TRF's complaints relate to one specific link for one specific type of user (motorcyclists) who are not mentioned in the NPSNN in the context that
	Paragraph 5.180 and 5.184 are critical and provides that:	Byway 12 will still be able to used to access the wider green network within the WHS.



"5.180 Where green infrastructure is affected, applicants should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes, National Trails and other public rights of way.

5.184 Public rights of way, National Trails, and other rights of access to land (e.g. open access land) are important recreational facilities for walkers, cyclists and equestrians.

Applicants are expected to take appropriate mitigation measures to address adverse effects on coastal access,

National Trails, other public rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve access. In considering revisions to an existing right of way consideration needs to be given to the use, character, attractiveness and convenience of the right of way. The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements in respect of these measures might be attached to any grant of development consent." (emphasis added)

As to para. 5.180 the TRF consider that byways forming part of the PROW network comprise "green infrastructure" ("GI") such that there is a policy imperative to "ensure the functionality and connectivity" of the GI network.

Paragraph 5.184 could not be clearer in indicating that applicants "are expected to take appropriate mitigation measures to address adverse effects...on other PROWs and to consider what opportunities there may be to improve access." In this case HE is pointedly refusing to promote appropriate mitigation measures in respect of the severing of the link between B11 and B12 and certainly has failed to consider any opportunities to "improve" (i.e.

This effect on one link for one class of user has been balanced against the benefits to other non-motorised users of the green network (including from not having to share routes with motorcyclists) and the wider WHS and the wider improvements to the network in putting together the PRoW and green network proposals for the Scheme.

Highways England considers that the design decisions are appropriate in the context of these policy provisions, even with one impact to one class of user of the green network.



do more than simply maintain the *status quo ante* by way of mitigation) access.

Paragraph 5.184 is also clear that "In considering revisions to an existing right of way consideration needs to be given to the use, character, attractiveness and convenience of the right of way." These are all matters which have been canvassed under other Agenda Items above on the initiative of the ExA but which, regrettably, appear to have been wholly overlooked by HE following the decision to remove the proposed substitute link between B11 and B12 from the Scheme.



9 National Trust (REP8-050)

9.1 Written summary of oral submission		
	Matter Raised	Highways England's Response
	cant's written oral submissions for ISH8 [REP8-016] and ISH11 [REP8-019] bed are detailed below.	nas responded to the points made by the National Trust in REP8-050. Additional
9.1.1	[In relation to ISH8 item 4.4 (iv) vi) and (vii)] 1.2.1 The Trust confirmed that we are part of the SDCG and that we are content with the group that is formed and the manner in which consultation is being proposed pursuant to section 4 of the OEMP. We are commenting on the latest version of the OEMP and have submitted comments to the Applicant on 2 September, which we would expect to be addressed in the D8 version of the OEMP. 1.3.1 The Trust confirmed that we are part of the SDCG and that we are content with the group that is formed and the manner in which consultation is being proposed pursuant to section 4 of the OEMP. We are commenting on the latest version of the OEMP and have submitted comments to the Applicant on 2 September, which we would expect to be addressed in the D8 version of the OEMP.	Highways England acknowledges the National Trust's positive comments regarding the SDCG and the way consultation is being proposed pursuant to section 4 of the OEMP. It is understood that the wording of Section 4 of the OEMP as submitted at deadline 9 is agreed with the National Trust.
	1.4.1 The Trust confirmed that in principle the Applicant (as The Authority) being the approving body for detailed design is accepted. Provided consultation with the SDCG is operating correctly, we are happy with the approvals mechanism. The details of that consultation process are under discussion.	
9.1.2	[In relation to ISH item 5.1 (iv)]	Highways England has responded to this point in its written summary of oral submissions made at ISH8 [REP8-016, agenda item 5.1(iv)], including agreeing that the DAMS cannot be inconsistent with the detail of the



	1.5.1 The Trust stated that the TPZ is secured in restrictive covenants attached to the land, which are under negotiation. The negotiation of land rights must precede what is in the DAMS and the wording in the DAMS must follow this and be consistent with it. The DAMS will be a certified document and there cannot be inconsistencies between that and the property rights that will have come into existence through the grants of restrictive covenants. We support publicity to the archaeological community as to what the restrictions are, and the process for dealing with them, but there must clearly be consistency between the as yet to be agreed restrictive covenants with the landowner(s) and how the final reflection of that agreement is to then follow in the DAMS.	restrictive covenant. The summary also notes that "the intention is not that the DAMS would be relied upon in order to understand the detail of the restrictions, which is appropriate given its function relates to the archaeological mitigation works for the Scheme, rather than future archaeological works unconnected with the Scheme." The final DAMS submitted at deadline 9 has been updated to ensure consistency with the restrictive covenants.
9.1.3	[In relation to ISH8 item 5.2 (ii)] 1.6.1 In respect of paragraph 6.1.22 of the DAMS, the Trust commented, in its role as a member of HMAG, that we would be seeking a change in language from 'input to decision'. 'Input to decisions' on interruption of works or delays are not sufficient. There should be meaningful consultation and HMAG would be looking for such 'consultation' to be consistent with consultation provisions set out elsewhere within the DCO documentation.	With regard to paragraph 6.1.22 of the DAMS [paragraph 6.1.23 in REP8-008], the wording has been updated to reflect the National Trust's comment and take their concerns into consideration: 'The TPA will consult Wiltshire Council and Historic England and, for sites within the WHS, HMAG, regarding the circumstances of any interruptions and delays. Resumption of work in such circumstances will be subject to consultation with Wiltshire Council and Historic England and, for sites within the WHS, HMAG. Nothing in this clause is intended to prevent Wiltshire Council (in consultation with Historic England and for sites within the WHS, HMAG) making representations regarding cessation or resumption of work, through the monitoring provisions described in section 8 of the Strategy (below).'
9.1.4	[In relation to ISH8 item 5.5 (ii)] 1.8.1 The Trust commented on the appeal process as set out, highlighting that as currently worded the appeals process only applies to Wiltshire Council or Historic England. Whilst we understand how the drafting of this particular process is intended to operate, the Trust sought ongoing discussions with the Applicant on this point and with respect of the overall process of consultation and	With regards to the appeals process, the wording in section 8.7 of the DAMS [REP8-008] has been updated to include the words 'and any other party, if a consultee to the decision' to address this comment and concern from the National Trust.



	disputes resolution; for that to be consistent and clear in all cases. We have commented on the latest version of the DAMS and have submitted comments to the Applicant on 4 September, which we would expect to be addressed in the D8 version of the DAMS.	
9.1.5	[In relation to ISH9 item 3.4 – NMC-04] 2.1.1 The Trust confirmed that, as owner of West Amesbury Farm, we echoed the points raised by others in the hearing regarding the design of the 'turning head' and for that to take in to account the access and usage needs at West Amesbury Farm. Detailed design and layout are important to ensure that, as well as not impeding access to West Amesbury Farm, there is no obstruction to the Private Means of Access to Stonehenge Cottages. We expect discussions to be ongoing with the Applicant regarding the specifics of design and implementation, but support the proposed change as non-material.	The National Trust are thanked for their comments and support for NMC-04 regarding the "turning head" and the need for access and usage at West Amesbury Farm. Highways England's Proposed Changes Consultation report [REP8-015] provides details of this NMC and the Applicant agrees that discussions will be ongoing in respect of the detailed design. As confirmed at the hearing [REP8-17], there is sufficient space within the Order limits for detailed design to take place. Highways England's deadline 9 submission entitled Proposed Changes Position Statement (including Responses to Comments on the Proposed Changes Consultation Report (non-statutory)) sets out Highways England's definitive NMC-04 proposal, in relation to the acceptance of which the Examining Authority's Procedural Decision is awaited.
9.1.6	[In relation to ISH11 item 3.5] 3.3.1 The Trust expressed it had no remaining concerns with regards to the drafting of the article. The reference in the article to 'adjacent' is the Trust's remaining concern as this would allow the exercise of the powers outside the Order Limits. Any such exercise of those powers requires adequate consultation. The Trust commented that this is under negotiation with the Applicant and we are confident that it will be agreed.	The Applicant welcomes the National Trust's confirmation that it is content with the article and the Applicant understands that an agreed position on consultation has now been reached.
9.1.7	[In relation to ISH11 item 3.6] 3.4.1 The Trust gave an update on the negotiations of the details of restrictive covenants governing the Tunnel Protection Zone. A very detailed examination of the proposed covenants by the Trust, and of our comments by the Applicant, has been undertaken, which is	The Applicant understands that agreement has been reached with the National Trust on this matter.



	taking us into the final phase of agreement. The Trust confirmed a high level of agreement, and that we think the ability to undertake future archaeological investigation will be protected - which is the primary concern. We still need precise definition on very shallow areas where the tunnel reaches the surface, to ensure that the covenants are not unintentionally putting areas out of reach for future research. There is also some discussion around the detail of the definition of restricted activities. We note the reference in the DAMS to the Tunnel Protection Zones [and, as stated at ISH 8], the wording included in the DAMS must follow and be consistent with the final wording of the restricted covenants agreed between the parties.	
9.1.8	[In relation to ISH11 item 3.6] 3.4.2 The Trust made a comment in relation to Article 22(2) in respect of the ability of Statutory Undertakers to exercise the powers to compulsorily acquire rights. The Trust has previously raised concerns regarding the exercise of these powers for utilities diversions over land owned by (or following compulsory acquisition on land previously owned by) the Trust. These issues are resolving into ensuring adequate consultation over the exercise of those powers on Trust land (or land previously owned by the Trust) where that falls outside the provisions relating to utilities diversions in the DAMS. It is not about the drafting of the power, we understand how it operates, it is the need for an appropriate consultation arrangement if the use of the power steps outside the provisions of the DAMS.	The Applicant welcomes the Trust's confirmation that it does not have issues with the drafting of article 22 and understands that the position is now agreed.
9.1.9	[In relation to ISH11 item 3.6] 3.4.3 The Trust raised an additional concern with regards to Article 27 and the ownership of the subsoil of the route of the redundant A303. Negotiations are proceeding with the Applicant on this. In regards this, our intention is simply to safeguard the Trust's position (post scheme construction) in terms of its land interests and rights.	The Applicant understands that an agreed position has now been reached.



	We are confident that the principle has been agreed and that it is now just the drafting to be agreed.	
9.1.10	[In relation to ISH11 item 4.2 (ii)] The Trust confirmed (as per comments from Historic England and Wiltshire Council) that we are part of discussions with the Applicant in this regard. We believe we are very close to agreement on the principles. There is still some ongoing negotiation about the process of consultation and dispute resolution within Section 4 of the OEMP which should be resolved. If, however, our concerns cannot be resolved by negotiation we will report in writing to the ExA and provide our version of the drafting of the OEMP and the DAMS. We are however expecting to reach agreement in due course.	The Applicant has engaged with the National Trust and it is understood that the wording of Section 4 of the OEMP as submitted at deadline 9 is agreed with the National Trust.
9.1.11	[In relation to ISH11 item 4.2 (iii)] 3.7.2 The Trust commented that our focus is around OEMP consultation processes (within PW-G1 and MW-G7), and that we are working through these, checking time periods and drafting, to be able to confirm if they are adequate. We are commenting on the latest version of the OEMP and have submitted comments to the Applicant on 2 September, which we would expect to be addressed in the D8 version of the OEMP.	The Applicant thanks the National Trust for the feedback and revisions to the OEMP have been undertaken. It is understood that the OEMP as submitted at deadline 9 is agreed with the National Trust.
9.1.12	[In relation to ISH11 item 4.3 (i)] 3.8.1 The Trust commented (lead by the discussion in the hearing) on the process of DAMS approvals. We understand that it is a certified document, so that is how it is approved by the SoS, and that other matters connected with it (e.g., SSWSI, HMP, MS) are to be approved by Wiltshire Council. The Trust sought ongoing discussions with the Applicant on this point and with respect of the overall	With regards to the consultation and appeals processes, the wording in sections 8.5 and 8.7 of the DAMS [REP8-008] was amended, having regard to comments from the National Trust. Following further discussions with members of HMAG, the DAMS has been further updated for final submission at deadline 9. A comments log will be provided to the National Trust to show how we have addressed their comments in the final version.



process of consultation and disputes resolution; for that to be consistent and clear in all cases. We have commented on the latest version of the DAMS and have submitted comments to the Applicant on 4 September, which we would expect to be addressed in the D8 version of the DAMS.



10 Historic England (REP8-041)

10.1	Written summary of oral submission	
	Matter Raised	Highways England's Response

The Applicant's Written Oral Submissions for ISH9 [REP8-016] have responded to Wiltshire Councils comments received at deadline 8. Additional points raised in Historic England's oral submission for ISH9 is detailed below.

10.1.1 2. THE WORLD HERITAGE SITE (Agenda Item 3)

- 2.1. HBMCE in its response drew the Examining Authority's attention to our previous submissions in Section 2.2.1 of our Deadline 4 Written Summaries of Oral Submissions at Issue Specific Hearing 2 [REP 4-85] which covered the implications arising from the 1972 Convention, the obligations on the State Party, and the relationship between Articles 4 and 5.
- 2.2. We indicated that the ICOMOS HIA Guidance acknowledges in section 2-1-5 that sometimes harm to World Heritage Sites will be unavoidable and that in those circumstances the decision should be based on whether the public benefit outweigh the harm. We further advised that in our opinion this guidance should apply in this case.
- 2.3. Ultimately, HBMCE observed that it will be for the Examining Authority to determine whether the present scheme is the best available on the basis of the evidence in front of it.
- 2.4. We noted that HBMCE's role is specifically in relation to the historic environment. It is our role to respond to the draft DCO and to do our best to ensure that in its final version it is appropriate to the OUV of the WHS and HBMCE has consistently sought to achieve this.
- 2.5. At the hearing we indicated that although our Head of International Affairs was not present, that our submissions

See Highways England's Written Summary of Oral Submissions made at ISH8 in relation to agenda items 3.1 and 3.2 [REP8-016] in terms of compliance with the World Heritage Convention and the ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (REP8-016 in turn cross refers to where else in the Applicant's submissions to the Examination compliance with the World Heritage Convention has been addressed, including the Applicant's response to Written Question G.1.1 [REP2-021], the Applicant's Written Summaries of oral submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030] (specifically agenda items 3(i), 3(v), 3(vi) and Appendix A to that document), and items 34.1.47 – 34.1.62 of the Applicant's response to comments submitted at deadline 4 [REP5-003]).

Highways England acknowledges Historic England's positive engagement with the Scheme throughout the development of the Scheme design and the Examination, and in particular its inputs to the development of the design principles and the Detailed Archaeological Mitigation Strategy (DAMS).



represented HBMCE's position but that we could elaborate further on this topic in writing should that be appropriate.

Post Hearing Note:

- 2.6. HBMCE attended the 43rd World Heritage Committee Session as part of the UK delegation led by DCMS. The UK attended as a State Party Observer and HBMCE acted in our role as adviser to the State Party.
- 2.7. In HBMCE's advice we have continually reinforced the importance of the World Heritage Site and reference to the Department for Transport's Cultural Heritage Objective for the Scheme. This reference is important to help inform the development of the design, in the need to minimise adverse impacts, and in securing appropriate safeguards for the historic environment and particularly in relation to parameters for decision making at detailed design stage.
- 2.8. In fulfilling our statutory role HBMCE's response to the effects of the Scheme

on attributes of OUV which relate to spatial relationships impacts has been to advise in relation to the development of the design principles and the DAMS. This is to ensure that they engage with the importance of those spatial relationships and consider, for example, how visual relationships can be retained and where possible enhanced, how the loss of archaeological remains should be mitigated through understanding the relationships between the monuments and those remains within their settings, and in considering through the landscaping scheme how integration with the existing landscape character can most successfully be achieved.

2.9. Ultimately the Examining Authority will need to take a view in the light of the assessed adverse impacts and positive benefits, taking account of the 1972 Convention and the requirements of national policy.



10.1.2

3. Outline Environmental Management Plan (OEMP) (DL6 version [REP6- 011 and REP6-012]) (Agenda Item 4)

- 3.1. HBMCE stated that we remained in discussion with Highways England regarding the range of documents and their hierarchy and the way in which we would best fulfil our role as a statutory consultee, as adviser to the State Party, as the Government's adviser on the historic environment, and as a member of the HMAG forum.
- 3.2. We indicated that we would review the list of documents cited, but welcomed the clarification from Highways England that the CEMPs and Management Plans were now to be categorised for approval by the Secretary of State, noting the exceptions to the list of the Heritage Management Plans (HMPs), Method Statements (MSs) and Site Specific Written Schemes of Investigation (SSWSI) which would be approved by Wiltshire Council in consultation with HBMCE.

Post Hearing Note:

3.3. HBMCE has continued to work with Highways England on the document hierarchy, and has provided Highways England with details of those elements

of the Scheme and those documents on which we would want to be consulted in order to best fulfil our statutory role. This has been provided in the hope that we will be able to agree those elements and documents with them (through discussion on the DAMS and OEMP) sufficiently in advance of Deadline 8 to facilitate the revision of these documents where necessary.

3.1/3.2 See Highways England's response to agenda item 4 of Highways England's Written Oral Submission [REP8-016] which confirms that Secretary of State approval would apply to:

- Ground Movement Monitoring Strategy (MW-CH8);
- Landscape and Ecology Management Plan (LEMP) (MW-LAN1);
- Arboricultural Mitigation Strategy (MW-LAN3); and
- Vibration control measures (PW-NO14 and MW-NO13) Vibration control measures will be included in the Noise and Vibration Management Plan, which will also be subject to SoS approval.

The exception to the rule is the Heritage Management Plans, SSWSIs and Method Statements, which are subject to approval by Wiltshire Council after consultation with Historic England and the other members of HMAG as appropriate (as provided for in the DAMS).

3.3 Highways England would like to thank Historic England for their positive engagement with the Scheme throughout the development of the OEMP and can confirm that agreed revisions have been made to the final OEMP submitted at deadline 9.

10.1.3

4.3 Miscellaneous

3.4. As part of continued subsequent discussion with Highways England regarding the OEMP, REAC tables and design commitments and principles, HBMCE has highlighted the need to consider carefully how the design and approach to temporary works,

The OEMP has been amended at deadline 9 to provide for a Design Principle that all temporary works will be designed and undertaken to minimise their visual impact, building on the requirement in MW-G28 that hoardings should be a suitable colour to aid integration with the surrounding landscape.



particularly those with potential for significant visual effects, are
addressed as part of the Scheme.

- 3.5. Consideration of height, colour, massing and visual screening could assist in this regard. We have highlighted the need to include additional drafting for design elements beyond the 'colour' of hoardings with reference to MW-G28.
- 3.6. We have also recommended that further design principles might be required to address temporary works in general and hope to see this addressed in the next iteration of the OEMP due to be submitted at Deadline 8.

10.1.4

4.1 Approvals/ agreements/ consultation (i)

- iv. Ground Movement Monitoring Strategy (MW-CH8, cf: DAMS, para 5.2.7). Has an agreed specification been established for acceptable levels of vibration and settlement? How should monitoring and remediation, during and post construction, be secured?
- 3.7. HBMCE stated that this was an element of the Scheme on which we would wish to be consulted, and welcomed the earlier clarification from Highways England in relation to the status of documentation. We stated that we had been looking carefully at how the provisions for mitigation are set out in the OEMP and how they relate to the provisions within the DAMS to ensure that there is consistency and that they work well together.
- 3.8. We confirmed that we remain in discussion with Highways England regarding various elements of the relationships between, for example, the Noise and Vibration Management Plan (MW-NOI3) and the DAMS which we were still in the process of exploring.
- 3.9. In addition we remain in discussion about the information collected as part of Highways England's assessment to date and how that might be helpful to us as a statutory consultee and the Government's adviser on the historic environment to assist in answering the difficult question surrounding the identification of the

- iv: No specification has been established. Item MW-CH8 of the OEMP [REP8-006] has been updated to identify that trigger and maximum settlement levels and responsibilities for remedial actions will be established as part of the Ground Movement Monitoring Strategy. As one of the members of HMAG, Historic England will be consulted during the development of this strategy.
- 3.7: Comment noted.
- 3.8: Comment noted the DAMS and OEMP must be considered together. In any event Historic England would be consulted on the NVMP as an appendix to the CEMP.
- 3.9: Comment noted.
- 3.10: Amendment has been made to item MW-NOI5 of the OEMP [REP8-006] to ensure that Stonehenge Monument and barrows are considered as vibration sensitive cultural heritage assets and to provide an explicit linkage to the DAMS.
- 3.11: The requirement to consult with Historic England, either through their statutory role or as a member of HMAG, is identified where relevant throughout the OEMP [REP8-006] (including within the development of detailed design refer to Chapter 4) and the DAMS [REP8-008]. Undertaking works in accordance with these documents is secured via Schedule 2 Para. 4



appropriate triggers on a case by case basis with respect to the sensitive cultural assets that the Scheme has potential to affect.

Post Hearing Note

3.10. We would also take this opportunity to draw the Examining Authority's attention to a related issue that we have been in continuing discussion with Highways England regarding, primarily through dialogue concerning the dDCO. This is due to the unintended capture or exclusion of scheduled

monuments from the definition of 'building'. The OEMP excludes 'buildings' from sensitive cultural heritage assets under MW-NOI5, but this would be at odds with the Ancient Monuments and Archaeological Areas Act 1979 definition of a scheduled monument. We would refer the Examining Authority to our submissions as part of the dDCO hearing where we expand on the detail of this point (paragraphs 10.19-20 below). The unintended consequence is the exclusion of the Stonehenge monument and barrows as the OEMP is currently drafted.

3.11. HBMCE consider that regardless of how it is determined appropriate safeguards should be secured it is essential that detailed consultation with HBMCE is secured under the DCO to enable us to provide advice based on the emerging information through the detailed design process and on the basis of the most up to date information available to Highways England.

and 5 of the dDCO [REP8-004] and therefore consultation with Historic England is secured within the DCO.

10.1.5

Design

iii. Design vision (Section 4.2): Discussion.

- 3.12 HBMCE confirmed that we attended a workshop, which we had initiated, regarding the design principles on Monday 19 August.
- 3.13. Our advice, as set out in our previous submissions, has been in relation to the need for the design vision to be set out very clearly and to be embedded in the OEMP as a mechanism to draw together the various information included within the application documentation
- 3.12 The Applicant thanks HBMCE for their attendance at the workshop and the attendance of their landscape architect and architect.
- 3.13 The design vision is very clearly set out and embedded in the OEMP, forming section 4.2 of the document. The OEMP has drawn together the various information within the DCO, including the Design and Access Statement material.
- 3.14 The Applicant welcomes the positive feedback on the OEMP and illustrations. It is understood that the wording of the OEMP and DCO at



which outline and provide an understanding of the design vision for the Scheme, such as the Design and Access Statement.

- 3.14. HBMCE welcomed the inclusion of this more comprehensive approach to the Design Vision set out and integrated within the OEMP where it is juxtaposed with the Design Commitments and Design Principles in the latest version of that document. In addition the recent inclusion of the Annex of associated illustrations which brings together the relevant commitments and principles in relation to key engineering elements has been helpful. This has assisted in the progression of on-going discussion with Highways England regarding the refinement of language in the OEMP with the overall intention of securing the highest quality in delivery of the scheme together with the potential heritage benefits and minimisation of negative effects on the WHS. This approach, with the WHS at its core would recognise the Cultural Heritage objective set by the Department for Transport for the Scheme.
- 3.15. HBMCE remains in conversation with Highways England on these matters but can confirm that we found the workshop very useful and productive in progressing those discussions on the refinement of language.
- 3.16. Whilst we indicated that the Design Vision remains under discussion we noted that we had found it helpful to bring that articulation of Highways England's vision for the Scheme together in one place. Some of the discussions in relation to the refinement of language have been able to articulate more clearly how the quality and appropriateness of the design can be secured, identifying the relationships between the landscaping scheme and the design of individual architectural elements as part of a single holistic approach to the development of the detailed design across the whole of the Scheme.

deadline 9 is now fully agreed with Historic England, including in relation to the cultural heritage objective.

3.15 and 3.16 – The Applicant thanks HBMCE for the feedback and revisions to the OEMP have been undertaken following the workshop.



10.1.6

- iv. Design principles (Section 4.3): Discussion.
- v. Para 4.3.2 Illustrated Examples of Key Design Elements, AnnexA4: Discussion. (Covered by discussion under agenda item above)
- 3.17. HBMCE indicated that one of the key purposes of the aforementioned workshop regarding the Design Principles and Commitments was to go through a process where they were tested and challenged, and consider how they would work together holistically with the Design Vision.
- 3.18. One particular intention was to identify very clearly in the drafting the elements of significance in relation to the historic environment which the drafting was intended to secure protection for as part of the decision making process. As part of that discussion we found it helpful to talk about 'landscape character' in order to convey an understanding of visual character, and the relationship between the natural environment, physical landform and historic environment and so to embody a range of concepts that would help describe the significance that the Design Principles were specifically designed to secure protection for. It was considered that this wider landscape approach also recognised the international importance of the WHS that the Scheme traverses.
- 3.19. HBMCE remains in discussion with Highways England following the workshop and looks forward to seeing the revised version of the OEMP and the updated language in Table 4.1 drawing on those conversations so that we can confirm that those discussions have been taken into account in the version to be submitted at Deadline 8.
- 3.20. In responding to the Examining Authority's follow up question regarding specific elements and drafting of the Design Principles we again highlighted the reflection of the concept of landscape character in the redrafting as outlined in paragraph 3.18 of our submissions above.

Highways England notes these comments, particularly with regards to the inclusion of the reference to landscape character.

It is understood that Historic England agrees that the wording of section 4 of the OEMP submitted at deadline 9 adequately considers landscape character.



	3.21. HBMCE indicated that we would provide the Examining Authority with an update following receipt of the revised OEMP regarding any further amendments or drafting of language that we considered necessary.	
10.1.7	vi. Para 4.5.14 – Final Decision on Detailed Design: Why not the traditional arrangement, whereby highways and planning requirements each have to be separately met and then approved by the competent statutory authority? 3.22. HBMCE stated that at the time of the hearing we had not had sufficient opportunity to review the latest version of the documents received from Highways England in advance of the hearing outlining the consultation process for the detailed design stage to comment in detail. As a result we remained in discussion with Highways England. We noted however, that at present the Deadline 6 draft OEMP was largely focused on the role of the Stakeholder Design Consultation Group (SDCG), and that it did not as yet reflect the full scope of either Historic England or Wiltshire Council's roles as statutory consultees inside and outside the WHS beyond that of their membership of HMAG and the SDCG. We noted that there was need for agreement of the Terms of Reference for the SDCG to assist in progressing that discussion. 3.23. Since HBMCE's role would be as a statutory consultee, as adviser to the State Party, as the Government's adviser on the historic environment, and as a member of the HMAG/SDCG fora we would expect, given the implications of the Scheme within the WHS and its setting, to be involved in discussions regarding the development of the detailed design. 3.24. Consequently discussion remains on-going with Highways England in relation to the procedures for consultation and engagement, and may be resolved as part of those conversations in relation to how HBMCE can best fulfil its statutory role.	It is understood that section 4 of the OEMP, including in respect of the design consultation process, is now fully agreed with Historic England. In any event, the response to Written Question De.2.5 [REP6-023], which when read with Written Questions DCO.2.44 and DCO.2.47 [REP6-027], explains why it is appropriate that Highways England should approve the final design of the Scheme, following the consultation process set out in the OEMP.



Post Hearing Note:

- 3.25. HBMCE have provided detailed comments back to Highways England regarding the drafting of the OEMP and the Design Principles and Commitments, and remain in discussion with them in relation to their response to those comments. Whilst we have found the Annex of illustrations useful, we have focused on the wording of the text they accompany since it is this that will provide the security in subsequent decision making stages to ensure that the level of quality that is required given the WHS inscription can be achieved in practice.
- 3.26. We would hope to have reached agreement in time for our key points to have been addressed in the version submitted to the Examining Authority at Deadline 8.
- 3.27. In relation to on-going discussions regarding the process for final decision making on the detailed design, HBMCE can update the Examining Authority as follows. HBMCE welcomed consideration of the question by the Examining Authority because our advice has been focused on how the quality of the scheme to be delivered can be secured at the highest level due to recognition through the WHS inscription that this is a landscape without parallel.
- 3.28. We have provided Highways England with our detailed comments regarding how and where we would look to engage with the consultation on the detailed design process in relation to specific documentation to best fulfil our statutory role. We have also continued conversation regarding the mechanisms and processes for that engagement and consultation.
- 3.29. HBMCE will look to review the updated versions of documentation due to be submitted at Deadline 8 and will consider whether we are able to agree and resolve the remaining issues on the topics outlined above, and whether we are able to agree the final language of the OEMP design principles and commitments to ensure that we are satisfied that there is sufficient safeguarding embedded within the processes for the Scheme to ensure that the avoidance



of negative effects on the historic environment is a decision making. Following this we will form a view documentation has taken on board our comments update to the Examining Authority at Deadline 9 in final process of decision making at the detailed des	on how the an elation to the	
ii. Section 4 – Archaeological Research Agenda. D 4.1. HBMCE stated that we have been involved discussions with Highways England regarding the provided a great deal of advice on the development Archaeological Research Agenda (ARA). 4.2. HBMCE has consistently advised in our previous the Examination that the research framework is an the DAMS for the Scheme. Its purpose is to provide the way in which the mitigation programme can be enhancement of our understanding of the significant assets affected by the Scheme, whether designate inform a process of decision making on an iterative basis to target the programme of mitigation, taking requirements under the NPSNN for this to be both proportionate. 4.3. Given the WHS inscription there is clearly a frequestions that address evidence from those chronochat has potential to contribute to the OUV of the Whave been clear in our advice that the landscape to Scheme is a multi-period one, and that understand from all periods is important as a robust basis for across the Order limits. 4.4. HBMCE has therefore provided suggestions at research questions posed might be enhanced, part development of Scheme specific research question assist in maximising the potential of the mitigation penhance our understanding of the WHS within its of the specific research question assist in maximising the potential of the mitigation penhance our understanding of the WHS within its of the specific research question assist in maximising the potential of the mitigation penhance our understanding of the WHS within its of the specific research question assist in maximising the potential of the mitigation penhance our understanding of the WHS within its of the provided suggestions as the potential of the mitigation penhance our understanding of the WHS within its of the provided suggestion and the provided s	with regards to the point by Historic England that 'understanding evidence from all periods is important as a robust basis for decising across the Order limits', the DAMS submitted at deadline 8 has been to reflect this comment including the Palaeolithic (Section 4.3) and updated Iron Age and Roman section (Section 4.8). Historic England's suggestions with regards to how the research oposed might be enhanced and sign-posted have been taken on bound intelligent count of the appropriate and suggestions of the DAMS issued at deadline 8 [REP8-008]. Highways England agrees with Historic England's comment that the development of those research questions included [in the DAMS as issued at deadline 8 [REP8-008]. Highways England confirm that this is the approach that the Adopt including opportunities to consider questions that can be porelation to more localised areas as well as the wider landscape being the evidence ecision making. Dut how the sularly in the that will really orgramme to	the on making een updated d an questions pard in the hey 'expect MS] to en under pplicant will psed in ased focus.



advised that more could be done to highlight these in the drafting and make them more clearly signposted in the next version of the DAMS.

- 4.5. We also clarified that the ARA in the DAMS is a starting point. We would expect the development of those research questions included to continue through the careful planning for the work to be undertaken under each SSWSI as set out in Appendix D of the DAMS. This will also offer the opportunity to consider questions that can be posed in relation to more localised areas as well as the wider landscape based focus.
- 4.6. Nonetheless we remained of the opinion that the incorporation of landscape scale research questions is particularly important given the extent of the Scheme. We have highlighted the opportunity for the Scheme to test some of the current proposed landscape models for the Stonehenge landscape, including some of those discussed during the Issue Specific Hearings and referred to in written submissions by other Interested Parties even if they are not included in an established research framework.

10.1.9

iv. Para 5.2.10 - Tunnel Protection Zones. Discussion

- 4.7. HBMCE has consistently advised in relation to the Tunnel Protection Zones proposed by Highways England that there is a need to identify an acceptable solution to enable archaeological work to continue within the WHS, whilst recognising that Highways England will want to ensure that this can proceed without affecting the stability of the tunnel.
- 4.8. We have welcomed the inclusion at 5.2.10 of the draft DAMS of additional explanation of how these zones have been identified. Whilst we confirmed that the drafting reflected our previous conversations, we also indicated that the figures that we understand have been produced to accompany that text were particularly helpful in illustrating the extent of the 0.6 and 1.2 m zones in relation to the tunnel and with reference to surrounding archaeological remains. It was not clear to us whether these images had been submitted to the Examination. We therefore

See Highways England's response to agenda item 5 (iv) of Highways England's Written Summary of Oral Submissions made at ISH8 [REP8-016] which explains that the DAMS is not the mechanism by which the restrictions in the tunnel protection zones are secured; it is simply the means of noting the obligations of National Trust and Wiltshire Council to ensure those wanting to do works in those zones in future are made aware of the restrictions. The detail of the restrictions themselves, including the accompanying plans, will be included in and secured by the restrictive covenants. The final DAMS submitted at deadline 9 has been updated to reflect the requirements in the restrictive covenants.

Regarding an image to illustrate the tunnel protection zones, this has been previously submitted to the Examining Authority in Appendix CH.1 (Question CH.1.27 Proposed restriction - Tunnel long section) in Response to the Examining Authority's Written Questions - 8.10.5 Cultural heritage (CH.1) [REP2-025, pages 126-127]. As noted above and explained in the written summary of oral submissions from ISH8 [REP8-016, agenda item 5(iv)] the



welcomed Highways England's statement during the hearing that plans are not included in the DAMS as "the intention is not that the DAMS they were engaged in deciding where was the most appropriate would be relied upon in order to understand the detail of the restrictions, location for these images to be included within the Examination documentation. with the Scheme."

4.9. HBMCE therefore continues in discussion with Highways England in relation to how the Tunnel Protection Zones relate to the Limits of Deviation and in relation to the draft restrictive covenants indicating how they will operate in practice. We noted that we had had discussions with Highways England regarding the alignment of advice relating to archaeological work in this area so that if any works also required Scheduled Monument Consent, a mechanism for sharing appropriate information and provision of relevant advice back to the applicant had been agreed in advance.

which is appropriate given its function relates to the archaeological mitigation works for the Scheme, rather than future archaeological works unconnected

Appropriate mechanisms for consultation with Historic England for the Detailed Design stage are included in the OEMP and the DAMS as submitted at deadline 9.

Post Hearing Note:

4.10. Following the hearing, HBMCE has now received the outstanding information we requested from Highways England relating to the restrictive covenant and the Tunnel Protection Zones subsequent to this being raised during the hearing. We will review this information in discussion with Highways England and seek to resolve any outstanding issues prior to providing the Examining Authority with our comments at Deadline 9.

10.1.10

v. Para 5.2.18 – Soils handling strategy. Discussion Post **Hearing Note**

4.11. HBMCE has provided detailed comments to Highways England on the Outline Soils Handling Strategy now embedded in the latest version of the OEMP and the need to ensure that this avoids rather than generates any conflict with process and procedures in the DAMS and the various contractors responsible. We consider the recognition of the relationship between the DAMS and the processes set out in the Soils Handling Strategy helpful, and Highways England notes these comments.



by addressing it in both the DAMS and OEMP these documents should assist in avoiding conflict in working practices. 10.1.11 Part 2 – Overarching Written Scheme of Investigation (WSI) Highways England notes these comments. 4.12. HBMCE agreed that the ploughzone archaeological resource Please refer to item 5.4i of Highways England's Written Summary of its Oral was very important and particularly so in the WHS. We referred the Submissions from ISH8 [REP8-016] which explains that the deadline 7 DAMS Examining Authority to our previous submissions [REP7-046 proposed at paragraph 6.3.14 that a representative sample will be identified paragraph 4.10] in relation to the programme of statistical analysis for further ploughzone sampling, in consultation with Wiltshire Council and being undertaken by Highways England. We noted that this was still Historic England and, for sites within the WHS, HMAG. In some areas, a underway and as yet therefore we were not able to consider sample of up to 100% of the artefact content of the ploughsoil may be questions such as the volume potentially required to be able to necessary, combined with a systematic sample to capture background answer landscape scale research questions, or the volume of work distributions and transitional areas. The strategy will adopt a reflexive required to achieve a statistically representative sample. approach such that the sample size may be increased locally in response to the results of the systematic sampling. The Applicant considers that the 4.13. We advised that our advice had fed into this process and had strategy as set out in the DAMS as submitted at deadline 9 provides recommended that questions such as that set out in section 6.3.51 of appropriate mechanisms for decision making to be made and developed the DAMS [REP7-019] should be considered in the approach to throughout the full life-cycle of the project with regards to sampling of features interrogation of the results from the evaluation stage of the Scheme. and sampling of the artefacts within the ploughzone. 4.14. We remain of the view that the statistical analysis may be able Highways England acknowledges Historic England's comments to the to help frame the reflexive and iterative approach. In particular, such Examining Authority in their post-meeting note with regards to the case-byanalysis has potential to help develop an intelligent approach to case basis of granting Scheduled Monument Consent (SMC) and the where work should be targeted to answer specific research variability and range of percentages of top soil/ plough soil sampling that have questions. It has potential to assist in identifying the extent of been consented by the Secretary of State in relation to SMC applications mitigation required with a high level of confidence in the results from within the WHS. the sample as being representative of the wider assemblage, and in identifying what level of baseline sampling would need to be The Applicant also notes Historic England's comments that 'the focus of any conducted in those areas to maximise the potential of the Scheme to sampling responds to significance, and targets mitigation in response to contribute to our understanding of the historic environment and its specific research questions. The objective is to enhance our understanding of significance and in particular the OUV of the WHS. the significance of the WHS and its OUV. rather than a process of continued collection of increasing volume of material even if that will not necessarily 4.15. HBMCE indicated that we were keen to see that initial process yield further understanding. [Historic England's] advice is that mitigation of analysis should be focused on the basis of a series of research questions that address the WHS at a landscape scale in order to maximise the potential of the results of the mitigation to provide meaningful answers to those questions.' Highways



concluded before finalising our advice and hoped that we would be able to update the Examining Authority further in relation to how the results might enable further refinement of the current proposals.

- 4.16. We concurred that there was need for agreement but considered that it would be worthwhile awaiting the results of this analysis before coming to any final conclusions.
- 4.17. In relation to the Examining Authority's follow up question regarding the stage at which we would be able to come to an agreement, we indicated that we remained hopeful that the results of the statistical analysis would be useful in addressing this point, but that regardless the DAMS set out a reflexive and iterative approach and further refinement was likely to be possible as part of the development of approaches in the SSWSIs drawing on the baseline set by the DAMS.
- 4.18. We further confirmed that there was need for confidence in the DAMS as the basis for modifying and developing the results and approaches.
- 4.19. In general HBMCE would note that when considering sampling strategies for work within scheduled monuments, we consider each application on a case by case basis, taking account of the significance of the area affected, and the impact of the proposed works and would base our recommendation on the results of this assessment.

Post Hearing Note:

- 4.20. During the ISH further queries were raised regarding the appropriate baseline for sampling of the plough soil within the Stonehenge WHS and regarding evidence from the approaches that had been taken within the preceding 10 years. Due to the concerns expressed by the Examining Authority as to the extent of time available, it was considered this could be dealt with more thoroughly in written submissions.
- 4.21. A supplemental query was raised which we understand to have questioned whether the proposed

England states that this is reflected in the DAMS that is submitted at deadline 9. The statistical analysis will be developed by the Applicant, following advice from Historic England, in consultation with Wiltshire Council and Historic England and, for sites within the WHS, HMAG, in order to inform a Method Statement and SSWSIs to be prepared by the Archaeological Contractor at the Preliminary Works stage, for approval by Wiltshire Council (in consultation with Historic England) as set out in the DAMS as submitted at deadline 9 [para. 6.3.18].



response would be to increase the extent of work where a high density of evidence was identified or where a low density of evidence was identified. We understood the question to be suggesting that it was in the areas where a low density of material was identified where a higher percentage sampling would be required to ensure that all diagnostic material was recovered.

- 4.22. Following the hearings, we have now had the opportunity to consider the matter further and also review our records for archaeological work conducted under scheduled monument consent (SMC) within the WHS where the plough soil/topsoil had been systematically sampled.
- 4.23. HBMCE has reviewed the information available from applications we have received and administered on behalf of the Secretary of State for SMC within the Stonehenge, Avebury and Associated Sites WHS that involved an element of ground disturbance.
- 4.24. The Examining Authority should be aware that applications for SMC cover a wide range of different types of works with differing impacts, and in many situations sampling of the topsoil would not be considered either valuable, appropriate or proportionate.
- 4.25. Our review of these applications demonstrates that a site by site and case by case approach has been taken, as set out in our oral submissions at the hearing (paragraph 4.19 above).
- 4.26. This approach follows DCMS policy (2013)1 (sections 15-21) in relation to the factors taken into account when deciding whether to grant SMC which require a case by case assessment of individual circumstances and justification for proposed works.
- 4.27. HBMCE's review of these applications indicates that a range of percentages of top soil/ plough soil sampling have been consented by the Secretary of State in relation to SMC applications within the WHS. Approaches have varied from no work being undertaken on the topsoil, to a set sampling process being undertaken (examples range between e.g. 4.2%, 10%, 100%), to the implementation of an



iterative strategy (increasing up to 100% depending on artefact presence/density identified during the excavation).

4.28. In summary HBMCE's advice is to ensure that the focus of any sampling responds to significance, and targets mitigation in response to specific research questions. The objective is to enhance our understanding of the significance of the WHS and its OUV, rather than a process of continued collection of increasing volume of material even if that will not necessarily yield further understanding. Our advice is that mitigation should be focused on the basis of a series of research questions that address the WHS at a landscape scale in order to maximise the potential of the results of the mitigation to provide meaningful answers to those questions.

10.1.12

The Examining Authority requested written submissions in relation to the following questions on the agenda which were not specifically addressed due to the time available (paragraphs 4.29-4.36 below):

Para 6.3.15 – How would the mechanism of a reflexive approach operate? How are trigger points and proportions determined?

4.29. HBMCE considers that one of the key benefits of having specialists as part of the archaeological project team based on site, is that they can contribute to the reflexive approach set out in the DAMS on the basis of their specialist expertise in specific areas. This will allow, for example, the lithics specialists on site to assess the assemblages identified in individual areas and to use this information to feed into the sampling strategy. This would be communicated to the statutory consultees, and within the WHS to HMAG, to respond. If changes to the strategy can only be made during site meetings with monitors this may make the iterative strategy difficult to implement and require many site meetings. Therefore there is need for the SSWSI to set out clear parameters for decision making to facilitate a fluid process on site. This will ensure the positive aspects of implementing a reflexive and iterative decision

See the Applicant's response to this point on page 1-39 of Highways England's Written Summary of its Oral Submissions made at ISH8 [REP8-016].

Historic England's comments regarding the parameters for decision-making to facilitate a fluid process on site, which will be set out in SSWSIs, are noted.



	making strategy are not constrained, whilst retaining confidence in the proportionality of the approach.	
10.1.13	Para 6.3.22 – Should decisions regarding cleaning by hand be made by the Contractor or by others? 4.30. Good practice would suggest hand cleaning is part of the process necessary to ensure site staff can see the features they are investigating, to clean off after machine excavation, to confirm whether remains are present, and to ensure site photographs are clear. As such HBMCE would expect this to be included as normal rather than an exception (bearing in mind the need to be proportionate in line with the NPSNN).	See the Applicant's response to this point on page 1-39 of Highways England's Written Summary of Oral Submissions made at ISH8 [REP8-016] which explains that in all areas, the sample excavation strategy would be applied as part of an iterative (reflexive) approach, responding to the form, extent and significance of archaeological remains revealed. This will include decisions regarding the extent of hand cleaning necessary to identify archaeological remains following machine stripping. This approach would be applied in consultation with Wiltshire Council and Historic England and, for sites within the WHS, HMAG, through the mechanism of the on-site monitoring meetings as outlined in section 8.1 of the DAMS. Initially, hand cleaning requirements identified in the approved SSWSI will be implemented by the Archaeological Contractor, these will be reviewed and agreed through the monitoring meetings.
10.1.14	Para 6.3.44 to 6.3.48 – Changes to the sampling strategy would mean a revised SSWSI, subject to Wiltshire Council's approval. 4.31. HBCME would refer the Examining Authority to our comments at paragraph 4.29 above where we indicate how the SSWSI will set our parameters for decision making which supports the on-site staff and specialists in making decisions about how to implement an iterative strategy based on a reflexive understanding of the emerging results of on-going work. This approach is designed to avoid the need for continued review and revision of individual SSWSI.	See the Applicant's response to this point on page 1-39 of Highways England's Written Summary of its Oral Submissions at ISH8 [REP8-016] which explains that paragraphs 6.3.44 to 6.3.48 of [REP6-013] deal with the approach to excavation and recording of specific types of archaeological deposits, for which it is not relevant to specify a minimum sample size: excavation of these features or deposits will follow an iterative process to be applied in consultation with Wiltshire Council and Historic England and, for sites within the WHS, HMAG. This approach requires the agreement of the sample size through the mechanism of the on-site monitoring meetings as outlined in section 8.1 of the DAMS, rather than revision of SSWSIs.
10.1.15	Para 6.3.50 – Agreement required on the proportion of tree hollows excavated. 4.32. HBCME would refer the Examining Authority to our response to their Written Questions CH.2.9 (ix) and CH.2.9 (viii) [REP6-053] and	See the Applicant's response to this point on page 1-39 of Highways England's Written Summary of Oral Submissions made at ISH8 [REP8-016] which explains that the deadline 7 DAMS [REP7-019] proposed at paragraph 6.3.49 - 51 that all tree hollows or possible tree hollows will be mapped and a representative sample identified for excavation, in consultation with Wiltshire



	paragraphs 4.12-17 above in relation to the on-going statistical analysis.	Council and Historic England and, for sites within the WHS, HMAG. A rationale for identifying a representative sample is proposed in paragraph 6.3.49. The strategy will adopt a reflexive approach such that the sample size may be revised in response to the results of the systematic sampling. This approach does not require agreement of a baseline tree hollow sample percentage in the DAMS.
10.1.16	Para 6.3.77 – Treatment of human remains. Discussion. 4.33. HBCME recognises that the treatment of human remains from archaeological contexts is a sensitive and emotive subject. We would refer the Examining Authority to our response to their Written Question HW.2.2 [REP6-053] and paragraph 4.11 of our comments on the Deadline 6 submissions [REP7-046]. We have continued to advise Highways England in relation to the drafting of the relevant sections of the DAMS to ensure that this, together with Article 16, makes clear the approach taken to historic burials as opposed to any more recent burials that may be encountered.	See the Applicant's response to on page 1-40 of Highways England's written summary of oral submissions made at ISH8 [REP8-016] which confirms that the text regarding the DCO provisions for treatment of human remains has been amended in the DAMS submitted at deadline 8 (paragraph 6.3.75).
10.1.17	 ii. Strip, Map and Record Para 6.4.4 – Agreement required on a baseline percentage for the proportion of features excavated. 4.34. HBCME would refer the Examining Authority to our responses above to 4.12-19 which addresses broadly the same issue and the way in which we have approached this in providing advice on the development of the DAMS. 4.35. HBMCE has promoted parameters for decision making in the DAMS which support a reflexive and iterative approach to the archaeological mitigation strategy focused on the potential of deposits and features to answer carefully considered research questions and enhance our understanding of the Stonehenge landscape of all periods, but particularly in relation to the OUV of the WHS. 	See the Applicant's response to on page 1-40 of Highways England's written summary of its oral submissions made at ISH8 [REP8-016] which confirms that the Strip, Map and Record (SMR) follows a reflexive and iterative approach suited to areas of more extensive archaeological remains with few or no apparent focus of activity, or areas where the assessed significance of the remains is lower. This approach requires the agreement of the sample size through the mechanism of the on-site monitoring meetings as outlined in section 8.1 of the DAMS.



10.1.18		
10.1.10	iii. Archaeological Monitoring and Recording	As with Strip, Map and Record at paragraph 10.1.17 above, Archaeologi Monitoring and Recording follows a reflexive and iterative approach suite areas of fewer archaeological remains, no apparent focus of activity, or a where the assessed significance of the remains is lower or where the remains
	Para 6.5.10 - Agreement required on a baseline for the quantum of excavation.	
	4.36. HBCME would refer the Examining Authority to our responses above to 4.12-19 which addresses broadly the same issue and the way in which we have approached this in providing advice on the development of the DAMS.	may have been previously disturbed. This approach requires the agreement of the sample size through the mechanism of the on-site monitoring meetings as outlined in section 8.1 of the DAMS.
10.1.19	Communications, etc.	Highways England has engaged with Historic England to remove the
	i. Para 8.5.1 – Consultation on SSWSIs, etc and para 8.6.1 – Approval of Documents by Wiltshire Council. Are these arrangements acceptable, including the time periods allowed?	highlighted inconsistencies in the deadline 9 versions of both the DAMS and the OEMP, including with regards to their statutory role in relation to the Scheme and the ways in which they would look to engage with the Scheme through the proposed consultation mechanisms.
	4.37. HBCME very briefly noted that we remained in discussion with Highways England and that part of those discussions crossed over between meetings regarding the OEMP and the DAMS and had led to a few unintentional inconsistencies. We stated that we hoped it would be possible to sort these out quickly in discussion with Highways England.	
	Post Hearing Note:	
	4.38. HBMCE have provided detailed comments to Highways England in relation to how we consider we can best fulfil our statutory role in relation to the Scheme and the ways in which we would look to engage through the proposed consultation mechanisms as set out in the DAMS and the OEMP and other associated documentation. We would hope to see that these comments have been incorporated into the documents submitted at Deadline 8.	
10.1.20	Part 3 – Tables, figures and references	Highways England have consulted with Historic England regarding the
	Post Hearing Note:	deadline 7 DAMS and have responded to their detailed comments in
	4.40. HBMCE have held further meetings with Highways England and other members of the HMAG forum to progress discussion on	appropriate comments logs. The DAMS has been submitted at deadline 9 as a final version.



	the detail of the proposed mitigation areas (Table 11.3) and actions, as well as those excluded from mitigation (Table 11.4) - a new inclusion into the DAMS on which we needed additional time to confirm our view.	
10.1.21	5. LANDSCAPE AND VISUAL (AGENDA ITEM 6) Landscape Character	5.1 – comments on landscape character within the OEMP are noted by the Applicant.
	5.1. HBMCE would request that the Examining Authority refer to our comments in relation to landscape character at paragraphs 3.18 and	5.2 The Applicant understands that no additional visualisations are required as the locations were set out to HBMCE in response to their written requests.
	3.20 above.	
	5.2. HBMCE noted that we welcomed the submission of additional visualisations from Highways England following requests from the Examining Authority and HBMCE. At the time of the hearing further visualisations had been submitted only a few days preceding. We therefore advised that we were still reviewing the additional visualisations and discussions remained on-going with Highways England in this regard.	
	5.3. However, we noted the Examining Authority's reminder in general that this was the last opportunity to request further visuals should these be considered essential to the Examination. HBMCE has reviewed our earlier requests, as set out in detail in our Written Representations [REP2-100] paragraphs 7.5.14- 29 with reference to the series of submissions provided subsequently and as considered as part of the Accompanied Site Visit on 29 August. We will provide our final assessment of the various visualisations, including the implications of the Limits of Deviation, in our Deadline 9 submission.	
	Post Hearing Note	
	5.4. HBMCE is able to confirm that we will not be making any further requests for visualisations in addition to those we have already set out in writing.	



10.1.22	6. BLICK MEAD HYDROLOGY (AGENDA ITEM 8) 6.1. In response to the Examining Authority's question HBMCE confirmed that our position in relation to our role and involvement had not change. As a non- designated heritage asset the primary responsibility for advice regarding Blick Mead lies with Wiltshire Council and therefore it will be for the Council and other interested parties to take a view on whether a new Requirement or amendments to the OEMP would best secure any additional monitoring and remediation considered necessary.	Highways England notes these comments – the OEMP submitted at deadline 8 [REP8-006] makes provision for Blick Mead as part of the Groundwater Management Plan to be considered by Wiltshire Council.
	cant's written oral submissions for ISH10 [REP8-017] have responded to England's oral submission for ISH10 are detailed below.	Historic England's comments received at deadline 8. Additional points raised
10.1.23	7. APPLICANT'S PROPOSED CHANGES [AS-067] (AGENDA ITEM 3) 7.1. As the Examining Authority will be aware, during the Issue Specific Hearing we raised a few questions for clarification on the proposals. This was to enable us to consider the changes in greater detail and be in a position to provide our formal response to these changes. 7.2. We attach overleaf our formal consultation response which sets out our position in the matter.	Highways England's Responses to the comments provided by Historic England are included in the Applicant's Proposed Changes Consultation Report [REP8-015]. Please also refer to the Applicant's written summary of its oral submissions made at ISH9 [REP8-017]. Highways England's deadline 9 submissions also include responses to Historic England's deadline 8a comments on the Proposed Changes Consultation Report [REP8-015]. Please see Chapter 5 of Highways England's Proposed Changes Position Statement (including Responses to Comments on the Proposed Changes Consultation Report (non-statutory)) submitted at deadline 9.
10.1.24	8. TRAIL RIDERS FELLOWSHIP'S (TRF) PROPOSED CHANGES [REP4-058] (AGENDA ITEM 4) 8.1. As the Examining Authority will be aware, HBMCE set out our position (sections 3 and 18) in our submission at Deadline 4a [REP4–008]. We have nothing further to add to those submissions.	Highways England notes these comments.



The Applicant's written oral submissions for ISH11 [REP8-019] have responded to Historic England's comments received at deadline 8. Additional points raised in Historic England's oral submission for ISH11 are detailed below.

Part 1 - Preliminary	The Applicant responded to the points referred to in Historic England's	
	submission [REP4-084] in the Applicant's [REP6-035] and responded to the matters referred to by Historic England in [REP7-046] in the Applicant's	
	Article 2 – Interpretation	[REP8-013]. The Applicant has provided additional information to Historic
	The extent of definitions, including the definition of "commence".	England concerning the scope and timing of the preliminary works and true that Historic England is now able to confirm that it is content.
	10.1. As the Examining Authority will be aware, HBMCE have set out their comments on this issue (and Requirement 1(1) in Schedule 2) in previous responses in particular REP7- 046 (see paragraphs 2.31 - 2.34) and also REP4 - 084 (see paragraphs 37 – 52). Our concern broadly relates to the "scope" and "timing" regarding the preliminary works.	
	10.2. As highlighted in those submissions, further clarification as to the commencement of Preliminary Works and the timing of the award of the Main Works contract and appointment of the Main Works contactor was requested from Highways England.	
	10.3. Since those submissions, further discussions have taken place as noted at the dDCO Issue Specific Hearing. As a consequence of those discussions we are confident that HBMCE and Highways England can now move to a resolution of this particular issue.	
	Post Hearing Note	
	10.4. We continue to discuss this issue with Highways England and would aim to update the Examining Authority as soon as we are able to, and in any event by Deadline 9.	
10.1.26	Part 2 – Works provisions Article 7 – Limits of deviation	ii. The Applicant has worked closely with Historic England and trusts that Historic England is now able to confirm that its concerns have been addressed.



- ii. The proposed LoD of up to 200m in a generally westerly direction for the western portal and whether any additional controls would be necessary to address any potential adverse visual impact that might result?
- 10.5. As the Examining Authority will be aware, HBMCE have set out their comments on this issue in previous responses in particular REP7- 046 (see paragraphs 2.11
- 2.12). We noted at the Issue Specific Hearing that we have progressed in our discussions with Highways England on some of the points and are looking to resolve the matter through the refinement of design principles and we have been working with HMAG as well on this. We have also looked at the recent visualisations provided by Highways England and these are helpful and will assist as part of the refinement of the language that is required in the design principles.
- 10.6. In addition, we have been engaged in reviewing a further iteration of the draft DAMS and the phasing of works. This is in the process of being further revised. Both the draft DAMS and the draft OEMP have been subject to revisions subsequent to the previous submission and we are reviewing them to see whether our concerns have been addressed. In light of all the recently submitted and further revised documentation that has been submitted we are not yet in a position to confirm our final position on this, and would anticipate updating the Examining Authority as soon as we are able to.
- iii. The provision made by the revised dDCO Article 7(6) for consultation by the Secretary of State in relation to the disapplication of the maximum vertical limits of deviation and whether any further amendment and/or provision for consultation would be required?
- 10.7. HBMCE considers that the reference to the Secretary of State and any other person the Secretary of State considers appropriate is helpful.

iii. The Applicant welcomes Historic England's confirmation. The Applicant has adopted in revision 7 of the DCO, with modifications, the additional wording referring to the statutory roles and responsibilities of persons to be consulted in both article 7(6) and requirement 3. The Applicant has not included the reference to "interested parties" as it considers that to do so would unnecessarily narrow the range of persons that the Secretary of State should consider consulting.



Post Hearing Note

10.8. As the Examining Authority will be aware discussions continue regarding the consultation of interested parties, and we would expect to be in a position to have a final update for the Examining Authority at Deadline 9.

10.9. We would also note that the Examining Authority in their recently published draft DCO made some suggested additions and deletions to the text. This included, in Requirement 3(1), additional wording in relation to consultation of other persons by the Secretary of State. We consider that the Examining Authority's additional wording in Requirement 3(1) is helpful and clear in nature. We would therefore suggest that consideration be given on the basis of consistency, that the wording introduced in relation to Requirement 3(1) is also introduced in Article 7 (6).

10.1.27

iv. Whether within the World Heritage Site (WHS) and its setting the LoD should be permitted to be exercised where it would simply be "convenient" to do so?

10.10. As the Examining Authority will be aware, HBMCE have set out their comments on this issue in previous responses notably REP7- 046 (see paragraph 2.18). Our concern relates to the inclusion of the word "convenient" in Article 7 and the ability of the undertaker to deviate either when he considers it necessary or convenient.

We noted at the dDCO Issue Specific Hearing that discussions had taken place, but we were not in a position to agree and our advice would be that the word "convenient" should be deleted. We noted the position taken by Highways England that they set out that the degree of flexibility had been assessed, however we remained of the view that the ability to exercise this on the basis of convenience was inappropriate in a World Heritage Site.

Post Hearing Note

The Applicant remains firmly of the view that it is appropriate for it to exercise the limits of deviation when it is either necessary or convenient to do so, subject as it is to compliance with the detailed restrictions and controls contained in the draft DCO, the DAMS and the OEMP.

The Applicant is unaware of any precedent where the exercise of limits of deviation has to be demonstrated to be "necessary" alone; the usual practice is for them to be the sole preserve of the undertaker without qualification. Striking out "convenient" would have a chilling effect on the ability of the contractor to develop the detailed design in such a way as to deliver better environmental outcomes and to deliver better value for money, such outcomes being clearly convenient, but may not be "necessary".

As has been noted throughout its submissions to the examination, the limits of deviation have been assessed, taking into account the World Heritage Site, and their exercise would not alter the outcomes of the environmental assessment or the heritage impact assessment. It follows then that the deletion of "convenient" merely imposes an additional unnecessary constraint on the flexibility required to develop a complex nationally significant infrastructure project with no benefit in terms of the outcome.



10.11. Subsequent to the hearing, we have again reflected on our position in this matter. We have carefully considered the response provided by Highways England and the position that they have taken - that the limits of deviation have been assessed in the Environmental Statement and also how the approach they are advocating here differs to other DCO examples. We appreciate that there may be differences to other DCOs, and each case would need to be considered on its merits. This is a Scheme which will be within the Stonehenge, Avebury and Associated Sites World Heritage Site (Stonehenge WHS) and its setting. Whilst the limits of deviation will have been assessed in order to understand the impact, it is unclear why there would need to be such a range of flexibility between "convenient" which is a low threshold, compared to "necessary". In addition, by having the scope to deviate on the basis of "convenience" could result in reliance on this, which would render the term "necessary" otiose. Whilst there may be occasions where there may be a need to deviate, and the limits of deviation provide this scope, we do not consider that the ability to exercise that deviation should be based on whether it is "convenient".

Please see the Applicant's 'Explanation of Changes to the Draft DCO (Rev 7) and the Applicant's Response to the Examining Authority's Draft DCO', submitted at deadline 9 for further details.

10.12. We would also note that Examining Authority in their published draft DCO made some suggested additions and deletions to the text. In particular, on this point of "convenient" (Article 7), we welcome the Examining Authority's suggestion that "convenient" be deleted.

10.1.28

Supplemental powers

Article 15 – Authority to survey and investigate land

i. Whether there are any outstanding concerns as regards this

provision and the means by which any intrusive surveys would be regulated by the OEMP and DAMS?

10.13. As the Examining Authority will be aware, we have already set out our concerns about intrusive investigations into the landscape of the WHS and its setting in previous responses in

The Applicant has maintained throughout that the exercise of article 15 will be subject to the requirements, in particular requirements 4 and 5 which secure compliance with the OEMP and the DAMS. At deadline 8, the Applicant amended the DAMS to clarify its intended application [REP8-008], see paragraph 5.1.3.

The Applicant understands that Historic England have residual concerns in relation to the potential for intrusive surveys, to be carried out beyond the Order limits. To address Historic England's residual concerns regarding such works on "adjacent land", the Applicant has amended article 3 (disapplication of legislative provisions) in revision 7 of the DCO to disapply section 33(1)(f)



particular in REP7- 046 (see paragraphs 2.20 - 2.21) and also REP4 Planning Act 2008, to re-instate the requirement to obtain scheduled ancient - 084 (see paragraphs 140-143). monument consent, where applicable, for any work or operation authorised by the DCO under Article 14 or Article 15 outside of the Order limits. 10.14. Since those submissions, further discussions have taken place as noted at the dDCO Issue Specific Hearing, and as a consequence of those discussions we would anticipate that the issues will be resolved as soon as possible. **Post Hearing Note** 10.15. As part of the on-going discussions with Highways England, we understand that our concerns with regards to the use of "adjacent" in the dDCO may be addressed through submissions which will be made by Deadline 8. This will then provide the relevant clarification of "adjacent" for both Article 15 and also Article 4(2) such as to resolve our concerns. Following the submission of this additional clarification we will review and provide an update to the Examining Authority by Deadline 9. 10.16.In addition to the discussions on this point in relation to the dDCO there are also associated conversations ongoing with Highways England in relation to the DAMS in order to ensure there is clarity regarding its operation and the potential requirement for

10.1.29

Part 3 – Powers of acquisition and possession of land Article 22 – Compulsory acquisition of rights

Act 1979 outside the Order limits.

Whether there are any outstanding concerns as regards the scope of restrictions that would be imposed upon the use of land above the tunnel and the implications that might have for archaeological investigations in the WHS?

consent under the Ancient Monuments and Archaeological Areas

10.17. As the Examining Authority will be aware from our submissions at the Cultural Heritage Issue Specific Hearing, we requested additional clarification from Highways England around the issues of restrictive covenants regarding archaeological research which related to the shallow areas above the tunnel. Once we

Please see the Applicant's response to paragraphs 4.7 to 4.10 of the Cultural Heritage Issue Specific Hearing in paragraph 10.1.9 above.



	have received that information to clarify matters we will then be in a position to respond to this in more detail and confirm our position.	
	Post Hearing Note	
	10.18. Please see our comments with regards the covenant in our Summary of the Cultural Heritage Issue Specific Hearing section above (paragraphs 4.7-4.10).	
10.1.30	Temporary possession of land	In respect of the use of the term "building" in the OEMP, please see the
	Article 29 – Temporary use of land for constructing the development	Applicant's response to 3.10 above, which confirms that MW-NOI5 has been amended to clarify its application.
	i. Whether there are any outstanding concerns in relation to the scope of the powers sought and the extent of land that would be subject to powers of Temporary Possession?	Regarding the definition of "building" in the draft DCO, it is understood that Historic England's concerns relate to its use in articles 14 and 29. The Applicant has maintained throughout that the exercise of article 14 and 29 will be subject to the requirements, in particular requirements 4 and 5 which
	10.19. As the Examining Authority will be aware from our previous submissions REP7- 046 (see paragraph 2.35) and REP4 - 084 (see paragraphs 135-139 and 153-157) we raised issues with regards this	secure compliance with the OEMP and the DAMS. At deadline 8 the Applicant amended the DAMS to clarify its intended application (see paragraph 5.1.3).
	Article and that of Article 14 due to the scope of "building" definition which could give rise to unintended consequences to designated heritage assets. As noted at the Issue Specific Hearing, discussions are continuing which should resolve our concerns (see also our comments with regards this point set out in our Summary of the Cultural Heritage Issue Specific Hearing section at paragraph 3.10 above).	The Applicant understands that Historic England have residual concerns in relation to the potential for protective works, carried out under article 14, to be carried out to scheduled monuments beyond the Order limits. While the Applicant is clear that protective works are not expected to be required, it is prudent to seek the power so Highways England is empowered to act should the need arise. To address Historic England's residual concerns regarding such works on "adjacent land", the Applicant has amended article 3
	Post Hearing Note	(disapplication of legislative provisions) in revision 7 of the DCO to disapply
	10.20. We remain concerned about the scope of the powers sought and the extent of land over which it is sought (both in the WHS and its setting). Section 61(7) of the Ancient Monuments and Archaeological Areas Act 1979 defines a "monument" to mean a)	section 33(1)(f) Planning Act 2008, to re-instate the requirement to obtain scheduled ancient monument consent, where applicable, for any work or operation authorised by the DCO under articles 14 or 15 outside of the Order limits.
	"any building, structure or work, whether above or below the surface of the land, and any cave or excavation", b) "any site comprising the remains of any such building, structure or work", and	The Applicant understands the position on these two points to now be agreed with Historic England.
	(8) states "the site of a monument includes not only the land in or on which it is situated but also any land comprising or adjoining it which	



appears to the Secretary of State or the Commission or a local authority, in the exercise in relation to that monument of any of their functions under this Act, to be essential for the monument's support and preservation". The definition of "building" within d5DCO would therefore capture scheduled monuments – hence our concern about the potential for unintended consequences.

10.21. As part of the ongoing discussions with Highways England, we understand that our concerns with the dDCO may be addressed through submissions which will be made by Deadline 8. Following the submission of this additional clarification we will review and provide an update to the Examining Authority by Deadline 9.

10.1.31 Supplementary

Article 53 – Operational land for the purposes of the 1990 Act

Whether the exercise of permitted development rights under the Town and Country Planning (General Permitted Development) Order 2015 within the WHS would be appropriately regulated or whether there is justification to restrict permitted development rights within the WHS given the particular circumstances of this project and site?

Post Hearing Note

10.22. We would also note that the Examining Authority in their published draft DCO made some suggested additions and deletions to the text. This included a new Requirement 12 which related to Permitted Development. As set out in REP2 -100 (see paragraph 1.8) we noted the issue around the ability to rely on Permitted Development Rights. As was noted by the Examining Authority there is a query as to whether it would be appropriate to restrict PD rights within the Scheme area. Having reviewed matters we consider that as the extent to which Highways England have assessed the application of PD rights within the EIA or otherwise is unclear, and

The Applicant's Environmental Statement has assessed the construction, operation and maintenance of the authorised development. In relation to development permitted under Class B of Part 9 of the Town and Country (General Permitted Development) (England) Order 2015, Environmental assessment of Class B Part 9 permitted development is addressed under Part VA Highways Act 1980 and as is explained in detail in its response to Written Question DCO.2.44 [REP6-027] Highways England is subject to binding environmental duties under the terms of licence.

Permitted development is an important part of Highways England's statutory powers that it needs to construct, maintain and operate the strategic highway network (see its response to Written Question DCO.2.31 [REP6-027] for further details). It should be noted that these powers are in place today through the existing A303. Notwithstanding this, in the particular circumstances of this scheme, the Applicant, in revision 6 of the DCO amended article 6 to make it clear that, within the World Heritage Site, it cannot rely on planning permission granted Class B of Part 9 for any part of the authorised development. The Applicant considers this strikes an appropriate balance by ensuring that the DCO is used for the authorised development but without restricting its ability to carry out the public functions with which it is charged under the Highways Act 1980 and related legislation. For further detail on this and Part 16 Class D permitted development, please see the Applicant's 'Explanation of Changes to the Draft DCO (Rev 7) and the



	in light of the infrastructure proposed in this unparalled landscape it would appear prudent to remove the PD rights.	Applicant's Response to the Examining Authority's Draft DCO', submitted at deadline 9 for further details.
10.1.32	11. SCHEDULE 2 – REQUIREMENTS (AGENDA ITEM 4) 11.1. As the Examining Authority will be aware from our previous submissions REP7- 046 (see paragraphs 2.22- 2.23) and REP4 – 084 (see paragraphs 182 – 183) we have raised various issues regarding design. We remain in discussion with Highways England and a meeting took place earlier in the week with other members of HMAG and Highways England. Highways England have submitted a further revision of the draft OEMP and requested comments back on this. We would hope that this latest version has reflected the conversations that have taken place both as part of the Workshop requested by HBMCE that took place on 19 August, as well as subsequent meetings and discussions. 11.2. The design element within the OEMP (including design commitments set out in Table 3.2a and 3.2 b, the Design Vision in section 4, and the Design Principles in Table 4.1 together with the illustrative examples now included in Annex A4) is indeed one of the issues that have been looked at, in particular in relation to the statutory roles and responsibilities of some of those involved in the detailed design consultation process, and it will be important to capture this in the revision. These, together with dispute provisions and the refinement of language are matters which continue to be discussed to ensure that the landscape can be appropriately safeguarded.	It is understood that section 4 of the OEMP, including in respect of the design consultation process and the design vision and design principles, is now fully agreed with Historic England. In its post hearing submissions [e.g. REP8-019], Highways England set out why a separate design parameters document was not required given the existence of section 4 of the OEMP and it is considered that this is even more so the case given the agreement of section 4.
	Post Hearing Note	
	11.3. A section providing a more coherent discussion of the Design Vision has been incorporated into the OEMP [REP6-011] and this with Annex 4 draws together the relevant commitments and principles so that the provisions could be tested in relation to individual key infrastructure elements. In the event that our requested drafting refinements and gaps in the coverage of the design	



commitments and principles are addressed by Highways England, we do not anticipate that a separate design parameters document will become necessary. However we will be able to provide our final comments once we have reviewed the revised version of the OEMP due to be submitted at Deadline 8.

- iii. Whether Requirement 3(1) as amended at Deadline 6 makes satisfactory provision for consultation with relevant parties on key aspects of the detailed design or whether any further amendment of this Requirement and/or the OEMP is necessary?
- 11.4. We would reiterate the points that we have made earlier in the dDCO Issue Specific Hearing regarding discussions between HBMCE and Highways England. The OEMP and CEMP should provide a robust framework and consultation provisions, together with mechanisms provided to make sure that the highest quality of design is achievable. This will require refinement in the drafting of the documents. The proposed approach to approvals will then be appropriate within the framework and standards provided. We continue to provide advice to make sure that there is meaningful discussion and updates in the document to reflect the detail. We would expect the updated draft OEMP to have picked up on the points we have made and to have addressed them.

10.1.33

Outline Environmental Management Plan

Requirement 4 – Outline Environmental Management Plan

- iv. Notwithstanding the provision within the revised OEMP for consultation with various stakeholders, whether there are any other outstanding concerns in this respect including the means whereby this would be secured by the dDCO?
- 11.5. In light of the ongoing discussions, and the comments made earlier in the dDCO Issue Specific Hearing, we reserved our position based on what we have previously set out in response to questions posed in the Cultural Heritage Issue Specific Hearing.

The OEMP provides both design commitments in respect of portal lighting (item D-CH9) [REP8-006] and a requirement for SDCG to be consulted on its details (paragraph 4.5.3 (b).

It is understood that the principles and commitments within the OEMP are now fully agreed and that therefore no further provision within the DCO or OEMP is needed.



viii. Whether the revised OEMP would provide sufficient control over the design of lighting at the tunnel portals or should the approval of the design of the lighting scheme be the subject of a specific dDCO Requirement? 11.6. We noted as part of this agenda item that we provided our comments regarding design and lighting in our Deadline 6 response REP6-053 (see response to Written Question DCO.2.51). We also understood that there was to be revised draft wording on this within the OEMP recently produced by Highways England and we will be reviewing this submission which is expected to be submitted at Deadline 8. **Post Hearing Note** 11.7. We would refer the Examining Authority to the comments we have made regarding the OEMP in our Summary of the Cultural Heritage Issue Specific Hearing at section 3 above. Archaeology The Applicant notes the response and has been working closely with Historic England and other heritage stakeholders in the finalisation of the DAMS. Requirement 5 - Archaeology Whether any additional provisions within the dDCO would be

mitigation? 11.8. HBMCE are not seeking any additional requirement provisions within the dDCO regarding archaeology.

necessary to secure the required level of archaeological

Post Hearing Note

10.1.34

11.9 As the Examining Authority will be aware from our various submissions to date, our focus has been to ensure that the historic environment would be appropriately safeguarded should this Scheme be granted consent. As part of the discussions that have taken place we have focused on the DAMS as this is a key document providing an overarching basis for the approach to archaeological mitigation that will be implemented across the Scheme. The Examining Authority have also recognised the importance of the



	document as they have been pressing for revisions and updates on the draft as we have proceeded through the examination. Having had those extensive discussions, we now await to see the submission at Deadline 8 to provide our final comments on this matter.	
10.1.35	Details of Consultation	The Applicant has noted the point and has amended requirement 11(1) in
	Requirement 11 – Details of Consultation	revision 7 of the DCO so as to require the inclusion in the summary report copies of written consultation received.
	Whether the wording of this requirement is now agreed or whether any further amendment would be necessary and reasonable?	copies of writter consultation received.
	11.10. As the Examining Authority will be aware from our previous submissions REP 7– 46 (see paragraphs 2.26 – 2.29) and REP4 -84 (see paragraph 191) we referred to consultation. We noted that it would be helpful for the Secretary of State to have a report setting out the consultation that has been undertaken, that the report should be provided to the relevant consultees and that the consultation responses should be provided with that consultation report.	
	11.11. We stated it would be sensible for there to be a package of information to include the consultation responses to be provided to the Secretary of State. This would enable the Secretary of State to be fully advised in relation to decisions concerning the WHS and its setting arising from the Scheme.	
	11.12. Subsequent to the hearing, we have again reflected on our position in this matter. We understand that other bodies, including statutory bodies have expressed contentment with the terms of this provision. Whilst recognising this, we would note that they will have different concerns and roles to ourselves. HBMCE has a role as adviser to the State Party to the 1972 Convention, and also a role as the Government's statutory adviser with regard to the historic environment. In light of the fact that the development will	



traverse the Stonehenge WHS and its setting, we consider that it would be appropriate as a consequence that the Secretary of State should be provided with a copy of the consultation responses from HBMCE which address and advise on the implications for the historic environment. We would therefore propose that Requirement 11(1) be refined to include as follows:

After "... with another party," add

save as to any consultation response made by Historic England and which must be provided by the undertaker to the Secretary of State as an annex to a summary report

11.13. On a broader point regarding consultation, as the Examining Authority will be aware from our previous submissions REP7-46 (see paragraphs 3.1 – 3.7 we noted our position with regards the need for our statutory role and that this and the level of engagement were still under discussion. We are continuing with those discussions, to ensure that appropriate provision is made for the safeguarding of the historic environment. These include provisions within the dDCO, OEMP, DAMS, and in the development of detailed design. We would expect to be in a position to have a final update for the Examining Authority at Deadline 9.

10.1.36

SCHEDULE 11 – PROTECTIVE PROVISIONS (AGENDA ITEM 5)

- ii. Whether it would be necessary for a Protective Provision to be included in the dDCO which explicitly referred to the Proposed Development as being within the WHS and its setting?
- 11.14. As the Examining Authority will be aware from our previous submissions REP7- 046 (see paragraphs 2.39-2.40) and REP4-084 (see paragraphs 169-172) we raised the possibility of a Protective Provision.
- 11.15. Greater clarity has been provided as the Examination has progressed regarding the Scheme, with various frameworks being discussed and finalised which will set out the parameters for

The Applicant has worked closely with Historic England to develop drafting in the DCO that addresses its concerns, within the constraints of the drafting conventions that apply to a statutory instrument.

This has been achieved as follows:

- (a) A new paragraph has been added to the pre-amble, on the very first page of the Order following the contents, that acknowledges that the Scheme traverses the World Heritage Site and its setting. The "Convention" has also been defined in article 2(1).
- (b) A new definition has been added to paragraph 1 of Schedule 2 (requirements) for "scheme objectives" which sets out the four objectives, including the cultural heritage objective. The definitions of the DAMS and



submission of detailed design in future. In our view, in light of the Scheme traversing a World Heritage Site and its setting, a Protective Provision would assist in retaining focus on the Cultural Heritage objective of the Scheme set by the Department for Transport.

- 11.16. We have had discussions with Highways England regarding the basis for a Protective Provision and as noted to the Examining Authority would send through draft wording to Highways England and to the Examining Authority for their consideration.
- 11.17. Generally, the frameworks which will govern the submission of details including that of design will be considered by multiple parties Secretary of State, undertakers of the Scheme, any transferees, members of the public etc. Therefore having, within the DCO itself, provisions which refer to the Cultural Heritage objective of the Secretary of State, and signpost and refer to the various obligations and requirements on how the Scheme is to be carried out and built, and provide a reminder of the status of the landscape in which it is to be constructed and operated within would in our view be appropriate.
- 11.18. We would consider that the wording would be straightforward and simple in nature so that it facilitates the scheme and parties would not lose sight of the World Heritage Site and that regard is to be had to it.

Post Hearing Note

- 11.19. HBMCE consider that in view of the Secretary of State's stated Objectives for the Scheme including a Cultural Heritage objective and that the Scheme will result in a highway infrastructure in the Stonehenge WHS there should be a Protective Provision in place to acknowledge this in the DCO.
- 11.20. The points to be included within the Protective Provisions can be as follows:
- 1. A statement confirming that the Scheme lies within the Stonehenge, Avebury and Associated Sites World Heritage Site (Stonehenge WHS) and its setting.

OEMP have been amended to acknowledge that each contain protections for the World Heritage Site and its setting.

- (c) At Historic England's request, requirement 13 (further information) requires the Secretary of State to consider the scheme objectives, together with any other relevant matter, when considering whether to request additional information in relation to any application under requirement.
- (d) "Historic England" has been defined in article 2(1) as requested by Historic England and the definition includes reference to its role as advisor to the government on the Convention and the historic environment in England.

The Applicant understands these amendments to be agreed by Historic England and address its concerns.



Stonenende WHS Wanadement Plan	Stonehenge WHS Management Plan. 3. Confirmation that in proposing the Scheme, the Secretary of State
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- 4. Reference to the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage (1972 Convention) and how decisions regarding preparation, delivery and future management of the Scheme and any issues surrounding the DCO provisions relate to it.
- 5. The role of the Historic Buildings and Monuments Commission for England (Historic England) as adviser to the State Party to the 1972 Convention , and also its role as the Government's statutory adviser with regards the historic environment; enables it to assist and engage with these issues and the implementation of the DCO as appropriate
- 11.21. We would ask the Examining Authority to note that we are currently in discussions with Highways England regarding the Provisions and the specific drafting required.

10.1.37

ANY OTHER MATTERS (AGENDA ITEM 9)

Post Hearing Note

11.22. The Examining Authority will be aware of the various matters raised in our submissions throughout the Examination – the most recent being [REP7- 046] at Deadline 7 – and which we trust provided an update as to the position of HBMCE on concerns we have. We did not therefore look to review those matters at the hearing itself and take up time. There have been a number of additional submissions by Highways England subsequent to Deadline 7 and we have been working closely with them in order to progress the development of these documents and address the remaining concerns. We would expect to be able to update and provide the Examining Authority with our full response to these and

It is understood that the parties are now fully agreed on the wording of the DCO, the OEMP and the DAMS.



all other outstanding matters raised in our submissions to date at Deadline 9 when all the documents will have been submitted by	
Highways England.	



11 Brian Edwards (REP8-056)

11.1	Written summary of oral submission		
	Matter Raised	Highways England's Response	
	The Applicant's Written Oral Submissions for ISH8 [REP8-016] has responded to the points made by the Brian Edwards in REP8-056. Additional points raised are detailed below		
11.1.1	There has as yet been no full discussion of the views of the western tunnel portal and future expressway from the present A303, and the impact that this would have on potential suicides.	The Applicant notes that this matter was raised and discussed at ISH8 (please see the Applicant's Written Summary of Oral Submissions at Issue Specific Hearing 8 on Cultural Heritage, Landscape and Visual Effects and Design, agenda item 4.4 ii [REP8-016]). Fences will be provided to prevent unsafe access. The design of any safety fencing installed within or in the vicinity of the WHS will need to be sensitive to its setting. The Outline Environmental Management Plan (OEMP) [REP8-006] at reference D-CH14, compliance with which is secured by Requirement 4 of Schedule 2 to the draft DCO [REP8-004], requires Highways England to develop the detail of fencing within the WHS in consultation with the National Trust, Historic England, English Heritage and Wiltshire Council.	
		The fencing design in these locations shall be reviewed under Road Safety Audits which are mandatory under HD 19/03 of Volume 5 of the Design Manual for Roads and Bridges. These ensure that the road safety implications of all highway improvement schemes are fully considered by a team independent of the design team. The safety measures at the cutting and portals will therefore be subject to independent audit as part of this exercise. The Applicant has, at deadline 8, included an additional design principle in this regard in the OEMP at P-G05, which states that 'The design of the Scheme shall be cognisant of public safety at the cuttings within the WHS'.	
11.1.2	There has been no full discussion of the impact of the loss of the surrounding view of the landscape of the WHS in addition to the loss	The approach to assessing health and wellbeing impacts is set out within the People and Communities chapter within the A303 Stonehenge Scoping Report [pre-application document available on the Planning Inspectorate	



of the renowned view of the stones from the A303, and how this might relate to mental health. See my original submission.

website]. Further details of the assessment are set out in the remainder of the response.

As stated within the operational driver views assessment, paragraph 13.9.54 of Chapter 13 People and Communities of the ES [APP-051], the tunnel and associated cutting within the Scheme would result in a loss of views from the road currently experienced both of the Stones and of the majority of views of the Stonehenge WHS. The paragraph concludes that there would be a major adverse and significant effect experienced by drivers in respect of views from the road in this section of the Scheme due to more than 10,000 travellers per day being affected by this loss in views.

However as stated in various submissions lodged as part of this Examination, the tunnel is a fundamental part of the Scheme, designed to bring substantial and significant benefits to the WHS by the removal of the sight and sound of traffic from the central part of the WHS. This means losing the view of Stonehenge from the A303, both from the east and west. The Scheme will transform the WHS landscape around Stonehenge including, in part, the removal of the existing surface road. All visitors will have the opportunity to experience and enjoy Stonehenge in an unspoiled setting, gaining a greater appreciation of the prehistoric landscape, and so too the significance of the WHS. They will be able to enjoy improved views from the new restricted byway on the line of the removed A303 rather than from a passing car.

Other responses to relevant representations confirm that the tunnel means losing the view of Stonehenge from the A303, but the experience for visitors to the WHS would be considerably enhanced, and access would be readily and freely available via the new public right of way to be created along the old A303 through the WHS, accessible from Winterbourne Stoke, Amesbury and connecting rights of way, as well as via the Stonehenge visitor centre [pages 3-7 and 3-19 of AS-026]. Overall, the operational period of the Scheme is identified as having permanent adverse effects on driver views through the WHS, but permanent beneficial effects on people and communities as follows: (i) on connectivity on local travel patterns for users of the private rights of way network, (ii) reduced severance for the community of Winterbourne Stoke and (iii) improved journey time reliability and reduced driver stress for drivers on A303 (please see Chapter 16, Summary of Effects [APP-054].



Paragraph 13.9.93 of Chapter 13 People and Communities of the ES [APP-051] as a component of its assessment of human health has assessed the effects of the Scheme proposals in respect of 'access to open space and nature'. This assesses that there will be a positive health and wellbeing effect on access to open space and nature arising from Scheme impacts overall, particularly due to enhanced access between communities and the WHS.
In summary, views of the landscape of the WHS and of the Stones will remain possible and from an enhanced setting whereby the sight and sound of traffic has been removed from the central part of the WHS landscape.



12 Blick Mead Project Team (REP8-031 and REP8-032)

12.1	Written summary of oral submission	
	Matter Raised	Highways England's Response

The Applicant's Written Oral Submissions for ISH8 [REP8-016] respond to Blick Mead Project Team's comments received at deadline 8. Additional points raised are detailed below.

12.1.1

[Harm to OUV and Place in Overall Acceptability]

- 1. The international obligation in articles 4 and 5 can broadly be summarised as the protection and conservation of the World Heritage Site ('WHS'). Harm to OUV of a WHS undoubtedly amounts to a breach of these articles.
- 2. Ordinarily, a breach of an international convention is likely to be a very weighty and potentially decisive material consideration in a planning decision. This is the case even where the convention in question, as with the World Heritage Convention ('WHC'), has not been transposed into domestic law.
- 3. However, here, in relation to a decision taken under the Planning Act 2008, the WHC has been given statutory force in domestic law. Section 104(3) and (4) Planning Act 2008 state:
 - (3) The [Secretary of State]7 must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8, applies.
 - (4) This subsection applies if the [Secretary of State]7 is satisfied that deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations.

The Applicant has set out extensive submissions in relation to the interpretation of the requirements of the World Heritage Convention:

- the Applicant's response to Written Question G.1.1 [REP2-021];
- the Applicant's Written Summaries of Oral Submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030] (specifically agenda items 3(i), 3(v), 3(vi) and Appendix A to that document);
- the Applicant's response to item 11.2.25 in the Comments on any Further Information at deadline 4 [REP5-003]; and
- the Applicant's Written Summary of Oral Submissions made at the Issue Specific Hearing on 21 August 2019 [REP8-016] with respect to agenda item 3.1(i) and 3.2(ii).

As submitted at ISH8 and recorded in the Applicant's Written Summary [REP8-016] in relation to agenda item 3.1(i), it is not correct to say that any harm to OUV would result in a breach of international obligations. This is an approach which would mean that once an element of harm to OUV is identified, the decision maker does not need to have any regard to any benefits that might arise, nor do they need to carry out a balance to determine whether overall OUV is conserved.

As a result, it is an approach which is wholly at odds with both the policy requirements of the NPSNN (which requires a balance to be struck) and the ICOMOS Guidance on Heritage Impact Assessment (which requires an



4. The only sensible reading of those sub-sections in the context of	overall view on it
the section as a whole is that if there is a breach of an international	adopt that appro
convention obligation then the application should be refused.	a The NIDSNINI

5. It is notable that the Secretary of State does not dispute that the World Heritage Convention contains international obligations for the purposes of s104(4) Planning Act 2008.

overall view on impact on all elements of OUV to be reached). Accordingly, to adopt that approach requires a decision maker to accept that:

- The NPSNN policy approach to World Heritage Sites is wrong in law; and
- ICOMOS's own guidance adopts an approach to heritage impact assessment which is wrong in law.

It is submitted that neither the UK Government in adopting the NPSNN nor ICOMOS has so erred; rather it is the approach advocated by interested parties which is wrong in law.

In terms of paragraph 5 of the submission, if the reference to the "Secretary of State" is intended to be to the Applicant, the Applicant agrees that the World Heritage Convention imposes international legal obligations on State Parties (and has stated as much, for example see Appendix A to Written Summaries of oral submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030]). The Applicant does not dispute that the Convention contains international obligations for the purposes of section 104(4) of the Planning Act 2008; where the Applicant disagrees with the Blick Mead Project Team relates to what those obligations require and what constitutes a breach of such obligations for the purposes of section 104(4).

12.1.2

[Harm to OUV and Place in Overall Acceptability]

6. Further, even if the decision is to be taken without regard to s104(3) and (4) and taken in accordance with the NPS then patently harm to OUV amounts to substantial harm to a heritage asset and therefore, in line with paragraph 5.133 NPS the Secretary of State should refuse consent unless it can be demonstrated:

'that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm, or alternatively that all of the following apply:

 the nature of the heritage asset prevents all reasonable uses of the site; and The Applicant does not agree that any harm to OUV results in substantial harm to a heritage asset. The Applicant has assessed the impact of the Scheme on the attributes of OUV and concluded that, overall, the Scheme would sustain the OUV of the WHS and have a slight beneficial effect on the WHS as a whole. The Applicant has considered the degree of harm to heritage assets as required for the purposes of the NPSNN, and, given its assessment of impact on the WHS and its OUV, does not consider substantial harm would be caused to the WHS. The requirements of paragraph 5.133 are therefore not triggered. As a result, no balancing of public benefits is required for the purposes of paragraph 5.133.



	 no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and the harm or loss is outweighed by the benefit of bringing the site back into use.' 7. We know here that the substantial harm is not necessary due to 	
	there being alternatives, including a longer tunnel that would avoid the harm. Further and in any event the public benefits are not substantial enough to outweigh the gravity of the permanent damage to a World Heritage Site.	
12.1.3	[Harm to OUV and Place in Overall Acceptability] 8. Finally, even if the harm is somehow considered less than substantial and para. 5.132 NPS applies, the public benefits are not sufficient to outweigh the very significant harm to the WHS. (The panel need only refer itself of the recent National Audit Office report of 20.5.19 in this regard).	Please see response to paragraph 12.1.2 above, which explains the Applicant's assessment that overall the Scheme will have a slight beneficial effect on the WHS. For the purposes of the NPSNN, Highways England's position is therefore that overall the Scheme results in enhancement of the significance of the World Heritage Site and therefore so far as the WHS as a designated asset is concerned the requirements of paragraph 5.132 are not engaged.
		The Applicant notes that less than substantial harm is anticipated to affect some designated and non-designated assets, including those within the WHS, however, it is considered that such harm is outweighed by the public benefits of the Scheme, as set out in the Appendix B of the Case for the Scheme and NPS Accordance [APP-294] (which is updated for deadline 9) with respect to paragraph 134 of the NPSNN.
12.1.4	[Significance of the World Heritage Committee decision and report] 9. The World Heritage Committee ('Committee') was set up by the World Heritage Convention. The UK, being a signatory to that convention can be taken to respect and accept the legitimacy and authority of the Committee.	The Applicant has previously addressed the decision of the World Heritage Committee at its response to comments submitted at deadline 4 [REP5-003] item 10.1.3, and the Applicant's answer to Written Question G.1.1 [REP2-021] regarding the state party's obligations under the World Heritage Convention. The Applicant also responded to submissions made on behalf of



	10. The whole purpose of the Convention is to elevate the conservation of certain assets to the world stage. As article 6(1) states:	the Blick Mead Project Team at ISH8, as recorded in the Applicant's Written Summary of Oral Submissions [REP8-016], agenda item 3.2(i). The Applicant, as was explained at ISH8, considers that the objective of
	'Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned in Articles 1 and 2 is situated, and without prejudice to property rights provided by national legislation, the States Parties to this Convention recognize	achieving the best possible outcome (as referred to in the World Heritage Committee decision) does not reflect either the obligations contained within the World Heritage Convention to protect and conserve the WHS nor indeed the approach set out in relevant ICOMOS published guidance.
	that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate.'	The phrase "best possible outcome" is not language that comes from the World Heritage Convention. It cannot be found within the NPSNN either. Indeed, it does not reflect the approach set out in ICOMOS's own guidance (i.e. that of taking an overall view of OUV once benefits and harm have been assessed). [The submissions from the Blick Mead Project Team do not actually address whether the approach taken by the World Heritage Committee is correct, however, this is relevant in terms of the weight that can be given to the decision]. In relation to the weight that should be placed on the World Heritage Committee's view, the Applicant's position is that the World Heritage Committee is not a decision-making body set up to determine whether developments around the world are acceptable or not. Consequently, the views of the World Heritage Committee should be treated as the views of a consultee, to be given appropriate weight by a decision maker. Any approach which treats the views of the Committee as determinative would be legally flawed and should be rejected.
12.1.6	[Significance of the World Heritage Committee decision and report] 11. It is true that responsibility for compliance with the WHC rests with State Parties. However, there is nothing in the WHC that supports the view that State Parties can simply take the WHC to mean what they say it means. In particular, there is nothing to support the contention that State Parties can apply their own definition to obligations such as 'protect' and 'enhance'. [Significance of the World Heritage Committee decision and report] 12. Significant and determinative weight must be given to the independent, specialist view of the Committee who have been advised by their expert advisors and who have made their decision following three advisory missions. The conclusion of the Committee	
	is clear, the proposed tunnel will not protect the WHS (see last para on p.2 of the report).	A further important point when considering the weight to be given to the World Heritage Committee's views relates to the evidence base before the Committee. The World Heritage Committee had been provided with the State of Conservation Report prepared by DCMS in February 2019 [REP1-015]. The evidence before the Committee was thus very different to that now before the Examining Authority and Secretary of State since the examination has been provided with the State of Conservation Report but also with many more documents which present new, more up to date and additional appraisal information. This includes for example, the detailed analysis of longer tunnel options in response to first Written Question AL.1.29 and a break-down of costs associated with the longer tunnel options in response to first written question AL.1.30 [REP2-024]. Accordingly, the weight given to the



Committee's views must recognise that they are based upon evidence which is incomplete and out of date.

In terms of paragraph 11 of the submission and the degree to which State Parties have discretion as to how to interpret the World Heritage Convention, the Applicant has previously set out the key points in this respect (see Appendix A to the Applicant's Written Summaries of oral submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030]). Those key points are set out below (with emphasis added) and demonstrate that the World Heritage Convention does not impose any specific action or binding commitment on a State Party, and that there is discretion for the State Party to determine the extent of the obligations and the mode of their performance:

- The World Heritage Convention imposes real legal obligations on State Parties. Whilst there is no discretion as to whether a State Party will abstain from taking any steps in discharge of the "duty" referred to in Article 4 of the Convention, there is discretion as to the manner in which the duty is performed, for example, it is for each State Party to decide the allocation of its resources. This is consistent with the imprecise nature of the obligations.
- Notwithstanding the wording of Article 4 of the World Heritage
 Convention, requiring that each State Party does "all it can" to protect and
 conserve cultural heritage "to the utmost of its own resources", the
 Convention has to be read as a whole. Article 4 therefore has to be read
 subject to the wording of Article 5.
- Article 5 sets out the specific steps a State Party can take in order to comply with the World Heritage Convention. It introduces those steps by stating that "each State Party to this Convention shall endeavour, so far as possible, and as appropriate for each country ..." to carry them out.
- Under the World Heritage Convention, then, <u>State Parties do not envisage absolute protection</u>, but a level of protection of WHSs taking account of economic, scientific and technical limitations, and the integration of heritage protection into broader economic and social decision making.



		Article 5 establishes that how the World Heritage Convention is implemented in practice is up to each State Party. The World Heritage Convention does not impose any specific action or binding commitment on a State Party. It is left to the State Party to determine the extent of the obligations and the mode of their performance. There is discretion as to what steps the State Party takes and "considerable latitude" as to their precise actions. The World Heritage Convention is to be interpreted in good faith and in accordance with the ordinary meaning of the words of the Convention in their context and in the light of the Convention's object and purpose.
12.1.7	[Further comment upon costs] 13. Article 4 of the WHC states: 'Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.' (my emphasis) 14. The WHC does not allow a State Party to take a position akin to: 'well we don't think spending the money on protection and conservation of the WHS is worth it' having conducted a basic cost/benefit assessment. Rather, a State Party is required to do what it can 'to the utmost of its resources'. 15. Our earlier submissions have already drawn the ExA's attention to the Tasmanian Dam case where the High Court of Australia found that a party is able to challenge a Nation State where it claims that it	Please see the Applicant's response to paragraph 11 above in item 12.1.5, which addresses the point about the discretion the State Party has in terms of the mode of performance of the obligations in the World Heritage Convention (in reliance upon key points on the interpretation of the World Heritage Convention, drawn in large part from the case law the Blick Mead Project Team relies upon, as set out in Appendix A to the Applicant's Written Summaries of Oral Submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030]). The Applicant has also responded to this point fully in its post hearing note contained within its Written Summary of Oral Submissions from ISH8 [REP8-016], agenda item 3.2(ii), where, having set out an extract from the Tasmanian Dam Case and the principles set out in response to paragraph 11 above, it concluded that: "It is clear from the case law and the principles it gives rise to, that it is an oversimplification of the position for Ms Hutton to simply say that there is a requirement in the World Heritage Convention for the UK to protect and conserve the WHS to the utmost of its resources, without any consideration of the Convention as a whole and how case law indicates it should be interpreted."

¹ Australian Conservation Foundation Incorporated v Minister for the Environment [2016] FCA 1042, paragraph 199



	does not have sufficient resources to meet its obligations. However, this Government has never claimed that it does not have sufficient resources to meet its obligations. Indeed, such an argument would be futile as here it is positive action by the Government which is causing the harm.	
12.1.8	38. It is essential that hydrological data are collected at points that are directly relevant to the archaeology. This should include a network of shallow piezometers (8) to monitor water levels, with automated logging on 2 piezometers. This network should be	Please see response to 34.1.74 in the deadline 5 – Comments on any further information at deadline 4 [REP5-003] which explains that there is local monitoring at Blick Mead as described in the monitoring report [AS-015]. Piezometers are installed at different depths in the key area of interest.
	supplemented by monitoring (and logging) of soil moisture at two locations.	Further monitoring is not required to support the Environmental Statement as explained in the deadline 1 Submission - Blick Mead - Note regarding proposals for additional monitoring [REP1-007]. Local and catchment-wide Chalk aquifer groundwater monitoring has led to the development of a conceptual model and Tiered Assessment. The reliability of the conceptual model has reached an acceptable level and has been verified by monitoring [AS-019].
12.1.9	39. While I believe these observations are necessary, it is also	A local model would represent a Tier 4 assessment.
	essential that a local hydrological model (with model cells of ~10m2) is developed to determine moisture levels throughout Blick Mead and interpolate between the point data derived from the water level and soil moisture observations.	During the ISH2 Hearing it was confirmed that Highways England has followed the required guidance from Historic England in the production of the Blick Mead assessment, Historic England further confirmed this at the hearing, noting also that the assessment conducted was adequate [REP4-030, 8 iii].
		A Tier 4 assessment is only required where mitigation is considered necessary to facilitate long-term preservation. As no significant effects were identified, no mitigation is necessary and therefore additional tiers of investigation and modelling are not required.
		Please see response to 40.1.6 to 40.1.9 in Comments on any further information at deadline 5 and 6 [REP7-021].
12.1.10	40. Development of the hydrological model would require a detailed ground (and geophysical) survey, to determine (for example) the lateral extent of the putty chalk, and estimate the variability of	Please see response to paragraph 12.1.9 above.



	parameters such as the hydraulic conductivity and porosity across the site.	
12.1.11	41. The model would require local estimates of precipitation and evapotranspiration (using data from existing monitoring stations). However, the model could be used in a predictive manner to quantify the additional volume of water required to maintain specific levels of saturation at key points of interest at Blick Mead.	Please see response to paragraph 12.1.9 above.
12.1.12	42. For the monitoring (and modelling) to be effective, an appropriate management system would have to be designed (for data collection, processing, and to run the model). There would also need to be some consideration of how the site could be irrigated if it was anticipated that threshold moisture levels might fall below a given threshold.	Please see response to paragraph 12.1.9 above.
12.2	Suggested Wording for OEMP and Additional Ro	equirement
	Matter Raised	Highways England's Response
12.2.1	43. Additional Requirement (potentially labelled as MW-WAT10A): Blick Mead Groundwater Management Plan (BMGMP)	Highways England has provided wording for item MW-WAT14 within the OEMP that was submitted at deadline 8 [REP8-006], following the August hearings.
	The main works contractor shall develop a BMGMP outlining how groundwater and soil saturation is to be protected and, if necessary, remediated at Blick Mead (including Site 2). The Plan shall be developed and implemented following consultation with the Blick	However, it considers that no separate DCO requirement is needed for the reasons given at ISH8, see [REP8-016], however to the extent that this is not agreed, suggested drafting was provided at the DCO Hearing [REP8-019].
	Mead Project Team, the owner of the Blick Mead Site, the Environment Agency and the Authority. The Plan shall be approved by Wiltshire Council. The Plan shall be implemented by the main works contractor and thereafter by the maintenance contractor.	The wording suggested by Highways England considers Blick Mead in the wider context of groundwater management and monitoring across the Scheme, i.e. that Blick Mead should be explicitly considered within the overall Groundwater Management Plan. In doing so, the Plan will consider re-
	The broad purpose of the Plan is to provide for the monitoring of	assessment through an update to the Groundwater Risk Assessment,



an appropriate mitigation/remediation strategy if the Scheme leads to the fall of groundwater and soil moisture below levels at which the archaeological resource is endangered.

Specifically, the Plan shall:

- (a) arrange for the monitoring of groundwater levels at Blick Mead through a network of at least 8 shallow piezometers with automated logging on 2 piezometers;
- (b) arrange for the monitoring of soil moisture levels at (a minimum of) two locations at Blick Mead;
- (c) arrange for the reporting of monitoring data to be shared with the Blick Mead Project Team, the owner of the Blick Mead Site, the Environment Agency, Wiltshire Council and the Authority;
- (d) include a local hydrological model which indicates moisture levels throughout the Blick Mead site, the model should be based upon monitoring data gathered over a period of at least 6 months together with a detailed ground and geophysical survey;
- (e) the Plan shall set out trigger levels relating to both groundwater levels and soil moisture content. The trigger levels shall take into account the monitoring data relating to groundwater and soil moisture levels together with the hydrological model. The trigger levels should be set at levels whereby if groundwater and soil moisture content were to fall below those levels the archaeological resource at Blick Mead would be endangered;
- (f) develop an appropriate remediation/mitigation plan to arrange for the re-watering of the site should ground-water levels or soil moisture levels fall below the trigger points, the mitigation plan should take into account the heritage sensitivities of Blick Mead;
- (g) ensure that monitoring and reporting of water levels and soil moisture levels continues for the lifetime of the Scheme; and
- (f) ensure that the obligation to remediate/mitigate endures for the lifetime of the Scheme.

appropriate levels of monitoring and, where necessary trigger levels and action plans.

Given the results of the ES, this is considered to be the appropriate approach, and the level of detail suggested by the Blick Mead Project Team is not required.



12.2.2	44.Note that Requirement 4(11) will need to include an additional subsection which states 'Blick Mead Groundwater Management Plan'.	Please see response to paragraph 12.2.1 above.
12.3	Suggested requirement wording:	
	Matter Raised	Highways England's Response
12.3.1	(1) No part of the authorised development is to commence until a Blick Mead Groundwater Management Plan has been submitted to and approved in writing by the Secretary of State, following consultation with the Blick Mead Project Team, Wiltshire Council and the Environment Agency.	Please see response to paragraph 12.2.1 above.
	(2) the Blick Mead Groundwater Management Plan must:	
	(a) arrange for the monitoring of groundwater levels at Blick Mead through a network of at least 8 shallow piezometers with automated logging on 2 piezometers;	
	(b) arrange for the monitoring of soil moisture levels at (a minimum of) two locations at Blick Mead;	
	(c) arrange for the reporting of monitoring data to be shared with the Blick Mead Project Team, the owner of the Blick Mead Site, the Environment Agency, Wiltshire Council and the Authority;	
	(d) include a local hydrological model which indicates moisture levels throughout the Blick Mead site, the model should be based upon monitoring data gathered over a period of at least 6 months together with a detailed ground and geophysical survey;	
	(e) the Plan shall set out trigger levels relating to both groundwater levels and soil moisture content. The trigger levels shall take into account the monitoring data relating to groundwater and soil moisture levels together with the hydrological model. The trigger levels should be set at levels whereby if groundwater and soil	



moisture content were to fall below those levels the archaeological resource at Blick Mead would be endangered;

- (f) develop an appropriate remediation/mitigation plan to arrange for the re- watering of the site should ground-water levels or soil moisture levels fall below the trigger points, the mitigation plan should take into account the heritage sensitivities of Blick Mead;
- (g) ensure that monitoring and reporting of water levels and soil moisture levels continues for the lifetime of the Scheme; and
- (f) ensure that the obligation to remediate/mitigate endures for the lifetime of the Scheme.
- (3) The authorised development must be operated and maintained in accordance with the Blick Mead Groundwater Management Plan.
- (4) The undertaker must make the Blick Mead Groundwater Management Plan available in an electronic form suitable for inspection by members of the public.



13 Environment Agency (REP8-039 and REP8-040)

13.1	Comments on the dDCO	
	Matter Raised	Highways England's Response
13.1.1	1.1 Article 13 – Discharge of water 1.1.1 We wish to maintain our position in requesting amendments to Article 13. Our amendments are given below: "Discharge of water (5) The undertaker must take such steps as are reasonably practicable to secure that any water discharged into a watercourse or public sewer or drain or to the ground under this article is as free as may be practicable from gravel, soil or other solid substance, oil or matter in suspension or dissolved pollutants. " 1.1.2 Our position is that due to the sensitivity of ground water resources within the area of the development Article 13 must seek to minimise the risk of pollution or contamination arising from the construction or maintenance of the development. This approach is consistent with its wider environmental duties and responsibilities under the Environment Act 1995 and is in accordance with its national policy approach to ground water protection. 1.1.3 On the basis that Article 13 allows discharges to watercourses and does not expressly exclude discharges to the ground the Environment Agency requires assurance that in the event that there are discharges to the ground from the development (which will be a highway) that the undertaker will take such steps as may be practicable to ensure that they are free from the materials and substances, including dissolved pollutants, that are mentioned in Article 13. We acknowledge the applicant's points raised at the hearing that the activities under Article 13 still requiring an environmental permit, however there are circumstances where	The Applicant maintains its position that the Environment Agency's proposed amendments to this article misconstrue its purpose and effect as was outlined at the second DCO ISH [see REP8-019 under agenda item 3.4(i)]. The purpose and effect of Article 13 is to provide a right for the undertaker to discharge water into existing drainage systems, including public sewers and watercourses. This right to connect is subject to the approval of the system's owner and a duty on the undertaker to ensure that the water discharged does not interfere with the operation of the drainage system (i.e. it is free from gravel, soil or other solid substance, oil or matter in suspension). The purpose and effect of the article is to authorise the connection to the drainage system as against the owner of that system. The article is not concerned with pollution control, which is regulated by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016 ("EPR 2016"). Nothing in this article overrides that, nor could it, as such a disapplication would require the Environment Agency's consent under section 150 Planning Act 2008 and the Environment Agency has been clear that such consent would not be granted. In respect of discharges to ground, the Applicant notes that article does not authorise discharges to ground and, as noted above, it does not override the requirement for an environmental permit, should one be required. The Applicant has considered the MoU with its predecessor, the Highways Agency, referred to by the Environment Agency, and this does not alter its view. The Environment Agency has not identified any shortcomings in the EPR 2016 which would necessitate the proposed amendment to article 13. As noted above, as a matter of law, the DCO cannot override the EPR 2016 without the Environment Agency's consent.



	highway undertakers do not need an environmental permit to undertake certain discharge activity; it is this scenario that the Environment Agency's amendment seeks to address. This was raised at the hearing by reference to the MOU between Highways England and the Environment Agency, which referred to Annex 1 – The Water Environment, which is attached.	It should further be noted that Article 13 is a very well precedented article, which has been included in substantially the same form in the vast majority of development consent orders that have been made to date.
13.2	Comments on the OEMP	
	Matter Raised	Highways England's Response
13.2.1	2.0 OEMP (revision 4 dated August 2019) 2.1 This version of the OEMP still refers to approval of the CEMP and associated management plans by Highways England rather than the Secretary of State as is now stated in Requirement 4 of the dDCO. The OEMP should be amended to reflect that Secretary of State approval is required and not Highways England.	Highways England can confirm that it is now identified within the OEMP [REP8-006] that the Secretary of State is to approve the CEMP and the relevant subsidiary plans identified within item MW-G7.
13.2.2	2.2 Figure A.1B (Environmental Constraints Plan) omits licensed abstraction points in and to the north of Winterbourne Stoke related to licence SW/043/0023/010. This omission has been raised previously by the holder of the licence who provided locations in [REP4- 057] and recognition of the five abstraction points was stated by the applicant in their response to Examiners Second Written Questions Ag.2.1. These points should be added to the Environmental Constraints Plan to ensure they are appropriately considered and protected by the scheme.	Highways England notes this comment and can confirm that the abstraction points related to licence SW/043/0023/010 will be included on the environmental constraints plan (Annex A.1) of the deadline 9 OEMP.
13.2.3	2.3 Annex A.3 – Outline Soils Management Strategy should also consider maintaining the hydrological characteristics of the existing soils and assessment of any impacts on runoff to surface watercourses and recharge to the aquifer. We recognise that a detailed Soils Management Strategy will be included in the CEMP	Text has been added to Para 3.1.9 of the Outline Soils Management Strategy contained within the deadline 9 OEMP. As noted, the Environment Agency will be consulted on further development of the Soils Management Strategy contained within the CEMP.



	and on which the Environment Agency will be consulted. We will expect this to include adequate consideration of any changes to the hydrological characteristics of soils as a result of the scheme if not considered elsewhere within the CEMP or management plans.	
13.2.4	2.4 MW-WAT12 – Flood risk management plan	Highways England can confirm that the amendment as suggested is include
	2.4.1 During the Issue Specific Hearing for flood risk, we supported Wiltshire Council with regard to flood risk issues. Since the hearing we have discussed possible wording to be included in the OEMP MW-WAT12. We recommend the following wording for MW-WAT12, which has been agreed with Wiltshire Council:	within item MW-WAT12 of the OEMP [REP8-006].
	Flood Risk Management Plan:	
	The main works contractor shall prepare a Flood Risk Management Plan to the Authority for approval, as part of the Water Management Plan. The plan will summarise:	
	a) any areas within the 1% AEP plus appropriate allowance for Climate Change, susceptible to groundwater flooding, and other flood risk sources, such as sewer flooding;	
	b) any applications made, or likely to be made, pursuant to the Environment Agency's protective provisions in the DCO, where required in relation to flood defence, for temporary and permanent works and the status of the works;	
	c) any specific requirements or conditions of the approval that will be obtained from the relevant consenting bodies;	
	d) any flood risk management or mitigation measures implemented, or to be implemented, in support of temporary and permanent works proposals; and	
	e) a statement on the cumulative flood risk impact of temporary and permanent works.	
	The plan shall build on the assessment of flood risk and mitigation recommended within the Flood Risk Assessment and its annexes submitted as part of the DCO examination (REP3-008).	



	The plan shall be developed and implemented following consultation with the Environment Agency and Wiltshire Council (in so far as relevant to its functions as lead local flood authority). 2.4.2 We are satisfied with the wording of MW-WAT12 and MW-	
	WAT13 other than the above amendment.	
13.2.5	2.5 MW-GEO8 – Construction on or adjacent to land affected by contamination	Please refer to the below response to item 13.1.4.
	2.5.1 We request additional wording to MW-GEO8 relating to land contamination. This is discussed in more detail below in our written summary under agenda item 4 of Hearing 10.	
13.1	Written Summary of Oral Submissions	
	Matter Raised	Highways England's Response
	icant's written oral submissions for ISH10 and ISH11 [REP8-018, REP8-08. Additional points raised in the Environment Agency's oral submission f	on ISH10 and ISH11 are detailed below
13.1.1	3.1 Drainage design and climate change allowances	See response to agenda item 3.1 i in Highways England Written Summary of
	Our understanding from the response to the inspectors questions from Wiltshire Council and HE is that this has now been agreed, ie land drainage to 40% and road drainage to 30% allowance. The new OEMP wording ensures encroachment into fluvial flood plain will be minimal.	Oral Submissions put at the Flood Risk Hearing [REP8-018] which confirms that the climate change allowances within the OEMP are adequately expressed.
13.1.2	3.2 Road drainage strategy	i) See response to agenda item 3.2 in Highways England Written Summary
	i) From the information submitted to date, it is not clear whether standards above the minimum stated in DMRB guidance will be	of Oral Submissions put at the Flood Risk Hearing [REP8-018] which explains that whether standards above the minimum stated in DMRB guidance will be required are matters of detailed design that will be able to be resolved



are likely to be required particularly in relation to storage volumes of potentially contaminated road runoff, up gradient of penstock. Following discussion with the applicant on this matter it was agreed that measures exceeding the minimum standards may be required and this agreement is recorded in our Statement of Common Ground with Highways England.

Although we note that Requirement 10 of the DCO secures consultation with the Environment Agency on the final drainage design, to avoid wasted time on the part of ourselves and the applicant's contractor in repeating the above discussions during the detailed design stage we request that the recognition that measures exceeding the minimum standards may be required is included in the DCO documentation. We suggest some wording could be added to Requirement 10 of the DCO or MW-WAT14 of the OEMP to this effect.

This addition will also reduce uncertainty on the part of potential contractors by providing greater transparency of the likely requirements for an acceptable drainage scheme prior to tendering.

Regarding Drainage Treatment Areas, we have not seen sufficiently detailed plans to date to be satisfied that the current design measures are adequate although we agree to their proposed use in principle. We consider that DCO Requirement 10 and clauses within the OEMP provide sufficient security that the final design will be adequate provided the Environment Agency are fully consulted and our recommendations incorporated. However, where certain aspects have been agreed at pre-consent stage, in the interests of the scheme progressing in a timely manner following issue of any DCO, these details should be incorporated into the DCO documentation.

ii) We maintain our position that the valve diverting runoff from within the tunnel to an impounding sump rather than discharge to the environment should be automatic so it is operated when any signage is operated to indicate there is an accident, maintenance work or incidents within the tunnel. This will help to ensure that the risk of any spillage or release of any contaminants are discharged appropriately, minimising the risk to the environment. It will also reduce the

In response to the point made around whether wording is needed to be added to Requirement 10 of the DCO or MW-WAT14 of the OEMP, please see response to agenda item 3.1 (ii) Highways England Written Summary of Oral Submissions put at the Flood Risk Hearing [REP8-018] which explains the reasons why additional wording is not required. In summary, Requirement 10 of the DCO establishes a process for the detailed design of the drainage to be approved by the Secretary of State in consultation with the Environment Agency and Wiltshire Council, and for this to be based on the mitigation measures in the ES, which includes the Road Drainage Strategy [REP2-009].

ii) See response to agenda item 3.2 (ii) in Highways England Written Summary of Oral Submissions put at the Flood Risk Hearing [REP8-018] which sets out the reasons why flexibility is needed for the tunnel drainage valve control. This is further explained in in the Applicant's response to Written Question Fg.2.14 [REP6-028].



workload of any control room, during such circumstances, and not rely on human activation by either on-site controls or remotely. We consider that it would provide the most robust assurance of timely operation if the valve were linked to warning signs of incident or maintenance within the tunnel.

We consider that if linked to signage, there will be low occurrence of inappropriate activation of the diverter valve as certain checks would have been made prior to or following their illumination. The automation simply removes the physical burden and risk of error/delay of an operative having to activate a valve separately to activating signage and dealing with a great number of other issues should an incident occur within the tunnel.

Our position on this matter is unlikely to change and although we recognise that consultation under Requirement 10 of the DCO will provide an opportunity to make this recommendation at the detailed design stage, we feel that incorporating this design principle into the DCO or OEMP would provide greater clarity to potential contractors and reduce time repeating discussions during the tight timescales proposed for the scheme after consent is granted.

13.1.3 3.4 Flood Risk Assessment

In relation to a DCO requirement referencing the FRA, we would support Wiltshire with this request however, the EA have ensured the OEMP in MW-WAT12 and 13 covers our requirements in more detail than the DCO requires. The EA suggest this is what Wiltshire could also complete for surface water issues.

During the Issue Specific Hearing for flood risk, we supported Wiltshire Council with regard to the points raised about flood risk issues. Since the hearing we have discussed possible wording with Wiltshire Council to be included in the OEMP MW-WAT12. We recommend the following wording to be included in MW-WAT12:

Flood Risk Management Plan:

Please refer to the above response to item 13.2.4.

The DCO submitted at deadline 8 included the amendment to Requirement 10.



The main works contractor shall prepare a Flood Risk Management Plan to the Authority for approval, as part of the Water Management Plan. The plan will summarise:

f) any areas within the 1% AEP plus appropriate allowance for Climate Change, susceptible to groundwater flooding, and other flood risk sources, such as sewer flooding;

g) any applications made, or likely to be made, pursuant to the Environment Agency's protective provisions in the DCO, where required in relation to flood defence, for temporary and permanent works and the status of the works;

h) any specific requirements or conditions of the approval that will be obtained from the relevant consenting bodies;

i) any flood risk management or mitigation measures implemented, or to be implemented, in support of temporary and permanent works proposals: and

j) a statement on the cumulative flood risk impact of temporary and permanent works.

The plan shall build on the assessment of flood risk and mitigation recommended within the Flood Risk Assessment and its annexes submitted as part of the DCO examination (REP3-008).

The plan shall be developed and implemented following consultation with the Environment Agency and Wiltshire Council (in so far as relevant to its functions as lead local flood authority).

We are satisfied with the wording of MW-WAT12 and MW-WAT13 other than the above suggested amendment.

We also requested at the hearing that 'flood risk' be included in Requirement 10, Drainage. This was subsequently agreed at Issue Specific Hearing 11 and we agree to the inclusion of 'management of flood risk' in this Requirement.



13.1.4

4. Contamination (including groundwater contamination)

i. We are satisfied with the current controls for dealing with risks from contamination once it is identified and during construction.

However, to minimise the risk of mobilising contamination and inducing delays into the construction programme if contamination were discovered during construction, we consider that where there is reasonable potential for contamination to exist (eg former military land) these investigations are carried out and reported on prior to development works commencing.

We welcome the addition of paragraph 'j' to MW-GEO8 in Revision 4 of the OEMP which largely addresses our concerns regarding the investigation and assessment of what might be termed 'anticipated' contamination. We do however request the addition of some method by which the results of the investigations and risk assessment are reported to regulatory bodies (Wiltshire Council and the Environment Agency) and that any remediation scheme is produced in consultation with regulatory bodies and delivered with their oversight (prior to development taking place). This addition would reflect the requirements for reporting and consultation for unexpected contamination that is currently included in the DCO (Requirement 7).

Following the hearing, the following additional wording (in square brackets and capitals) for MW-GEO8 has been agreed with the Applicant which, if implemented would satisfy our concerns. We do however request one further change in that the phrase 'significant risk' is replaced with 'unacceptable risk' as the criteria for triggering further assessment or mitigation since this wording is aligned with the criteria in CLR11 Model Procedures for the Management of Land Contamination.

j) proposed work areas located within 50m of potential or known areas of land contamination, as identified in the Environmental Statement, shall be investigated using a risk based approach in accordance with Contaminated Land Report 11, Model Procedures for the Management of Land Contamination (2004) both in the preconstruction and construction phases [AND A RISK ASSESSMENT

The words as agreed at the ISH held on 29 August 2019 [REP8-018] have been incorporated into the OEMP which will be submitted at deadline 9.

With regard to the Phase 7 Ground Investigation works, see the response to agenda item 4 [REP8-018] which sets out that:

- The Phase 7 ground investigation is a 2-year ground investigation programme in two phases (7A and 7B). The first phase in 2019 is to provide identified supplemental information to inform the main works tender design.
- Phase 7A was also split into two parts to accommodate landowner harvesting requirements. 7A(i) comprised exploratory holes needed for the design of green bridges but included where the proposed scheme crossed RAF Stonehenge and RAF Oatlands Hill and so some contamination testing was undertaken. This was completed 3-4 weeks ago on site. The Contractor returned on the 19th August 2019 to commence 7A(ii) which is currently programmed to finish on 20th September 2019, which also includes additional investigation in the former RAF Oatlands Hill.
- The Phase 7Ai Factual Report is currently being compiled by the ground investigation contractor. Going forward it is Highways England's intention to work with tenderers to finalise the ground investigation scope for 7B and its interpretation to support their design whilst also taking onboard the views of stakeholders. Phase 7B is currently programmed for Q2 2020.



PRODUCED IN CONSULTATION WITH THE PLANNING AUTHORITY AND THE ENVIRONMENT AGENCY. THE UNDERTAKER MUST PROVIDE TO THE PLANNING AUTHORITY AND THE ENVIRONMENT AGENCY A COPY OF THE RISK ASSESSMENT AS SOON AS REASONABLY PRACTICABLE AFTER ITS COMPLETION]. Where significant UNACCEPTABLE risks are identified, further assessment and/or appropriate mitigation (remediation) to reduce to acceptable levels the potential short and long-term health and safety and

environmental risks to sensitive receptors will be identified [IN CONSULTATION WITH WILTSHIRE COUNCIL AND THE ENVIRONMENT AGENCY] and implemented. Associated additional ground investigations will be undertaken in accordance with UK good practice, including BS 5930:2015 Code of Practice for ground investigations and BS 10175:2011 + A2:2017 Investigation of Potentially Contaminated Sites Code of Practice.

Should these amendments be incorporated into the final OEMP then we do not consider that a further Requirement would be required in the DCO.

- ii. To date we have not received any specific details of the scope or results of the ongoing 'Phase 7' works.
- iii. At this stage we do not have sufficient details regarding the ongoing and planned survey work to determine whether further works will be necessary. However, provided the amendment to MW-GEO8 described above in 'ii' is implemented we consider that controls regarding the management of contaminated land will be adequate.

13.1.5

5. Private water supplies

i. We consider the listed controls adequate for the protection of private water supplies. In addition, MW- WAT9 will provide control regarding fluids used for ground treatment including grouts and drilling fluids.

- i. The Environment Agency will be consulted during development of the Groundwater Management Plan.
- ii. As noted at item 5 of ISH10 [REP8-018], due to the nature of the preliminary works, it is not considered that there is potential for the preliminary works to impact private water supplies.
- iii. Noted



We will expect the trigger levels and action plans derived as part of the Groundwater Management Plan (OEMP MW-WAT10d) to be set so as to provide sufficient warning of likely impact to private water supplies to enable mitigation measures to be implemented. Detection of impacts at the private water supply should not be the trigger for mitigation/remedial action unless action is triggered at levels that provide a suitable 'safety margin'.

- ii. Where there is potential for preliminary works to impact private water supplies then the same degree of controls as placed on the main works should be implemented to ensure the supplies are protected.
- iii. We defer to Wiltshire Council on whether they consider amendments are required to enable them to fulfil their regulatory duties.

13.1.6 **6. Tunneling**

i. We note and welcome the commitment to use closed face tunneling techniques for the main bored sections that will avoid the need for large scale dewatering. OEMP D-CH32 does not however make clear that this would also relate to cross passages. In early discussions with the Applicant's consultants it was stated that small closed face tunnel boring machines are available that could potentially be used to construct the cross passages through saturated ground and therefore minimise the requirement for dewatering.

Should closed face tunnel boring machines not be utilised for cross passages, we understand from representation made by the Applicant at Issue Specific Hearing 10 that grouting could be used prior to excavation of the cross passages by conventional excavator and that this would not require dewatering. If this were the case, we could agree in principle to this approach but would require further assurances that the potential for passive dewatering and/or impedance to groundwater flow from excessive grout invasion will be adequately controlled.

Highways England can confirm that the amendment as suggested is included within item D-CH32 of the OEMP [REP8-006].



We would therefore request that the following wording is added to OEMP D-CH32:

"...Cross passages shall be constructed in the same way or using other techniques that prevent/minimise entry of water into the tunnel whilst also preventing or minimises the impedance of groundwater flow around, above or below the tunnel"

We would expect such details to be included and assessed in the Groundwater Management Plan secured by OEMP MW-WAT10. With inclusion of this wording and the fact that construction dewatering now falls within the abstraction licensing regime regulated by the Environment Agency, we are satisfied that adequate controls would be in place to ensure dewatering is minimised and tunnelling will not result in unacceptable impacts on the environment.

13.1.7 **7. Requirements and OEMP**

Draft DCO

Requirement 3 - Preparation of detailed design, etc.

We request the following amendment to DCO Requirement 3 (in square brackets below) to provide greater assurance that the Environment Agency will be consulted on changes to the detailed design. We note the specific reference to consultation with the planning authority on matters related to its functions and seek an equally robust assurance that the environmental impacts of any proposed changes will be assessed by the appropriate regulatory body.

Preparation of detailed design, etc.

3.—(1) The authorised development must be designed in detail and carried out so that it is compatible with the works plans, the engineering section drawings (plan and profiles) and the engineering section drawings (cross sections) unless otherwise agreed in writing by the Secretary of State, following consultation with the planning authority on matters related to its functions and any other person the Secretary of State considers appropriate having regard to the

In respect of requirement 3, the Applicant has amended it to refer to the "statutory roles and responsibilities" of the persons that the Secretary of State is considering consulting under the requirement in revision 7 of the DCO. The Applicant considers it inappropriate to refer to "interested parties" as that would unduly narrow the scope of persons who the Secretary of State is required to consider.

 In respect of Requirement 10, the Applicant added the reference to the "management of flood risk" in revision 6 of the DCO [REP8-005].



proposed amendment in question, [and the statutory roles and responsibilities of the interested parties to the Scheme] and provided that the Secretary of State is satisfied that any amendments to the works plans, the engineering section drawings (plan and profiles) and the engineering section drawings (cross sections) would not give rise to any materially new or materially worse adverse environmental effects in comparison with those reported in the environmental statement.

Requirement 10 - Drainage

At the hearing we discussed the inclusion of 'and flood risk' in Requirement 10. The inclusion of 'and management of flood risk' was subsequently agreed during Issue Specific Hearing 11. Requirement 10 should now read as follows:

- **10.**—(1) No part of the authorised development is to commence until written details of the drainage system to be constructed for that part, based on the mitigation measures included in the environmental statement and including a timetable for implementation and means of pollution control **and management of flood risk**, have been submitted to and approved in writing by the Secretary of State, following consultation with the planning authority on matters related to its land drainage functions, and the Environment Agency.
- (2) The drainage system must be constructed in accordance with the approved details referred to in sub-paragraph (1) prior to that part of the authorised development becoming open for public use.

13.1.8 **OEMP**

We request that the OEMP clauses referring to approval of the CEMP or associated management plans (including but not limited to MW-G5 to MW-G7) are updated to reflect the latest version of Requirement 4 in DCO Revision 5 where approval is provided by the Secretary of State.

OEMP MW-WAT12 - Flood Risk Management Plan

In terms of MW-WAT12, see response to agenda item 7 (i) in Highways England Written Summary of oral submissions put at the Flood Risk Hearing [REP8-018] (page 17) which explains why the OEMP already includes provisions for the EA to consider such matters, and therefore why the suggested wording is not needed.

With regard to MW-G7, the Applicant does not consider that this is necessary as it would create an overly bureaucratic approach to matters that may require only minor changes - in the midst of a construction scheme, the



We recommend that MW-WAT 12 includes wording similar to the following regarding dewatering:

"The construction method at present does not require any dewatering. It is essential that any changes to the detailed design are adequately risk assessed. The EA should be consulted on any updated design and risk assessment, and agreement reached with the EA regarding conclusions and any mitigation measures proposed. No works should commence until written agreement that these plans provide appropriate measures and mitigation to protect the site and surrounding area from flood risk during construction and operation of the scheme."

OEMP MW-G7

We request that the Environment Agency are consulted on all updates to the management plans referred to in OEMP MW-G7. We consider that whether an update to a plan is material or not should be determined by the regulator rather than the Applicant.

OEMP MW-WAT13

We recommend the following wording relating to flood risk and groundwater data be included in the OEMP MW-WAT13, or another suitable location in the OEMP:

"Following the post construction groundwater monitoring, Highways England will provide data collected and allow the Environment Agency/Wiltshire Council to adopt the boreholes to inform their groundwater flood warning service.

Once further modelling work is completed by Highways England at detailed design stage, meeting the standards for flood map updates, the Environment Agency and Wiltshire Council can utilise this modelling work to update the fluvial, pluvial and groundwater flood map."

contractor will need to be able to deal with minor issues, rather than waiting for stakeholders to agree that they are indeed minor.

With regard to the MW-WAT13 comment, Highways England can confirm item MW-WAT15 (Monitoring of water resources) of the OEMP [REP8-006] was updated to reflect this point. The last sentence now includes 'Monitoring arrangements (including the sharing of data and, where relevant, the handover of assets) shall be included within the Groundwater Management Plan'.

13.1.9

Part 2 – Works provisions

3.2 Article 3 - Disapplication of legislative provisions

The Applicant welcomes the Environment Agency's confirmation.



Whether there are any outstanding concerns as regards Protective Provisions and amendments for the protection of drainage authorities? The proposed disapplication of the provisions of the Neighbourhood Planning Act 2017 insofar as they relate to Temporary Possession of land under Articles 29 and 30. We are satisfied that our Protective Provisions have been agreed and included in the latest version of the draft DCO. 13.1.10 3.2 Issue Specific Hearing 11 - Draft Development Consent 3.3 (i) and (ii) - the Applicant welcomes the Environment Agency's **Order (30 August 2019)** confirmation it is content in respect of these matters. 3.3 Article 7 - Limits of deviation 3.3(iii) – the Applicant has made an amendment of equivalent effect to article 7(6) to refer to the "roles and responsibilities". For the same reasons as in i. We consider that any change to the tunnel vertical alignment in the relation to the Environment Agency's introduction of the same wording into final detailed design would be assessed as part of the updated requirement 3, the Applicant has not adopted the reference to "interested Groundwater Risk Assessment within the Groundwater Management parties" as it would, in the Applicant's view, inappropriately narrow the scope Plan (OEMP MW-WAT10 b) and therefore existing controls are of the persons who could be consulted. adequate. The updated Risk Assessment should assess whether the numerical modelling already conducted is representative of the final design or if updates to the modelling are required. ii. Any lateral deviation from the draft design should also be assessed for impacts on groundwater at the detailed design stage. We are satisfied that this would be secured by MW-WAT10. iii. Detailed design, risk assessments and mitigation measures put forward to protect the water environment should be agreed by the Secretary of State in consultation with the Environment Agency and other relevant authorities. We request the following additional

dDCO Article 7(6)

within its remit.

(6) The maximum vertical limits of deviation referred to in paragraphs

wording (in square brackets) is added to the article to provide greater assurance that the Environment Agency will be consulted on matters

(4) and (5) do not apply where it is demonstrated by the undertaker to the Secretary of State's satisfaction and the Secretary of State



	certifies accordingly, following consultation with the planning authority and any other person the Secretary of State considers appropriate having regard to the proposed deviation in question [and the statutory roles and responsibilities of interested parties], that a deviation in excess of these limits would not give rise to any materially new or materially worse adverse environmental effects in comparison with those reported in the environmental statement.	
13.1.11	Supplemental powers	Please see the Applicant's response to item 13.1.1 above.
	i. We maintain our position that Article 13 should be amended to include discharges to ground and consideration of dissolved pollutants (as shown below in square brackets). This amendment is in line with the final draft DCO recently submitted to the A303 Sparkford to Ilchester DCO Examination in Somerset which relates to a less sensitive groundwater environment than the Amesbury to Berwick Down scheme.	
	Discharge of water	
	13.— (5) The undertaker must take such steps as are reasonably practicable to secure that any water discharged into a watercourse or public sewer or drain [or to the ground] under the powers conferred by this article is as free as may be practicable from gravel, soil or other solid substance, oil or matter in suspension [or dissolved pollutants].	
	The Memorandum of Understanding between Highways Agency and Environment Agency: Annex 1 – Water Environment (2009) attached describes the provision within the Highways Act (1980) whereby an environmental permit is not required for discharges of highway runoff to ground provided it does not cause pollution. With the wording above we seek a commitment within the DCO that discharges to the environment will be acceptable and therefore fall within the situation described by the MoU. Without such a commitment it may be necessary for the discharges of runoff from the scheme to be permitted.	



13.1.12	4. Schedule 2 Requirements	The Applicant welcomes the Environment Agency's confirmation.
	4.1 Requirement 1(1) – Interpretation	
	Yes we believe the OEMP is now satisfactorily defined.	
13.1.13	4. Schedule 2 Requirements 4.2 Requirement 3(1) and (2) – Preparation of detailed design etc	In respect of the matters in item i, the Applicant amended Requirement 3 in revision 6 of the DCO [REP8-005] to adopt the "in accordance" wording. In respect of the matters in item ii please see the responses earlier in this
	i. The Environment Agency supports Wiltshire Councils suggestion that detailed design should be "in accordance with" the listed plans	table.
	and any departure from these is within the agreed Limits of Deviation and in line with principles outlined in OEMP. This is to ensure that the final design complies with the principles of the plans put forward at application and the assessment of impacts at the pre-consent stage (and considered by the Examination) accurately reflects the likely impacts of the completed scheme.	In respect of the matters in items iii and iv the Applicant has amended article 7(6) and requirement 3(1) in revision 7 of the draft DCO submitted at deadline 9 to include reference to the "statutory roles and responsibilities" of the persons who the Secretary of State is considering consulting in respect of applications made under those provisions as requested by the Environment Agency.
	ii. The final design will require further risk assessment. We are satisfied that the principles of the scheme have been agreed and the environmental risks can be adequately controlled in the final design provided the Environment Agency has meaningful influence through consultation. There are three design principles that have been discussed during Hearings 10 and 11 on which we maintain our position and consider the DCO should secure a commitment to include in the final design:	
	Recognition that standards of drainage design in excess of the minimum stated in the DMRB may be required due to the sensitivity of the receiving environment	
	2. The valve controlling diversion of contaminated runoff from within the tunnel from discharge to the environment or to an impounding sump should be automatically activated during incidents and maintenance activities.	
	3. OEMP D-CH32; Cross passages should be constructed using closed face tunnel boring machines or using other techniques that prevent/minimise entry of water into the tunnel during and after	



construction whilst also preventing or minimises the impedance of groundwater flow around, above or below the tunnel"

A commitment to these design aspects within the DCO will provide clarity to potential contractors on the standards of drainage design likely to be required and help speed up the design process following issue of a DCO.

- iii. We welcome the amendment at Deadline 6 but request further amendment as explained below in iv.
- iv. We request the stated amendment to DCO Requirement 3 to provide greater assurance that the Environment Agency will be consulted on changes to the detailed design. We note the specific reference to consultation with the planning authority on matters related to its functions and seek an equally robust assurance that the environmental impacts of any proposed changes will be assessed by the appropriate regulatory body

13.1.14

Outline Environmental Management Plan

4.3 Requirement 4 – Outline Environmental Management Plan

- i. We do not think it is appropriate for Highways England to be the approver for the CEMP and other management plans. We are however satisfied with the amendment included in the latest (Revision 5) draft DCO in which the approver for the CEMP and associated management plans is secured as being the Secretary of State following the consultation specified in the OEMP.
- ii. We have no objection to Wiltshire Council being the approving body for plans relating to matters within their remit such as contaminated land and emergency preparedness.
- iii. We are satisfied that Requirement 4 as amended in the revision 5 version of the DCO and the revision 4 OEMP contains sufficient provision for consultation with the Environment Agency on matters regarding the CEMP and associated management plans.
- iv. We are satisfied with the provision for consultation within the

i. Noted.

- ii. The Applicant's position is that the CEMPs, together with their associated plans and strategies would be for the Secretary of State's approval. The exception to this position is that Wiltshire Council would approve the Heritage Management Plan, Archaeological Method Statements and Site Specific Written Schemes of Investigation, which would be for Wiltshire Council to approve. The Applicant notes that the Environment Agency does not object to this approach.
- iii. The Applicant welcomes the Environment Agency's confirmation.
- iv. The Applicant welcomes the Environment Agency's confirmation.
- v. The Applicant welcomes the Environment Agency's confirmation.



	revised OEMP (revision 4) and the method by which it is secured by the amended Requirement 4 of the DCO (revision 5). v. We are satisfied that the revised MW-G11 in the revision 4 OEMP	
	requires a summary report of consultation regarding the HEMP to be submitted with the request for approval. This addresses our previous concern.	
	vi. No comment	
	vii. No comment	
	No comment	
13.1.15	Contaminated land	Please refer to the above response to item 13.1.4.
	4.5 Requirement 7 – Contaminated land	
	We are satisfied with the current controls for dealing with risks from contamination once it is identified and during construction.	
	However, to minimise the risk of mobilising contamination and inducing delays into the construction programme if contamination were discovered during construction, we consider that where there is reasonable potential for contamination to exist (eg former military land) these investigations are carried out and reported on prior to development works commencing.	
	We welcome the addition of paragraph 'j' to MW-GEO8 in Revision 4 of the OEMP which largely addresses our concerns regarding the investigation and assessment of what might be termed 'anticipated' contamination. We do however request the addition of some method by which the results of the investigations and risk assessment are reported to regulatory bodies (Wiltshire Council and the Environment Agency) and that any remediation scheme is produced in consultation with regulatory bodies and delivered with their oversight (prior to development taking place). This addition would reflect the requirements for reporting and consultation for unexpected contamination that is currently included in the DCO (Requirement 7).	



Following the hearing, the following additional wording (in square brackets and capitals) for MW-GEO8 has been agreed with the Applicant which, if implemented would satisfy our concerns. We do however request one further change in that the phrase 'significant risk' is replaced with 'unacceptable risk' as the criteria for triggering further assessment or mitigation since this wording is aligned with the criteria in CLR11 Model Procedures for the Management of Land Contamination.

j) proposed work areas located within 50m of potential or known areas of land contamination, as identified in the Environmental Statement, shall be investigated using a risk based approach in accordance with Contaminated Land Report 11, Model Procedures for the Management of Land Contamination (2004) both in the pre-construction and construction phases [AND A RISK ASSESSMENT PRODUCED IN CONSULTATION WITH THE PLANNING AUTHORITY AND THE ENVIRONMENT AGENCY. THE UNDERTAKER MUST PROVIDE TO THE PLANNING AUTHORITY AND THE ENVIRONMENT AGENCY A COPY OF THE RISK ASSESSMENT AS SOON AS REASONABLY PRACTICABLE AFTER ITS COMPLETION]. Where significant

<u>UNACCEPTABLE</u> risks are identified, further assessment and/or appropriate mitigation (remediation) to reduce to acceptable levels the potential short and long-term health and safety and



environmental risks to sensitive receptors will be identified [IN

CONSULTATION WITH WILTSHIRE COUNCIL AND THE ENVIRONMENT AGENCY] and implemented. Associated additional ground investigations will be undertaken in accordance with UK good practice, including BS 5930:2015 Code of Practice for ground investigations and BS 10175:2011 + A2:2017 Investigation of Potentially Contaminated Sites Code of Practice.

Should these amendments be incorporated into the final OEMP then we do not consider that a further Requirement would be required in the DCO.

13.1.16 **Drainage**

4.7 Requirement 10 - Drainage

We are satisfied with the provision within Requirement 10 for consultation with the Environment Agency.

Although we note that Requirement 10 of the DCO secures consultation with the Environment Agency on the final drainage design, to avoid wasted time on the part of ourselves and the applicant's contractor by repeating discussions conducted during the pre-consent stage during the detailed design stage, we request that recognition that measures exceeding the minimum standards set out for drainage design in DMRB guidance may be required is stated in the DCO documentation. We suggest some wording could be added to Requirement 10 of the DCO or MW-WAT14 of the OEMP to this effect. It should be noted that the potential for such measures has been agreed with the Applicant as recorded in the Statement of Common Ground (SOCG). Any link to the SOCG in the OEMP or DCO would be beneficial.

This is not agreed - please see Highways England's written summary of oral submissions put at the Flood Risk Hearing [REP8-018] which explains the reasons why additional wording is not required. In summary, Requirement 10 of the DCO establishes a process for the detailed design of the drainage to be approved by the Secretary of State in consultation with the Environment Agency and Wiltshire Council, and for this to be based on the mitigation measures in the ES, which includes the Road Drainage Strategy [REP2-009]; rather than setting detailed provisions now.

The final detailed design must be appropriate for this Scheme and its surrounding baseline – the Secretary of State will determine this through the Requirement 10 process.



	This addition will also reduce uncertainty on the part of potential contractors by providing greater transparency of the likely requirements for an acceptable drainage scheme prior to tendering.	
13.1.17	Details of Consultation	The Applicant welcomes the Environment Agency's confirmation.
	4.8 Requirement 11 – Details of Consultation	
	We are satisfied with the wording of Requirement 11.	
13.1.18	4.9 Whether any additional Requirements are necessary? i) If Wiltshire Council's proposed CEMP Requirement is incorporated into the DCO, we request that the Environment Agency are added to part (1) as a consultee due to our responsibilities and expertise regarding environmental protection and the sensitivity of the	i. As discussed at the second DCO ISH ([REP8-019] see agenda item 4.3), the Applicant amended requirement 4 in revision 5 of the draft DCO. Consultation on the CEMPs and associated plans to be developed into the CEMPs will be as set out in the OEMP. iii. The Applicant notes the Environment Agency's response but considers, for
	environment in the area of the scheme.ii) No commentiii) Improvements to waterbodies/ RARP	the reasons set out in detail in its response to Written Question DCO.2.67 [REP6-027], that its application is fully compliant with the applicable policy on biodiversity enhancement and so neither a requirement, nor an amendment to the OEMP, is necessary or appropriate.
	We are pleased to receive the letter from Highways England dated the 27 August 2019 relating to maximising outcomes for the environment and welcome the points raised about working with Highways England on proposals for the Designated funds, Biodiversity Strategy and Benefits Steering Group.	The Applicant welcomes the Environment Agency's confirmation of the adequacy of the DCO, OEMP and notes, with regards to consultation under article 7(6) and Requirement 3, that its suggestions have been accepted subject to the amendments discussed in item 13.1.10 above.
	However, we wish to maintain our position to request that the A303 Stonehenge scheme contributes to improvements to waterbodies in the vicinity of the scheme.	
	We are aware of the designated funds scheme, but the success rate for obtaining funds has been low to date, so we consider that a bid from this fund may not provide financial support or certainty. Therefore we maintain our position that the A303 Stonehenge scheme should be supporting this directly.	
	We believe the Proposed Development should contribute to improvements to waterbodies, due to national and local aims for	



improving the environment. There are government aspirations for river restoration, net gain, partnership working and multiple benefits. These include: Biodiversity 2020; A Green Future: Our 25 Year Plan to Improve the Environment (2018); National Planning Policy Framework (NPPF); SW River Basin Management Plan; and the River Avon Salmon Action Plan.

In particular we would reference the recent Biodiversity Net Gain good practice guidance as published by CIEEM and CIRIA (and 2019 government consultation), promoting:

- Being inclusive, equitable, sharing benefits amongst stakeholders;
- Being additional to achieve conservation outcomes that demonstrably exceed existing obligations;
- Optimise sustainability and the wider environmental benefits for a sustainable society and economy.

On a more local level the River Avon Restoration Plan sets out the aims for the River Avon catchment.

Environmental Enhancement Plan Requirement. We maintain our view that a Requirement for an Environmental Enhancement Plan should be included. However, we would also be satisfied if the need for producing and implementing the Environmental Enhancement Plan was included in the OEMP, if that is a more suitable location.

We consider it would be reasonable and necessary to secure this within the dDCO for the reasons outlined above and given in our previous written representations. In particular to fulfil the aims of the River Avon Restoration Plan; to maximise the water environment opportunities in the vicinity of the A303 road scheme; and to ensure the scheme satisfies the requirements of national and local policy.

Currently there is no commitment within the current A303 Stonehenge road scheme to directly enhance the water environment in the area nor take advantage of existing partnership opportunities that may contribute to overall net gain and achieve multiple benefits.



Multiple benefits could be achieved by contributing to climate change resilience, potential air quality/noise benefits from any increased (wet) woodland, wellbeing and recreational benefits from angling and other public opportunities, not least alongside species and habitat improvements from improved morphology.

The production and implementation of the Environmental Enhancement Plan would require Highways England and partners to explore and utilise the opportunities within the Hampshire Avon catchment, to help deliver the River Avon Restoration Plan and its associated multiple benefits. This would seek to achieve enhancement of the water environment and biodiversity net gain.

We are satisfied that the existing OEMP clauses and DCO Requirements will be sufficient to minimise impacts on surface and groundwater subject to the recommendations we've made in our written representations and at Issue Specific Hearings. We consider that the Groundwater Management Plan, secured by OEMP MW-WAT10 makes adequate provision for monitoring of groundwater dependent receptors.

We consider that amendments to the draft DCO and OEMP have largely addressed our earlier concerns and that a separate Requirement is not necessary provided consultation on matters within our remit can be assured. Most notably we seek further assurance that the Environment Agency would be considered an 'appropriate person' and therefore consulted when the Secretary of State considers any changes to the detailed design or the management plans submitted as part of the CEMP.



14 English Heritage Trust (REP8-038)

14.1 Written summary of oral submissions Matter Raised Highways England's Response

The Applicant's Written Summary of Oral Submissions for ISH9 [REP8-017] has previously responded to English Heritage Trust's comments received at deadline 8. An additional point raised in English Heritage Trust's oral submission is detailed below.

14.1.1 [In relation to A360 PRoW options]

However, by way of update, it is understood that Option A cannot proceed as it is now understood that Wiltshire Council does not agree the option. EHT appreciates Highways England's efforts to reduce the impacts of concern to EHT, but considers that Option B provides only a relatively modest reduction in impacts and concerns in comparison to the original A360 PROW contained in the DCO application. EHT's objection is maintained.

This comment from EHT's deadline 8 submission [REP8-038] relates to Highways England's application to the Examining Authority for acceptance of a proposed non-material change to the Scheme's public rights of way proposals in the vicinity of the Stonehenge Visitor Centre. The proposed change, identified in Highways England's Proposed Changes Application [AS-067] as NMC-06, featured two potential alternatives referred to [in AS-067] as Options A and B.

By way of background, Table 4.8 of the Applicant's Proposed Changes Consultation Report (non-statutory), September 2019 [REP8-015] summarises the consultation responses received in relation to proposed change NMC-06 and these consultation responses include Wiltshire Council's comments (in row 4.8.6) that "Wiltshire Council's preference is for NMC-06 Option B to be taken forward as part of the Scheme."; row 4.8.8 also reports Wiltshire Council's comment that "Option A is not supported".

EHT's comment cited here is also reiterated in its deadline 8a submission [see paragraph 1 of REP8a-002], responding to Highways England's Proposed Changes Consultation Report [REP8-015]. As such, Highways England's response to this comment is set out in its deadline 9 submission – Proposed Changes Position Statement (including responses to comments received on the Proposed Changes Consultation Report (non-statutory)): see item 22 in Table 5-1 in Chapter 5 of that Statement, reproduced here:

"Highways England notes the objection. However, the impact on the temporary overflow parking area is reduced compared with the Scheme's



proposals as submitted in the original application, with Option B requiring a strip of land approximately 1m wide (compared with 11m originally) from the western edge of the Visitor Centre parking area. Subject to detailed design, it is envisaged that the shared use cycle track would be separated from the Visitor Centre by a fence similar in appearance to the existing fence alongside the Visitor Centre boundary with the A360 at present, providing a similar level of security and having a similar visual impact."

Highways England's position in relation to proposed change NMC-06 is set out in full in the above-mentioned Position Statement submitted at deadline 9 and is therefore not reiterated here. The deadline 9 Position Statement also includes a full response to EHT's additional related comments on NMC-06 (which, in the interests of brevity, are not repeated here).



15 Mr F and Mrs L Whiting (REP8-062)

15.1	.1 Written summary of oral submission		
	Matter Raised	Highways England's Response	
The Applicant's Written Oral Submissions for ISH10 [REP8-018] has responded to the points made by the Mr F and Mrs L Whiting in REP8-062. Additional points raised are detailed below.			
15.1.1	The owners of Scotland Lodge Farm would be affected as well and, unlike the Turners and Hosiers, there is no reservoir on Scotland Lodge Farm as their private supply is located on property they do not own which means water is supplied instantly to where it is needed to either any of the properties, stables, buildings and paddocks. If the supply was affected in any way the results would be known instantly by the 3 dwellings as well as the livery business. Horses need regular supplies of fresh water and will on average consume about 10 gallons per day.	The Groundwater Risk Assessment [APP-282] found no change to groundwater levels as a result of the Scheme in the area of Scotland Lodge Farm. The question implies that the Turners and Hosiers would be affected by the Scheme. The Groundwater Risk Assessment [APP-282] found no change to groundwater levels as a result of the Scheme at the Turner's or Hosier's abstractions. Nevertheless, there are measures in place for the protection of water supplies and provision of alternatives should these required (see paragraph 15.1.2).	
15.1.2	This is a very real possibility if the provision of potential alternative supplies is not adequately addressed now that the applicant may play a part in the unavoidable destruction of livestock as a result of failing to understand the need for a plan to be in place prior to any construction. It is simply unacceptable that this function be passed over by the applicant to the mains works contractor.	Highways England notes this comment and takes this opportunity to state that it recognises the importance of maintaining private water supplies to landowners / occupiers. The OEMP [REP8-006] item MW-COM6 has been updated and includes for pre-construction water supply statement to be provided to landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These will identify (in liaison with landowners) how water supply is to be maintained in the unlikely event that existing supplies are adversely affected as a consequence of the works.	
15.1.3	What has also not been addressed is as a result of a failure of supply who will pay for the water consumed if the supply is from Wessex	As outlined in the Environmental Management Plan (OEMP) [REP8-006], the water management plan will be put in place to ensure that landowners will not be left without a water supply which includes providing or procuring or	



Water and if in the event that the alternative supply cannot be reconnected that the applicant will pay these costs in perpetuity.	meeting the reasonable cost of a permanent means of alternative supply (see MW-COM6).



16 Barry Garwood (REP8-057 and REP8-058)

16.1	Written summary of oral submission	
	Matter Raised	Highways England's Response
	icant's Written Oral Submissions for ISH8, ISH9, ISH10 and ISH11 [REF is received at deadline 8. Additional points raised in Barry Garwood's oral s	P8-016, REP8-017, REP8-018, REP8-019] have responded to Barry Garwood's submission for ISH8, 9 and 11 are detailed below.
16.1.1	[In relation to ISH8 Item 3.1] I pointed out that harm to the OUV could be avoided by finding a route outside the WHS. However, I was informed that alternative routes were not being considered here.	Alternative routes have been considered at length in the Applicant's application documents, and during the Examination. See response to Key Issue 3.1.11 in the deadline 3 Comments on Written Representations [REP3-013] which explains that a full options appraisal and considerations of alternatives has been undertaken. The Scheme Assessment Report (SAR) [REP1-032] and Technical Appraisal Report (TAR) [REP1-031] describe the appraisal of routes undertaken, including surface routes (all corridors apart from Corridor D) and routes outside of the WHS (Corridor A, F north and south, and G). The Environmental Statement Chapter 3 - Assessment of Alternatives [APP-041] sets out the assessment which has already been carried out in respect of alternatives, in accordance with the requirements of the EIA Regulations. See also the Applicant's Written Summary from the first Issue Specific Hearing on Traffic [REP4-034] which records the discussion of alternative routes against agenda item 7 (and which also directs to other relevant documents submitted during the Examination).
16.1.2	[In relation to ISH8 Item 3.1] Subsequently, under item 3.2, Reuben Taylor QC for Highways England pointed out that the World Heritage Committee were no longer mentioning alternative routes in their latest report.	See paragraph 16.1.1 above. For clarity, the Applicant's Written Summary of the Oral Submissions from ISH8 [REP8-016] records Mr Taylor QC's submission as follows: "In response to a submission from George Lambrick of CBA, about an alternative surface route to the South, Mr Taylor QC explained that this is an option that was raised in previous reports from ICOMOS and the World



	My point here is that there has been almost no consideration of alternative routes. A tunnel is the only option available for Examination.	Heritage Committee, but which is no longer pursued by ICOMOS / the Committee and is not referred to in the recent decision."
16.1.3	[In relation to ISH9 item 3.8] A shared use path alongside the A360 would be the safest place for equestrians, as well as pedestrians and cyclists. If I were riding a horse along the route, I would certainly use such a path rather than ride in the road, regardless of its designated status. I support the creation of a mixed use Public Right of Way suitable for equestrians, cyclists and pedestrians along this route.	Mr Garwood's comments are noted. See responses to items 4.8.1 and 4.8.2 in the Applicant's Proposed Changes Consultation Report [REP8-015] which explains that Highways England has endeavoured to provide a continuous circuit for all non-motorised users via Airman's Corner. It has not been possible to achieve a continuous off-road circuit for equestrians due to the interaction of all users in the busy and constrained area between Airman's Corner and the Visitor Centre. Equestrians and carriage drivers will be able to use most of the new public rights of way being created. There is a desire for safe off-road access to areas north and west of the World Heritage Site that is beyond the ability of this Scheme to deliver. However, the Scheme provides part of that route, while the remainder and / or alternatives could be delivered separately in the future. As set out in [REP8-015], paragraph 4.8.19, Highways England continues to actively explore an alternative solution. If identified and deliverable, this would be progressed outside the DCO.
16.1.4	[In relation to ISH9 item 4] If the A303 is closed to motor vehicles, along all or part of its length through the WHS, there will undoubtedly be a reduction in traffic accessing the Byways from it. The principal access point for Byway Amesbury 12 would be from the north at Larkhill. Heading south Byway 12 crosses the route of the A303 and rises up onto Normanton Down. South of Normanton Down, conditions are challenging. This may be fun for trail riders, but it is unsuitable for most vehicles. The majority of traffic using the route would need to turn around and go back to Larkhill to rejoin the road, if prohibited from using the A303.	In relation to Mr Garwood's statement regarding it being desirable to retain access along the A303 for motor vehicles, preferably to link in with the rest of the road network, the Applicant has explained why this is not a part of the proposed Scheme in various response documents. These include its Relevant Representation Report [AS-026], page 14-2 and in the Applicant's Written Summary of Oral Submissions put at the Traffic and Transportation Hearing on 27 August 2019 [REP8-017], matter 4.7. Parties such as the National Trust have also explained [REP8-050] why such a provision for motorcyclists would not be acceptable. The Scheme does not change the access to Byway 12, however any improvements to it that may be required are, and would be, the responsibility of Wiltshire Council.



	If access to the A303 is maintained, it would be possible to turn onto it and join Byway Amesbury 11, which has a more gentle gradient that Byway 12 south of the A303.	
	Byway 11 is currently in good condition, with light rutting. Combined with Byway 12 and the A303, it forms a route suitable for most vehicles through the WHS.	
	Byway 11 is less used than Byway 12 and may require maintenance if use increases. Byway 12 south of the A303 requires considerable maintenance if it is to be used as a through route for most vehicles.	
	It would be desirable to retain access along the A303 for motor vehicles, preferably to link up with the rest of the road network.	
	The alternative is that vehicles on Byway 12 will have to turn around and go back past the Stones, the shuttle bus turn around point and the Cursus to Larkhill, in order to rejoin the road network.	
	Other north-south routes are set to be lost by the scheme. It is important to maintain access for all to the Stones.	
16.1.5	[In relation to ISH9 item 4]	Provision of vehicular access along the existing route of the A303, through
	My preferred position is to maintain vehicle access along the A303, linking with the rest of the road network.	the WHS, would conflict with one of the main aims of the Scheme, which is to remove the sight and sound of traffic as far as possible from the WHS. It is therefore proposed that there will be no public rights for motorised vehicles on
	If an alternative route is provided, preferably outside the WHS, with Byway access along the A303, there would be at least a 99% reduction in traffic through the WHS.	the old A303. The proposed classification for the old A303 through the WHS is a Restricted Byway as shown on the Rights of Way and Access Plans [APP-009].
	This would satisfy the Statement of OUV, which calls for a long term solution to the negative impact of the A303.	
	It would also retain the sight of the Stones for those who wish to see them, including those with mobility issues, allowing access for all.	
16.1.6	[In relation to ISH10 item 3.2]	The Road Drainage Strategy [REP2-009] defines a number of pollution control measures within the highway drainage networks that will mitigate the risk of pollutants reaching the River Avon. These control measures include:



I am concerned about the eastern area of the scheme. The Avon flood plain is a very sensitive area, with Blick Mead and other sites of Mesolithic interest in the vicinity.

I sought assurance that in the event of long term failure of any pumps or equipment, or blockage of drainage routes, the default position would not be to run off to these sensitive areas.

No such assurance has been given.

The Applicants response to the ExA's Written Question on road pollution control in the eastern part of the scheme (REP 6 -028, Fg.2.16), that road edge channels or gullies would flow into carrier pipes.

It seems likely that in the event of a blockage, any road pollution would enter the surrounding environment.

- The tunnel drainage would be pumped to a point east of the tunnel where a gravity system would then convey the flow to either the impounding sump or the proposed highway network depending on water quality. A diverter valve would allow the flows to be directed to the correct system; any polluted water would be contained in the impounding sump prior to being removed and disposed in a safe manner. Our response to Written Question Fg.2.14 [REP6-028] has described the "failsafe" provision of the diverter valve, explaining that if power were lost, the valve would move to a previously agreed "safe" position, which would direct water to the impounding sump. In addition, our summary of oral presentation at ISH10 [REP8-018, agenda item 3.2.ii] explains why loss of power of either incoming electrical supply will not cause a failure in that pumping system. The Scheme requires flexibility for detailed design, noting that even manual operation of the valve is done remotely. At Issue Specific Hearing 10 regarding flood risk, groundwater protection, geology and land contamination, Ms Hunt explained that if the valves were to operate automatically it would work on a variety of different inputs - some of which are complex (see deadline 8 Submission - 8.52.3, Written Summary of Oral Submissions put at Flood Risk, Groundwater Protection. Geology and Land Contamination Hearing, Section 3.2.ii [REP8-018]). The valves can interpret signals from numerous different triggers so there is potential that they could be less robust than manual controls, leading to increased cost and maintenance. The detailed designer will need the flexibility to work out what those inputs will be to be sure that they would not be overloaded or less robust, as such there should not be a specific direction within the application documentation. Please see further discussion on this point in the Applicant's response to Written Question Fg.2.14 [REP6-028].
- The eastern section of the highway drainage includes eight new Drainage Treatment Areas in the form of linear ponds located within the highway boundary adjacent to the slip roads at Countess Roundabout. These ponds would replace the existing unlined ditches to which the runoff from the carriageway currently outfalls. The ponds would be lined, planted with reeds and contain permanent water to provide treatment prior to discharge and enhance biodiversity opportunities.



		Particular attention has been given to the catchment adjacent to Blick
		Mead, the preliminary proposals include the re-use of the existing highway ditch in this locality, the ditch would be lined with a filtration treatment system to treat the runoff.
		Penstocks would also be provided in the chambers immediately upstream of the ponds to provide additional spillage containment.
		These are all matters of detailed design that will be able to be resolved through the Requirement 10 process. The Secretary of State will be determining if the design is appropriate for this Scheme, taking account of the local environmental context.
		It should also be noted that, as reported in the Chapter 11 of the Environmental Statement [APP-049], on the basis of the mitigation set out in the Road Drainage Strategy, the assessment concluded that there would be no likely significant effects on the water quality of the River Till and the groundwater, and a likely significant beneficial effect on the water quality of the River Avon.
16.1.7	[In relation to ISH10 item 6] The plan we were shown at the previous round of Issue Specific Hearings showed a design with a tunnel well below the water table, creating a dam across the aquifer at such depth that water may be able to flow across the top of it. Cross tunnel passages and a low point sump would need to be excavated below the water table. The wording of the Application does not exclude dewatering. However, in response to the ExA's Written Question on small-scaledewatering (REP 6 – 028, Fg.2.33), the Applicant excludes small-scale dewatering. I am left wondering what amount of dewatering may be required. The	The tunnel will be constructed below the water table using a closed face tunnel boring machine. Cross passages link these tunnels and therefore are no deeper than the tunnel. As the cross passages are situated between the two bored tunnels, they cause no additional impediment to groundwater flow. The use of a closed-face TBM method for tunnelling removes the need for large scale dewatering for construction of the main tunnels. Using the method of ground stabilisation, staged excavation with face depressurisation, as discussed at the ISH and included in the Written Summary of the Oral Hearing Flood Risk, Groundwater Protection, Geology & Land Contamination under item 6 Tunnelling [REP8-018], removes the need for large-scale dewatering for the cross-passages; this method is equally valid for the low-point sump construction. The water chapter of the ES [APP-049] assesses the effect of 'damming' and concludes that there are no significant adverse effects on the water environment.
	low point sump would involve excavation well below the water table.	The response to Written Question Fg.2.33 [REP6-028] states that dewatering is not required for the current design and construction methods. It is possible that temporary and localised groundwater control could be required for the



	It is difficult to see how this could be constructed without considerable dewatering, even in the light of the possible method for cross passage construction described at the hearing.	construction of the tunnel portal slab to launch the tunnel boring machine and for some cross passages for mechanical and electrical services at Stonehenge Bottom, however if this was required
		MW-WAT8 states that the main works contractor shall be responsible for obtaining the necessary approvals and permits to enable abstraction and discharge of pumped water in an approved manner. Therefore, no dewatering will occur without the approval of the Environment Agency and Wiltshire Council.
		In addition, item D-CH32 in the deadline 9 OEMP has been amended to include the commitment that "Cross passages shall be constructed using techniques that prevent/minimise entry of water into the tunnel whilst also preventing or minimising the impedance of groundwater flow around, above or below the tunnel."
16.1.8	[In relation to the presentation given by Dr Reeves during ISH10]	See Appendix A in the Applicant's Written Summary of Oral Submission from
	My understanding of Dr Reeves' analysis is that the Whitway Rock forms an impermeable barrier below the highly permeable layer.	ISH10 [REP8-018] for a full response to this issue. Please see also responses to item 11.1.1 and 11.1.3 in the Comments on any
	The resultant hydrogeology is a zone just above the Whitway Rock	Further Information at Deadline 4 [REP5-003] and Comments on any Further Information at Deadline 7 [REP8-013] paragraph 6.2.4.
	where water can flow freely and rapidly in a horizontal direction, but is prevented from flowing down into the rock.	The Groundwater Risk Assessment [APP-282] Annex 1 describes model
	This, not surprisingly, leads to springs where the Whitway Rock comes near to the surface.	simulations of the effects of the tunnel at extreme low water level conditions, average, and extreme high conditions. No significant changes to the water table at Blick Mead are predicted by the groundwater model scenarios.
	I understand from Dr Reeves that the Whitway Rock is found in the vicinity of Blick Mead, just above the level of Mesolithic deposits.	The modelling has been reviewed and considered appropriate by the Environment Agency and Wiltshire Council's peer reviewers.
	This implies a flow, perched on the Whitway Rock, continuously maintaining the damp ground at Blick Mead.	Zivironinion, rigorio, and vinterinio courion o poor reviewere.
	The act of tunneling would shatter the Whitway Rock over a wide area as the boring machine passed through the vicinity.	
	Vibration would cause settling of material into the fractures above, restricting the flow in the highly permeable zone and allowing water to transmit down through the impermeable Whitway Rock layer.	



	I cannot see how any amount of grouting would prevent this. Indeed, grout would serve to further block the faults in the permeable layer, while being unlikely to repair the fracturing of the impermeable layer. The result will be unknown changes to the hydrogeology of the Chalk. What seems likely is that horizontal flow will be disrupted by the act of tunneling. This is likely to result in reduced flow towards Blick Mead and Amesbury Abbey springs.	
16.1.9	The Applicant notes in their answers to the ExA's Written Questions (REP 6 – 028, Fg.2.45), that there will be at least 0.35 m of saturation above the Mesolithic layer when groundwater levels are high. There does not seem to be any specific consideration of when groundwater levels are low, which would be more relevant.	The response to Written Question Fg.2.45 [REP6-028] was in response to a question about high water levels from the Environment Agency. The Groundwater Risk Assessment [APP-282] Annex 1 describes model simulations of the effects of the tunnel at extreme low water level (drought) conditions, average, and at extreme high (flood) conditions. No significant changes to the water table at Blick Mead are predicted for any of these scenarios. The modelling has been reviewed and accepted by the Environment Agency and Wiltshire Council's peer reviewers and is appropriate for determination of the Application.
16.2	Comments on [REP7-21]	
	Matter Raised	Highways England's Response
16.2.1	[In relation to IAN 114/08 – Highways Agency Carbon Calculation and Reporting Requirements and Highways England's Carbon Report Tool as referenced in ES Chapter 14 – Climate [APP-052]] The main guidance referred to by Highways England, IAN 114/08, seems vague, out of date and irrelevant, from what I have found online.	Interim Advice Note (IAN) 114/08 sets out Highways England's requirements for carbon calculation and reporting for the design, construction and operation of Major Project Schemes. The methodology outlined in IAN 114/08 follows accepted industry practice for carbon accounting in that it aligns with the approach and method advocated by the World Business Council for Sustainable Development (WBCSD/World Resources Institute (WRI) Greenhouse Gas Protocol ¹ and the Institute of Environmental Management



Even the more recent documents owe more to management talk, economic growth and other general concepts, than they do to modern climate science.

and Assessment (IEMA) Guidance on Assessing Greenhouse Gas Emissions and Evaluating their Significance².

The assessment of carbon emissions impacts as presented in Chapter 14 of the Environmental Statement [APP-052] has followed the requirements outlined in the IAN 114/08 including the use of the Highways England Carbon Calculation tool. Mr Garwood's comment does not explain the way in which IAN 114/08 can be said to be "vague, out of date and irrelevant". The methodology used in the assessment as set out in Chapter 14 of the ES applies up to date, accurate emissions factors and is based on current industry practice for carbon calculation.

The assessment is further supported by a range of other up to date and directly relevant sources of guidance and climate science. This includes guidance and information published by the Institute of Environmental Management and Assessment (IEMA) on both assessing Greenhouse Gas Emissions and Evaluating their Significance, and assessing Climate Change Resilience and Adaption, the UK Met Office historic climate data³, UK Climate Projections⁴, and the Committee on Climate Change carbon budgets⁵ (Cited in Chapter 14 of the ES [App-052]). Therefore, the approach taken reflects widely recognised and accepted industry practice and modern climate science.

(1) WBSCD/WRI GHG Protocol https://ghgprotocol.org/corporate-standard

(2) IEMA

(3). The Met Office historic climate data www.metoffice.gov.uk/public/weather/climate/gcqfp5e8q

- (4) UK Climate Projections UK Climate Projections (UKCP09). http://ukclimateprojections.metoffice.gov.uk/
- (5) Committee on Climate Change carbon budgets https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/



16.2.2

The first point to notice is the claim that 'standards are informed by the latest science on climate change'.

This is followed by 'the UK Government target of an 80% reduction in carbon emissions, against the levels in the 1990s, by 2050'.

As most people are probably aware, the Government have now committed to zero net carbon emissions by 2050.

The latest scientific advice from the IPCC is that we need to take action now to reduce our emissions.

The Applicant refers Mr Garwood to the Applicant's response [item 9.1.1 in REP8-013 to his representation REP7-053], where the Applicant has explained that the results of the carbon assessment in Chapter 14 of the Environmental Statement (ES) [APP-052] present the impact of the Scheme as measured against the UK meeting its existing carbon budgets, which at the time of the assessment were set through to 2032. Each carbon budget provides a forecast for a permissible level of carbon emissions within a five-year period. The carbon budgets allow for an increasing reduction in emissions over time to allow for the implementation of necessary policy change and improved technologies to allow for the 2050 target to be met.

As the Applicant has previously noted throughout the Examination, (including within item 9.1.1 in [REP8-013]), the Governmental Committee on Climate Change has announced that they intend to publish revised carbon budgets in light of the new 2050 target. However, these revised budgets are not expected until at least 2020. As such, it has not been possible for the Applicant to assess the Scheme against any revised carbon budgets.

However, the Applicant reinforces that the assessment has been undertaken using a conservative, 'worst-case emissions' approach, considering emissions from the Scheme in two separate phases, emissions during construction and emissions during operation. Construction of the Scheme is a short-term activity that will be complete by 2026. Emissions from construction therefore fall within the nearer term 3rd and 4th carbon budgets. Emissions from the operation of the Scheme will fall into the 4th, 5th and subsequent future budgets, once set, through to 2050. Whilst a reduction in the carbon budgets may occur in the 2020 review, the Committee on Climate Change has indicated that the trajectory will be steeper therefore it is later carbon budgets rather than near term ones which will see a greater impact. The Applicant also reiterates its previous assessment against the existing carbon budgets, the results of which indicate that the carbon impact of the Scheme is within the carbon budget threshold and therefore will not have a material impact. For instance, the updated assessment set out in the Applicant's response to the Examining Authority's First Written Question CC.1.6 [REP2-028] demonstrates the Scheme's Greenhouse Gas (GHG) impact as a proportion of total UK carbon emissions equates to 0.023% of the fourth carbon budget and 0.008% of the fifth carbon budget.



		Despite this scale and the precautionary nature of our assessment, Highways England recognises the need to mitigate GHG emissions hence we have identified several GHG mitigation proposals as outlined in Section 14.8, Chapter 14 of the ES [APP-052].
16.2.3	The Sustainable Development Strategy acknowledges that the 'infrastructure sector is responsible for almost one-sixth of total emissions' and 'Road transport is one of the main sources of carbon emissions', stating 'We will play our part in reducing UK carbon emissions: carbon emissions play a significant role in increasing the rate of climate change'. Such language is not consistent with the detail of this scheme. The position of Highways England appears to be to carry on as before, pouring concrete and increasing road capacity.	See the response to item 6.2.28 [REP8-013]. Regarding embodied emissions of construction materials, the Applicant would refer Mr Garwood to the responses in section 9 of [REP8-013] which states that the assessment of carbon emissions presented in Chapter 14 of the ES [APP-052] included embodied carbon emissions within materials, such as concrete, to be used to construct the Scheme. The assessment concluded that the carbon impact of the Scheme would be within the carbon budget threshold and therefore not have a material impact. The updated assessment set out in the Applicant's response to Written Question CC.1.6 [REP2-028] demonstrates that the Scheme's GHG impact as a proportion of total UK carbon emissions in the fourth carbon budget period, i.e. when construction occurs, is 0.023%. Regarding the increase to road capacity, the response to [REP7-053], as set out in [REP8-013], explains due to the increase in the use of electric vehicles, reduced operational emissions from fume extraction systems within the tunnel, and the decarbonisation of the grid, the carbon impact associated with road users will decrease and be significantly lower than the numbers identified in the assessment, which has been undertaken using a conservative basis. Additionally, Highways England are committed to reducing the operational emissions of the road network at a strategic national network scale, as well as on an individual infrastructure project scale. Highways England are investing in renewable energy technology and feasibility studies across the network to reduce carbon emissions, including renewable energy solar farms to support the energy requirements of road tunnels, and photovoltaic noise barriers to power signage, cameras and roadside detectors. Highways England are also reducing the emissions of assets and buildings and rolling out improvements to depot efficiencies as part of the depot greening programme, including fitting solar panels and using LED task lighting. These changes will further decrease the GHG emissions of th



		vehicles and away from diesel and petrol vehicles). Therefore, the Applicant does not accept that the language within the Highways England Sustainable Development Strategy¹ is inconsistent with the detail of this scheme or with Highways England's approach to reducing carbon emissions of the road network as a whole. (¹¹) Highways England Sustainable Development Strategy https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605079/Sustainable_Development_Strategy_6.pdf
16.2.4	The language of the Environmental Statement (ES) on Climate (APP – 052) comprises more of the self-assessed matrices that lead to conclusions of no adverse impacts.	It is assumed the comment relates to the 'no adverse impacts' conclusions in the climate resilience assessment matrices set out in Chapter 14 of the Environmental Statement (ES) [APP-052]. As Chapter 14 explains, consideration of climate change adaptation within Environmental Impact Assessments such as the kind reported in Chapter 14 is an area of emerging practice. There is not a prescribed format for undertaking such assessments, therefore the approach taken has followed industry guidelines including the Institute of Environmental Management and Assessment (IEMA), Environmental Impact Assessment Guide to Climate Change Resilience and Adaption 2015 and good practice from other similar studies. IEMA's guidance promotes the use of their approach to undertaking self-assessment of climate change resilience.
16.2.5	ES Section 14.6.11 states that 'By the 2020s (2010-2039), annual average daily temperatures are projected to be 1.45°C higher than the 1961-90 baseline average.' The latest IPCC report that sets out a framework for this talks of limiting temperature rises to 1.5°C above pre-industrial (19th Century) levels.	The purpose of the climate change risk assessment presented in Chapter 14 of the ES [APP-052] is to identify the resilience of the Scheme to future climate change impacts. This assessment has been undertaken in line with industry guidance published by the Institute of Environmental Management and Assessment (IEMA), Environmental Impact Assessment Guide to Climate Change Resilience and Adaption 2015.
	Highways England consider much higher temperature rises to be acceptable, with their 1.45°C above 1961-90 levels being equivalent to around 2°C above pre-industrial levels and this by the 2020s, not 2050.	By referencing the '1.45°C higher' temperatures, the assessment is not stating that these temperature increases are "acceptable", as the comment suggests, but rather, it is presenting the latest climate projections available at the time the assessment was undertaken (Met Office climate projection data published in 2009 (UKCP09)) as context to the assessment. As



		acknowledged in the Applicant's response to Written Question CC.2.4 [REP6-025], UKCP09 climate projections were the latest set of projection data available at the time the assessment was undertaken for the ES. An updated set of projections was published in 2018 (UKCP18) and the Applicant's response to the Examining Authority's Second Written Question CC 2.4 [REP6-025] presents an updated assessment of the resilience of the Scheme to climate change using the UKCP18 data. The response to CC.2.4 also presents a comparison between the climate change impacts identified using UKCP09 and UKCP18. In this comparison, the Representative Concentration Pathway (RCP) 8.5 scenario from UKCP18 was used, which is the scenario most similar to the UKCP09 'High Emissions' scenario that was used in the original assessment. The Intergovernmental Panel on Climate Change (IPCC) "Special Report on the impacts of global warming of 1.5 °C"¹ that is referred to in Mr Garwood's comment sets out the projected impacts and associated risks of global warming of 1.5 °C rather than setting new emissions scenarios or baselines. The UKCP18 RCP does, however, use the latest emissions scenarios that are used in the IPCC's latest 5th assessment report ² . 1) IPCC Special Report on impacts of global warming of 1.5 °C t: https://www.ipcc.ch/sr15/ 2) IPCC Special Report on Emissions Scenarios https://www.ipcc.ch/report/emissions-scenarios/
16.2.6	ES Table 14.14: Emissions breakdown by construction activity notes:	See the response to item 6.2.28 [REP8-013] and also the response to item 16.2.3 above.
	Embodied carbon in raw materials and transportation of materials to site - 267,100 tons CO2 emission, comprising 57% of the total.	We note Mr Garwood's view, however can confirm that the data presented in
	Fuel, electricity and water - 198,935 tons CO2 emission, comprising 43% of the total.	Chapter 14 of the ES as quoted here is not a minimum figure nor an underestimation. As set out in the response above to item 16.2.2, the assessment has been undertaken using a conservative, 'worst-case
	My view is that the figure for materials is likely to be a minimal estimate for tunnel construction alone, given the quantity of concrete likely to be required and the very high emissions resulting from its production.	emissions' approach. Conservative estimates for travel distances to site for transportation of materials to site, and energy use from plant during construction have been made. The assessment of embodied carbon emissions within materials, such as concrete, to be used to construct the Scheme has been based on design estimates at the time and is based on



	Another 200,000 tons CO2 emissions are estimated from fuel for construction purposes. These are very large figures given the urgency of the situation has led to declerations of a Climate Emergency.	conservative estimates that do not account for measures such as choosing materials with higher recycled content.
16.2.7	Highways England note in ES 14.9.10 that on the basis of their own calculations, the scheme would contribute no more than 0.03% of any 5 year carbon budget. That is for the construction stage of this scheme alone. There are many further schemes proposed along the A303, which are not included in this figure. Other road schemes are planned elsewhere around the country. When added together, they are likely to comprise several percent of such budgets. Of course, additional road capacity leads to further emissions from increased traffic.	The carbon assessment as presented in Chapter 14 of the ES [APP-052] identified that the Scheme would create carbon emissions above the existing baseline but as outlined in applicant's response [REP3-052]: "this assessment established that even during the period when carbon emissions from the project will be at their highest level (short and near term construction activity), the project will only contribute to 0.023% of the UK's carbon budget for the relevant carbon budget period (the 4th carbon budget period). During Scheme operation, the Scheme's carbon emissions will equate to an extremely marginal 0.008% of the UK's carbon budget for the 5th carbon budget period. These figures are based on a precautionary assessment which does not take into account or rely upon the further decarbonisation of the UK electricity system, ongoing move to lower carbon fuels nor the carbon benefits from land use changes incorporated into the scheme (i.e. increased areas of habitat and decreased areas of land under intensive arable agriculture). Despite this scale and the precautionary nature of our assessment, we recognise the need to mitigate GHG emissions hence, we have identified several GHG mitigation proposals as outlined in Chapter 14 of the ES [APP-052]. The carbon assessment has considered emissions from the Scheme in two separate phases, emissions during construction and emissions during operation. Construction of the Scheme is a short-term activity that will be complete by 2026. Emissions from construction therefore fall within the nearer term 3rd and 4th carbon budgets. Emissions from the operation of the Scheme will fall into the 4th, 5th and subsequent future budgets once set through to 2050. Whilst these are due to reflect the recent commitment to a net zero carbon economy by 2050, the Committee on Climate Change has indicated that the trajectory will be steeper therefore it is the later carbon budgets rather than near term ones which will see a greater impact. We do not expect therefore that the near-term carbon b



The assessment of carbon emissions presented in Chapter 14 of the ES [APP-052] considers the carbon emissions impact of road users of the Scheme. Carbon emissions from road users have been calculated as part of the WebTag assessment process. Between 2026, the year of opening and 2032, the end year of the latest carbon budget to be set, carbon emissions from road users are estimated to increase by 16%. As stated in Chapter 14 of the ES, paragraph 14.3.7 however, the uptake of lower carbon fuels, electric vehicle technology and the decarbonisation of the grid is not accounted for under the industry standard HA207/07 approach used for the carbon assessment. In practice therefore, as the measures contained in the UK Government Strategy 'Road to Zero'(1) published in 2018 are realised e.g. by 2030 between 50% and 70% of new car sales and 40% of new van sales will be ultra-low emission vehicles, and by 2040 all new car and van sales will be zero carbon vehicles, the carbon impact associated with road users will in practice be substantially lower than the numbers identified in the assessment. The projected increase in Electric Vehicles will also reduce the energy requirements of extraction systems within the tunnel reducing operational emissions further.

Highways England is committed to reducing the operational emissions of the road network at a national scale, as well as on an individual infrastructure project scale. Highways England is investing in renewable energy technology and feasibility studies across the network to reduce carbon emissions, including renewable energy solar farms to support the energy requirements of road tunnels, and photovoltaic noise barriers to power signage, cameras and roadside detectors. Highways England is also reducing the emissions of assets and buildings and rolling out improvements to depot efficiencies as part of the depot greening programme, including fitting solar panels and using LED task lighting. In practice, these Highway England programmes which are being assessed and managed across the strategic road transport network and estate will substantially decrease operational emissions beyond that stated in the assessment.

Appendix 14.1 to the ES outlines that a qualitative assessment of the identified schemes has been undertaken and it is not anticipated there will be a significant cumulative impact with regard to GHG emissions. Regarding operational emissions, please refer to applicant's response REP3-013: "The cumulative impacts arising from other schemes to enhance the A303/A358



		corridor committed to within RIS1 have been fully considered. In relation to cumulative traffic effects, traffic details can be found in the Transport Assessment [APP-297] section 5.3. Regarding cumulative emissions effects, the traffic data utilised in the assessment of air quality effects assumes that the Road Investment Programme (RIP) schemes in the Road Investment Strategy (RIS1) to the west of Stonehenge: the A303 Sparkford to Ilchester improvement; and the A358 Taunton to Southfields scheme are constructed and operational, as set out in ES Chapter 5, Air Quality [APP-043], Section 5.4. As such, the full impacts of these schemes are fully understood in the context of emissions."
		Within the response to Written Question CC.1.6 [REP2-028], Highways England also notes paragraph 5.17 of the National Policy Statement for National Networks (NPSNN) which states that it is "very unlikely that a road project will in isolation affect the ability of Government to meet its carbon reduction plans". In the context of the Scheme, we agree with that statement and that this Scheme is assessed and demonstrated to be such a policy compliant case. Highways England considers climate change to be a very important issue, and as such has conducted a thorough assessment of the impact of the Scheme on climate change. (1) https://www.gov.uk/government/news/government-launches-road-to-zero-strategy-to-lead-the-world-in-zero-emission-vehicle-technology
16.2.8	ES Table 14.15 suggests this scheme alone will lead to an annual increase of 33,915 tons CO2 emissions by 2041 above a baseline of leaving the road as is.	See response to item 6.2.28 [REP8-013] and also the response to item 16.2.7 above.
	That would equate to an extra 165,000 tons in any five year period, at a time when these budgets are expected to decrease rapidly.	
	The carbon budgets used are themselves based on previous carbon emission targets that have now been superseded by the latest plans to reduce emissions to zero net carbon dioxide by 2050.	



16.2.9	By continuing to push ahead with such a scheme, Highways England gives the impression that Climate Change is not their problem.	See the response to item 16.2.7 above.
16.2.10	The Government is unlikely to meet the latest climate targets by continuing with policies such as the A303 and other similar road widening schemes.	See the response to Written Question CC.1.6 [REP6-025], the conclusions of which are confirmed in the response to the Examining Authority's Written Question CC.2.1 (ii) [REP6-025] as being robust to the net zero carbon emission by 2050 target. See also the response to item 16.2.7 above.



17 M&R Hosier (REP8-042 to REP8-046)

17.1	Comments on Photomontages provided at Dead	Iline 7
	Matter Raised	Highways England's Response
17.1.1	[AS-079] LVIA Figure 7.97 Dynamic view 3 from proposed PRoW and PMA within the WHS looking east We are not sure why the PRoW has only got fencing along one side, as this is of no practical use for prevention of trespass to private land.	There is fencing provided on both sides of the restricted byway and this is shown on the image. Because the view is taken from the surfaced area of the path, the fence on the right of the image appears much smaller as it is located on the opposite side of the wide grass verge intended for equestrian use. The fencing is appropriate to prevent trespass to private land and fit with the landscape character context of the WHS. If one wishes to trespass, then this is an illegal activity which would occur regardless of the fencing type.
17.1.2	[AS-079] LVIA Figure 7.97 Dynamic view 3 from proposed PRoW and PMA within the WHS looking east We still disagree with the requirement for this new PRoW within the WHS, especially as the visual shows the lack of inter-visibility of monuments within the sightline of the area.	Highways England has balanced a number of factors – the aims of the 2015 World Heritage Site Management Plan (WHSMP, Simmonds & Thomas 2015), potential impact in terms of the Outstanding Universal Value (OUV) and other heritage matters, and the consideration of other assessment disciplines, in bringing forward the public rights of way proposals This matter has been considered in the Applicant's responses to Written Representations [REP3-013], in paragraph 4.2.25 where it is explained that:
		"Highways England wishes to ensure that the Scheme is integrated within the existing byway network and, where the opportunity exists, create legacy benefits for non-motorised users in accordance with its Strategic Business Plan and Roads Investment Strategy, which are aligned with Government policy to encourage walking, cycling & horse-riding through national and local policies and plans." The byway at this location provides interconnectivity between Winterbourne Stoke and the WHS, and the wider network provided for by the Scheme; meeting the Scheme objective to improve access to and within the WHS.
		It is not correct for M&R Hosier to state that there is a 'lack of inter-visibility of monuments within the sightline of the area' on the basis of this photomontage



		alone. The photomontage [AS-079; LVIA Figure 7.97] shows the view from the south side of Green Bridge No. 4 looking north-east. The view is not taken from an upstanding heritage asset nor does it look towards an upstanding heritage asset. As shown in the Cultural Heritage Setting Assessment [APP-218; Figure 7 Viewpoint CH06], there is clearly inter-visibility in the area, between the upstanding long barrow in the AG12 Winterbourne Stoke Crossroads Barrows and the upstanding long barrow in the AG13 The Diamond Group across Green Bridge No. 4.
17.1.3	Dynamic view 3 from proposed PRoW and PMA within the WHS looking east The location plan accompanying the views shows the area where the dynamic view was taken from. However, it does not show the location of the western portal or green bridge 4. This omitted detail is important, as from initial assessment it looks as if the western portal has not been placed in the correct location. It could simply be that the visual has just used the same uniform block to depict the chalk grassland rather than adding any perspective to the grassland around the western portal. Therefore, we trust this is a perspective issue rather than an error.	The western portal has been located in the correct position because it is taken from the engineering model and co-ordinated with surveyed locations in the landscape so that is correctly positioned within the image. The methodology for the photomontages is provided in [APP-231]. The location plan is appropriate to indicate the location of the view in addition to the detail in the key, and in accordance with industry guidance.
17.1.4	[AS-080] LVIA Figure 7.98 Dynamic view 4 from southern edge of green bridge 4, looking east. From first impressions, it appears that the Applicant has raised the ground level to the height of the oilseed rape crop (in the baseline summer view). This inflated ground level has been carried over onto the view shown on proposed (summer year 15) photomontage. This has the effect of misrepresenting the true visual impact of the western portal. For a more accurate representation, the Applicant would need to reduce the ground level by 4-5 feet. The topography of the green bridge 4 is such that, at its southern most section, it is in	The height of the ground level has not been raised. Had that been the case, then the bottom of the fence posts would be situated higher in the image, such that they would extend above the horizon line. Additionally, the suggestion of 4-5 feet would have put the rape crop virtually across the camera lens. Instead the crop is not this height in this location, which can be seen by the bare ground in the centre left of the image.



	the bottom of the dry valley, so from here it will be looking up the valley to the western portal.	
17.1.5	[AS-081] LVIA Figure 7.99 Dynamic view 5 from the centre part of green bridge 4, looking east [REP-024] OEMP Annex 4A, Key Principles A, P-PWS02 references "colours in keeping with the surrounding landscape and to echo local materials. The design should adopt an earthy tone to create spaces which are warm and natural in appearance." In our opinion, the retaining cutting walls depicted within the visuals stand out in stark contrast, rather than blending into the landscape. The eye is drawn to these features. The views provided do not offer any feeling of greater interconnectivity to the monuments within the WHS. Indeed, my focus is on the cutting and portal, as there are no monuments visible from this location, apart from the top of the longbarrow of the Diamond Group.	Clearly from this location there will be views along the cutting. Figure 7.99 illustrates one way in which the design principles within the Outline Environmental Management Plan (OEMP) [REP8-006] could come forward and provides surface tones which are warm and natural in appearance, such that the Applicant respectfully suggests the contrast is not through their aesthetic, but via the inherent change in level as a result of the cutting. There is a greater focus across the landscape with the existing A303 placed in the cutting and there would be an improved connectivity between monuments in the WHS.
17.1.6	[AS-082] LVIA Figure 7.10 Dynamic view 6 from the proposed restricted byway (former A303) looking east We had asked the Applicant to provide a view from the proposed restricted byway (former A303) down onto the location of the western portal, to establish how much of the portal and retaining walls would be seen at this position.	See response to item 17.2.20 below.
17.1.7	However, the Applicant has provided this image from the current layby next to Winterbourne Stoke Clump (wood) instead. [AS-083] LVIA Figure 7.101 View from the eastern edge of green bridge 4 looking east	This view point, on the eastern edge of proposed Green Bridge No. 4 looking towards the eastern portal, has been selected to illustrate the Scheme design principles from a point where it is not possible to hide the proposed



The eye is drawn more to the walls than the road and completely misses the brief as stated within OEMP Under Vision, 4.2.10 (a) "should maximise the concealment of structures and features outside of the tunnel" and "choice of materials and colour tone and finishes" Under Key Principals A, OEMP P-PWS02 "the colours to be in keeping with the surrounding landscape, and to echo local materials" and B, OEMP P-PWS03 "The surface finish of the western cutting retaining walls (within the WHS) to be in keeping with the character of the surrounding landscape."

infrastructure from view. The location would not be publicly accessible. As such, the main receptor group (i.e. people with the view) will be the motorists, and the design of the walls is therefore important for this aesthetic context, which, as acknowledged by the comment, achieves the principles of the OEMP because the walls are the focus of the view.

The colours and surface treatment have been selected to illustrate principle P-PWS02 and 03 in a manner agreed with the Stakeholder Design Consultation Group and are considered by the Applicant to meet the brief requirements of the OEMP.

Figure 7.101 [AS-083] also illustrates design commitment D-CH5 regarding the size and shape of the retained cutting including the grassed slopes in the upper 2.5m of the cut.

Ultimately, Figure 7.101 illustrates one way in which the principles could be applied, and the development of the detail design is set out in Section 4 of the OEMP.

17.1.8 [AS-083] LVIA Figure 7.101

View from the eastern edge of green bridge 4 looking east

There is no inter-visibility to the monuments and we do not believe the Vision 4.2.6 (a) "has taken into consideration the unique historic landscape in which it sits", and in our opinion this does not meet the brief in relation to OUV and the WHS.

With regards to the inter-visibility of monuments from this specific location, there are no asset groups or discrete or isolated assets that contribute to the OUV of the WHS within the footprint of Green Bridge No. 4.

With regards to the Scheme vision, the Scheme design has been developed to conceal the new road infrastructure in key views between asset groups identified in consultation with HMAG members. The upper 2.5m of the retaining walls of the western portal will be formed of grassed slopes to help conceal the structure within the landscape (see OEMP requirement D-CH5 [REP8-006]). Fencing will be visually recessive and placed below the height of these earthworks so as not to be visible above the western cutting (see OEMP requirement D-CH24 & D-CH25). The Applicant acknowledges that it will be possible to see the cutting when using the Green Bridge No. 4.

The Applicant disagrees that the Scheme has not been designed to take into consideration the unique landscape in which it sits.



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17.1.9	View from the western edge of green bridge 4 looking east This could be taken from any bridge over a dual carriageway and in our opinion with the noise of the traffic this does not, as per [REP-024] OEMP Annex 4A "take full account of the character of the unique historic landscape" in which the bridge sits. Added to this the objective to "ensure visibility of the Scheme is minimised, the design is elegant and impacts positively on the user experience of the WHS" is not achieved.	As with figure 7.101, this view point is taken from on Green Bridge No. 4, this time looking west towards Longbarrow junction, to illustrate the Scheme design principles from a point where it is not possible to hide the proposed infrastructure from view. The location would not be publicly accessible, therefore the main receptor (i.e. person with the view) is the motorists. The Applicant respectfully states that this could not be taken from any bridge over a dual carriageway, as green bridges are neither commonplace on highways schemes, nor is the design of the walls and the setting generic. The cutting enables the visibility of the Scheme to be minimised in relation to the wider landscape and the walls are elegant, such that the user experience of the motorists would be positive. In addition to the principles and commitments illustrated in figure 7.101, this view also illustrates how the alignment and earthworks design of Longbarrow junction enables the proposed junction to sit sympathetically within the existing landscape. Ultimately, Figure 7.101 illustrates one way in which the principles could be applied, and the development of the detail design is set out in Section 4 of the OEMP.
17.1.10	View from the western edge of green bridge 4 looking east In our opinion, [AS-084], [AS-083] and [AS-081] illustrate the importance of extending the tunnel so the western portal emerges outside the WHS, or underlying the need to consider an alternative route that goes around the WHS.	Prior to the preferred route announcement, Highways England carried out a full and proportionate option identification and selection process details of which are signposted in response to Written Question AL.1.4 [REP2-024]. Various options for longer tunnel and for routes around the WHS were included in the options identification and selection procedure. Details of the options and assessment of longer tunnel options are given in Highways England's response to Written Question AL.1.29 [REP2-024] which concludes that: "The locations of the eastern and western portals in the proposed Scheme have been identified as the optimum locations when all environmental, technical and economic considerations are taken into account. There is no evidence that the additional investment required to extend the tunnel length would deliver meaningful additional benefits to the WHS that would justify the additional cost."



		The options identification and selection process included route corridor options both north and south of the WHS referred to as corridors A, F and G in the Technical Appraisal Report [REP1-031]. Further signposting to the assessment of options outside the WHS can be found in Highways England's response to Written Questions AL.1.7 to AL.1.15. [REP2-024]. The best performing of the routes outside the WHS was the southern route option known as F010. The reasons for rejection of this route have been the subject of various written questions, representations and responses but are summarised in the Environmental Statement in table 3.1 [APP-041] as:
		"Comparison of the appraisals for each of the three retained options suggested that, on balance, options D061 and D062 performed better than option F010 in terms of the assessed impacts. Key differentiators were F010 being a significantly longer route which would pass through a largely unspoilt, high quality, tranquil landscape with an additional crossing of the River Avon Special Area of Conservation (SAC). It would have a much larger footprint and a greater overall environmental impact, despite having greater benefits for the WHS. There would be disbenefits for road users having to travel on a longer F010 route, offsetting lower construction costs. F010 would also not interact effectively with the local road network, leaving higher levels of ratrunning traffic adversely affecting the quality of life in local communities. The two route alignments within Corridor D, namely D061 and D062 were therefore identified as the preferred route options for consultation on the basis that they performed better against Client Scheme Requirements (CSR) and the relevant national and local policy objectives than F010."
17.2	Comments on OEMP Annex A.4-Illustrated Exar	mples of Key Design Elements (REP7-024)
	Matter Raised	Highways England's Response
17.2.1	We were under the impression that the Applicant's brief was not to significantly modify the topography within the WHS, although this document does not mention this under the key commitments.	The importance of the topography is reflected in the following OEMP [REP8-006] provisions:



		D-CH19: Wherever the topography requires a variation in retaining wall height, there shall be no steps in the wall height and top of the wall shall follow a smooth alignment.
		MW-LAN5: Earthworks shall be rounded at changes in grade and direction to provide a natural appearance and reflect the surrounding topography.
		The respect to the landform is also in the Vision (Applicant's underlining):
		"Integration and Connectivity. The detailed design should show careful and sensitive alignment of the proposed road in relation to cultural and ecological designations, <u>landform</u> , vegetation and features, so that the Scheme reflects the beauty of the natural, built and historic environment through which it passes."
17.2.2	It is not possible to create a deep cutting, with level sides, rolling tops and a graded portal entrance within a dry valley without greatly altering the topography and character of the landscape. We fail to see how the designs shown differ from those outside the WHS with no strict criteria.	It is possible to create a deep cutting with level sides and integrated into the landscape, along with graded portal entrances within the landscape, such that by removing the existing A303 there would be improvements to the wider landscape character of the WHS. There would be localised re-grading of the landform adjacent to these structures, with the cutting and the western portal designed and located within the landscape in accordance with the design vision, principles and commitments given in the OEMP [REP8-006]. These include D-CH5: "The new A303 within the WHS western approach shall be in cutting to a minimum 7m depth with retaining walls. The front face of the retaining walls shall have a backwards incline from vertical away from the road of no shallower than 1 in 10 the top approximately 2.5m by depth of each side of the cutting shall be formed of grassed slopes at approximately 1 in 2." Refer also to Highways England's response to items 17.1.7, 17.1.8, 17.1.9 and 17.1.10 above regarding LVIA figures 7.101 and 7.102.
17.2.3	Contrary to the intention of the document, we believe that for a true assessment of the design, all the key potential aspects at each location need to be included. In this way, the design can be assessed for its full impact on sustaining the OUV of the WHS and respecting and responding to the historic landscape etc. It is only	This document was provided to provide an illustration of how the Scheme could look following the application of the design commitments and design principles within the OEMP – it does not show the final design and should not be used as a way of ascertaining the full impact of the Scheme on the OUV of the WHS.



	with all these details that the true assessment of the Scheme can be made.	
17.2.4		Retained vegetation has been indicated on the Environmental Masterplan [APP-059] along with the extent of new planting. The Applicant respectfully disagrees that the vegetation breaks up the presence of the road within the WHS; the amount of vegetation between New King Barrow Ridge and Longbarrow roundabout is very limited adjacent to the road, such that it is readily visible. The location of grass mowings is a matter of detailed design. The location and specification of fences along the PRoWs and farm boundaries will be addressed at detailed design stage. As per design principle P-PRoW2 within the OEMP, timber posts and strained wire fences are to be used to separate PRoWs from adjacent private land in accordance with Highway Construction Details in the Manual of Contract Documents for Highway Works (MCHW) and Design Manual for Road and
		Bridges (DMRB). Where necessary for adjacent land use, appropriate stock-proof netting is to be added to strained wire fences. The provision of fencing will be discussed further with landowners via the Agricultural Liaison Officer pursuant to table 2.1 and item MW-COM3 of the OEMP, which is secured through Requirement 4 pursuant to Schedule 2 to the DCO [REP8-004].
17.2.6	What measures will be incorporated into the fencing to stop people from breaching the fence to gain access to the tunnel? As far as we are aware, it will only be the fencing along the PRoW and the rails along the cutting carriageway that will prevent access.	Safety measures which prevent access to the cuttings are acknowledged by Highways England as being an area of concern and discussions have been ongoing with the key stakeholders on the preferred style and appearance of such measures. Further consultation will take place during the detailed design phase. As stated within section 4.5.3 of the OEMP, members of the Stakeholder Design Consultation Group will be consulted on fencing.



		This will inherently include the safety measures incorporated into the design to prevent access to adjacent cuttings or the tunnel. Fencing will be provided throughout the Scheme to secure the boundaries and marshal pedestrians to safe crossing points.
		There are numerous provisions controlling fencing within the REAC tables of the OEMP, including Item D-CH14, which requires the provision of fencing and surfacing within the WHS to be developed in consultation with the National Trust, Historic England, English Heritage Trust and Wiltshire Council. Other items include MW-CH3, CH24, CH25 and P-G05, all of which impose requirements in respect of how fencing is brought forward.
		Design principle P-G05 also sets out that the design of the Scheme will be cognisant of public safety at the cuttings and portals within the WHS.
		Highways England will also liaise with affected landowners on fencing (MW-COM3).
		It should be noted that Road Safety Audits are mandatory under HD 19/03 of Volume 5 of the Design Manual for Roads and Bridges to ensure that the road safety implications of all highway improvement schemes are fully considered by a team independent of the design team. The safety measures at the cutting will therefore be subject to independent audit as part of this exercise.
17.2.7	The Applicant seems to be oblivious of the fact that the WHS is already perceived by many to be open access land and from our own experience, PRoW users take no notice of any fences or signage that is erected.	The Applicant's response to Written Representations [REP3-013] at paragraph 40.7.9, explains that the management and enforcement of access across PROWs within the World Heritage Site (WHS) is a matter for Wiltshire Council (as the highways authority with responsibility for the public rights of way), as well as landowners, including the National Trust and English Heritage. Public access to bridleways would be controlled by equestrian gates which are too narrow for motor vehicles to use. Public access to restricted byways would be controlled by Kent carriage gaps which are designed to prevent entry by motorised vehicles, all embedding good design measures into the project.



17.2.8	As raised at the Issue Specific Hearing 9, there is the real concern that those intent on committing suicide will have relatively unimpeded access to reaching the cutting walls. We have had experience of suicides on our byway.	Fences will be provided to prevent unsafe access. The design of any safety fencing installed within or in the vicinity of the WHS will need to be sensitive to its setting. The Outline Environmental Management Plan (OEMP) [REP8-006] at reference D-CH14, compliance with which is secured by requirement 4 of Schedule 2 to the draft DCO [REP8-004], requires Highways England to develop the detail of fencing within the WHS in consultation with the National Trust, Historic England, English Heritage and Wiltshire Council.
		The fencing design in these locations will be reviewed under Road Safety Audits which are mandatory under HD 19/03 of Volume 5 of the Design Manual for Roads and Bridges. These ensure that the road safety implications of all highway improvement schemes are fully considered by a team independent of the design team. The safety measures at the cutting and portals will therefore be subject to independent audit as part of this exercise. The Applicant has, at deadline 8, included an additional design principle in this regard in the OEMP at P-G05, which states that 'The design of the Scheme shall be cognisant of public safety at the cuttings within the WHS'.
17.2.9	The fencing does not seem to have taken into account the large population of deer that reside within this area. Deer were not assessed within the Environmental Statement. Perhaps the Applicant had no idea of the numbers or their movements. By remodelling the topography, there is the potential for deer to venture into the area near the cutting, as the road will not be so visible to them. There is the possibility that if deer are chased	The impact on deer populations has not been assessed within the Biodiversity Chapter of the Environmental Statement [APP-046] as they were not considered to be an important biodiversity feature in accordance with current best practice (Chartered Institute of Ecology and Environmental Management (2016) and Highways England's Interim Advice Note 130/10 (2010)). The fencing measures and any further survey work / assessment of the local deer population is a matter for the detailed design phase.
	within the area that they will fail to see the fencing and the road until it is too late. This will result in them clearing the fence or getting impaled on the angled railings.	Please see response to agenda item 4.4 ii. in Written Summary of ISH8 [REP8-016] where it states that to comply with OEMP requirement D-CH25, the fence at the western cutting could be any height as long as it complies with the requirement that "the top of new highway boundary fencing within the western cutting shall be no higher than the ground level at the top of the cutting alongside which the fencing runs".
		The typical cross section at Ch 6900 Work No.1D on Sheet 7 of the Engineering Section Drawings (Cross Sections) [APP-011] indicates that the top of the retaining wall is over 2 metres below existing ground level adjacent



		to the cutting, allowing sufficiently high fencing to prevent deer jumping over the fence.
17.2.10	Location of visualisations We have asked for a visualisation to be produced of the western portal, to be taken looking down from the current A303, (or future PRoW) in the area where the current ground level has been built up and where the western portal emerges from the tunnel. This view has not been provided. Instead the visualisations for the portal have been taken from the opposite side of the carriageway, from our private land. Therefore, this does not represent a view that will be available to users of the PRoW.	A view from the existing A303 towards the western portal is provided in the OEMP [REP8-006] and [AS-082]. Several of the locations from the opposite side of the carriageway represent future views, from new public access across Green Bridge No. 4 and therefore do represent views which will be available to users of PRoW.
17.2.11	To conclude, we continue to struggle to see how a modern expressway, with concrete walls and surrounding parapet, will integrate into the cultural landscape. We believe that this surface carriageway although set in a deep cutting, will be seen and heard in the surrounding area both in close proximity and from a distance. As such, it interferes with the inter-visibility between monuments heritage assets and their relationship within the WHS. Therefore, we do not concede that this will provide users of the PRoW with the positive experience of the WHS intended by the Applicant.	See responses to items 17.1.5, 17.1.8 and 17.2.2 above.
17.2.12	Western Portal Approach and Western Portal Under Vision, 4.2.6 (a) Respecting and Responding to the Historic Landscape There seems to be a poor representation of the contours of the landscape. The location of the current A303, (or future PRoW), is also not well depicted within the drawing. The vast difference in height between the PRoW on a higher level, with the natural ground level of the portal is not readily apparent. From the height of the PRoW and its close proximity to the portal, there would be a	The contours of the landscape are adequately represented in the CGIs within [REP8-007], taking account of the differing levels between the existing A303 and the location of the western portal. The Applicant has set out that there would be views of vehicles within the retained cutting by Zone of Theoretical Visibility [REP7-025]. In terms of users of the ex-A303 being able to look down into the western portal, the Applicant has set out in its Written Summary of Oral Submissions made at ISH8 [REP8-016] that the upper part of the cutting, including the upper part of the retaining walls, would be visible from parts of the ex-A303 which are broadly parallel with the length of cutting between Green Bridge



view not only of the sidewalls, but probably of the carriageway as well.

This in our opinion, is not "elegant and impacts positively on the user experience within the WHS" as stated.

No. 4 and the western portal. This has been demonstrated by the Applicant through its submission of photomontage [AS-082] which illustrates a part of the cutting around the western portal being visible, whilst the remainder of the cutting is not visible, being below the line of sight

Similarly, the Applicant has responded in [REP7-035] that the design of the Scheme has taken account of the future users of the ex-A303 by siting the western portal in a low point within the landscape, so that the focus of the view will be across the landscape. The changes to the earthworks and upper part of the slope above the retaining walls will be integrated into the landscape by the proposed chalk grassland to maximise the concealment of the cutting, as indicated by [AS-082]. This visibility of the upper part of the cutting is both localised to a small part of the existing A303 and would form a small component of a new view for recreational users, as they cannot walk along the existing A303 presently. Within this new view, the focus will be across the landscape, because of the cutting being sensitively sited, and from locations such as adjacent to the Stones the cutting will not be visible, as is demonstrated by [REP7-035].

Views of vehicles will also not be visible from most of the existing A303 when it is a restricted byway, as demonstrated by the Zone of Theoretical Visibility mapping presented in [REP7-025], This mapping demonstrates a substantial reduction in the visibility of vehicles from across the wider landscape, with only a small part of the existing A303, broadly parallel with the western cutting, likely to have views of vehicles because it is in an elevated position. The design has taken account of this view through the proposed commitments in the OEMP (including P-PWS01 D-CH17, D-CH19, D-CH22, D-CH24, D-CH25) to integrate the western approach cutting so that it is sensitive to its place and demonstrates good aesthetics as far as possible as well as the LoD which allow for the 200m extension of the western portal from this elevated part of the existing A303.

By vehicles being in cutting and below the direct line of sight, this will impact positively on the user experience. Similarly, the principles of the OEMP will ensure that the retaining walls are elegant through their tone and form.



17.2.13	Western Portal Approach and Western Portal Under heading Key Principles A	It is inevitable that the Scheme will remove the view of the Stones for vehicle users, and this has been set out in Chapter 13 of the ES, People and Communities [APP-051].
	P-PWS04 The tunnel to be designed to enhance the user experience and become a new point of reference when travelling along the A303.	The portals and bridges are not representative of driving down 'any road'. There are very few green bridges on the road network and the OEMP design principles will enable the Scheme to achieve the vision of exemplary design in
	However, as stated at Issue Specific Hearing 9, Culture, Landscape	the WHS.
	and Visual, the tunnel Scheme removes the quick and tantalising views as one drives through the WHS to the everyday users of the A303. These are unquantifiable values, but from looking at the drawing for portals and bridges, you could be driving down any road in the UK.	The Scheme intent through the WHS is to reduce the presence of vehicles and therefore they are either in tunnel or deep cutting and as such they will not have views of landscape features as per existing views. To address this, the OEMP sets out principles to ensure the design of the retaining walls, portal and tunnel will enhance their journey through its design.
	The Scheme does not provide an enriching experience as one drives through the tunnel. There are no landscape features to denote you are within the WHS, and no brief glimpses of monuments that	The pedestrian experience within the WHS has been prioritised, so that vehicles are not visible to the extent which they presently are.
	encourage casual drivers to stop and visit the area.	The ability for drivers to stop and visit the area will remain and intended visitor access will be enhanced by the Scheme.
	We did ask for a drawing for the PRoW on the line of the A303 in the location of the western portal, but the Applicant has not provided one. We made this request, as from this location we believe there will be clear views of traffic emerging from the portal.	There are drawings in the OEMP and AS-082 from the existing A303 towards the western portal. The ZTV [REP7-025] has illustrated the theoretical visibility of the road and vehicles along the western approach cutting. The submission acknowledges this via paragraph 17.2.18.
17.2.14	Western Portal Approach and Western Portal	See response to item 17.1.5 above.
	Under Key Principals B, P-PWS02	
	We do not think the sidewalls and parapet of the cutting are in harmony with the surroundings or in keeping with the WHS. How will "earthy tones" on manmade structures blend into the existing chalk grassland with livestock and rolling arable fields with crops? There are no long linear manmade concrete structures within the WHS other than the existing A303, so we do not see the road in a cutting	

to be an improvement on the current setting.



17.2.15	Green Bridge 4 Are the retaining walls within the WHS different to any of the sections of sidewalls proposed outside of the WHS?	In terms of sidewalls, the Applicant is not clear which parts of the Scheme are being referred to, as the main level changes are achieved through the sympathetic re-grading of landform. There would be structures on the River Till Viaduct and the Countess Flyover.
		The detail design of the retaining walls and other walls will be developed by the main works contractor and so there could be some localised variance in the design of the structures. However, the design intent is that all structures have a consistent appearance to reflect the vision and design principles recorded in the OEMP [REP8-006].
		One of the overall aims in the vision for the scheme is recorded in OEMP paragraph 4.2.6 c as:
		"High quality and imaginative design. The engineering and architectural design of the Scheme should create a clear design rationale and its context using a co-ordinated palette of materials and finishes, with imaginative design features, e.g. green bridges
		This has been translated in to design principle P-PWS02:
		"All external scheme components to use a common materials palette; applying to colour, surface finish and texture. The colours to be in keeping with the surrounding landscape, and to echo local materials. The design should adopt an earthy tone to create spaces which are warm and natural in appearance.
		"The final details will be developed in consultation with the SDCG and will be subject to onsite trial panels." See also design commitment D-CH05 and design principle P-PWS03, the latter of which sets out that the surface finish of the western cutting retaining walls (within the WHS) will reflect the character of the surrounding landscape,
17.2.16	Green Bridge 4 Under Key Principles B	The visualisations are illustrative of one way in which the principles of the OEMP could be brought forwards at the detail design stage. However, the actual detail design is still to be achieved, with the Section 4 of the OEMP setting out the mechanisms for this.



		P-PWS03 "The surface finish of the western cutting retaining walls (within the WHS) to be in keeping with the character of the surrounding landscape" We are not of the opinion that the views of the bridge as depicted are either in keeping with the landscape or echo local materials. The visualisation shows a large expanse of manmade walling with a most peculiar textured finish unlike anything we have ever seen reflected in the local natural environment.	The walling is evidently manmade because it is a retaining structure to achieve a deep cutting which minimises land take from within the WHS. The textured finish provides a variety and interest and breaks up the overall mass of the retaining walls for the driver, who will be the main viewer of these structures.
17	7.2.17	We still remain concerned the lighting under the bridge will be updated in the future to a level where it will out spill within the landscape.	As noted in the response to Written Question LV.2.5 [REP6-030] and also in paragraph 3.4.20 of [REP7-021], the lighting under Green Bridge No. 4 will only occur between dawn and dusk, be dimmer controlled, and be designed to minimise light spill outside of the bridge footprint. There are no plans to update the lighting in the future so that it spills out within the landscape. The Scheme, once operational, will be required to continue to comply with the DCO requirements, therefore, provisions in the OEMP (including D-CH10, which provides that "Lighting under Green Bridge Four will only occur between dawn and dusk, be able to be varied, and will be designed to minimise light spill outside of the bridge footprint") must be complied with. It follows that any future upgrades to lighting equipment will need to be undertaken to comply with these requirements.
17	7.2.18	PRoW on the line of the old A303 We are unsure about the depiction of the drawing, as the mouth of the western portal seems to be shown in the middle of the length of cutting rather than at the far end by Normanton Gorse Wood?	Highways England can confirm that all the images included in the "Illustrated Examples of Key Design Elements" [REP7-024] are generated from the same model which in turn is based on the design shown on the DCO drawings. The proposed location of the Western Portal is described in Environmental Statement, Chapter 3 [APP-040] as:
			"The western tunnel portal (Figure 2.5) would be located within the WHS, north west of Normanton Gorse, approximately 1.0km east of the existing Longbarrow Roundabout and immediately to the south of the existing A303"
			The illustration therefore accurately locates the position of the portal.



17.2.19	PRoW on the line of the old A303 We note the fencing along the PRoW, is similar to what we have currently, which people cut or climb over for access, especially if the Applicant chooses to omit barbed wire.	See responses to items 17.1.1, 17.2.5, 17.2.6 and 17.2.7 above.
17.2.20	Due to the marked difference in the ground level between the current A303 and the proposed new location [of the western portal approach], the users of the new A303 PRoW will be looking down onto the area of the western portaland there will be a view of both the portal and deep cutting. We have asked for photomontages from this location but the the Applicant has not provided any. The only drawing produced from the A303 PRoW, has been from the layby next to Winterbourne Stoke Clump. The photographs [provided by M & R Hosier – see REP8-046] clearly show that the design with the western portal and deep cutting within the WHS do not fall within the Scheme criteria as noted in a number of the OEMP items including 4.2.10 (a) and 4.2.6 (a).	The changes in ground level are acknowledged by the Applicant, and this was evident at both the accompanied site inspections. The visibility of vehicles and the road is illustrated on the ZTV [REP7-025]. Views from the existing A303 towards the portal have been provided as acknowledged by the question and in the OEMP; the layby location is appropriate as representative of future views from the A303 as a restricted byway and logistically a safe and accessible location to take a photograph from. All the commentary on visibility of the cutting does not take account of any of the existing views of vehicles on the A303 as evident by REP8-046 Figure 1 and that these will no longer be present of the A303 from the surrounding
	of the OLIM Rome moraling 4.2. To (a) and 4.2.0 (a).	In terms of users of the ex-A303 being able to look down into the western portal the Applicant has set out in ISH8 [REP8-016] that the upper part of the cutting, inclduing the upper part of the retaining walls, would be visible from parts of the ex-A303 which are broadly parallel with the length of cutting between Green Bridge No. 4 and the western portal. This has been demonstrated by the Applicant through its submission of photomontage [AS-082] which illustrates a part of the cutting around the western portal being visible, whilst the remainder of the cutting is not visible, being below the line of sight
		Similarly, the Applicant has responded in [REP7-035] that the design of the Scheme has taken account of the future users of the ex-A303 by siting the western portal in a low point within the landscape, so that the focus of the view will be across the landscape. The changes to the earthworks and upper part of the slope above the retaining walls will be integrated into the landscape by the proposed chalk grassland to maximise the concealment of the cutting, as indicated by [AS-082]. This visibility of the upper part of the cutting is both localised to a small part of the existing A303 and would form a



		small component of a new view for recreational users, as they cannot walk along the existing A303 presently. Within this new view, the focus will be across the landscape because of the cutting being sensitively sited, and from locations such as adjacent to the Stones the cutting will not be visible, as is demonstrated by [REP7-035]. Views of vehicles will also not be visible from most of the existing A303 when it is a restricted byway, as demonstrated by the Zone of Theoretical Visibility mapping presented in [REP7-025]. This mapping demonstrates a substantial reduction in the visibility of vehicles from across the wider landscape, with only a small part of the existing A303, broadly parallel with the western cutting, likely to have views of vehicles because it is in an elevated position. The design has taken account of this view through the proposed commitments in the OEMP (including P-PWS01 D-CH17, D-CH19, D-CH22, D-CH24, D-CH25) to integrate the western approach cutting so that it is sensitive to its place and demonstrates good aesthetics as far as possible, as well as the LoD which allow for the 200m extension of the western portal from
		this elevated part of the existing A303. With respect to M and R Hosier's representation [REP8-046], the changes in
		ground level are accounted for by the regrading around the western cutting and portal as indicated on the General Arrangement Drawings and indicated on the Environmental Masterplan.
		M and R Hosier representation [REP8-046] includes Figure 5; this is not an accurate representation as it has obliquely stretched the image from the OEMP illustrations (evident by the oblique angle of the lettering in the image) and should not be relied upon by the ExA.
17.3	Comments on [REP7-021]	
	Matter Raised	Highways England's Response
17.3.1	Paragraph 5.1.1 The Applicant has chosen not to respond to our question.	To clarify, [REP4-035] is a summary of the Applicant's oral submissions made at the hearing in question only and is not intended to capture in detail points raised by all interested parties. This is confirmed in paragraph 1.1.3 of [REP4-



As already stated, the Written Summaries or Oral Submissions regarding Biodiversity and Ecology at deadline 4 [REP4-035] have omitted points made by M & R Hosier. Therefore, we do not take this to be a true representation of the hearing. The Applicant has chosen not to update the report.

The OEMP as it stands, contains no reference to the whole breeding cycle of the Schedule 1 SPA Stone Curlews. From conversations with RSPB this week, it is clear that there is a difference in understanding between the Applicant's interpretation of OEMP PW-BIO5 and that of the RSPB conservation officer.

The RSPB understanding of measures included within the OEMP is "a nesting attempt starts at the point of courtship display during settlement and can only be considered to be over when chicks fledge, or the attempt fails. As a Scheduled 1 species on the Wildlife & Countryside Act 1981, it is an offence to intentionally or recklessly disturb Stone curlew whilst nesting, the provision of monitoring in the OEMP will inform the appropriate measures to be taken should nesting occur in an a area where disturbance is likely to have an adverse effect on successful breeding."

The Applicant's response within [REP5-003] M & R Hosier response to comments on 8.36, item

18.2.40 as referenced within this reply states:

"with regards to the breeding cycle of 10 weeks, it was not considered suitable to require the protection of the nest for 10 weeks, as stated within item 9.7.17 of the Comments received to Deadline 3 [REP4-036], a nest is considered active (and thus protected) until the chicks are no longer dependent on the nest (please refer to PW-BIO of the OEMP [REP4-020]"

Also within [REP4-036] M & R Hosier response to comments on 8.31, item 9.7.17, the first two paragraphs of the Applicants response:

035]: "This document does not purport to summarise the oral submissions of parties other than the Applicant, and summaries of submissions made by other parties are only included where necessary in order to give context to the Applicant's submissions in response, or where the Applicant agreed with the submissions of another party and so made no further submissions itself (this document notes where that is the case)." As such, there is no requirement to update the document in question.

Stone curlew chicks are precocial, they are born in a near adult state and can forage for themselves from a young age (unlike other songbirds, which require higher levels of parental care). The birds are dependent on the nest or breeding plot and surrounding area until they have fully fledged, as such, a chick is considered to be dependent on the nest / adults (or breeding area) until they are fully fledged, as such, they will be protected from disturbance until this point. The birds will be continually monitored, whereby the area will be considered protected until the birds are no longer considered dependent on the nest. The RSPB will be fully consulted during this process as stated within PW-BIO5 and MW-BIO8 of the OEMP. As stated within response to 11.1.2 within [REP8-013], the measures that have been previously stated within the OEMP [AS-085] and the response to 9.5.1 of the Comments on any further information requested by the ExA and received to deadline 3 [REP4-036], are sufficient to avoid an adverse effect on the integrity of the Salisbury Plain SPA in relation to disturbance of stone curley associated with the construction phase of the Scheme.

With regards to protection of young chicks please refer to the response to 11.1.2 of Comments on any further information requested by the Examining Authority and received to deadline 7 [REP8-013] which states that all wild bird species, their eggs and nests are protected by law, as such, should any chicks be present within the construction site suitably experienced specialists would check daily for activity and ensure measures were in place to protect them from harm during construction (as set out in the OEMP [AS-085]).

With regards to mitigation measures for autumn roosts, please refer to the response of 11.1.31 of Comments on any further information requested by



"To clarify, Stone curlews will no longer be considered to be utilising the nest once all of the chicks are no longer dependent on the nest.

The monitoring of nest usage would continue until then. This may extend beyond a 10 week period or before, depending on the status of the nest. As stated in PW-BIO5 and MW-BIO8 an appropriate specialist will undertake the Stone curlew monitoring."

The wording within OEMP PW-BIO5 seems to be focussed on the nest and does not include the hatched but unfledged birds:

PW-BIO5

"the actions required of the preliminary works contractor (ecology) should a Scheduled 1/Annex 1 species be discovered within an area to be disturbed, are those general measures as set out above for breeding birds, with the added requirement that any Scheduled1/Annex 1 species or its dependent young must not be disturbed WHILE AT OR BUILDING A NEST..."

The RSPB understanding above, clearly states that it is both the nest, and the chicks up until the point of fledging that require monitoring and protection.

Therefore, there is no mitigation in respect of protection measures for the chicks after they have left the nest, prior to fledging. There is a period of up to 42 days between hatching and being able to fly. Stone curlews rely upon their camouflage and are at great risk of being run over if they are taken into foraging areas near to the construction area by their parents. They will not be able to fly and will simply squat down.

Therefore the Applicant has not fully taken on board the Scheduled 1, SPA Stone curlew species and is in breach of Habitat Regulations.

the Examining Authority and received to deadline 7 [REP8-013]. As stated within 1.60 of Appendix A of the SoCG with Natural England, during the late summer to autumn, the birds have the option of congregating on the Normanton Down plots, or any other stone curlew plots within the SPA and extensive surrounding zone. Due to the extensive area of foraging and roosting habitat within the wider surrounds, should birds be deterred from foraging / roosting within proximity of the Scheme, it is unlikely to result in an adverse impact on the local population and would not result in increased competition with other birds.

The measures that have been previously stated within the OEMP [AS-085] and the response to 9.5.1 of the Comments on any further information requested by the ExA and received to deadline 3 [REP4-036], are sufficient to avoid an adverse effect on the integrity of the Salisbury Plain SPA as a result of impacts to stone curlew from disturbance associated with the construction phase of the Scheme.

It is not considered necessary to set out the parameters of a 'suitably qualified' ecologist at this point. The parameters will be confirmed within the Construction Environmental Management Plans and method statements that will be produced by the Main Works contractor (and in respect of the CEMPs themselves, subject to approval by the Secretary of State). Further consultation will also be undertaken with RSPB and Natural England with respect to these as stated in PW-BIO5 and MW-BIO8 of the OEMP [AS-085].

Overall, as agreed with RSPB and Natural England in the relevant Statements of Common Ground, the mitigation provisions proposed for the Scheme are appropriate and sufficient. There is no breach of the Habitats Regulations, as asserted. 17.3.

In addition, there is no mitigation in respect of the autumn

ahead with works with no due consideration for the Stone Curlews.



	roost, which is an integral part of the juvenile Stone curlew development and survival.	
	There are no parameters set for ECoW or a "suitably qualified" person to ensure they have experience of working with Stone Curlews and fully understand the species.	
Reference circumsta measure not provious This doe understa At the on the docu	Paragraph 5.1.2	During the 2018 archaeological and ground investigation works, the ECoW identified the presence of stone curlew within 500m from the working area, following which, given the specific circumstances, it was decided that an exclusion zone should be set-up. During this time the birds were monitored by the ECoW, bird specialists and the RSPB, as such, visual screens were not considered necessary (as agreed with the RSPB).
	References to the "tailor-made" response to each particular circumstance, suggests that the Applicant has no list of potential measures that may be used in respect of screening as they have not provided us with any further information following our requests. This does not give us confidence that the Applicant fully	
	understands the behaviour of the Stone curlew species.	As summarised in Table 1 of the Statement of Common Ground with the RSPB [REP7-013], consultation with the RSPB was undertaken to consider impacts on established stone curlew territories during the construction and pre-construction activities, and it is agreed between the parties that disturbance impacts could be avoided with the incorporation of suitable working methods / mitigation measures.
	At the onset of the 2018 archaeological survey we asked for site of the document prepared in relation to measures to be put in place for Stone Curlews, but this was never provided. Therefore, we would suggest that no such measures exist and the Applicant will just go	

Please refer to the response to 11.1.1 of the Comments on any further information requested by the Examining Authority and received to deadline 7 [REP8-013] and 5.1.2 in the Comments on any Further Information received at deadline 5 and 6 [REP7-021] which explains that it is not considered to be suitable to specify deterrent or screening measures to be incorporated at this stage, as the measures will be determined on a site by site basis. However, should stone curlew be identified within proximity to the working area (as stated within PW-BIO5 and MW-BIO8) a series of suitable avoidance (and where necessary anti-disturbance) mitigation measures will be implemented. This may include the erection of visual screens such as screened herras fencing, buffer areas, or placement of other objects that may impede line of sight.

Given the status of the OEMP (as secured by Requirement 4), the Applicant is under a legal obligation to comply with the measures contained within it, including in respect of stone curlew.



17.3.3	Paragraph 5.1.3	In respect of [REP4-035], please see response to item 17.3.1 above.
	Written Summaries or Oral Submissions regarding Biodiversity and Ecology at deadline 4 [REP4- 035] omitted comments. Therefore, we do not believe it is a true representation of matters discussed at the hearing. The Applicant has chosen not to update the report.	The information provided by the Great Bustard Group was considered suitable to inform the status of the species within the area. It was confirmed during the screening and consultation with Natural England and the RSPB that further specific great bustard surveys were not considered necessary to inform the Environmental Statement, as stated within Issue ref 3.1 of both the Natural England [REP7-011] and RSPB [REP7-013] Statement of Common Ground. Furthermore, both Natural England and the RSPB were satisfied with the baseline of the bird species within the Survey Area and wider area. It should be noted that further consultation has been undertaken with the Great Bustard Group and will continue with regards to the provision of suitable mitigation measures, as detailed within PW-BIO5 and MW-BIO8 of the OEMP [AS-085].
	We believe that the Applicant cannot have fully assessed the impact of the Scheme on the Great Bustard reintroduction project because: The Applicant has carried out no specific surveys in respect of the Great Bustard species.	
	The Applicant has had minimal consultation with the GBG until June 2019.	
	The Applicant is basing the impact of the Scheme on just one map provided by GBG in 2017	
	Breeding bird surveys would not have picked up nesting Great Bustards as they would not have known what to look for and would in fact have probably resulted in the birds just sitting tight or vacating the area.	
	How can appropriate mitigation measures be put in place for the GB species if the Applicant does not know what the species require?	
17.3.4	Paragraph 5.1.4	In respect of [REP4-035], please see response to item 17.3.1 above.
	As already stated, Written Summaries of Oral Submissions	The results of the Phase 1 Habitat Survey results are considered to be a

As already stated, Written Summaries of Oral Submissions Biodiversity and Ecology at deadline 4 [REP4-035] have omitted comments made. Therefore, we do not believe it is a true representation of matters discussed at the hearing. The Applicant has chosen not updated the report.

The east-west connectivity already exists within this area, as National Trust arable reverted grassland has been wrongly noted on maps as arable. We would also suggest that within the area of the Scheme there already exists a large block of arable chalk

The results of the Phase 1 Habitat Survey results are considered to be a snapshot in time and correct at the time of survey [APP-237 and APP-151]. Pre-construction surveys (as set out in the OEMP) will be undertaken prior to the commencement of works to update the ecological constraints associated with the working area.

With respect to the land between the current A30 and the portal, the Applicant has set out its response in the response to Written Question CA.2.45 [REP6-026].



grassland reversion. Other areas would have a greater benefit from the addition of chalk grassland reversion, although we concede that if done well, it has the ability to build on existing chalk grassland within the area.

We disagree that the area between the current A303 and the portal needs to be under the ownership of the Applicant, so the land use can be under the Applicant's control. It is possible for the Applicant to enter into a legal agreement with M & R Hosier for the land use and management of the area, but they have failed to engage with us in this respect.

It would be more cost effective for the land to remain within M & R Hosier's ownership. In this scenario, the Applicant would not have to enter into management agreements with other contractors to manage the area as it would all be agreed under one legal document. We also have prior experience of chalk grassland management and would keep to the Applicant's "vision" for the area.

We note within ExA's Second Written Questions Compulsory Acquisition, CA.2.45 that the Applicant would discuss the management of the land within this area with us, but to date even this has not taken place. We have had no meetings to discuss Accommodation Works or Position Statements since March.

In addition, we note under the Applicants response to CA.2.45 i) 4

"Visually, while the retained cutting would be visible from very close proximity, because it forms a physical break in the landform, the chalk grassland mitigation beyond the retained cutting would lessen the impact by establishing a visual buffer which would soften views of the cutting. The visual presence of the retained cutting would also be lessened by the long bridge, and the combination of chalk grassland across and around the bridge would visually aid the integration of this structure within the landscape."

Meetings have taken place with Mrs Hosier and her agent regarding the accommodation works and discussions are ongoing with the intention to reach agreement on these, and on the matter of responsibility for future maintenance (a meeting was scheduled on 17/09/2019 however due to unforeseen circumstances this had to be postponed).

Negotiations are ongoing with Mrs Hosier, as shown in the Land Acquisition and Temporary Possession Negotiations Schedule submitted at deadline 4 [REP4-027] and updated again at deadline 6. Tunnel restriction information has been provided and discussions are ongoing to reach agreement of outstanding issues within the Position Statement and with accommodation works. The Applicant is working towards an agreement for the acquisition and management with Mrs Hosier however this is unlikely to be concluded before the close of examination

The Applicant considers that the establishment of chalk grassland in this area is achievable and is fully understood, both in terms of implementation and management, please refer to the OLEMP [APP-267]. The addition of further chalk grassland to the extensive area of chalk grassland within the wider area illustrated within the Phase 1 Habitat Map [APP-151] will enhance the east-west connectivity within the area and facilitate the achievement of the aims of the Porton to Plain project by improving the grassland network across the project area (Natural England (Undated) Porton to Plain Wildlife Connections, *Creating wildlife connections from Porton Down to Salisbury Plan*).

Mowing or strimming of the upper slope is achievable and there will not be a striping effect as suggested. The Applicant acknowledges that the establishment of a continuous sward will take time and in the early years there will be bare ground whilst this establishes, however there is already bare ground within the landscape via the pig farm and areas of bare ground would provide an element of habitat heterogeneity that may enhance the area for chalk grassland invertebrates.

Management and collection of grass is a detailed design matter and one which is considered to be fully achievable.

All fencing proposed for the Scheme has been taken into account within the relevant assessments and design. Please see response to agenda item 4.4 ii.



We are of the opinion that the Applicant needs to look more closely at the management of this area, as there is every possibility that what they deem to be achievable may not actually be practical.

From previous written responses, the Applicant seems content to leave decisions on the land management of this area until a later date. However, we believe there are a number of constraints that the Applicant has not taken into account.

The top 2.5m of the cutting are to be reverted to grassland to reduce the visible impact of the cutting, yet the Applicant does not seem to have considered how this slope will be managed. Health and safety issues will prevent mowing the slope with conventional machinery, so the 800m length of the cutting will have to be strimmed on both side. This is a large management commitment and cost. Furthermore, the vision for the area to be managed for early stages of successional calcareous grassland suggests that the remaining grassland either side of the slope will be mowed short.

Therefore, although the area will all be grassland, due to the varying management of the slope and the remaining area of grassland, there will naturally be a striping effect due to the longer and shorter grass lengths. This will result in a striping effect on the landscape; the hay colour of the longer grass and the bright green of the shorter grass with bare ground and rock.

How does the Applicant advocate the strimmed material be collected, and where will it be composted along the area, so as not to be obtrusive within the landscape? This will be a costly management task adding considerably to the maintenance of the Scheme.

Furthermore we note under the Applicants response to CA.2.45 i) 5 "Without the chalk grassland, and with the agricultural land uses remaining to the north and south of the retained cutting, this part of the landscape would be at risk of becoming cluttered or degraded through agricultural land use, which could require high fencing to prevent animals from jumping into the retained cutting or eroding

in Written Summary of ISH8 [REP8-016] where it states that to comply with OEMP requirement D-CH25, the fence at the western cutting could be any height as long as it complies with the requirement that "the top of new highway boundary fencing within the western cutting shall be no higher than the ground level at the top of the cutting alongside which the fencing runs".

The typical cross section at Ch 6900 Work No.1D on Sheet 7 of the Engineering Section Drawings (Cross Sections) [APP-011] indicates that the top of the retaining wall is over 2 metres below existing ground level adjacent to the cutting, allowing sufficiently high fencing to prevent deer jumping over the fence.



the profiles. The perception of the alignment of the retained cutting would therefore be emphasised and would not be concealed in the way that it would if the essential mitigation wasdelivered as designed."

Once again we believe there is a lack of understanding of the parameters of grassland management within this area to deliver the vision. Whilst conventional arable land use will cause striping within the landscape, this will also naturally occur due to the variation of grassland management heights within the area. This will be compounded by the varying depths of topsoil of the area with differing water holding capacities of the soils. Archaeologists are well aware of the lines that appear in grassland as a result of historic human intervention within the landscape as this is how a large number of our prehistoric monuments are first identified. The presence of these new marks within the WHS landscape have the effect of negatively impacting on the OUV of the WHS as these will not be historic in origin but modern additions to further complicate the understanding of the area.

From the Applicant's comments we doubt that the area will be grazed with livestock as a whole, although this would solve the problem of striping, awkward management and the slopes of the cutting. We believe the retained cutting is more at risk from deer, foxes and badgers than from livestock production.

At the Issue Specific Hearing 8, Cultural Heritage, Landscape and Visuals the Applicant stated there would be inclined fencing at a height of 1.2m at the edge of the cutting to prevent access. The Applicant must be aware that deer fencing has to be six feet in height to prevent deer from jumping over and ending up on the carriageway beneath. As the cutting is designed to integrate within the landscape, deer will not be aware of it until they are upon the 1.2m fence, so will ultimately end up either caught up in the wire or on the road beneath. The Applicant has also failed to appreciate that the boundary between the Scheme and our farm boundary will also be fenced. This will be a very visual feature within the landscape that does not seem to have been taken into account.



Alternatively, perhaps the Applicant will leave the whole area with a long grass sward so the cutting and the chalk grassland area will all be uniform? A lot of emphasis of this Scheme is given to how the area is to be perceived. Therefore, the management of the area needs to be addressed at this point.

The grassland management over the western portal canopy will also need careful consideration. As all archaeologists know, many sub soil features show up in grassland, especially during summer months. There is the potential that as well as the striping effects of the tops of the grass slopes, the varying soil depth over the western portal will also have a different grass growth pattern. Will the portal be landscaped so rain will drain off the top, in which case there will be a more vigorous grass growth at the sides of the portal? Or will the portal be flat topped which will allow the water to pool within the area as the drainage will be hampered by the infrastructure of the portal?

We agree, that if done well, the chalk grassland creation within this area has the potential to increase invertebrate biodiversity and build on the existing chalk grassland in the locality. However, from what we read within the OLEMP, we remain concerned about the management of the area and its ability to deliver the visual integration of the deep cutting and western portal within the landscape.

To date, there has been no meetings with the Applicant to further discussions on land acquisition, grassland management, Accommodation Works or the Position Statement, since March. Therefore we do not believe that any agreements will be reached before the close of the examination.

17.3.5

Paragraph 5.2.1

The Applicant has not answered our questions.

The Applicant seems unwilling to enter into discussions with us concerning the ownership and management of the area required for "essential mitigation". It is possible to enter into a legal agreement with the Applicant for the management of the chalk

As detailed within response 17.3.4 above, meetings have taken place with Mrs Hosier and her agent regarding the accommodation works and discussions are ongoing with the intention to reach agreement on these, and on the matter of responsibility for future maintenance. Negotiations are ongoing with Mrs Hosier, as shown in the Land Acquisition and Temporary Possession Negotiations Schedule submitted at deadline 4 [REP4-027] and updated again at deadline 6. Tunnel restriction information has been provided



	grassland, but we would suggest that as we have not entered into a Statement of Common Ground, the Applicant has failed to consult further with us. The last meeting that we had with the Applicant was March 2019, and despite their request for further meetings, this has not been taken any further as they have not provided us with information to discuss.	and discussions are ongoing to reach agreement of outstanding issues within the Position Statement and with accommodation works. The Applicant is working towards an agreement for the acquisition and management with Mrs Hosier however this is unlikely to be concluded before the close of examination.
17.3.6	Paragraph 5.2.2 The Applicant had not instructed the District Valuer to begin negotiations with M & R Hosier until the week before the Compulsory Acquisition Hearing. A single correspondence providing a starting figure for land value is not an ongoing negotiations in parallel with compulsory acquisition. It is a merely a belated starting point within a process. We would like to remind the Applicant that it is their responsibility to open discussions and not for agents to do their work for them, as seems to be the case within this Scheme. As stated above, we have not had a meeting with the Applicant since March 2019. Indeed, they have requested a further meeting but we have not been provided with any dates or information for discussion. Perhaps the Applicant has been preoccupied by those other organisations that have Statements of Common Ground rather than concentrating on farmers in relation to land acquisition.	Until the detailed design of the Scheme is progressed, such that definitive identification of the land actually required for the Scheme is possible, Highways England's ability to discuss the quantum of compensation payments is necessarily restricted to discussions of price per acre. Meeting requests have been made by the Applicant to M & R Hosier's land agent on the following dates: 29/05/2019, 09/08/2019 and 22/08/2019. Therefore, the assertion that there have been no requests to meet is incorrect. In addition, the Applicant's representatives have maintained regular contact by email during the period since March 2019.
17.3.7	Paragraph 5.2.3 Market value is dependent on the end purpose of the purchased land. The land is worth more than market value to our business as it is part of our holding, ie in very close proximity. Therefore should we be in a situation to purchase such land we would be offering over and above market value to ensure the area was secured. As such, we believe that due to the importance the Applicant is placing on upgrading the current A303, the value of the land is considerably more than just agricultural land market value. In addition to this, the Applicant has agreed that there would be additional impact of fixed costs of production on our business should we be unable to purchase extra land in another location.	Compensation for land subject to compulsory acquisition is limited to the market value of the land; that rule is set out in statute (section 5 (Rules for assessing compensation) of the Land Compensation Act 1961). Highways England is unable to pay more than the market value of the land; however, compensation will be payable for any severance/injurious affection that affects the value of the land retained by M&R Hosier.



As the Applicant is well aware, investment into other business opportunities will not provide any CGT relief. Therefore, the sum available for investment will be considerably reduced. Perhaps the Applicant would like to pay our CGT on our behalf? Or perhaps they would agree to the land

proposed for "essential mitigation" to remain within our ownership, but farmed for their vision under a legal agreement.

17.3.8 Paragraph 5.2.4

The Applicant chooses to misinterpret our words. See our response to Comments received at deadline 4 [REP5-003] our response to item 18.2.43. Engagement has only been in relation to the Applicant's Scheme agenda rather than to our business requirements.

At the beginning of the Scheme, the Applicant informed us that we would be developing Position Statements (PS) rather than the more usual Statements of Common Ground. (PS being no more than a glorified set of minutes for all our meetings). We acknowledge that we have the opportunity to transfer to a SoCG, but as the Applicant has not taken on board any of our concerns for further meaningful discussion, we believe that there is no common ground to be had. However, since the beginning of the Inspection period, it seems that the Applicant has chosen to further discussions with those organisations that have SoCG rather than landowners with PS.

We have seen no evidence of "careful balance to all considerations" as at meetings we have constantly been told, that criteria have been decided in consultation with heritage organisations etc. This has taken no regard of our farming practices or practicalities.

We disagree that the Applicant is keen to pursue legacy benefits to all, including the farming community, as they have chosen not to pursue our request to enter into a management agreement for the grassland around the green bridge 4 and western portal.

The Position Statement is structured in a way that mirrors a Statement of Common Ground – the difference between the two is that the Position Statement constitutes a private record of the engagement between landowners affected by the Scheme and Highways England, which is not submitted to the Examining Authority during the examination of the DCO application.

The Applicant has held three meetings with Mrs Hosier and her agent, specifically to review the Position Statement with a view to addressing the key concerns Mrs Hosier has regarding the Scheme, and which are logged individually in the Position Statement. There are currently two issues which have been 'AGREED', two which are 'NOT AGREED' and 29 'UNDER DISCUSSION'. The Applicant would like to complete this process; however, scheduling meetings with Mrs Hosier in recent months has proved difficult.

Chalk grassland areas will be managed through the maintenance contracts awarded by Highways England or through land and works agreements with Landowners. A 'Landscape and Ecology Management Plan' will be produced which will stipulate requirements for the management of chalk grassland, to ensure that the target habitat is established. This will be secured through item MW-LAN1 in the OEMP [please refer to the version submitted at deadline 9], compliance with which is secured pursuant to Requirement 4 in Schedule 2 to the draft DCO [REP8-005].

In addition, item MW-LAN4 in the OEMP contains management obligations in respect of planting and seeding works. Landscape management measures considered during the Environmental Assessment can be found within the Outline Landscape and Ecology Management Plan [APP-267].



We are surprised by the Applicant's referral to the Scheme aiding our business as on numerous occasions during meetings we have pointed out how the Scheme will impact negatively on our farm rather than provide positive legacy on "at running". During the construction phase the Scheme will have a large negative impact on our business as we use the Woodford Valley for access and not predominantly the A303. Hence, the increase in traffic through the inappropriate narrow lanes of the Woodford Valley and roads leading from the A360 will cause immense problems. The lanes are too small for lorries to pass cars as there are too few passing places. There will be grid lock!

The WHS management panel has only one farming representative. As the larger part of the WHS is under agriculture, for a full understanding of the agricultural landscape, each of the farming businesses within the WHS should be represented.

Section 9 of the Transport Assessment [APP-297] indicates the forecast impacts of the current scheme construction plan for traffic levels on local roads during the two construction phases assessed. The plan is for the A303 to remain open during construction, however reduced speed limits will be in place, which will lead to some diversion of traffic to alternative routes. The assessment indicates that traffic levels on the A360 South of the A303 will reduce as traffic seeks alternative routes to get to and from Salisbury, making greater use of the A36, A345 and A338 to avoid the section of the A303 where roadworks will be in place.

Construction related traffic will be instructed to travel via the A36 and A303 rather than inappropriate local roads.

A detailed Traffic Management Plan (TMP), which will provide further details regarding the traffic management strategy during construction, will be prepared by the successful scheme contractor for acceptance by the Secretary of State. This TMP will be agreed by Highways England in consultation with stakeholders including Wiltshire Council as local highway authority. (The OEMP Table 3.2b Record of Environmental Actions and Commitments for the main works, item MW-G7 refers).

It is not for the Applicant to comment on how the World Heritage Site management panel is administered; however, your comment has been noted.

17.3.9 Paragraph 5.2.5

We believe that the inappropriate use of Section 172 powers is relevant to the determination of the application, as the manner that the Applicant has treated landowners is inappropriate and has bypassed the need for meaning full negotiation.

We would suggest that if the Applicant cannot meet their timetable without resorting to the Section 172 process, they have not allowed adequate time for surveying, analysing and developing the Scheme. The Applicant's use of powers has been in relation to their timetable, with no consideration for our farming calendar, which was explained at our initial meeting with the Applicant. Neither do we believe the use of powers has been appropriate. On

With regard to the Applicant's use of section 172 powers, please refer to the response in section 11.1.53 within Table 11.1 in the Applicant's Comments on any further information requested by the Examining Authority and received at deadline 7 [REP8-013].

Survey work is seasonal and dependant on programme requirements. More survey works will be required in the future and Mrs Hosier will be made aware of the need for these as soon as, and with as much notice as, possible.



many occasions, it has been the Applicant's delay in feeding back information concerning survey access routes or position of welfare facilities that has resulted in the serving of a Section 172 notice. Furthermore, we have discovered that boreholes constructed last autumn (under threat of S172) have not had the monitoring equipment installed! Similarly, in respect of the archaeological surveys following the relocation of the pigs, the Applicant would have been well aware of the pig dung on the ground prior to the survey taking place. Therefore, they never intended to adhere to the requirements laid out within the archaeological method statements, for sifting the topsoil behind the pigs. Perhaps the Applicant prevents their operatives from using gloves whilst at work, especially as it was a clear 2 months prior to surveys taking place within the area.

Compensation for the 2018 archaeological survey has yet to be negotiated and agreed with the Applicant. Rather than entering the area once to carry out all their survey work, they keep returning every few months to do yet more surveys, which makes compensation more difficult to quantify.

17.3.10

Paragraph 5.2.6

The Applicant has been more open to negotiation in respect of surveys since the Examination process has been underway, so we look forward to this continuing into the future. However, our business has had unnecessary disruptions as a result of the Applicant's timetable driven agenda, which is still ongoing today. For example, during the 2018 archaeological survey, metal road pins were left in our fields and these are still being picked up by our agricultural machinery. (We picked up another metal pin during this harvest).

The Scheduled monument NHLE 1009618 is a visible monument spanning byway 12, so we were shocked to discover that the archaeological surveys had not taken this into account with repeated tracked digger access to the survey area. As previously stated, the Applicant has never discussed this matter with us despite us bringing it to their attention. However, subsequent

The Applicant acknowledges the comment by M&R Hosier with regards to improved relations in respect of surveys and continuing that engagement into the future. The Applicant looks forward to constructive dialogue going forward.

With regards to metal pins, the Applicant apologises for the continued issues and this should be picked up with Highways England's Lands Team.

The Applicant stands by its previous responses regarding damage to a Scheduled Monument [see REP5-003; item 18.2.43 and REP7-021; item 5.2.6].

As stated in REP7-021; item 5.2.6, all other matters, from the Applicant's perspective, were dealt with in a respectful and open manner during on-site discussions with the landowner at the time of the surveys and resolved as far as possible, including suitable compensation paid where required.



surveys have taken more account of the Scheduled monuments
in the vicinity of the surveys and access routes.

The Applicant has paid for the damage caused to farm machinery by the road pins, the broken fence and the broken gate. However, we suggest that a most of these issues would not have occurred if the Applicant had taken more care with surveys in the first instance.

17.3.11 Paragraph 5.3.1

See paragraph 5.3.3 from WQ Ag.2.10 as referenced in relation to our response.

The Applicant may believe that there is sufficient detail for the purposes of the determination of the application, but as previously stated, we do not believe this to be the case.

There has been:

An unwillingness to admit to the complex geology and resulting hydrogeology within the Scheme area. Therefore, insufficient survey work has been carried out.

Inaccurate interpretation of survey results.

Failure to carry out a Fracman 3 D model to show the fractures and therefore determine the location of high and low flow zones.

The water model used in place of a 3 D model has a grid of 250m, when quite possibly, my water supply could be affected by a few fissures of 5mm.

A lack of tracer tests to identify potential links to private water supplies.

No feasibility assessments for providing alternative water supplies should this be required. A lack of monitoring of private water supplies.

Therefore, in our opinion, the true extent of the water issues are not represented within the DCO documents. This will be reflected in inaccurate and unrealistic costs for the project.

Please refer to response to item 11.1.25 in Comments on any further information requested by the Examining Authority and received to Deadline 7 [REP8-013]. 'The matter of 3D geology modelling was explained at the ISH [REP4-032] and dealt with comprehensively in the response to SWQs Fg.2.38, Fg.2.40 & Fg.2.51 [REP6-028], which confirm the Applicant's view that the information presented in the Environmental Statement is more than sufficient at this stage of the consents process and that a 3D model is not required. A proportionate approach has been taken to characterise the variable nature of the geology employing experts in this field including Professor Rory Mortimore.'

For a response on a 250 m model grid please see paragraph 11.1.3 of [REP5-003]; 'The model with a 250m grid is conservative because if the tunnel crosses part of a 250m model cell the entire cell is set to block a proportion of flow. In a refined grid with a mesh of 50m or 20m, but less of the aquifer would be blocked and the results would be less precautionary. The precautionary approach to the modelling used is therefore robust and sound.' Please also see paragraph 18.2.45 [REP5-003] which set out a detailed response to the point on fissures and tracer tests and modelling.

Please also see the response at paragraph 11.1.54 [REP8-013] regarding tracer tests.

The effects of the Scheme in relation to the boreholes, some of which are a distance of several kilometres from the Scheme, have been fully assessed (paragraph 18.2.56 [REP5-003]).

Water supplies are protected through the provisions of the OEMP [REP8-006]. MW-COM6 includes a provision for a Water Supply Statement for landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These shall identify how water supply is to be



OEMP submitted at deadline 6 [REP6-011], page 19 details more of the responsibilities of the ALO. However, we still remain concerned that they will not have adequate experience with soil mechanics, hydrogeology and engineering experience to know what is, and what is not possible. We also note that the AOL will have no particular authority within the Scheme. They will only advise, coordinate and liaise, so it is quite probable that no one within the Scheme will take notice of what they put forward.

as a consequence of the works

maintained in the unlikely event that existing supplies are adversely affected

Provisions within OEMP in relation to soil, have new additions of PW-COM2 Restoration of agricultural land and aftercare, which notes liaison with the ALO. In addition there are two further inclusions of PW-COM3 Record of Condition survey and PW-GEO3 Soil Management Strategy.

The Applicant welcomes the acknowledgment of the new additions to the OEMP.

17.3.12 Par

Paragraph 5.3.2

As previously stated [REP4-036] as well as [REP5-003] and within the ExA's Second Round of Written Questions, the measures within the OEMP [REP6-011] in our opinion, are not adequate to protect our private water supply and our Business. Despite drawing attention to areas within items that need addressing, the Applicant has chosen to ignore our concerns. For the large part, the OEMP in relation to groundwater protection has not been updated since version 2.

The Applicant has stated that they cannot be completely certain that there will be no issue with groundwater as a result of the tunnel construction and once the Scheme is in operation. However, they have not provided us with a percentage risk to our groundwater supply. If the Applicant is unable to provide a risk percentage, how can we fully assess the impact of the Scheme on our business?

We have put forward suggestions for additional wording to be included within the OEMP for safeguarding our supply, but the Applicant has chosen to ignore these, instead choosing to continually requote their responses. We would suggest that this is neither negotiation nor consultation. In addition, the main works

Highways England notes these comments and refers to the responses within items 5.3.2, 5.3.3, 5.3.5 and 5.3.6 of Comments on any further information requested by the ExA and received to deadline 5 and 6 [REP7-021].

Highways England maintains its position that the measures contained within the OEMP [REP8-006] are appropriate to ensure the protection of private water supplies and secure the provision of an alternative supply in the unlikely event that private water supplies are disrupted.

The Water supply statements required by item MW-COM6 will be developed in liaison with landowners and will enable farm specific measures to be put in place as the detailed design develops, rather than setting an arbitrary strategy at this earlier design stage, particularly in the context of the ES results in relation to private water supply.



contractor seems to be responsible for all planning and strategies, with no sharing of risk with the Applicant. This seems inappropriate when it is the Applicant and not the main works contractor that has carried out all the survey work and the interpretations of the data.

If as the Applicant states, there will be minimal disruption to water supplies, there would be no reason for the Applicant to not include these suggestions within the OEMP.

17.3.13 Paragraph 5.3.3

The Applicant is choosing to reference the main works contractor as being responsible for all Scheme measures within the framework of the OEMP. Who will oversee the contractor to ensure that all the methodologies and parameters are adhered to? We are concerned that areas within the OEMP do not provide adequate protection for our farming business.

MW-WAT5 Pollution incident monitoring.

The Applicant states that the ALO is responsible for communicating with landowners who are likely to be affected by the Scheme and that significant pollution incidents will be reported to any potentially affected landowners. Yet this is not set out within the wording of MW-WAT5. We have asked for this to be included but to date, the Applicant has not taken heed of our request.

We are also concerned by the wording "significant polluting incident". Who decides what is a "significant" polluting event? How is "significant" quantified? For the sake of transparency, would it not be more appropriate for all polluting incidents to be relayed to all private abstractors?

MW-WAT6 Protection of Water Courses

This is in respect of working in or adjacent to watercourses, but we note this also includes boreholes aquifers and catchment areas of work operations. "The main works contractor shall adopt measures

The Applicant maintains that there will be no significant adverse effects on the water environment and on private water supplies [APP-049]. Without prejudice to this position the Applicant has set out provisions in the OEMP [REP8-006] which would be secured through the DCO. These provisions include Management of impact on abstraction boreholes (MW-WAT11); Water Supply Statements (MW-COM6); Record of Condition survey (MW-COM8); the responsibilities of the Agricultural Liaison Officer (ALO); Pollution control (PW-WAT1 and MW-WAT1); Emergency Preparedness and Response Plan (to include a Pollution Incident Control Plan) (MW-G7 and G20); Water Management Plan (MW-WAT2); Spill response (MW-WAT4); Pollution incident monitoring (MW-WAT5); Protection of watercourses (MW-WAT6); Control of pollution to waterbodies (MW-WAT7): and Monitoring of water resources (MW-WAT15).MW-WAT5:

Highways England can confirm that the wording 'informing affected landowners or occupiers of any significant pollution incident that has the potential to, or has affected their private boreholes directly following any such incident.' was included within item MW-WAT5 of the OEMP submitted at deadline 8 [REP8-006].

Highways England considers that the term 'significant' is appropriate and a contractor constructing a scheme of this nature will have suitable experience to consider what a significant pollution incident is. It is not considered appropriate for all polluting incidents to be relayed to all abstractors as this would require every incident, including those of a minor nature which do not affect groundwater resources, to be reported.

MW-WAT6:



to prevent deposition of silt or other material into existing watercourses (boreholes, aquifers and

catchment areas)".

In respect of surveys, the Applicant stated that due to health reasons archaeological topsoil could not be sifted on land occupied by the pigs. Therefore, there should be no water discharge from dewatering on land that has intensive livestock activity, as this would carry a health risk by washing silt and organic matter into the groundwater.

MW-WAT7 Control of pollution to water bodies

Who will monitor the main works contractors to ensure that the handling of contaminated material treatment processes and storage does not affect the chalk aguifer?

MW-WAT8 Dewatering and abstraction

The Applicant has not answered our question. Fig 2.33 is in respect of small scale dewatering and

8.30.2 item 8.1i) is in relation to Cultural Heritage. What happens if there is a need for "temporary and localised groundwater control around the portals and Stonehenge Bottom" as noted within the documents, and the Environment Agency is not in agreement with this, due to the level of dewatering being significantly greater than that identified within the groundwater risk assessment?

As referenced in the Applicants response, the EA's response to the Examining Authority states:

"There has so far been no assessment of dewatering relating to this scheme"

"Under the Water Resources Act 1991, a licence is required from the EA if dewatering is proposed at rates greater than 20m3/day. We will expect any application to be accompanied by a detailed assessment of impacts." Please refer to the response to item 17.4.4 below.

MW-WAT7:

Please refer to the response to item 17.4.5 below.

MW-WAT8:

No dewatering can occur without an abstraction licence from the Environment Agency.

Dewatering for the portals would only be required during periods of very high groundwater levels well above typical winter highs. The lowering of water levels to allow portal construction would reduce water levels to approximately the typical winter high levels, so no environmental or heritage impacts would occur.

MW-COM6:

The groundwater risk assessment undertaken to date has concluded that there is no significant effect on groundwater resources. The Environment Agency has reviewed this assessment and is in agreement with the findings, as set out in the Statement of Common Ground.

As such, Highways England does not propose to provide a risk percentage to demonstrate this low risk.

With regard to the provisions of the Water Supply Statements, these have been developed in consultation the NFU and Highways England does not propose any further amendments. They are not a box ticking exercise, but instead a commitment for the main works contractor to work with landowners to develop a solution that works for that landowner and in respect of the detailed design, rather than making arbitrary decisions now.

MW-WAT10 and UK Drinking Water Standards:

It would not be acceptable to wait until effects were felt in private supplies to raise an alert that the scheme may be causing impacts to water supplies. The Groundwater Management Plan will monitor a series of boreholes between the scheme and all water dependent receptors so that any changes at these monitoring points can be investigated long before effects are felt at receptors.



"It should be noted that the EA will not grant a licence for dewatering or any other abstraction if it cannot be demonstrated the impacts are acceptable. By the applicant requiring EA approval for any risk assessment and mitigation through planning we should not get into a situation where planning is approved but the applicant cannot obtain a permit to undertake such activities."

We stand by our comments, and remain concerned that there is still the potential for dewatering during the Scheme. This may be greater than the limits the EA would allow to prevent negative impacts on the water environment. With no 3D modelling having taken place to provide a greater understanding of the hydrogeology and structural geology of the Scheme area, there is a possibility that "unforeseen issues" will occur.

MW-COM6 Private water supplies:

As previously stated, wording within item MW-COM6 does not provide us with confidence:

We are not convinced that MW—COM6 wording is specific enough to cover impact on groundwater due to the presence of the tunnel within the groundwater, as it refers only to construction. Unless it is the intention of the wording "severance of the existing supply" is to also be applicable to the severance of the fissures that supply our boreholes.

The Applicants response notes that the tunnel will be a barrier to water flow, therefore although the "water modelling" does not show a "significant" effect, there is a requirement to balance this within the OEMP. The Applicants response also states that due to the "low risk of adverse effects on private water supplies, it is not considered proportionate for Highways England to provide a preconstruction alternative water supply". However, the Applicant has not provided us with any percentage of risk to back up this comment. Presumably, they must have carried out this exercise to come to their conclusion? Losing our water supply would have a devastating long term consequence on our farming business.

Regarding drinking water standards, please refer to the response to item 17.4.7 below;

Table 2.1:

Please refer to the response to item 17.4.1 below and the response to MW-COM6 above. It is considered that the provisions of MW-COM6 and MW-COM7 provide sufficient commitments in respect of water supply and drainage to be dealt with in detailed design.

MW-WAT11:

Regarding the water supply feasibility study, please refer to the response to item 17.4.1 below.

Regarding 3D modelling, please refer to the response to item 17.3.11 above.

Regarding points a - c, please see the response to item 17.4.8 below.

MW-WAT15:

Please refer to the response to item 17.4.9 below:



We believe, at a minimum, the cost of providing an alternative water supply for all abstractors needs to be assessed prior to the Scheme construction, as this will be required by the contractors to enable appropriate tendering. We urge that alternative supplies are in place ahead of works, as constructing a permanent supply could potentially take 18 months plus to install. Boreholes will require a licence agreement ahead of works as well as engaging a water engineer for construction.

Mains water capacity may not be available for our business requirements and a connection may not deliver water pressure capable of supplying the farm network to keep up with livestock demand.

Temporary water provision is included within the item, but without additional road infrastructure in place, it is not possible for an emergency water tanker to reach the farm reservoir as it is situated in the middle of a field. Therefore, to be fit for purpose, a feasibility study of the farm water network is required. Temporary water provision also needs to take into account that our reservoir only holds 24 hours water supply, so emergency measures would have to be in place within that time period for animal welfare not to be compromised.

In respect of a permanent water supply, there is a need for this to be on a "like for like" basis. Reduced water pressure will not circulate water around the farm network to the livestock. Similarly, we do not pay any water meterage charge, so it would be the responsibility of the main contractor, or the Applicant to pay for our water use in perpetuity.

We note within the recent OEMP additional submission Rev 4 at 19th August, the provision of a Water Supply Statement to be produced by the main works contractor prior to work commencing. This is an improvement, but critical points have still been omitted, therefore rendering the update a box ticking exercise.

OEMP MW COM6 updated



We welcome the inclusion of the Water Supply Statement (WSS), but believe it needs additions to make it fit for purpose.

Under item a)

It is not sufficient to just show the location of the boreholes, as these are only a part of the water supply infrastructure. The whole water system needs to be fully noted and assessed to include reservoir, water network, electricity supplies and access routes to reservoirs etc. A tanker of water sitting at the farm gate is of no practical use if it is unable to discharge into our reservoir due to its location in an arable field.

Under item b)

We would suggest that ALL information relating to groundwater surveys and the results are included in every farm WSS, not just the information that is deemed "relevant". Will it be the Applicant who decides what data is relevant, as the contractor will be working at a disadvantage having not carried out the surveys? This provision will ensure the contractor has as much information as possible, should it be needed at a later date, as well as saving on time and money as all information is to hand.

Our independent hydrogeology assessment does not agree with the Applicant's interpretation of the data, so by including all survey data and results, the main works contractor has the ability to make their independent assessment of the groundwater.

Under item c)

We would suggest a change of wording to "how and when" an emergency will be reported if water is contaminated. If monitoring is only going to be done once a month and not from private abstraction boreholes, then there is a strong possibility that we will already be drinking contaminated water.

Under item d)

This point relates to temporary water supply issues.



There is a need to commit to providing temporary water supplies within 24 hours, as our reservoir only holds a day's supply. We have animal welfare to consider as well as farm cottage tenants.

We would request the words "like for like" to be added to the clause as there is no assurance that the temporary water provided will be adequate for the basic farm demands. We may end up with low water pressure (if mains option is preferred), in which case, we would be unable to supply water to the whole of our network.

We would suggest there is a maximum period that farmers would have to rely on temporary/emergency water supplies. Water tanker availability at weekends/holiday periods is questionable and there may be a requirement for additional reservoir capacity.

Should a timescale for temporary water supplies be included; when does a temporary supply need to be considered for a permanent solution?

Under item e)

The Water Statement only mentions a new permanent supply in relation to contamination issues.

(Although the second paragraph of the main MW COM6 item does refer to "permanent severance of the existing supply"). Better clarification of this point would improve our confidence in the item.

In addition to the points above, we would suggest the WSS includes a 24hour, 365 day contact number for us to use if we experience any problems. In addition, a feasibility study needs to be carried out, to ascertain whether there are any structures or infrastructure that needs to be in place ahead, to ensure temporary water can be delivered ie: roads.

MW-WAT10 Groundwater management plan

Under point c)

There is no noting of private boreholes (which supply our drinking water) being monitored.



No mention is made of monitoring water to Drinking Water Standards. Within the Environment Agencies Deadline 7 comments on Highways England's DL6 responses to the Examining Authorities Second Written Questions under Fg 2.21 they note that "Both Drinking Water Standards and Freshwater Environmental Quality Standards are appropriate in this Scheme since groundwater supplies both potable abstractors and baseflow to the Rivers Till and Avon."

Fg. 2.22 also states "Groundwater monitoring is in the interest of landowners in the area owing to the reliance on groundwater supplies" From previous experience with the Applicant, our private water supplies were assessed in May in relation to work required to the borehole head to allow monitoring. We have only just received the report no work has been carried out to facilitate monitoring. Therefore, our boreholes **remain unmonitored.**

UK Drinking Water Standards

We understand that monitoring groundwater samples have been compared to DWI standards, but as previously stated in our reply to Comments at Deadline 4 [REP-003], it is not possible to make comparisons with such standards as the sampling methods are different. DWI samples have to be analysed within 4 hours of collection and be kept at critical temperatures and analysed at specific laboratories. As the chemical analysis of the water changes over time, it is not possible to compare the Applicant's chemical analysis with that of DWI samples, thus rendering them unrepresentative. Similarly DWI sampling analyses pathogens which the Applicant's sample analysis does not.

We believe the Applicant has a duty of care to ensure that all private water supplies that are used for human consumption, are tested to DWI standards to ensure that they are safe to drink. As the Applicant will be carrying out tunnelling, dewatering and recharging within the aquifer, they have a duty of care to ensure that their actions do not have a negative impact on drinking water quality. By testing water at all private water supplies to DWI



standards, the Applicant will be monitoring the effect the Scheme has on the safety of the drinking water.

We have never suggested that any samples taken by the Applicants at DWI standards would replace the current DWI sampling that is undertaken by our local authority. This would not be acceptable or compliant with regulations.

DWI testing by the Applicant will provide protection for them, as well as for those drinking from private water supplies. This is good practice.

OEMP Table 2.1, page 20

One of the roles of the Agricultural Liaison Officer (ALO) is to establish measures to maintain livestock water supplies which may be affected by construction works.

The above, in isolation, will not ensure livestock water supplies are safe guarded. The measures need to be translated into a practical framework, so that water provision can be delivered in a timely manner: ie: infrastructure (such as road access to our reservoir) needs to be in place in the first instance.

Following on from this exercise there is a need for referencing any infrastructure required, to be put into place to ensure temporary water supplies are practical: ie: the provision of a road to our farm reservoir. A timetable for works can then be drawn up.

MW-WAT11 Management of impact on abstraction boreholes

Firstly, the A303 tunnelling Scheme is not a typical Scheme as referenced within the Applicant's response. This Scheme involves tunnelling into complex geology with areas of weak structural phosphatic chalk. The hydrogeology of the area is complex.

Secondly, the Applicant's response cannot guarantee that there will be no problems with the water supply and quality as a result of the Scheme, during construction or once in operation. They openly state they can "minimise and reduce potential adverse impacts".



As such, we believe there is a requirement to carry out the feasibility studies to ascertain how temporary or permanent water can be supplied to private water abstractors. These supplies need to be on a "like for like" basis, ie pressure, volume and cost to the abstractor. Alternative water supplies need to be in place within 24 hours. This is not possible if feasibility studies or infrastructure works have not been carried out prior to Scheme construction.

See our response above in relation to groundwater sampling of our private water supplies within MW-WAT 10 above. The Applicant has a duty of care to show that the Scheme does not have a negative impact on the quality of private water supplies.

Whilst the Applicant has carried out water modelling, our independent research has shown that this is not refined to a level able to reflect the true hydrogeology within the area. There is the potential for problems to occur with the groundwater, despite being within the margins of error, therefore rendering the model inadequate. No 3 D modelling has been carried out along the length of the Scheme to fully assess the structural geology, hydrogeology and assessment of fractures. This would either support the water model or show areas where it would require further adjustments.

Independent analysis of water monitoring data within reports does not back up the Applicant's assessments and conclusions. However, the Applicant has never included the basic survey data in their reports to allow others to assess to a similar depth. With this lack of transparency, we would suggest that both the Environment Agency and Wiltshire Council are only able to assess the reports using the abbreviated data available in reports.

The Applicant refers to the groundwater level trends being typical of chalk aquifers and does not suggest there are specific fracture controls on flow to private supply boreholes. However, the geology within the Scheme is not typical chalk due to the presence of phosphatic chalk.



Furthermore, assumptions have been made, but no tracer tests or 3D modelling has been carried out to back up the trends to show "actuals".

Under Point a)

"where determined, and agreed with the owners/operators or other abstraction licence holders, target risk-based audits and checks of water quality monitoring will be undertaken at abstraction sources by the main works contractor."

Who will "determine" where the water quality monitoring will be carried out? Will farmers be able to request monitoring of their own private boreholes?

Will quality monitoring be carried out to Drinking Water Standards or to standards required by farm livestock assurance schemes?

Will farmers be provided with a copy of the results so they can produce evidence at farm assurance scheme audits? If so, when would the information be provided to us?

Under Point b)

With regard to dewatering, the EA has stated in their response to the Examining Authority that the dewatering of the Scheme has not been assessed, as the Applicant has stated their intention to need no dewatering. What will happen if the Scheme shows there is a need for a significant level of dewatering over and above the levels that are deemed safe by the EA?

Under point c)

As stated within the text "Emergency measures may include the transfer of a potable water supply to another water source and informing the water users."

For emergency water to be supplied to our farm reservoir there would be the need for an access road capable of carrying a large water tanker to the reservoir so it can discharge the



water. Our farm reservoir is located in the middle of an arable field with no track or road access.

If our reservoir has also been contaminated, there would be a need for this to be disinfected, so a temporary reservoir facility would also be required.

MW-WAT15 Monitoring of water resources:

We stand by our responses made in [REP5-003]

Monitoring needs to take into account private water abstractors who provide drinking water for human consumption. Therefore, we would suggest that this is carried out as frequently as possible to ensure that people are not drinking contaminated water.

We also stand by our comments that to date, no base line monitoring has been carried out on our private water supplies to determine the current baseline. Private water supplies would need to be monitored as well as the "selected observation piezometers". This is due to the fact the Applicant has not determined any fracture flow within the area, so cannot accurately know where the key observation piezometers would be within the landscape. In addition, with no baseline data it is impossible to set trigger levels for remedial action to be taken.

See our response above in regard to groundwater modelling. From our independent assessment of the water modelling, we do not believe it to be refined to a level of detail required to show potential problems.

17.3.14

Paragraph 5.3.5

The Applicant's response within 18.2.3 states the "OEMP is not intended to define all measures to reduce construction impacts, but they are required to create the framework". Yet by omitting to undertake feasibility studies on the provision of temporary or permanent alternative water supplies to our farm, they are not providing the adequate framework for potential contractors to tender or fully understand the financial implications this would impose on the Scheme. Given that our reservoir only has capacity

Refer to the above response to 17.3.12. In addition to these responses, the OEMP [REP8-006] item MW-COM6 includes for a pre-construction water supply statement to be provided to landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These will identify how water supply is to be maintained in the unlikely event that existing supplies are adversely affected as a consequence of the works.

The Water supply statements required by item MW-COM6 will be developed in liaison with landowners and will enable farm specific measures to be put in place as the detailed design develops, rather than setting an arbitrary



to supply for cottages and livestock for 24 hours, we do not believe that the Applicant is taking this risk seriously. Measures outlined within the OEMP do not take into account the additional infrastructure needed to provide temporary/emergency water supplies to deliver water for our livestock and cottages. Added to this, a permanent water supply would take over a year to install requiring various assessments and permits before installation could even take place. These points are not covered within the OEMP "framework".

strategy at this earlier design stage, particularly in the context of the ES results in relation to private water supply.

The Applicant is duty bound to bring all potential issues to the attention of tendering contractors prior to them accepting the contract (NEC 3 and 4). However, we do not believe this is reflected in the Applicant's responses to our questions.

Therefore, we maintain that MW-COM7 and MW-WAT11 indicated by the Applicant as measures to "minimise and reduce potential adverse impacts on private boreholes" do not provide an appropriate "framework" for contractors to work within.

17.3.15 Paragraph 5.3.6

We acknowledge the Applicant's statement that as the Scheme promoter, they are responsible for ensuring that groundwater resources including the supply and quality are protected during the construction and operation of the Scheme. However, following independent assessment of the reports, we disagree with the Applicant's interpretation of geology and hydrogeology surveys within Environmental Statement, Chapter 11 [APP-049] and the Groundwater Risk Assessment [APP-282]. We believe there is a significant risk to groundwater resources. In addition, we have concerns that measures for groundwater protection within the OEMP have omitted important points that would provide confidence in the Applicant's statement to ensure groundwater resources of quality and supply. See our previous comments to [REP5-003], [REP4-036] and [REP3-013].

The Applicant states they have been working with Wessex Water and other statutory utility providers, but as the Applicant has not

Refer to the above response to 17.3.12 and 17.3.14 with regard to the protection of groundwater resources and provision of an alternative supply. The Applicant maintains that there will be no significant adverse effects on the water environment and on private water supplies [APP-049]. Without prejudice to this position the Applicant has set out provisions in the OEMP [REP8-006] which would be secured through the DCO.

A response to the independent assessment of Dr Reeves is provided at Appendix A of deadline 8 submission - 8.52.3- Written Summary of Oral Submissions put at Flood risk, Groundwater Protection, Geology and Land Contamination Hearing on 29 August 2019 - September 2019 [REP8-018]. The Applicant disagrees with the interpretation put forward by Dr Reeves as set out therein and maintains that the interpretation of geology and hydrogeology surveys within Environmental Statement, Chapter 11 [APP-049] and the Groundwater Risk Assessment [APP-282] is defensible and sufficient to determine the application. The Environmental Statement [APP-049] and APP-282] assesses impacts on water supply boreholes and details of the boreholes are included in the reports. The Applicant is currently in discussion



carried out any assessment of our farm water supply, we fail to see how discussions with Wessex Water will be meaningful as they will not have the information they require for planning.

with water users regarding monitoring of water supply boreholes although this is not necessary for the determination of the application.

The development of the Water Supply Statements with landowners will

The Applicant fails to engage in meaningful discussions with us over areas of concern, choosing to deal with our issues during general meetings with no persons present who are authorised to answer our questions.

The development of the Water Supply Statements with landowners will enable all parties (including Wessex Water) to have clarity on what is required.

17.4 Written summary of oral submission

Matter Raised

Highways England's Response

The Applicant's Written Oral Submissions for ISH10 [REP8-016] have responded to M&R Hosier's comments received at deadline 8. Any additional points raised in M&R Hosier's oral submission for ISH10 is detailed below.

17.4.1

Agenda item 5 Private Water Supplies

i) Whether the controls in the OEMP (for example MW-WAT2, MW-WAT4, MW-WAT10, MW-WAT11, MW-WAT15 and MW-COM6 are adequate?

As it stands, if we lose our water supply, it is not possible for the emergency tankers to bring in water supplies, as our reservoir is in the middle of an arable field with no approach road.

Therefore, there is a requirement that following on from the assessment of how water supplies are to be maintained, any infrastructure for emergency water deliveries is put into place prior to the Scheme construction. Our reservoir only has 24 hours water capacity.

As previously stated, the OEMP [REP8-006] has been amended in response to these concerns, specifically item MW-COM6 which contains provision for the production of Water Supply Statements (pertinent points in bold for emphasis):

'The main works contractor shall produce Water Supply Statements for landowners / occupiers who rely on private water supplies which could be affected by the Scheme. **These shall identify how water supply is to be maintained** in the unlikely event that existing supplies are adversely affected as a consequence of the works. The statements shall be produced and provided to landowners / occupiers and The Authority prior to works commencing and include, as a minimum:

- a) Details and locations of existing boreholes which supply the landowner / occupier;
- b) Recorded results from groundwater monitoring undertaken by the main works contractor (as part of the Groundwater Management Plan) that are relevant to those boreholes:
- c) How an emergency will be reported if water is contaminated;



		 d) The procedure for getting water to a farm and how it will be distributed to animals and residential properties if water is affected on a temporary basis; and e) The procedure for getting a new supply of water whether from a borehole, mains supply or combination of both to a farm if the water from the boreholes is contaminated on a permanent basis. '
		There will therefore be a procedure in place to ensure that water is available (within 24hrs) should the supply be affected.
17.4.2	OEMP item MW-GEO2 Groundwater contamination: We suggest there is a need for all water abstractors to be notified if there is any groundwater contamination incident on site as there is the potential for this to enter the water supply that is drunk by farm tenants and livestock. I have a responsibility to provide water to Drinking Water Inspectorate standards (DWI). Livestock Assurance Schemes also have water quality standards required by retailers	Highways England notes this comment, Item MW-WAT5 (pollution incident monitoring) of the OEMP [REP8-006] has been updated to include the following provision: f) informing affected landowners or occupiers of any significant pollution incident that has the potential to, or has affected their private boreholes directly following any such incident.
17.4.3	OEMP item MW-WAT5 Pollution incident monitoring. There is no mention that any "actual significant pollution incidents" will be reported to any private water abstractors for them to monitor their water supplies or seek to take remedial action. Who defines what "significant" should mean. How is "significant" quantified?	See the above response to item 17.4.2 and 17.3.13.
17.4.4	OEMP item MW-WAT6 Protection of water courses: This is in respect of working in or adjacent to watercourses, but it also includes boreholes aquifers and catchment areas of workoperations. "The main works contractor shall adopt measures to prevent deposition of silt or	Should dewatering activities be required, these will be undertaken under the Environment Agency's environmental permitting regime which sits outside of the consents / permits disapplied via the DCO (refer to item MW-WAT8 of the OEMP [REP8-006]). As such, the contractor can only dewater in accordance with the provisions approved within the environmental permit which will have considered the impacts of such dewatering.



	other materiel into existing watercourses (boreholes, aquifers and catchment areas)." Previously, the Applicant stated that due to health reasons, the archaeological topsoil could not be sifted on land occupied by the pigs. Similarly there should be no water discharge from dewatering on land that has intensive livestock activity, as this would carry a health risk washing silt, organic matter and pathogens into the groundwater. Is this item dealt with within the OEMP?	
17.4.5	OEMP item MW-WAT7 Control of pollution to water bodies: Who will monitor the main works contractors to ensure the handling of contaminated material treatment processes and storage does not affect the chalk aquifer?	Monitoring of the groundwater shall be undertaken in accordance with the monitoring regime defined within the Groundwater Management Plan developed in consultation with Wiltshire Council and the Environment Agency (refer to item MW-WAT10 of the OEMP [REP8-006]. The Contractor's Project Manager and Environmental Manager (refer to table 2.1 pf the OEMP) are responsible for monitoring and ensuring that controls specified within the CEMP are implemented.
17.4.6	OEMP item MW-WAT8 Dewatering and abstraction: What will happen if the Scheme, whilst tunnelling, identifies a need for dewatering and the Environment Agency (EA) do not agree to this due to the fact that the level of dewatering is significantly more than has been identified within the groundwater risk assessment? Will this just go ahead and all private water abstractors will be warned in advance with temporary water supply on standby?	The construction of the tunnel will be undertaken using closed faced tunnelling techniques which do not require dewatering. This construction methodology is required by item D-CH32 of the OEMP [REP8-006] and secured via Schedule 2, paragraph 4 of the dDCO. The contractor therefore has no option but to use this technique and, as such, no assessment of dewatering associated with tunnelling has been required. Regarding discharges should and limited dewatering occur, please refer to the above response to 17.4.4.
	With reference to the Examining Authorities Written Questions submitted at deadline 6 [REP- 028, Question Fg.2.33] The Environment Agency response states "there has so far been no assessment of dewatering relating to this scheme".	
	We have concerns regarding the areas where any discharge from dewatering will occur. See point above in relation to water discharge in areas of historic intensive livestock production.	



17.4.7	OEMP item MW-WAT10 Groundwater management Plan: From independent research, we remain concerned that the main works contractor when compiling the Groundwater management plan, will be relying on the Applicant's survey works and their interpretation, which we believe to be inaccurate. Under point c) There is no noting of private boreholes being monitored, when	See response to AT regarding the interpretation. Highways England does not agree with the interpretation put forward by Dr Reeves. The Applicant's hydrogeological interpretation and assessment has been discussed and agreed with the Environment Agency and the peer reviewers of Wiltshire Council, as set out in the Statements of Common Ground. The Groundwater Management Plan (MW-WAT10) includes monitoring of water supply boreholes. These will require sampling for a standard suite of analytes to compare with the baseline for any changes that could be attributable to construction. These will be compared to drinking water
	these are the boreholes that we rely on for all our water supply. There is no requirement to monitor the water quality levels for drinking water standards. Therefore, there is the potential for private water abstractors to ultimately be drinking contaminated water as only chemical components will be picked up. There is no noting of how often the water monitoring will take place. If only carried out quarterly or monthly, there is the possibility that water could be contaminated for a period of time before the issue identified. If this was to be the case, people and livestock would be drinking contaminated water.	standards as have the baseline sampling results. Wiltshire Council is responsible for sampling in accordance with DWI regulations and for assessing the potability of private water supplies and this will continue. The monitoring requirements are to be defined by the Contractor in developing the Groundwater Management Plan in consultation with the Environment Agency and Wiltshire Council, for acceptance by Highways England and approval by the Secretary of State (noting that item MW-WAT10 of the OEMP was updated at deadline 8 to specifically require the plan to consider private water supplies). The regulatory authorities and Highways England shall ensure that the monitoring regime is suitably robust and frequent to ensure that, in the unlikely event of contamination, this is identified. Please see the response above to 17.4.2 which details further requirements for informing of pollution incidents which may affect boreholes.
17.4.8	OEMP MW-WAT11 Management of impact on abstraction boreholes: Background to our comments	The groundwater risk assessment undertaken to date has concluded that there is no significant adverseeffect on groundwater resources. The Environment Agency has reviewed this assessment and is satisfied with the conclusions of the assessments, as set out in the Statement of Common Ground.



The Applicant's response to our reply at 8.44 states MW-WAT11 contains measures to "minimise and reduce potential adverse impacts on abstraction boreholes". It does not guarantee that there will be no problems. As the Applicant has not provided "risk percentage" of the adverse impact, therefore we do not believe they have accurately assessed this risk.

If it cannot be proved that the Scheme will not impact on the quality and quantity of water from private borehole abstractions, the risk percentage to water needs to be calculated. By failing to provide a risk percentage, the Applicant has a responsibility to have alternative water supplies all ready in place prior to the Scheme going ahead.

We do not believe the A303 tunnel Scheme is a typical Scheme as stated by the Applicant. The geology of the area is complex including weak structural phosphatic chalk. The hydrogeology of the area is complex.

Independent research has shown that alternative water supplies can take as long as 18 months plus to put in place and it would be unreasonable for the Applicant to rely on temporary water supplies over that length of time.

OEMP makes no mention of what constitutes "appropriate monitoring". Will farmers be consulted, to ensure that what is proposed is actually "appropriate" for their farm circumstances? Will water be monitored to drinking water inspectorate standards where people are drinking the borehole water?

Points of concern within MW-WAT11

Under the second paragraph we note that main works contractors will consult with existing abstractors for measures to minimise loss or interruption of supply, provision of emergency water supply, and provision of alternative permanent water supplies.

Point a) states "Where determined, and agreed with the owners /operators or other abstraction licence holders, targeted risk-based

Please see the above responses to 17.3.12 and 17.4.2 which respectively address measures to protect private water supplies and monitoring. Preconstruction Water Supply Statements, as required by MW-COM6 (see above response to 17.4.1), are to be undertaken to ensure that temporary water supplies can be provided in case of interruption in supply.

As stated within MW-WAT11 consultation is to be undertaken with abstractors. The results of this consultation will be used to determine whether monitoring is required and the frequency, monitoring requirements etc. As discussed in response 17.4.2, groundwater monitoring requirements are to be agreed in consultation with Wiltshire Council and the Environment Agency and ultimately approved by the Secretary of State. Highways England is already undertaking monitoring of the aquifer to determine baseline quality and supply. Farmers, through the ALO, will be able to access the results of baseline and construction period monitoring, the timeframe of which this is available will be determined based upon the defined monitoring regime.

There is no requirement to monitor all abstraction boreholes as all assessments undertaken to take have concluded that there is minimal risk, therefore the 'significant possibility' that boreholes experiencing problems is not considered accurate. Regarding the Water Supply Statements ('feasibility study') and informing of pollution events, please refer to the above responses to 17.4.1, 17.4.2 and 17.4.7 respectively.

See response at 17.3.11 regarding 3D models and fissure flow.



audits and checks of water quality monitoring will be undertaken at abstraction sources by the main works contractor"

Who will "determine" whether these water quality monitoring will be carried out? Will farmers be able to request this monitoring? Will quality monitoring be to drinking water standards or to standards required by farm livestock assurance schemes? Will farmers be provided with a copy of the results so they can provide evidence at farm assurance schemes audits? How soon will information be provided to farmers?

Point a) continues "The period of monitoring will be appropriate to the timing and type of work undertaken, and will include a period of baseline monitoring".

Realistically, there is no way of knowing what an "appropriate period of monitoring" is, so we would suggest that this is carried out as frequently as possible.

No mention is made of when the baseline monitoring would start. To provide a representative for baseline quality and supply, monitoring should be undertaken as soon as possible and we would suggest that it should already be happening. Our water engineers are concerned that this is not currently happening.

The Applicant is relying on water models for the flow of water within the area, but there is no certainty that these will be accurate. The Applicant believes there to be no karstic behaviour of the rock within the area, but if this is incorrect: We believe, the water flow within the area will be quicker than anticipated, so contamination incidents would show up sooner. Having not carried out any 3 D modelling of the Scheme to show fissure flow, how can the main works contractor or even any landowners etc, properly assess where these monitoring boreholes should be accurately placed within the landscape?

There is no requirement for all private water abstraction boreholes to be monitored. As such, there is the significant possibility that



boreholes deemed not to be at risk, will not be monitored and may experience problems at a later date.

Point b) of MW-WAT11 states "the main works contractor will arrange any monitoring of water levels in areas where dewatering of the chalk aquifer is required"

The location of the monitoring will naturally depend on how much water will be abstracted by dewatering. If there is a large volume of water to be abstracted then this could potentially have a large drawdown area within the landscape. We believe that the Applicant's water model needs to be backed up by a full fracture 3D model. This will show the extent of fissures within the geology, which will accurately inform where these additional water monitoring points should be and provide more information to assess the dewatering needs of the Scheme on the chalk aquifer.

Point c) of MW-WAT11 states "where the water quality monitoring shows an adverse impact on water quality as a result of the works, the main works contractor will contact the relevant abstractor (licence holder and operator) and will put in place appropriate emergency measures to overcome the adverse impact where this has resulted from the construction works"

Point c) continues "these emergency measures may include the transfer of a potable water supply to another water source and informing the water users."

There is a need for the main works contractor to carry out a feasibility study to assess any work required to enable emergency tankers of water to access our farm and discharge the water into farm reservoirs. A tanker of water delivered to the farm entrance alone is not sufficient. The farm reservoir is located in the middle of an arable field with no road/track, so it is not possible for a tanker to even reach the reservoir. Therefore as already noted, there is a considerable amount of work that needs to take place prior to the Scheme construction to ensure farm emergency water supplies are secure in a practical respect as well as on paper.



We would hope that we would be informed of any suspected contamination problem as soon as it becomes apparent, so we are able to stop tenants and livestock drinking contaminated water.

Should our supply become contaminated, there will be a need to clean out and disinfect our reservoir and water network.

Alternative temporary reservoir facilities would be required in this event.

17.4.9 *OEMP MW-WAT15*

Monitoring of water resources: Under heading Groundwater, this states, "The main works contractor shall, where changes in groundwater levels are predicted to occur as a result of construction activity, which would be considered significant using the methodology defined in the groundwater management plan (refer to MW-WAT10) undertake additional site investigations".

We understand that this makes the main works contractor responsible for carrying out additional surveys should it be shown that there is a need for dewatering or there is evidence that the tunnel constructed within the water table is having a greater than anticipated effect on the groundwater flow. This is putting too much responsibility on the main works contractor. If the Applicant carried out a full 3 D fracture model of the Scheme prior to starting the tendering process, the contractor would be fully aware of all potential problems, so able to tender accordingly reducing the risk of the Scheme running over budget.

MW-WAT15 continues "Water levels at selected observation piezometers will be monitored before, during and after any dewatering associated with the construction of the tunnel".

By carrying out a 3D fracture model it will show where the observation piezometers need to be placed within the Scheme to provide an accurate representation of what is occurring in the groundwater.

In addition to this, we note that some of the monitoring boreholes (that were constructed on our farm last October with a view to

The requirement for the contractor to undertake further monitoring (should this be required) is entirely appropriate for a scheme of this nature and as such the contractor will be tendering accordingly.

Regarding dewatering and contamination, please see the above response to 17.4.4. Note that only approved substances can be discharged that may infiltrate to groundwater. The Environment Agency will not allow the scheme to include in its design the contamination of an aquifer.

Please see response to 17.3.11 and also see paragraph 18.2.45 [REP5-003] which set out a detailed response to the point on 3D models, fissures and tracer tests and modelling and why the assessment to date is sufficient for determination of the Application.

Additional ground investigation will be carried out to support the design and all the data will be made available to the Contractor. Contractors and their advisors will have the ability to assess dewatering requirements, should any be necessary, and to obtain the necessary permits from the Environment Agency for these activities.

Groundwater baseline monitoring has been undertaken and is adequate for the purposes of the ES. Monitoring is ongoing and will commence at water supply boreholes prior to construction.

The concerns relating to water discharge are noted. Discharges are subject to regulation by the Environment Agency.



providing baseline information prior to construction), have yet to have any monitoring equipment installed. We would suggest that the Applicant is failing in its duty to carry out adequate base line monitoring for which the groundwater levels will be assessed. This has the potential for the main works contractor to base assessments on insufficient information leading to errors.

MW-WAT15 concludes that "additional drainage will be provided as mitigation where necessary. Monitoring arrangements will be in defined within the groundwater management plan."

What happens if the EA does not permit additional drainage within areas? And what measures will be put in place to ensure that water discharge areas are not going to contaminate the groundwater? See points above in relation to location of water discharge. There is the potential for farmers to be blamed for groundwater contamination due to livestock production rather than the practices of the contractor who is discharging water in inappropriate locations.

We are pleased to see that the EA and WC are also sharing responsibility for the protection of private water supplies.

17.4.10 *OEMP item MW-COM6*

Private water supplies: Wording within first paragraph "Where an existing private water supply to a farm is adversely and directly affected by the construction of the Scheme"

This only refers to the construction of the Scheme. It does not directly refer to any problems that will arise in the groundwater as a result of the tunnel being present within the geology, blocking water flow. This has the potential for devastating long term consequences on our farming business. Is this wording adequate to cover any impact on groundwater due to the presence of the tunnel within the groundwater? Can we have some written assurance that this worst case scenario is catered for?

As previously discussed, the risk to private water supplies is low and therefore it is not reasonable to expect Highways England to provide an alternative supply prior to works commencing, given the highly unlikely chance of interruption of supply. Please refer to the response to 17.4.1 above regarding the provision of Water Supply Statements. The wording affected by 'the construction of the scheme' covers the long-term impact of the tunnel, with the cost of providing an alternative permanent supply being carried as a risk by the contractor. In the event that a new permanent supply is needed, the type and funding of supply will be determined in accordance with MW-COM6.

The Water supply statements required by item MW-COM6 will be developed in liaison with landowners and will enable farm specific measures to be put in place as the detailed design develops, rather than setting an arbitrary strategy at this earlier design stage, particularly in the context of the ES



The paragraph continues, "the main works contractor shall, if requested by the farmer or landowner to do so, provide or procure or meet the reasonable cost of the provision of an alternative supply of water (at the contractor's option)"

We suggest that the cost of providing an alternative water supply for all abstractors needs to be assessed prior to the Scheme construction, as this has the potential to be a considerable cost which would need to be built into any contractor's tender. We believe that the Applicant should undertake assessment of costs relating to provision of alternative water supplies and not leave this to the main works contractor. We urge that the alternative supply of water should be in place ahead of Scheme work commencing, as it would take potentially 18 months to construct an alternative water network. Studies will need to be carried out to ascertain whether Wessex Water has the capacity to add large farms onto the existing mains network, with a suitable water pressure that the farms can operate with no adversity. Should a mains supply be chosen, then on a like for like basis, farmers should not pay for the water they use. Who will pay for the farmers' water usage? Will it be the main works contractor or will it be the Applicant?

Construction of new boreholes also have a licence application requirement prior to any work commencing. The availability of a water engineer to construct the borehole also has to be taken into account.

The paragraph continues, "Where the supply is affected temporarily by the construction of the Scheme, then the alternative supply need only be supplied for the period during which it is affected."

Temporary water provision will also need considerable assessment by the main works contractor as it is not sufficient for a tanker to be delivered to the farm gate. The means by which the potable water is transferred by the tanker into the farm water network is important, as is year round access to the farm water network. See OEMP points above. results in relation to private water supply. Highways England notes paragraph (d) refers to the 'procedure' for getting water to a farm - this would need to deal with scenarios relevant to the concerns of an individual business such as capacity.



When does a temporary water provision change to a need for a permanent water provision? Long-term temporary water supplies will be costly to the contractor, as well as bringing added complications of ensuring regular supplies over periods of drought and bank holidays. Public water supplies always take priority over private water requirements, so this needs to be considered.

Our farm reservoir only has a 24hour capacity. Therefore, any emergency temporary water will have to be in place within 24 hours of the problem being identified. This is an animal welfare issue as well as a one of public health. We have a duty to provide safe drinking water to tenants living in our farm cottages.

Second paragraph, "Where a request is made by the farmer or landowner for a permanent supply due to permanent severance of the existing supply caused by the construction of the Scheme".

Similar to the first paragraph in MW-COM6, does this take into consideration the severance of fissures within the geology that supply water to our borehole, ie fissures that are either blocked by grout, or blocked by the physical presence of the tunnel itself. Is additional wording required to take this into account? Can we have written assurance that this scenario is covered?

Continuing in the second paragraph, "the main works contractor shall, where provision of an alternative means of supply can be demonstrated by the landowner/farmer to be reasonably required for his business, provide or procure or meet the reasonable cost of a permanent means of alternative supply of water..."

We would add that the supply of water would be on a like for like basis, (with no added water meterage costs and at a similar water pressure as existing supply), if a mains water connection ishosen. We would also suggest that the new supply is designed in consultation with our existing water engineers. As they are familiar with our network, this would speed up the design process.



For animal welfare reasons and business security we would suggest a permanent water supply is installed ahead of the Scheme works taking place as it would remove a lot of the other private water abstracting issues.

Water Supply Statement (WSS)

This is only intended to show "how" the water supply will be maintained in the unlikely event that there is a problem as a consequence of the works. There is a further need to ensure that the WSS is backed up with a practical assessment to ensure that what is proposed will actually be practical and possible.

We are pleased to see we will be provided with a copy of the WSS in advance of works commencing. Previously we have had to wait months for reports to be signed off before they have been shared with us. Due to past experience, we are not confident that reports will be made available in a timely manner.

Points of inclusion within the WSS:

Under point a)

It is not sufficient to just show the locations of the boreholes as they are only one part of the water supply infrastructure. The whole of the water system needs to be fully assessed to include reservoir, water pipe network, electrical supplies and road access. A tanker of water sitting at the farm gate is of no practical use if it is unable to discharge into the farm reservoir due to it's location in an arable field to the reservoir is of no practical use.

Under point b)

We would suggest that ALL information and test results relating to groundwater surveys are included in every farm WSS, not just the information that is deemed "relevant". Who will decide what data is relevant and what is not? The contractor will be working from documents that they have not produced so will be at a disadvantage. Provision of all groundwater surveys and results will ensure the contractor has as much information to refer to as



possible should it be needed at a later date. This will save on time and money having all information to hand in one document.

Under point c)

We would like to see the wording changed to "how and when" an emergency will be reported if water is contaminated. If monitoring is only going to be done once a month and does not include monitoring of private abstraction boreholes, there is the possibility that we will already be drinking contaminated water.

Under point d)

This point relates to temporary supply issues.

There is a need to commit to provide temporary water supplies within 24 hours, as our reservoir only holds a day supply. We have animal welfare issues to consider, as well as farm cottage tenants. We would request the wording "like for like" to be added to the clause, as there is no assurance that temporary water provided will be adequate for the basic farm demands. If mains supply is used for temporary water, we could potentially end up with a poor water pressure that will either not keep up with the demands of livestock, or is not capable of reaching the whole farm network.

We would suggest the inclusion of a minimum period for which farmers will have to rely on temporary/emergency water supplies, as this is vulnerable in its provision. Water tanker availability at weekends/holiday periods is questionable and may even result in the requirement of additional reservoir capacity. When does the need for a temporary water supply become permanent? Should a time scale be specified?

Under item e)

The WSS only mentions a new permanent supply in respect of contamination issues, although the second paragraph of the main MW-COM6 item does refer to "permanent severance of the existing supply." Better clarification on this point to include water quantity as well would provide more confidence in this item.



Additional points we would suggest to be included within the WSS would be:

The provision of a contact number 24 hours a day, 365 days of the year, so any issues are dealt with promptly to ensure a water supply is in place within 24 hours.

The requirement for a feasibility study to be carried out, on the provision of the most appropriate methods for temporary and permanent water supplies to be established.

The provision of any infrastructure requirement necessary, as noted within the feasibility study, to enable emergency/temporary water supplies to be provided, ie: to provide road access to enable a tanker to deliver water to our reservoir.

Agricultural Liaison Officer (ALO)

The provision of an ALO on paper is a good idea. However, unless he has any authority to make decisions and is contactable 24hours a day 365 days of the year, this is of limited use. It is doubtful they will have water engineering experience and will not necessarily understand our water requirements and the practicalities involved. From past experience the Applicant's agricultural representatives have not seemed to grasp the issues we have faced with surveys or understood our farming operations. Inevitably issues with water etc occur over bank holidays, or at 4pm on Fridays, when it is difficult to get in contact with relevant parties. If we lose our water supply at 4pm on a bank holiday Friday, how is an ALO going to ensure we get an alternative source within 24 hours?



18 Council for British Archaeology (REP8-036 and REP8-037)

18.1	Oral Submission	
	Matter Raised	Highways England's Response
18.1.1	3. THE WORLD HERITAGE SITE 3.1 Harm to the Outstanding Universal Value (OUV) i. Harm to the OUV and its place in the overall acceptability of the Proposed Development. Discussion. Highways England and Historic England indicated that the scheme did not breach international obligations because in their view the was	In terms of the CBA's comment that 'Highways England and Historic England indicated that the scheme did not breach international obligations because in their view the was a net balance of benefit over harm', this over-simplifies the Applicant's position. The Applicant has stated that the Scheme will not put the UK Government in breach of its international obligations under the World Heritage Convention for the reasons set out in its response to Response to the Examining Authority's Written Questions - General and cross-topic questions (G.1) [REP2-021; response to Written Question G.1.1, which
	a net balance of benefit over harm. Mr Lambrick referred to previous CBA Submissions ([REP2-070 and REP2-075] for comments on policy context and overall balance; and CBA Submissions [REP2a-005; REP3-049; REP6-084] for further comments on aspects of harm that have not been sufficiently identified or underestimated, and benefits that have been overstated). Mr Lambrick noted that	include that: "The UK has taken the steps required by Articles 4 and 5 (in particular Article 5) by putting in place the UK legal and policy framework in connection with the assessment and consideration of harm to heritage assets – namely, the UK's national policy statements, NPPF, Planning Act 2008 provision, and established approach to assessment of impacts on heritage generally and the balancing of factors in decision making. The protection and conservation of world heritage sites is integrated into the comprehensive planning programme
	 the claimed net benefit reflects (in part) a comparison of irreparable loss of fabric and some significant harm to settings, versus some gains for some other settings and wider experiential qualities. as previously submitted [REP2-070 pp14-17; REP2a-005], the totality of the archaeological loss had not been extrapolated from the archaeological field surveys and evaluations as previously explained both by CBA (REP2a-005) and others, the loss of archaeological remains and therefore substantial harm to heritage assets including significant 	in the UK for nationally significant infrastructure projects (as required by the Article 5(a)), and the appropriate measures taken by the UK in legislation and policy surrounding planning decisions including the NPSNN for the protection, conservation, presentation and rehabilitation of world heritage sites (required by Article 5(d)) place great weight on their harm. It follows that the application of the planning balance envisaged in the NPSNN, by the Secretary of State, would be in accordance with Articles 4 and 5. The NPSNN accordance table in Appendix A of the Case for the Scheme and NPS Accordance [APP-294] demonstrates that the Scheme complies with the requirements of the NPSNN with respect to the WHS.



- contributions to OUV would be very much higher than Highways England have acknowledged to date.
- since the last hearing (after which HE claimed that paragraph 5.139 of the NPSNN should be reinterpreted in the light of Hayes vs York City Council), the Historic Environment section of the National Planning Policy Guidance has been updated (July 23rd 2019) including paragraph 02 which unambiguously states that paragraph 199 of the NPPF and therefore by inference paragraph 5.139 should be read as drafted, and NOT reinterpreted as the Applicant has asserted (see Appendix of CBA's complementary Written Submission on items 5.4 to 5.8 of the agenda for 21st August).
- taken with the absence of any extrapolation of the total archaeology of the scheme footprint this reinforces the CBA's consistent position that the balance of harm over benefit has been misconstrued, and the loss of OUV would be much greater than the Applicant claims.

The Applicant asserted that

 The main public benefit for the scheme lay in other considerations, not just the claimed net benefit to the WHS OUV and that s.104 of the 2008 Act had to be interpreted in the light of NPSNN as long as it is not inconsistent with international obligations, and only needed to show a net benefit.

Post hearing notes:

a) The Applicant's emphasis if anything ADDS weight to the points made by Mr Lambrick in the hearing in which he emphasised that in the context of a World Heritage Site an especially precautionary approach is needed in the light of NPSNN paragraphs 5.124, 5.129, 5.131, and WHS Management Plan 2.3.1, especially when also taking account of NPSNN paragraph 5.139 – noting the revised Historic Environment PPG of 23rd July 2019, paragraph 002. (see CBA main written submission With respect to the specific impact of the scheme on the WHS, the Heritage Impact Assessment (HIA) submitted with the application [APP-195] assesses the impact of the proposed scheme on the attributes of the OUV, integrity and authenticity of the WHS. It also considers the alignment of the Scheme with the vision, aims and policies of the 2015 WHS Management Plan and the criteria for the site's inscription as a WHS. The scheme is assessed to have a Slight Beneficial effect on the OUV of the WHS as a whole. This takes into account that of the seven attributes of OUV for the WHS, whilst the scheme will have a slight adverse effect on two of those attributes, it will have a beneficial effect on the remaining five (being a slight beneficial effect on 3 of the attributes, a large beneficial effect on one, and a very large beneficial effect on one). This conclusion also takes into account that the scheme will have a slight beneficial effect on the authenticity and integrity of the WHS. Overall, the OUV of the WHS would be sustained, and it is clear that, in line with Articles 4 and 5 of the WHC, the Scheme – and any decision to grant consent for it - would not put the UK in breach of the duty to protect and conserve the cultural and natural heritage of the WHS."

It is up to the Examining Authority and the Secretary of State to assess whether the Scheme's public benefit outweighs the less than substantial harm reported in the ES and the Case for the Scheme and NPS accordance [APP-294].

With regards to the CBA's comments regarding adverse impacts in one part of the WHS being counter balanced by positive benefits in other parts of the WHS, the Applicant has responded to this previously in its Comments on Written Representations [REP3-013; paragraph 21.2.57] where it stated 'In terms of balancing the harm and benefits to attributes of OUV as a result of the Scheme, in order to arrive at an overall effect on the WHS as a whole, the Heritage Impact Assessment has been prepared following ICOMOS guidelines (https://www.icomos.org/world_heritage/HIA_20110201.pdf). The scope and approach of this assessment, which is reported in ES Appendix 6.1 [APP-195], was endorsed by UNESCO/ICOMOS in their report from their third advisory mission on the scheme early in 2018 (https://whc.unesco.org/en/list/373/documents/). The Applicant considers that the HIA has been carried out accurately and with a full appreciation and understanding of the importance of the WHS and its OUV, and it considers the approach to balancing the impacts on attributes of OUV in order to reach



[REP2-070] and Appendix D [REP2-075]; comments on ExA 2nd questions [REP6-084] pp12-13)

b) When taken in conjunction with the availability of much more effective solutions to removing the A303 from the WHS (including cheaper as well as more expensive ones) the highly dubious validity of the special contingent valuation study, and other value for money considerations (CBA submissions [REP2-070]; [REP6-084] pp 66; 77-82) the Applicant's weighing of public benefits is fundamentally flawed.

an overall conclusion in terms of the impact on the OUV of the WHS is appropriate, and necessary in order to inform the tests required to be undertaken by the Secretary of State.'

See also the Applicant's Written Summary of Oral Submissions made at ISH2 [REP-030], agenda item 3(vi) and the Applicant's Written Summary of Oral Submissions made at ISH8 [REP8-016], agenda item 3.1(i).

With regards to the CBA's comment that 'the totality of the archaeological loss had not been extrapolated from the archaeological field surveys and evaluations', the Applicant has responded to this previously [for example REP8-013; item 2.1.6] where it stated that 'it has provided a comprehensive set of archaeological evaluation reports [REP1-041-052] which set out their results in detail and this provides the robust baseline that has been assessed in the ES [APP-044] and the HIA [APP-195]'.

The Applicant refutes the CBA's comments that 'the loss of archaeological remains and therefore substantial harm to heritage assets including significant contributions to OUV would be very much higher than Highways England have acknowledged to date.' The Scheme will result in less than substantial harm to some designated heritage assets (not the WHS) as reported in the Case for the Scheme and NPS Accordance [APP-294]. The archaeological remains that will be removed by the construction of the Scheme do not 'make a significant contribution to the OUV of the WHS' such that the integrity of the WHS would be diminished by the removal of these remains.

In respect of the updated planning practice guidance (PPG), the Applicant notes that the text has been updated to reflect the wording of the NPPF i.e. the relevant text of the PPG for the historic environment now reads (with new text typed in blue for ease of identification):

Part of the public value of heritage assets is the contribution that they can make to understanding and interpreting our past. So where the complete or partial loss of a heritage asset is justified (noting that the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted), the aim then is to-:



- capture and record the evidence of the asset's significance which is to be lost,
- interpret its contribution to the understanding of our past,: and
- make that publicly available. (National Planning Policy Framework paragraph 199)

It overstates the position to assert that this paragraph 002 of the PPG "unambiguously states that paragraph 199 of the NPPF – and therefore by inference paragraph 5.139 – should be read as drafted, and NOT reinterpreted as the Applicant has asserted".

The Applicant considers it to be usual and expected procedure for the PPG to be updated to reflect the wording of the parent document, the NPPF. To that end then, our previous analysis of the NPSNN applies to the updated PPG text as quoted here (see the Applicant's Written Summary of Oral Submissions made at ISH8 [REP8-016], agenda item 3.1(i)). This is, in brief, that the fact that the NPPF and NPSNN have not been amended since the Hayes v York CC case is evidence that the accepted interpretation of the NPPF is that which is set out in that case, i.e. "the last sentence of that paragraph [paragraph 141 of the NPPF] only makes good sense if interpreted so that the words "should not be a factor" are taken to bear the meaning "should not be a decisive factor". That this recent update to the PPG did not introduce updated wording to contradict the Hayes v York CC position lends further evidence to the position that the law is as set out in that case.

The CBA relies on its interpretation of paragraph 5.139 to demonstrate the point that "the balance of harm over benefit has been misconstrued, and the loss of OUV would be much greater than the Applicant claims". The Applicant has responded previously (see for example REP3-013, paragraph 21.4.5) in terms of assertions that it has under-estimated the impact of the Scheme on OUV, where it has concluded that:

"[...] The Applicant considers that the HIA has been carried out accurately and with a full appreciation and understanding of the importance of the WHS and its OUV (including the contribution from archaeological remains). As a result, the Applicant does not accept that the harm to the OUV of the WHS has been underestimated." [REP3-013, para. 21.4.5].



It is worth noting in this context, that in undertaking its HIA [APP-195] and the ES [APP-044], the Applicant has not relied upon mitigation measures such as the ability to preserve remains by record, in reaching its conclusions as to the impact of the Scheme on the OUV of the WHS. Thus where archaeological mitigation is proposed, it does not reduce the level of impact – i.e. a Slight Adverse would remain a Slight Adverse even following the archaeological excavation and recording of the archaeological remains. Not only does this make the conclusions in the HIA wholly transparent, but it makes the CBA assertion that the conclusion on OUV is flawed by virtue of reliance on the ability to record archaeology, incorrect.

The CBA has reported the Applicant's position as being that:

"The main public benefit for the scheme lay in other considerations, not just the claimed net benefit to the WHS OUV and that s.104 of the 2008 Act had to be interpreted in the light of NPSNN as long as it is not inconsistent with international obligations, and only needed to show a net benefit."

To be clear, section 104(3) of the Planning Act 2008 requires the Secretary of State to decide the application in accordance with the NPSNN, except to the extent the exceptions set out in section 104(4)-(8) apply. Section 104(4) provides one such exception if deciding the application in accordance with the NPSNN would lead to the UK being in breach of an international obligation.

The submissions the CBA refers to appear to relate, in part, to the Applicant's submissions at ISH8 addressing the approach of the World Heritage Committee to the Scheme needing to be the "best possible outcome", as reported in its Written Summary of Oral Submissions from ISH8 [REP8-016], agenda item 3.2(i):

"In response, Mr Taylor QC explained that in terms of whether there was an obligation to produce the best possible solution, the starting point was the World Heritage Convention. The Convention's obligations are to protect and conserve the WHS, and Highways England's position is that its Scheme achieves that objective because it results in enhancement of the OUV of the WHS and an overall slight beneficial effect on the WHS as a whole. Mr Taylor QC submitted that it was difficult to comprehend how an objective to achieve the best possible outcome, which would appear to go beyond enhancement, can be identified from an obligation to protect and conserve the WHS."



In terms of the benefits of the Scheme, these are set out and considered in the Case for the Scheme and NPS Accordance [APP-294], and include, in addition to substantial cultural heritage benefits, transportation and economic benefits.

Post hearing notes:

 The assessment undertaken, particularly with respect to the WHS as reported in the HIA, has been extremely thorough and comprehensive.

The HIA has been undertaken in line with the ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS 2011) and following the method and approaches set out in an HIA Scoping report that the UNESCO/ ICOMOS Mission 2018 deemed to be appropriate. HMAG members agree that the HIA has been undertaken in accordance with the HIA Scoping Report and with the ICOMOS Guidance 2011. The HIA has been undertaken with a full appreciation and understanding of the importance of the WHS and its OUV.

The Scheme has been subject to a comprehensive archaeological evaluation programme which provides a robust baseline against which the Scheme impacts on heritage assets have been assessed (in the ES [APP-044]) and the impacts of the Scheme on the Attributes of OUV, Integrity and Authenticity of the WHS have been assessed (in the HIA [APP-195]). The HIA includes consideration of the ways in which the Scheme delivers against the aims and polices of the 2015 WHS Management Plan (see Section 12.3), and the compliance of the Scheme with relevant requirements of the NPSNN is set out at Appendix B of the Case for the Scheme and NPS Accordance [APP-294] (an updated version of which is submitted at deadline 9).

As stated elsewhere in this respect and in previous submissions, in terms of the approach to mitigation (as set out in the Detailed Archaeological Mitigation Strategy (the final version of which is submitted at deadline 9)) the Applicant has taken a precautionary approach and considered what potential archaeology may be



		uncovered by the Scheme, what research questions that archaeology could address and what investigative methods need to be applied and where in consultation with Wiltshire Council, Historic England and HMAG (including Wiltshire Council, Historic England, the National Trust and English Heritage). The sampling approach is reflexive and iterative and will be the subject of on-site monitoring and consultation with heritage consultees.
		b) Prior to the preferred route announcement, Highways England carried out a full and proportionate option identification and selection process details of which are signposted in response to Written Question AL.1.4 [REP2-024]. This included corridor options both north and south of the WHS referred to as corridors A, F and G in the Technical Appraisal Report [REP1-031]. Further signposting to the assessment of options outside the WHS can be found in Highways England's response to Written Questions AL.1.7 to AL.1.15. [REP2-024].
		In terms of criticism of the contingent valuation study, the Applicant has responded to the CBA's submission [REP6-084] in detail at deadline 8 [REP8-013], item 2.1.41, concluding that:
		"By applying the results of the CVR equally to options that went around the WHS as to tunnel options, and by complementing this with qualitative analysis of differences between these options, Highways England undertook a balanced and systematic analysis of the VfM of all options. The CVR has not been used to skew the analysis in favour of any one solution over another."
		The Applicant has responded robustly throughout the Examination to submissions of Interested Parties in respect of the CVR (see, for example REP3-013, but also Highways England's submissions response documents at deadlines 4-8).
18.1.2	3.2 World Heritage Committee adopted decision and report, July 2019 i criticism of the focus on measuring and aggregating its impact on individual components, and assessing whether the	See response 18.1.1 above with regard to CBA's comment regarding balancing harm and benefits. It is not correct to suggest that the Applicant has asserted that the balancing exercise is a crude balancing exercise undertaken without regard to the requirements of the NPSNN or other relevant heritage policy. The decision-making framework very clearly requires the Examining Authority and Secretary of State to undertake the balancing



proposal is an improvement, rather than the best available outcome for the property.

ii. that a longer tunnel is technically feasible but is not proceeding because of cost.. however, a detailed analysis of the benefits compared with the costs of a longer tunnel is absent from the application.

Mr Lambrick noted that

- reliance on a mere net balance of improvement over harm is not consistent with the heritage policy weight and tests of substantial and less than substantial harm etc set out in the NPSNN
- UNESCO had also [in previous comments] drawn attention to other available options such as the surface route to the S which would be much cheaper but have also been inadequately assessed [or compared for cost since the proposed tunnel was lengthened from 2.9km to 3.3km or potentially up to 3.55km]
- the Applicant has not given a full explanation of why RIS and/or the relevant route strategy has not been and is not being subjected to SEA [by which the environmental benefits and losses, other public interest issues and public expenditure value for money would be tested across scheme and options]. The Applicant only asserted that SEA is not required without backing it up with a formal legal opinion or a rigorous screening opinion setting out all the tests for SEA.

The DCMS representative read out a formal statement which referred to the scheme being justified because it would 'remove' the A303 from the WHS.

Mr Lambrick invited the DCMS representative to rephrase the statement since the scheme plainly would NOT 'remove' the A303 from the WHS.

DCMS's response did not rephrase the statement but seemed to equivocate as to what was meant.

exercise in the context of the requirements of the NPSNN (including with respect to less than substantial harm, and the significance of the WHS), compliance with the World Heritage Convention, and any other relevant matters.

With respect to the World Heritage Committee's consideration of the surface route to the south of the WHS, this point was dealt with at ISH8 as recorded in the Applicant's Written Summary of Oral Submissions [REP8-016], in relation to agenda item 3.2(ii):

"In response to a submission from George Lambrick of CBA, about an alternative surface route to the South, Mr Taylor QC explained that this is an option that was raised in previous reports from ICOMOS and the World Heritage Committee, but which is no longer pursued by ICOMOS / the Committee and is not referred to in the recent decision."

Various surface routes to the south of the WHS were included in the option identification and selection process described in the Technical Appraisal Report [REP1-031], the Scheme Assessment Report [REP1-023] and further signposted in response to Written Question AL.1.4 [REP2-024]. The best performing of the southern route options was the route known as F010. The reasons for rejection of this route have been the subject of various written questions, representations and responses but are summarised in the Environmental Statement in table 3.1 [APP-041] as:

"Comparison of the appraisals for each of the three retained options suggested that, on balance, options D061 and D062 performed better than option F010 in terms of the assessed impacts. Key differentiators were F010 being a significantly longer route which would pass through a largely unspoilt, high quality, tranquil landscape with an additional crossing of the River Avon Special Area of Conservation (SAC). It would have a much larger footprint and a greater overall environmental impact, despite having greater benefits for the WHS. There would be disbenefits for road users having to travel on a longer F010 route, offsetting lower construction costs. F010 would also not interact effectively with the local road network, leaving higher levels of rat-running traffic adversely affecting the quality of life in local communities.



		The two route alignments within Corridor D, namely D061 and D062 were therefore identified as the preferred route options for consultation on the basis that they performed better against Client Scheme Requirements (CSR) and the relevant national and local policy objectives than F010." With respect to submissions on the RIS and SEA, the Applicant has responded to the CBA's submission in detail at deadline 8 [REP8-013], item 2.1.1. With regards to the evidence presented by DCMS, it is the Applicant's understanding that DCMS initially stated that 'the A303 would be removed from the WHS by the Scheme' before clarifying following a comment by the CBA that 'the A303 would not be completely removed from the WHS by the Scheme'.
18.1.3	 3.3 Heritage Impact Assessment (HIA) i. The HIA's approach to the effects of the Proposed Development on the OUV given that four of the seven attributes which together express the OUV of the site concern spatial relationships. Mr Lambrick noted that Apart from Stonehenge itself, the other SIX of the seven attributes that express the OUV of the WHS concern spatial relationships (added emphasis): 2. The physical remains of the Neolithic and Bronze Age funerary 	The Applicant provided a response at Issue Specific Hearing (ISH) 8 which is detailed in its Written Summary of Oral Submissions put at the Cultural Heritage, Landscape and Visual Effects and Design Hearing on 21 August 2019 [REP8-016]; agenda item 3(i)] on the HIA's approach to the effects of the Proposed Development on the OUV given that four of the seven attributes which together express the OUV of the site concern spatial relationships. The Applicant stands by its HIA which has followed the HIA Scoping Report, endorsed by the ICOMOS Advisory Mission 2018 and members of HMAG, and has followed the ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS 2011). With regards to the CBA's comment that 'several aspects of these relationships have not been adequately assessed ([REP2-070]), including
	 2. The physical remains of the Neolithic and Bronze Age funerary and ceremonial monuments and associated sites. 3. The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the landscape. 4. The design of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the skies and astronomy. 	the setting of Blick Mead, Vespasian's Camp and the Amesbury Abbey RPG' the Applicant has responded to these comments previously, including to the Examining Authority in its Responses to the ExA's Written Questions-Cultural Heritage [REP6-022; Response to Written Question CH.2.8] and to comments made by the CBA in its Comments on any further information requested by the Examining Authority and received to deadline 7 [REP8-013; item 2.1.7].



- 5. The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to each other.
- The disposition, physical remains and settings of the key Neolithic and Bronze Age funerary, ceremonial and other monuments and sites of the period, which together form <u>a landscape without</u> <u>parallel.</u>
- 7. The <u>influence of the remains of Neolithic and Bronze Age funerary</u> and ceremonial monuments and their landscape settings on architects, artists, historians, archaeologists and others.
- The CBA has commented in its different submissions that several aspects of these relationships have not been adequately assessed ([REP2-070]), including in the CBA's most recent comments on the ExA questions CH.2.8 about the setting of Blick Mead, Vespasian's Camp and the Amesbury Abbey RPG (see [REP6-084] pp 18-24).
- With regard to attribute 7, the CBA has drawn attention to the importance of Amesbury Abbey park and associated tree planting and landscaping of Vespasian's Camp and barrows on King Barrow Ridge as an outstanding example of how 18th century landscape architects sought to incorporate prehistoric monuments into designed landscapes ([REP6-084] pp 18-19; 20-24).
- It is important to appreciate the cumulative harm to the significance of these assets arising from the proposed scheme is added to that caused by the present A303 [NOTE: see PINS Infrastructure Advice Note 17 Cumulative Effects Assessment para 1.5; NPSNN para 4.16 "When considering significant cumulative effects, any environmental statement should provide information on how the effects of the applicant's proposal would combine and interact with the effects of other development (including projects for which consent has been granted, as well as those already in existence)" added emphasis].

The CBA's discussion of the importance of Amesbury Abbey Park and Garden and its 18th Century design has also been responded to by the Applicant previously [see REP8-013; items 2.1.7 and 2.1.28].

With regards to cumulative impacts on Blick Mead, Vespasian's Camp and Amesbury Abbey Registered Park and Garden, the Applicant has responded previously to this comment of the CBA's [see REP8-013, item 2.1.7] where we state that 'The Applicant does not agree that we have 'misunderstood the contributions that these assets make to the WHS OUV.' Or that there is 'cumulative harm' from the construction of the Scheme on these assets.' More generally, the Applicant has considered the likely significant effects of the Scheme, including cumulative effects, as set out in its Environmental Statement (see in particular Chapter 15 Cumulative Effects [APP-053]) and as required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and in line with other relevant guidance and policy.

Post hearing notes:

- c) The Applicant has no further comments
- d) The Applicant has no further comments
- e) The Applicant has no further comments
- f) and (g) As stated previously by the Applicant [in REP8-013; item 2.1.7]
 'the Applicant acknowledges that the Amesbury Abbey estate used to be much larger than the current area that is designated as a Registered Park and Garden. The Applicant notes, however, that areas to the north and west of the RPG would have been considered for designation as part of the designation process. The elements that survive of the earlier larger estate are considered within the Historic Landscape Character Assessment [APP-215].' They are also considered within the HIA [APP-195; paragraph 6.3.2 and Section 6.4].
- (iii) The Applicant provided a response at ISH8 which is detailed in its Written Summary of Oral Submissions put at Cultural Heritage, Landscape and Visual Effects and Design Hearing on 21 August 2019 [REP8-016; agenda item 3.3 (iii)] with regards to harm to the OUV from effects outside the boundaries of the World Heritage Site, which in turn directed the Examining Authority to the Applicant's response to Written Question LV.2.1 [REP6-030],



Post hearing notes:

- c) The importance of Registered Parks and Gardens and extensive tree planting on monuments is emphasised in the WHS Management Plan, though given the extent of relevant research (see references below) the link to attribute 7 could be more explicit as a very tangible expression of how prehistoric monuments and their interrelationships influenced landscape design in the 18th century, both at Stonehenge and Avebury. The design idea was to embrace the idea of bringing the idea of wilderness and antiquity into the aesthetics of landscape design, clearly seeking to emphasise and create access to monuments and their position in the landscape, while not being averse to modifying them where it was deemed necessary to facilitate access or adapt them to suit the overall landscape design concept.
- d) Discussing Vespasian's Camp, Sue Haynes (2013) comments

'The site is dominated by a prehistoric earthwork, the heavily wooded univallate Iron Age hillfort known as Vespasian's Camp, enclosing 15 ha and rising to 91m at its highest point. Bridgeman's design makes use of the south- eastern ramparts, and the remains of one of two Bronze Age barrows on the summit of the hill-fort appears to be the focus of rising and tapering grassy terraces. The prehistoric monuments are part of the Stonehenge World Heritage Site, and the extent to which they were modified by eighteenth- century landscaping is of considerable interest.

with respect to Longbarrow junction (in particular responses to parts (vi) and (vii)) and to its response to Written Question CH.1.58 [REP2-025].

With regards to the CBA's comments that it 'has further highlighted possible alignment relationships between monuments outside the WHS and the Winterbourne Stoke long barrow and/or linear cemetery that have not been considered' the Applicant has previously responded to this in its Comments on any further information requested by the Examining Authority and received to deadline 7 [REP8-013; item 2.1.7] as follows:

'Regarding the scheduled bowl barrow 250m south west of Longbarrow crossroads, west of A360 (NHLE 1011045), the Applicant has previously responded to this in response 13.1.4 [REP4-036]. This asset is considered as part of the AG13 Diamond Group in the Setting Assessment [APP-218] and in the HIA [APP-195]. It lies off the ridge line and is sited to the south of the dry valley that divides it and the rest of the AG13 Diamond Group from the AG12 Winterbourne Stoke Crossroads Barrow Group to the north.' The barrow and its relationships to other barrows has therefore been considered.

Regarding the OUV of buried archaeological remains within the compound areas, these have been considered in the HIA [APP-195]. The Applicant intends to preserve topsoil in situ in these areas and use a 'no-dig' solution for compounds so that these remains will not be impacted by construction (temporary or permanent). Regarding the deliverability of preservation in situ requirements for compounds and haul roads, it is the Applicant's view that preservation in situ is feasible and deliverable. The Applicant provided clarity on the fact that it does not expect the DEFRA Code to override the detailed considerations in the DAMS in its response at ISH8 [REP8-016; agenda item 5.1(v), page 1-33], and the OEMP and DAMS were amended at deadline 8 to provide clarity in this respect. See also the Applicant's response to Deadline 7 comments [REP8-013] at 2.1.43.



- e) This is of even greater interest when the later extension of the designed landscape to King Barrow Ridge is also taken into account (see CBA comments on ExA Questions 2 [REP6-084] pp 20-24).
- f) As part of Bridgman's 1738 landscaping scheme, Vespasian's Camp was modified to incorporate carriage drives, walks and new vistas (see detailed plan next page). Bowden (2016, p8) suggests that the N entrance was "widened for the passage of a carriage drive in the 18th century, as there is now an 8m-wide gap between the substantial bank terminals." Before the present A303 cutting through the ridge at this point, the carriage drive would have emerged in a long narrow field leading NW to the King Barrow Ridge monuments, in the area that by 1773 had been incorporated into the parkland (see map showing 19th century landuse in CBA comments on ExA Questions 2 [REP6-084] pp 22). On the map below dated 1823 (Bowden 2016 Fig 3 p.4) a track is shown on this line still surviving after the area reverted to fields with tree clumps, retaining most of the key features of the designed landscape. This line is follows a field boundary severed by the present A303, more being lost to the scheme proposed.
- g) Even more than Avebury Manor and designed tree planting on ridge-top barrows in that part of the WHS, the Amesbury Abbey Park/ Nile Clumps/ King Barrow Ridge barrow clumps and coupled with Vespasian's Camp constitute one of the very best examples of "the influence of the remains of Neolithic and Bronze Age funerary and ceremonial monuments and their landscape settings on



[landscape architecture]". Bridgeman was amongst the most influential landscape architects of his day and this is an excellent example of several key themes of 18th century landscape architecture.

iii. Harm to the OUV from effects outside the boundaries of the World Heritage Site.

Mr Lambrick noted that

- The CBA has commented on this in previous submissions, both in respect of setting issues and archaeological fabric ([REP2-070]; [REP2a-005] pp 9, 13-16, 18-20)
- In commenting on the ExA Second Questions ([REP6-084] p60)
 the CBA has further highlighted possible alignment relationships
 between monuments outside the WHS and the Winterbourne
 Stoke long barrow and/or linear cemetery that have not been
 considered.
- The main compounds both W of the A360 and at Countess affect areas with significant archaeology contributing to OUV but whether in fact these can be retained in situ as proposed remains very uncertain. If, as proposed, DEFRA guidelines and BS soil handling requirements are to be applied, the technical requirements to achieve archaeological preservation in situ will NOT be feasible. [See CBA's comments on ExA Second Questions ([REP6-084] pp 36-40) and below].

In the absence of clarity about archaeological preservation in situ overriding established soil handling standards, it appears that under paragraph 5.1.2 of the DAMS the default position is that they would be excavated, adding to the cumulative loss of archaeology which is relevant to the cumulative planning balance (see CBA's comments on ExA Second Questions ([REP6-084] pp 38-40).



18.1.4	 4. Outline Environmental Management Plan (OEMP) (DL6 version [REP6-011 and REP6-012]) 4.1 Approvals/ agreements/ consultation i. MW-G7 and MW-CH1 ii. Discussion on approval of the Construction Environmental Management Plan (CEMP) (MW-G5) and Handover Environmental Management Plan (HEMP) Mr Lambrick noted that It is not clear who is responsible for approving the Soil Management Plan How would conflicts between DAMS and DEFRA and BS Soil Standards would be resolved On this basis the default position of excavation in areas where preservation in situ is not feasible (draft DAMS paragraph 5.1.2) should be assumed Highways England said The Secretary of State would approve the Plan and that all such plans would have to be consistent with each other Post hearing note: From this response it still remains entirely unclear whether the DAMS requirements for preservation in situ or the DEFRA soil handling guidelines and BS Standards would take precedence. 	As stated in Highways England's deadline 8 Written Summary of Oral Submissions from ISH8 [REP8-016] in relation to the Soils Management Plan, Mr Taylor QC confirmed that this would be subject to the Secretary of State's approval. See response 18.1.3 above with regards to the Applicant's position on the feasibility of preservation in situ and conflicts between the DAMS and relevant soil handling standards. Comments in relation to paragraph 5.1.2 of the DAMS were responded to in the Applicant's Written Summary of Oral Submissions from ISH8 [REP8-016] agenda item 5.1(v), which confirmed that paragraphs 5.1.1 and 5.1.2 of the DAMS were amended at deadline 8 to provide further clarity. Post hearing note: See response 18.1.3 above with regards to the Applicant's position on the precedence that the DAMS will take over the DEFRA Code.
18.1.5	4.3 Miscellaneous iv. Ground Movement Monitoring Strategy (MW-CH8, cf: DAMS, para 5.2.7). Has an agreed specification been established for acceptable levels of vibration and settlement? How should monitoring and remediation, during and post construction, be	The Applicant has previously responded to the CBA's comments on vibration and settlement on archaeological remains above the tunnel and 3D modelling in its Comments on any further information requested by the Examining Authority and received to Deadline 7 [REP8-013; item 2.1.37].



secured? - Through the OEMP? or through an additional Requirement?

Mr Lambrick noted that

- In the absence of established archaeological standards for acceptable levels of vibration and settlement the CBA had suggested in its answers to the ExA 2nd Questions ([REP6-084] pp 69-77) at the accuracy that archaeologists apply to their recording together with the potential occurrence of deposits and objects of particular sensitivity to damage offered some broad parameters, which suggest that currently estimated movement of 2-3cms could be significant
- There are established methods for 3D modelling of ground movement over tunnels that should be applied (albeit requiring more information about geological conditions as outlined by others).
- The proposal to 'minimise' the number of monitoring points is not a satisfactory approach: the objective should be to ensure a robust basis for detecting and monitoring potentially harmful movement and take action to minimise harm.
- Actual movement should be correlated with the 3D computer medalling for future reference

However approved, a specific tailor-made scheme is needed to ensure that sufficient measuring points are included to monitor movement both in relation to known sites and monuments and as a general record for any as yet undiscovered remains – noting that none of the burials cremations and pits found in evaluation were known or detected by geophysics.

The Applicant also responded in relation to modelling as recorded in its Written Summary of Oral Submissions made at ISH8 [REP8-016] agenda item 4.3(iv) as follows:

Mr Taylor QC clarified (in response to comments from Mr Lambrick) that the purpose of the monitoring proposed in the Ground Movement Monitoring Strategy was not to verify the computer modelling, as it is extremely robust. The monitoring is to ensure that much lower levels of settlement are generated by the Scheme. Mr Taylor QC further explained that there has been considerable research in terms of computer modelling being verified by monitoring, for example, Cross Rail, where the computer modelling predicted 10mm of settlement and the monitoring showed it was actually 1mm. Mr Taylor QC confirmed that the standard required by the best practice approach had been applied.

Ms Ayliffe explained that it is not standard practice to have 3D geology models at this stage of a tunnelling project. The tunnelling contractor will not be relying on a 3D geology model; they will be relying on what is happening in the ground on the basis of the location-specific ground investigation particularly where they break out from the protection of the TBM tunnel primary lining at cross-passage locations. Ms Ayliffe further explained that a 3D geology model was useful in complex situations where other infrastructure was present and there was complex geology, however, such models have not been used on similar projects to the Scheme to the level of detail suggested.

Ms Ayliffe confirmed that the approach for the Scheme has been to apply best practice, which has involved applying 2D modelling to a 3D environment. Ms Ayliffe noted that the assessment that had been undertaken was particularly conservative. Post hearing note: This assessment included the application of the standard conservative Greenfield assessment at 100m centres along the alignment as part of a staged approach to understanding the development of tunnelling-induced ground settlement, that has been used in every tunnelling project requiring consent; interpolation between these points is used as standard to apply the 2D results into 3D predictions of movement. The standard Greenfield assessment was supplemented by 2D Finite Element Analysis at 200m centres along the alignment, again interpolated into 3D predictions of movement, allowing more accurate



modelling of the actual rock parameters determined from the Ground Investigation. Regarding the CBA's comment on minimising the number of monitoring points the Applicant has previously responded on this in its Comments on any further information requested by the Examining Authority and received to Deadline 7 [REP8-013; item 2.1.39] where it stated that. 'The installation of monitoring equipment and programme of monitoring to monitor ground movement above the tunnel will be included as part of the Heritage Management Plan required by item PW-CH1 and MW-CH1 of the Outline Environmental Management Plan. The Ground Movement Monitoring Strategy will be developed in accordance with best practice including the British Tunnelling Society and International Tunnel Association as part of the risk management of the works. This will include a detailed consideration of the location of monitoring with respects to the archaeology.' Both the potential for undiscovered archaeological remains and identified heritage assets will be considered in the Ground Movement Monitoring Strategy. See also the Applicant's Written Summary of Oral Submissions made at ISH8 [REP8-016] agenda item 4.3(iv) with respect to monitoring locations and the approach in the Ground Movement Monitoring Strategy. 18.1.6 4.4 Design Regarding the CBA's comments 'on air quality issues in the vicinity of monuments close to the scheme, especially the tunnel portals where vi. Design consultation (Section 4.5): Discussion. ventilation would focus emissions' the Applicant has responded previously to this point in its Comments on any further information requested by the Mr Lambrick noted that Examining Authority and received to Deadline 7 [REP8-013; item 2.1.34]. • The CBA had previously highlighted (CBA Main submission Paragraph 5.9.45 seq. of Chapter 5 of the ES: Air Quality [APP-043], sets out [REP2-070] para 63, pp 21-2) that the ES failed to report on that the emissions of air pollutants from the Scheme tunnel portals are not air quality issues in the vicinity of monuments close to the considered to be potentially significant for air quality sensitive receptors scheme, especially the tunnel portals where ventilation would outside the tunnel. focus emissions. Additionally, the air quality effects of the scheme around the tunnel portals Since the previous hearing the Planning Policy Guidance for and approaches were considered within the response to Written Question the Historic Environment has been up dated (23rd June) AQ.1.12 [REP2-023]. The response identified that air quality around the confirming that 'smell' is an aspect of setting that needs to be scheme approaches and tunnel portals is good and that significant air quality considered. effects were not expected. The design of the tunnel ventilation system could affect this.



Highways England

- Referred to the ES and said that it fulfilled the defined scope and normal standards for air quality assessments in relation to sensitive receptors as defined by DMRB etc.
- Detailed figures had already been presented for sensitive receptors

Mr Lambrick noted that

- This an issue of SETTING not the amenity of domestic residences or ecologically sensitive receptors.
- As previously noted by the CBA ([REP2-070] para 63), the ES has NOT presented details of air quality impacts in the vicinity of monuments close to the scheme, especially those close to the tunnel portals where a change from clean air to concentrated emissions close to the tunnel portals in particular is most likely to be significant.
- The Avenue is the most obviously affected case.

Post Hearing Note:

- j) That smell and/or the intrusion of smell is an aspect of heritage settings that needs to be considered where relevant is already established by Historic England's The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) pp10-11. The 23rd July update of PPG Historic Environment has now recognised this in formal government policy (See https://www.gov.uk/guidance/conserving-and-enhancing-the-historic- environment).
- k) 200m is the standard proximity for air quality assessment according to DMRB, but this is for general purposes; a greater distance seems likely to be relevant for the concentrated emissions from ventilation of a 3.3km to 3.55km tunnel.

With regards to the impact of smell and 'emissions' on the setting of monuments, this was considered during the Setting Assessment [APP-218], and fed into the ES [APP-044] and the HIA [APP-195]. It should be noted, however that in relation to smell, road traffic is not a recognised source of odour, as the principal emissions from road vehicles are oxides of nitrogen and particulates which are not odorous.

See also the Applicant's Written Summary of Oral Submissions made at ISH8 [REP8-016] with respect to agenda item 4.4(v).

With regards to 'the Avenue', its setting will be improved by the construction and operation of the Scheme, as it is currently bisected by the existing road.

- j) See above response with regards to the impact of smell and 'emissions' on the setting of monuments.
- k) In relation to the distance that air quality should be considered around tunnel portals and the applicability of a 200m study area, this was addressed and 200m confirmed as appropriate within Paragraph 5.9.49 seq. of ES Chapter 5: Air Quality [APP-043].
- I) As described above the air quality effects of the scheme around the tunnel portals and approaches were considered within the response to Written Question AQ.1.12 [REP2-023]. The response identified that air quality around the scheme approaches and tunnel portals is good and that significant air quality effects were not expected. As noted above, road traffic is not a recognised source of odour. The impacts and effects on the Countess Farm West Barrows and the Avenue are considered in ES Chapter 6 [APP-044] and the HIA [APP-195].

Response to post hearing notes m) and n): the updated OEMP [REP8-006] includes a specific commitment (commitment D-CH13) within Table 3.2b (REAC tables for the Main Works) that states that there shall be no tunnel ventilation shafts within the WHS.



L) Monuments within or very close to 200m from the E tunnel portal		
includes two barrows; those within or very close to 200m from the E		
tunnel portal include a section of the Avenue and four individual		
barrows or barrow clusters.		

- m) As noted in CBA's main written submission ([REP2-070] para 63 pp 21-2) although ventilation is assumed in the ES to be provided by longitudinal jet fans at the tunnel portals, the latest OEMP (item MW AIR 3) still specifies nothing in relation to this, and it remains an issue to be proposed by the Main Contractor authorised at the sole discretion of Highways England "during construction of the tunnel" without reference to Historic England or Wiltshire County Council.
- n) This provision and the DCO do not preclude the Main Contractor choosing to opt for different ventilation methods such as by ventilation shafts. There is no indication of where these might be placed and potential impacts, or how their design would be handled.

18.1.7

5. DAMS (DL7 version [REP7-019 and REP7-020])

5.1 Part 1 – DAMS

ii. Section 4 – Archaeological Research Agenda. Discussion.

Mr Lambrick noted that

- The addition into the DAMs of more acknowledgement of research issues is welcomed but does not overcome the serious flaws in the DAMS (See CBA Response to ExA 2nd Questions [REP6-084] pp 25-6)
- This is because its whole approach is bottom-up damagelimitation philosophy based on known sites and monuments and what was found in survey and evaluation work, not properly taking account of the substantial limitations and uncertainties entailed.

(ii) We note the CBA's positive comments that more acknowledgement of research issues is welcomed. However, as stated in response to item 40.1.1 in the deadline 7 – Comments on any further information [REP7-021] and in response to item 10.1.1 in Deadline 8 – Comments on any further information [REP8-013] the Applicant refutes that the Draft Detailed Archaeological Mitigation (DAMS) is a flawed document.

As stated in response to item 2.1.8 in the deadline 8 – Comments on any further information [REP8-013], the Applicant does not agree that the DAMS is a 'bottom-up damage limitation' approach but is research-led as agreed with Wiltshire Council, Historic England and HMAG. The Applicant does not agree with the CBA's comment that the approach 'does not take into account the substantial limitations and uncertainties entailed'. The Applicant has taken a precautionary approach and considered what potential archaeology may be uncovered by the Scheme. Both top-down and bottom-up approaches have been considered in the Archaeological Research Agenda (ARA) of the DAMS (as submitted at deadline 9; Section 4).

The Applicant refutes the CBA's comment that 'the current approach is hampered by any quantitative analysis'. As stated in response to item 5.1 ii in



- A more productive and realistic approach would be a topdown spatially structured approach to consider the opportunity that the scheme presents to address much larger issues which could be addressed, based on extrapolations from previous knowledge and the results of survey and evaluation work (in terms of scale, location and time-span of the actual archaeological content of the areas affected by the scheme).
- Such an approach would seek to overcome rather than be steered by the limitations and uncertainties of the survey and evaluation work.
- The current approach is badly hampered by the lack of any quantitative analysis of the limitations of the survey and evaluation work or any predictive analysis of the potential real archaeological totality of the areas affected by the scheme (See CBA Written Submission [REP2-070] p 14-16; and Supplementary Observations on Fieldwork Reports [REP2a-005] pp 21-5).
- The recurrent use of the outdated and discredited term 'preservation by record' in the DAMS is unhelpful and misleading. There is no equivalence between investigation and recording and preservation (as CBA has repeatedly stressed). There is a real policy differences in this respect as reflected in NPSNN paragraph 5.139, now reinforced by the recent revision of the Historic Environment PPG, paragraph 002.
- Highways England have displayed an inappropriate degree
 of hubris in dismissing the very real issue of preservation for
 the benefit of future generations when questions will be
 different and investigative techniques far better than they are
 now: this is the case now as compared with a generation
 ago. Here again it is not coincidence that NPSNN (like
 NPPF) refers to the importance of conserving irreplaceable
 heritage for future generations (See CBA Written Submission)

the deadline 8 – Written Summary of Oral Submissions made at ISH8 [REP8-016], the Applicant submits that the ARA is based on the evaluation evidence and that this evidence has been correctly analysed and used in developing not only the ARA but also the mitigation strategies and approaches set out in the DAMS.

In response to the point made by the CBA that "preservation by record" in the DAMS is unhelpful and misleading'. As explained in Highways England's deadline 8 - Written Summary of Oral Submissions made at ISH8 [REP8-016] with respect to agenda item 5.4i this term is used in the DAMS as a convenient shorthand indicating the need for one or more forms of archaeological recording, in circumstances where archaeological remains cannot be preserved. In the DAMS, the term is applied to encompass Archaeological Excavation and Recording, Strip Map and Record, Archaeological Recording and Monitoring, Topographic Survey, etc. The Applicant acknowledges that the term is not used in current policy and quidance but submits that the use of the term in the DAMS is clear and the archaeological mitigation approaches covered by the term represent current practice. The approach to heritage mitigation follows current principles including maximising the public benefits of development-led investigation through the Public Archaeology and Community Engagement Strategy (DAMS Appendix E: REP8-004), the emphasis on a strategy focussed on archaeological interest and significance, and its research focus.

The interpretation of paragraph 5.139 of the NPSNN has been addressed above in item 18.1.1.

In response to the point made that "Highways England have dismissed the issue of preservation for the benefit of future generations when questions and techniques are better than they are now" the Applicant has responded to this previously in response to agenda item 6 from the deadline 4 – Written Summary of Oral Submission [REP4-030] and its comments on the Council for British Archaeologists' written representation [REP3-013] at paragraph 21.4.4, and also in response to CBA in the Applicant's response to deadline 7 submissions [REP8-013] items 2.1.4 and 2.1.30. These responses explain that it is an unpersuasive position to assert that the Scheme should be prevented from being progressed in the face of a speculative argument that future technology may discover more information in this area of the WHS.



[REP2-070] pp 6, 13, 18, 21, 31, 35, 37; and Supplementary Observations on Fieldwork Reports [REP2a-005] pp 22-23).

iii. Para 5.1.18 – Unexpected discoveries during the construction process. Do these procedures also apply to the Preliminary Works?

Mr Lambrick noted that

- With respect to both 5.1.18 and 6.1.18 the question of unexpected discoveries needs to be considered in relation to the potential for delays (paragraph 6.1.20). As CBA have commented in relation to ExA Questions 2 ([REP6-084] pp 28-30), it is where substantial unexpected discoveries result in delays or rearrangements in programming that the greatest problems arise (either impacting on construction or on the time available to complete archaeological work).
- The procurement process is a key consideration to ensure that all parties work in partnership to resolve problems (BAA's approach to Terminal 5 being a good example involving very extensive archaeology) – see CBA comments on ExA Questions 2 ([REP6-084] pp 29).
- Highways England commented that all archaeological works would be part of the Preliminary Works programme before the Main Contract, so conflicts would not arise.

Post Hearing Notes:

- o) While provision to complete all archaeological works prior to the main contract is a sensible precaution it is not clear what contractual precautions will be built in to guarantee this and ensure that any overruns do not impinge on the main contract.
- p) It should be noted that this is further complicated by the potential for the Archaeological contractor to be different for the Main Works as compared with the Preliminary Works (draft DAMS

This is particularly the case having regard to the technology which is already available now, the comprehensiveness of the assessment undertaken and the mitigation measures in place in the Detailed Archaeological Mitigation Strategy (DAMS) [REP8-004].

The application documents, in particular the Case for the Scheme [APP-294], have set out the need for the Scheme; it is neither appropriate nor a feasible approach to delay or prevent a development on the basis that there could potentially be better technologies in future. Taking that approach, no infrastructure would ever be delivered, despite the need for it. In any event, were future technologies to be developed, the Applicant has built into the Scheme via the DAMS the ability to allow for archaeological remains that are excavated as part of the Scheme works to be preserved in anticipation of further analysis.

(iii) See Highways England's response to agenda item 5.1 (iii) in the Applicant's deadline 8 – Written Summary of Oral Submissions [REP8-016] in respect of the point that "discoveries needs to be considered in relation to the potential for delays" which explains the Scheme aims to deliver 90% of the archaeological works during the Preliminary Works stage, and as a result it is expected that archaeology would be removed before the Main Works stage commences. Highways England is therefore content that the risk in terms of programme delay has been managed in the way the works are being contracted.

The Applicant notes CBA's comments in relation to the point that "the procurement process is a key consideration to ensure all parties work in partnership to resolve problems". Highways England has responded to this point in 2.1.8 in the Comments on any further information requested by the ExA and received to Deadline 7 [REP7-021] which explains that these aspects have been a part of the Applicant's philosophy for some time in its development of the delivery programme for the archaeological mitigation works (as set out in the draft DAMS) and in its approach to procurement.

Regarding the tendering process, documentation, and selection of archaeological contractors, the archaeological contractors will be required to comply with the terms of the DAMS and the plans and statements sitting under it.



paras 5.1.9 to 5.1.12). This potentially means a significant loss of coherence in terms of archaeological endeavour, however careful the handover.

Highways England acknowledges that the transition between the Preliminary Works and the Main Works phases is important to the delivery of the DAMS and an appropriate mechanism for this has been included in the draft DAMS as submitted at deadline 9 [paragraphs 5.1.9-5.1.12].

q) This reinforces the CBA's point about ensuring that the contract procurement process is embedded in principles of collaborative continuous improvement to achieve enhanced quality of outcome (see CBA Comments on ExA 2nd Questions, [**REP6-084**] pp 29-30)).

The Applicant agrees with the CBA's point that the contract procurement process should be embedded in principles of collaborative continuous improvement to achieve enhanced quality of outcome and this is what is being developed by the Applicant.

18.1.8

v. Para 5.2.18 - Soils handling strategy. Discussion

vi. Para 5.2.35 – Earthworks haul roads. In addition to the all-weather haul roads indicated in Fig 2.7. How is archaeology to be protected?

Mr Lambrick noted that

 The CBA has repeatedly drawn attention to the problems arising from the conflicts between DEFRA and BS soil handling requirements and archaeological preservation in situ, but without the applicant providing ANY explanation, calculations or projections to show otherwise (see CBA Submission [REP2-070] pp 16-17; Supplementary Observations on Fieldwork Reports [REP2a-005] pp 23-4; Comments on ExA's 2nd Questions [REP6-084] pp 36-40, 72, 84).

Highways England referred to its previous responses and read out a long passage that indicated what was intended, but provided no new clarity as to how the conflicts would be resolved.

Mr Lambrick noted that

 The points have been made repeatedly without any substantive response being offered by the Applicant even to acknowledge that there could be a problem of reconciling soil handling standards and archaeological requirements. The Applicant intends to preserve topsoil in situ where it has indicated an area for the preservation of archaeological remains in the DAMS. In these areas a 'no-dig' solution with regards to the topsoil will be instigated and archaeological remains will not be impacted by construction (temporary or permanent). Regarding the deliverability of preservation in situ requirements, it is the Applicant's view that preservation in situ is feasible and deliverable. The Applicant provided clarity on the fact that it does not expect the DEFRA Code to override the detailed considerations in the DAMS in its response at ISH8 [REP8-016; agenda item 3(v), page 1-33]. See the Applicant's response to item 18.1.3 and 18.1.4 above.



	Given the limited time available for this hearing the ExA is referred to the CBA's detailed illustration of the how the provisions of the DEFRA guidance are not compatible with achieving archaeological preservation in situ (see refernces above and in particular CBA responses to ExA Questions 2 [REP6-084] pp.36-40)	
18.1.9	5.2 Part 2 – Overarching Written Scheme of Investigation (WSI) ii. Para 6.1.21 – Interruptions and Delays. Agreement should take place between the parties on cessation or resumption.	As explained at ISH8 in response to agenda item 5.2 (ii) [REP8-016], the provisions for management of decisions regarding interruptions and delays are set out in paragraph 6.1.21 of the DAMS and these recognise the need for prompt decision-making to prevent potential damage to archaeological remains.
	Mr Lambrick noted that The points have been made above (referring to para 5.1.18 and 6.1.18) – while seasonal delays are possible, they should be allowed for in the time allocations for each area of work according to season (see CBA response to ExA Questions 2 [REP6- 084] pp. 28-30).	Given the need for those timely decisions to be made on site, Highways England consider these should be made by the Archaeological Contractor and the Technical Partner's Archaeologist (TPA). The TPA will be represented on site by the Archaeological Clerk of Works, ensuring full awareness of the circumstances. Wiltshire Council, Historic England and HMAG will be kept fully informed through the monitoring provisions at Section 8.1. The Applicant acknowledges that seasonal variability should be factored in to the delivery programme for the archaeological works, and this will be taken in to account during the development of the Preliminary Works programme and the Main Works programme.
18.1.10	i. Paras 6.2.4 to 6.2.6 - Preservation Beneath Fill. The method statement should take account of the different kinds of possible overload - heavy, dynamic load as well as static load (cf paras 5.3.16 to 5.3.19 – Protection beneath fill material and construction working areas). Post Hearing Note	As explained in the post hearing note in the Applicant's Written Summary of Oral Submissions at ISH8 in relation to agenda item 5.3 (i) [REP8-016] paragraph 6.2.6 has been amended in the DAMS submitted at D8 to take account of dynamic loads. "6.2.6 The PW or MW Contractor (as relevant) will describe in a Method
		Statement the effects of compression and loading (whether dynamic or static) and site specific protective measures, including the extent of the area to be protected, the depth of fill required and the type of fill []."
	r) The CBA has consistently raised the issue of the absence of technical detail to show that preservation in situ is proposed is	See response 18.1.3, 18.1.4 and 18.1.8 above with regards to the soils handling standards and strategy.
	feasible. The Applicant's acknowledgement that heavy dynamic loads as well as static loads must be taken into account mere	With regards to the CBA's comment regarding 'the risk that areas returned to agriculture would be deemed by the farmer to require de-compaction -



recognises the obvious: it provides no explanation of the types of archaeological damage that need to be addressed and how the measures would be reconciled with soil handling standards or the risk that areas returned to agriculture would be deemed by the farmer to require de-compaction - whether or not a real problem were to exist (see above and CBA Submission [REP2-070] pp 16-17; Supplementary Observations on Fieldwork Reports [REP2a-005] pp 23-4; Comments on ExA's 2nd Questions [REP6-084] pp 36-40, 72, 84).

whether or not a real problem were to exist' item MW-CH5 of the Outline Environmental Management Plan (OEMP) [REP8-006] (a final version of which is submitted at deadline 9) requires that the main works contractor will prepare an Archaeological Method Statement (in compliance with the provisions of the DAMS and the approved HMP) setting out how it intends to preserve in situ sensitive archaeological remains and prevent deformation of topsoil/ subsoil horizons (including no-dig solutions), and how the measures would be reversed following the end of construction (e.g. removal of temporary compounds) and the ground and the surface returned to its original shape and condition. The DAMS [REP8-008; para 5.2.40] states that 'Topsoil preparation prior to return to agriculture would be limited to ploughing to the depth normally applied by the landowner.'

Land which is currently in agricultural use, and which is used for temporary construction compounds by exercise of the powers of temporary possession in the DCO, will be returned to agriculture; the Applicant will have no control over the use of such land thereafter and it is not therefore possible to restrict normal agricultural practices in these areas.

18.1.11

5.4 Preservation by record – sections 6.3 to 6.5

(Including a 10-minute presentation by Professor Parker Pearson – and a 10-minute presentation by Mr Lambrick)

Mr Lambrick made a short presentation about the archaeology of tree throw holes (See CBA Slide Deck [AS-075]).

- Slide 1: Mr Lambrick noted that most of his slides related to one of his excavations at Drayton Cursus near Abingdon Oxon which is cited by Highways England. The investigation specifically targeted and area sealed by alluvium
- Slide 2: Mr Lambrick explained the formation of tree-throw holes and their often distinctive stratigraphy, noting that upturned root plates can be used as shelters and archaeological material may be deposited, specially placed or redeposited with slumped soil into the hole carved out by the tree

The CBA's presentation on tree throws and their importance is welcomed and noted. Tree throws (or tree hollows) are recognised by the Applicant in the DAMS as an important feature of archaeological sites that require archaeological investigation [REP8-008; para. 6.3.49]. The Applicant also recognises the importance of the ploughzone [REP8-008; paragraphs 5.3.29-5.3.31 and 6.3.11-6.3.19] and the importance of buried ground surfaces [REP8-008; para. 6.3.43]. The Applicant recognises the research potential of these deposits and features and their relevance for understanding past human activity within the WHS landscape and its environs. The Applicant agrees with the CBA that they need to be treated as valuable and complementary sources of information, not separate entities, and the provisions of the DAMS reflect that.



- Slide 3: Mr Lambrick noted that at Drayton about 30% of the old ground surface beneath the alluvium was occupied by tree-throw holes; it was possible to discern which direction they had fallen (raising issues of agency); and recover dating evidence (in this case spanning early/middle Neolithic to Beaker periods)
- Slide 4: Mr Lambrick noted the relative distribution of pottery and flintwork relative to three small pits and a spread of charcoal.
- Slide 5: Mr Lambrick noted the variety of flintwork and pottery found in tree-throw holes, including much of an Ebbsfleet ware bowl (bottom right) which may have bee a deliberate deposit.
- Slide 6: Mr Lambrick noted the very high proportion of finds and animal bones coming from the old ground surface (which in other cases would have been incorporated into the ploughzone) and tree-throw holes and the very low proportion from deliberately dug pits. He explained that the histograms for pits include ALL pits on the site, not just those from the excavation area with the old ground surface and tree holes. The pits and spread there had produced only one sherd of pottery and a few flint chips: a more realistic figure would be less that 1% finds in pits. He also drew attention to the differences in charcoal recovered from tree holes and pits and domestic burnt spreads, suggesting very different sources of firewood from the ambient environment.
- Slide 7: Mr Lambrick explained how another example at Rollright N Oxon illustrates how a tree-throw could be associated with a very short one-off episode in Mesolithic tool preparation, and how that evidence could have been ploughed out, illustrating the complex interplay of buried surfaces, tree-throw holes and the ploughzone.
- Slide 8: Mr Lambrick explained that as between deliberately dug features, tree-throw holes, buried ground surfaces and



the ploughzone, these represent deposits that have different pros and cons in terms of how they contain evidence of past human activity, both spatially and quantitatively, but also qualitatively. As such they all need to be treated as valuable and complementary sources of information, not separate entities. In particular, tree throw holes and any surviving buried soils should be seen as directly complementary to the ploughzone and vice-versa.

NOTE: AFTER THE PRESENTATIONS, DUE TO PRESSURES OF TIME, SEVERAL ITEMS WERE NOT DISCUSSED (OR WERE ONLY REFERRED TO GOVERNMENT BODIES FOR COMMENT): THE EXAMINING AUTHORITY INVITED WRITTEN COMMENTS INSTEAD.

18.1.12

8. BLICK MEAD HYDROLOGY

Mr Lambrick noted that

- As explained in detail in the CBA's response to ExA 2nd Questions ([REP6-084] pp 47 to 54) the issues involved at Blickmead involve a highly complex situation involving
 - A complex 3-D archaeological horizon varying significantly in height thickness and composition
 - o Substantial variation of hydrological conditions
 - o Signifcant variation in preservation
 - o Significant chronological variation in remains.
- As outlined in the hearing on 6th June and in more detail in the CBA's response to ExA 2nd Questions ([REP6-084] esp pp 49-50), the issue is not just about hydrological variability of height, but also duration and in relation to highly variable parameters affecting preservation of organic remains

The Applicant has responded previously to the CBA's comments regarding the need for 'a bespoke heritage-led approach' with regards to the preservation of waterlogged deposits at Blick Mead, in the Applicant's Written Summary of Oral Submissions put at the Hearings in June 2019 [REP4-030]; agenda item 8 (iii), where it stated that it 'confirmed that the [tiered] assessment had been undertaken carefully and fully. The assessment confirmed that no element of the scheme is likely to have a material effect upon the hydrology of Blick Mead and no mitigation would be required to preserve the significance of Blick Mead.' The tiered assessment [APP-282] has been accepted by Historic England as being undertaken adequately and following its guidance — Preserving Archaeological Remains Decision-taking for Sites under Development (Historic England 2016). As no element of the Scheme is likely to have a material effect upon the hydrology of Blick Mead, a bespoke solution in not required.

The groundwater levels and rainfall and drainage at Blick Mead would not be affected by the Scheme and therefore there is no mechanism for hydrological impacts at Blick Mead. Given that no significant effects are predicted at Blick Mead [APP-282], additional investigations into the detail of Blick Mead and site specific modelling would not change the outcome of the assessment. (paragraph 11.1.2 [REP5-003]).



	Given the complexity of the situation, the variable involved and the significant problems with the record to date ([REP6-084] pp 50 to 52), it seems very clear that a bespoke heritage-led approach is needed that fully reflects the complexities involved.	The importance of the Blick Mead site is recognised by Highways England and provisions are made in the draft Development Consent Order through the OEMP [REP8-006] for Blick Mead to be included in the Groundwater Management Plan (MW-WAT10) as follows: 'f) In respect of all of the above matters, the Plan must specifically indicate how Blick Mead and private water supplies are to be considered. During the development of the Groundwater Management Pland, the main works contractor shall consult with the Environment Agency and Wiltshire Council with regard to the groundwater flood risk component and any heritage implications to Blick Mead'.
18.2	Additional Submission	
	Matter Raised	Highways England's Response
18.2.1	Introduction 1.Under a later item (5.5) Mr Lambrick drew attention orally to	2. The Applicant refutes the CBA's comment that 'the methods and sampling strategy actually proposed in the draft DAMS falls far short of [the highest practicable standards]'. As stated in 5.1.2 of the DAMS [REP8-008]:
"The archaeological mitigation programme will address the Archaeological Research Agenda (ARA, see section 4 above) and will be undertaken to the highest practicable standards, employing innovative data collection approaches and techniques." "a comprehensive program recording will be implement excavations, recording, reportative data collection approaches and techniques."	'a comprehensive programme of archaeological mitigation fieldwork and recording will be implemented. This will include archaeological excavations, recording, reporting, publication, and dissemination to local communities, the wider general public and academics. The archaeological mitigation programme will address the Archaeological Research Agenda	
	It will also be noted that paragraph 1.2.2 states that	(ARA, see section 4 above) and will be undertaken to the highest
	"The Scheme passes through a landscape of high archaeological significance, both inside and outside the WHS. Accordingly, the intention of the Strategy is to apply the highest practicable standards of mitigation, employing innovative approaches to address a	practicable standards, employing innovative data collection approaches and techniques. The question-led approach will aim to contribute to the corpus of archaeological research and understanding to mitigate the loss of archaeological remains.'
	question-based research strategy that places the significance of the archaeological resource at the centre of decision-making both at design and implementation phases."	3. The Applicant refutes the CBA's comments that 'significantly different standards are be adopted for different kinds of archaeological mitigation arbitrarily divided between those areas within the WHS and those outside it'. This is not correct as, for example, an archaeological mitigation strategy for ploughzone archaeology is proposed both within the WHS (western portal



- 2.ALL aspects of the DAMS sections covering investigative excavations (ie 6.3 to 6.5 but also 6.6 and 6.7) thus need to be judged against this self-imposed requirement to achieve "the highest practicable standards." As a clear principle applicable to the whole scheme and in particular the WHS and its environs that contribute to its OUV, this is entirely appropriate; but the methods and sampling strategy actually proposed in the draft DAMS falls far short of this.
- 3. For unexplained (mechanistic, procedural or legalistic?) reasons significantly different standards are be adopted for different kinds of archaeological mitigation arbitrarily divided between those areas within the WHS and those outside it, not taking account of whether the material contributes to an understanding OUV (let alone the wider scheme-wide commitment expressed in paragraph 1.2.2.
- 4. Currently, as emphasised by the CBA as well as by the Consortium of Archaeologists, the methods and sampling strategy proposed do not reflect the 'highest standard' of research that is 'practicable' from an archaeological perspective. They are far more akin to a 'business as usual' approach where the emphasis is on general characterisation of the archaeological resource rather than robustly ensuring across all aspects that the full potential is met, including full identification and recovery of very rare but important evidence.
- 5. The limits of what is 'practicable' as implied by the different methodological approaches and sampling proportions set out in the draft DAMS is NOT determined by what is technically possible archaeologically, or in terms of what research questions might be addressed given sufficient time and resources the proposals do not involve anything obviously innovative. For example, there is no proposal to work with Universities to develop new methods or refine technologies or carry out rigorous scientific scrutiny of sampling procedures to show what information is lost in standard approaches.
- 6. The actual limitations of what is deemed 'practicable' as set out in the draft DAMS are left undefined, and the options to increase levels of sampling etc show that the starting point is not the 'highest practicable standard' but something well below from which higher

and approaches, eastern portal and approaches and Rollestone corner) and outside the WHS at Longbarrow junction.

The Applicant also refutes the CBA's comment that the archaeological mitigation strategy, as proposed in the DAMS [REP8-008] is 'not taking account of whether the material contributes to an understanding OUV.' As stated in the version of the DAMS submitted at deadline 8 [REP8-008; para. 1.2.2], 'Accordingly, the intention of the Strategy is to apply the highest practicable standards of mitigation, employing innovative approaches to address a question-based research strategy that places the significance of the archaeological resource at the centre of decision-making both at design and implementation phases. [Applicant's emphasis]' and also, for example paragraphs 6.3.41, 6.3.42, 6.3.43, 6.3.44, 6.3.47 where it states that 'The significance of the remains and their potential to contribute to the OUV of the WHS will be considered in consultation with Wiltshire Council and Historic England (and, for sites within the WHS, HMAG) in determining the sample size to be excavated.'

- 4. See point 2 above. The Applicant also refutes the CBA's comment that the DAMS as issued is 'more akin to a 'business as usual' approach where the emphasis is on general characterisation of the archaeological resource rather than robustly ensuring across all aspects that the full potential is met, including full identification and recovery of very rare but important evidence.' It is the Applicant's view that the DAMS offers the opportunity to deliver a research-led approach to archaeological mitigation that places the significance of the archaeological resource at the centre of decision-making with regards to the levels of sampling required in consultation with Wiltshire Council, Historic England and, within the WHS, HMAG. This will robustly ensure, across all of the archaeological mitigation aspects of the project, that the potential of the archaeological remains to answer key research questions according to their significance is met including the identification and recovery of very rare and important evidence.
- 5. The Applicant agrees with the CBA in that the different methodological approaches and sampling proportions set out in the draft DAMS are not determined by "the limits of what is 'practicable'" or what is 'technically possible archaeologically', or by "what research questions might be addressed given sufficient time and resources". As stated in [REP8-008;



standards can be sought if desired. In the absence of any technical archaeological constraints, one or more of the following are presumably the constraining factors currently applied:

- An unspoken and entirely undefined limit on what time, resources and specialist expertise that Highways England is prepared to devote to the work
- o A programming time limit
- A basic failure to look beyond 'business-as-usual' limits on what is normally expected of developers, rather than applying the same standards that are applied to any research-led archaeology within the WHS or affecting its OUV.
- 7. Given the extent of the WHS and its environs that contribute to OUV that are affected by irreparable loss of archaeological remains, it is more important that the highest standards are applied, not less so just because the scale of work would be so substantial.
- 8. As the CBA observed at the hearing on June 6th, a highly precautionary approach is needed, and this should be seen in the wider policy context including how the limits of archaeological investigation proposed preclude later re-investigation by future generations. This needs to be judged in the context of:
 - o NPSNN paragraphs 5.1.22, 5.124, 5.129, 5.131 and 5.139
 - o Historic Environment PPG (July 23rd 2019) paragraph 002
 - o WHS Management Plan paragraph 2.3.1

AND must also be viewed in the context of cumulative effects, as indicated by

- o NPSNN paragraphs 4.16 to 4.17
- o PINS Infrastructure advice note 17.

- para. 1.2.2] 'Accordingly, the intention of the Strategy is to apply the highest practicable standards of mitigation, employing innovative approaches to address a question-based research strategy that places the significance of the archaeological resource at the centre of decision-making both at design and implementation phases.' It is not the role of the DAMS to present innovative and untested methods, but to put forward a framework within the DAMS within which the Archaeological Contractor(s) can work. This does not constrain the Archaeological Contractor in any way from developing and applying innovative approaches or ways of working to deliver the works as proposed or to suggest collaborative working with Universities. The Applicant is always open to innovation and new ideas, methods, approaches and changes in technology.
 - a) 6. The Applicant has previously responded to this point [REP8-013; item 2.1.8] where it stated that: 'The DAMS has been revised at Deadline 7 [REP7-019] including updates to the ploughzone artefact collection strategy (paras. 6.3.11 – 6.3.18); artefact recovery strategy (paras. 6.3.28 – 6.3.35 – including bulk sieving for the recovery of small items such as Mesolithic microliths) and the overall excavation sampling strategy (paras 6.3.36 – 6.3.52). The DAMS sets out the minimum sampling requirements, noting that these may be varied to suit the research value of the remains, subject to consultation with Wiltshire Council and Historic England and, for sites within the WHS. HMAG and the TPA: the SSWSI will identify the appropriate sample for excavation, but the strategy responds reflexively to the significance of the archaeological remains as it is excavated on site and varies the sampling accordingly through the consultation process. The results and application of this approach will be reviewed as part of the iterative application of the DAMS, with the potential to revise the sample size upward or downward in the light of emerging results.' The strategy on site is developed reflexively and responds to the significance of the archaeological remains in consultation with Wiltshire Council, Historic England and, within the WHS, HMAG, and is not limited by time, resources, specialist expertise or programme as suggested by the CBA. With regards to the CBA's comment that the Applicant has taken a 'business-as-usual' approach 'rather than applying the same standards that are applied to any research-led



archaeology within the WHS or affecting its OUV', the Applicant has previously refuted these points [REP8-008; para. 2.1.8]. The work as proposed in the DAMS is not 'business as usual'. The Applicant is following a research-led approach, based on current research frameworks and agendas, the archaeological evaluation results and as discussed and agreed with Wiltshire Council, Historic England and HMAG. With regards to the CBA's comment that we should apply the same standards as academic projects within the WHS, the Applicant has responded to this in previous submissions (see items 18.2.19 and 34.1.17 [REP5-003]).

- 7. The Applicant has responded previously to the point by the CBA regarding the irreparable loss of archaeological remains that contribute to OUV [REP8-008; para. 2.1.31]. 'The Applicant restates that the design has been specifically chosen to limit the landtake for the construction of the Scheme both within the WHS and outside of it. The Scheme avoids known funerary and ceremonial monuments and has been designed to minimise landtake and the loss of archaeological remains within the WHS. The archaeological remains that will be removed by the construction of the Scheme do not 'make a significant contribution to the OUV of the WHS' such that the integrity of the WHS would be diminished by the removal of these remains. Regarding the setting of assets and Asset Groups, these are considered both in the Setting Assessment [APP-218] and the HIA [APP-195]. The landscape design of the Scheme has been sensitively designed in order to integrate the Scheme into the existing landform and to remove the sight and sound of traffic from much of the WHS landscape, a key aspiration of the 2015 WHS Management Plan.' With regards to standards – the Applicant has responded to this above at point 3.
- 8. The Applicant has taken a precautionary approach and considered what potential archaeology may be uncovered by the Scheme, what research questions that archaeology could address and what investigative methods need to be applied and where in consultation with Wiltshire Council, Historic England and HMAG (including Wiltshire Council, Historic England, the National Trust and English Heritage). As noted above, the assertion from CBA as to limits on the archaeological investigation is not correct. The Applicant does not accept that its approach precludes re-investigation by



future generations, and it has responded on this point previously; see the Applicant's response to deadline 7 submissions [REP8-013] items 2.1.4 and 2.1.30. The Applicant has addressed compliance with the various policy requirements and guidance cited elsewhere. With respect to the NPSNN please see the Case for the Scheme and NPS Accordance [APP-294] (the PPG sits alongside the NPPF, the historic environment provisions of which accord with NPSNN), and the Heritage Impact Assessment [APP-195] has addressed the alignment of the Scheme with the WHS Management Plan 2015 (section 12.3). As noted earlier in this response, the Applicant has considered the likely significant effects of the Scheme, including cumulative effects, as set out in its Environmental Statement (see in particular Chapter 15 Cumulative Effects [APP-053]) and as required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and in line with other relevant guidance and policy. 18.2.2 i. Archaeological excavation and recording 9. The Applicant has previously responded with regards to the the need for a high percentage of ploughzone sampling [REP8-013; item 2.1.4] where it Agreement required on a baseline percentage for plough zone stated: and other sampling. 'The approach to ploughzone sampling was also discussed at the issue 9. CBA endorses Professor Parker Pearson's presentation which specific hearing on 21 August 2019, as recorded in the Applicant's written clearly made the case for a very high level of ploughzone sampling. summary of oral submissions in relation to Agenda Item 5.4 (submitted at 10. We further wish to emphasise that this substantially reinforced Mr deadline 8), where the Applicant's iterative and reflexive approach to Lambrick's presentation and vice-versa, showing the need for a sampling in the DAMS was explained. As noted in ISH8, the deadline 8 holistic understanding of the dynamics of deposit formation and DAMS proposes at paragraph 6.3.16 that a representative sample will be where cultural and ecological remains end up and what information identified for further ploughzone sampling, in consultation with Wiltshire may be lost if this is not fully understood and catered for in research Council and Historic England and, for sites within the WHS, HMAG. In some questions, objectives and investigative sampling methods. areas, a sample of up to 100% of the artefact content of the ploughsoil may be necessary, combined with a systematic sample to capture background 11. For these reasons and the more general point that the draft distributions and transitional areas. The strategy will adopt a reflexive DAMS is seeking to achieve "highest practicable standards" and approach such that the sample size may be increased locally in response to practical considerations of management we believe that the default the results of the systematic sampling." position should be 100% recovery with any departures from that being agreed with the relevant authorities based on clear 10. The Applicant states that the DAMS provides a framework for the demonstrable evidence that, allowing for chronology, rarity of archaeological mitigation works to be undertaken during the preliminary objects, function of objects, source of 'exotic' materials and clarity of works phase by the archaeological contractor. The mitigation works will



spatial patterning ALL useful research data could be recovered by a enable a holistic understanding of the processes and dynamics of deposit lower level of sampling. formation to be undertaken and to understand where cultural and palaeoenvironmental material ends up and the local taphonomic processes 12. The CBA has also highlighted other shortcomings of sampling in involved. The Applicant is following a research-led approach, based on current research frameworks and agendas, the archaeological evaluation

its comments on the EXA 2nd Questions ([REP6-084] pp 5-12)

results and as discussed and agreed with Wiltshire Council, Historic England and HMAG. 11. See point 18.2.2 (9.) above regarding 100% recovery of artefacts from the ploughzone. See item 18.2.1 above regarding 'highest practicable standards'

12. The Applicant has addressed the CBA's views on shortcomings of the sampling strategy as set out in the DAMS previously in [REP8-013; para 2.1.4]. See also the response to 18.2.1 (6.) above.

and the recovery or rare and important evidence.

18.2.3

- Para 6.3.15 How would the mechanism of a reflexive approach [to plough zone archaeology] operate? How are trigger points and proportions determined?
- 13. As clearly explained by Professor Parker Pearson and reinforced by Mr Lambrick in their short presentations, the approach to ploughzone archaeology is fundamentally misconstrued. As the CBA has previously observed ([REP6-084] pp 7, 26, 30) the key issue is to ensure recovery of the rare but important artefacts that elucidate a wide range of research issues, and (as Mr Lambrick noted in relation to another intervention at the hearing, it may well be where there is little sign of other activity that some of clearer indications could be found).
- 14. An 'opportunity' based approach would address this in the opposite manner, assuming 100% recovery would most securely meet all research issues across a wide range of spatial and chronological and thematic levels, and would then be tested by asking what lower proportion of recovery would still securely recover sufficient evidence to address all those issues?
- 15. This is what underpins the 100% sampling of the ploughzone that has been applied in the WHS as vindicated by Professor Parker

- 13. The Applicant does not agree with the CBA's view that the 'approach to ploughzone archaeology is fundamentally misconstrued. The Applicant asserts that it is a research-led approach following detailed consultation with Wiltshire Council, Historic England and, within the WHS, HMAG. The strategy as set out in the DAMS [as submitted at deadline 9; see paragraphs 6.3.15 and 6.3.18) encapsulates methods in order to capture chronologically or typologically diagnostic artefacts (the 'rare but important artefacts' as indicated by the CBA) and also to sample in areas where there is higher densities of lithics, transition areas, lower areas of lithics, or areas that appear to be devoid of lithics.
- 14. Regarding 100% sampling, see 18.2.2 (9.) above. An 'opportunity' based approach is being taken with the use of a statistical analysis as well as a suite of other interpretative tools in order to propose a suitable ploughzone artefact sample that will be able to address specific research questions [see the DAMS as submitted at deadline 9; para. 6.3.17] including being able to address the wide range of spatial and chronological and thematic research questions as set out in the Archaeological Research Agenda in Section 4 of the DAMS. The research questions will be further developed during the preparation of the SSWSIs in consultation with Wiltshire Council, Historic England and, within the WHS, HMAG.



Pearson's example, in which he showed how lower levels of sampling significantly reduce the potential to address currently recognised research questions.

- 16. It should be noted that reduced sampling both lowers the confidence with which any patterning can be discerned, and in many cases may not even address several research questions.
- 17. As noted above, the current approach to mitigation is to treat it as a damage limitation exercise not an opportunity to conduct research of 'the highest practicable standard' into the archaeological remains that would be lost.
- 18. The enhanced sampling of the ploughzone now proposed is of very limited applicability, only involving areas earmarked for Archaeological Excavation and Recording (as defined by draft DAMS section 6.3) not other areas.
- 19. The areas to which this would be applied are also of limited and only vaguely defined extent:
 - 5 areas of lithic material concentrations in and close to the western part of the WHS that would repay closer examination, based on distribution of the material, incidence of chronologically and/or typologically distinctive pieces, coincidence with subsurface features encountered in trial trenching, and possible topographical or activity-related distributions (Highways England, 2019n) [REP3-024].
 - Further areas for investigation within the WHS will include parts of the Eastern Portal approach; and
 - The footprint of the proposed junction improvement at Rollestone Corner [now downgraded to Strip Map and Record]
- 20. The 'reflexive' basis is only to determine what within these parameters is to be done, with no provision for extending the approach to other areas.

- 15. Regarding 100% sampling, see 18.2.2 (9.) above. As stated previously by the Applicant in [REP8-013; item 2.1.8] regarding the Archaeological Research Agenda, as set out in Section 4 of the DAMS (as submitted at deadline 9), this considers the archaeological evidence identified during the evaluation programme and known from other surveys in the area, against the themes and research questions set out in relevant published research frameworks. These include, but are not limited to, the Stonehenge and Avebury Archaeological Research Framework (SAARF), the South West Archaeological Research Framework (SWARF), and selected period-specific research agendas. As part of the DAMS, the ARA has been developed in consultation with HMAG and the Scientific Committee, who were invited to contribute research themes and questions. The research questions will be further developed during the preparation of SSWSIs in consultation with heritage stakeholders and approved by Wiltshire Council (in consultation with Historic England).
- 16. As stated in the DAMS (as submitted at deadline 9; para. 6.3.11 and 6.3.18), the strategy for ploughzone artefact collection will be developed with a specific emphasis on the ARA and how the artefactual resource within the ploughzone can contribute to and identify specific research questions that they have the potential to answer. Sample excavation will be utilised to test hypotheses and assumptions and in order to answer and continually review specific research questions in an iterative and reflexive manner, in consultation with Wiltshire Council and Historic England, and for sites within the WHS, HMAG. The Applicant does not agree with the CBA's or Professor Parker Pearson's points that this 'lowers the confidence with which any patterning can be discerned', or that it gives the assemblage an inability to answer research questions.
- 17. The Applicant has previously refuted the CBA's comment that the strategy as presented in the DAMS is a 'Damage limitation' exercise [REP8-008; item 2.1.8] 'the Applicant does not agree that Section 4 of the draft DAMS as submitted at Deadline 7 [REP7-019] is a 'narrow damage-limitation exercise' but is research-led as agreed with Wiltshire Council, Historic England and HMAG.' With regards to the CBA's comment regarding using the 'highest practicable standard' see 18.2.1 (2.) above.



- 21. The approach is deeply flawed also in being limited to and thereby heavily biased towards investigating what is already been discovered, NOT the idea of recovering systematic objective information about human activity (or the lack of it) across the affected areas at different periods and of different character.
- 22. The CBA has consistently urged a precautionary approach and has suggested that all sampling rates for investigation be considered from the opposite perspective of what proportion of deposits and their contents would be discarded without any further recovery, and how that might curtail or prevent some important research issues being addressed.
- 23. The assumption for the purposes of paragraph 6.3.15 should be reversed, assuming 100% sampling as the default for the WHS and areas contributing to its OUV, only reducing this where it is demonstrable that sufficient sample of diagnostic artefacts in terms chronology, function, source, spatial patterning and scale of activity have been recovered to enable all relevant research issues capable of being addressed. This needs to be done in a manner that considers not just what is recoverable from the ploughzone but also how it may shed light on research questions (including through contrasts and presence and absence of material) when coupled with material from other types of deposit.

- 18. The Applicant refutes the CBA's statement that 'The enhanced sampling of the ploughzone now proposed is of very limited applicability, only involving areas earmarked for Archaeological Excavation and Recording (as defined by draft DAMS section 6.3) not other areas'. The strategy is reflexive and iterative and therefore allows changes to the methodology following assessment of the results from the on-site works [DAMS as submitted at deadline 9, para. 6.1.24].
- 19. The Applicant refutes the CBA's comment that the areas for ploughzone artefact collection are limited. See responses (13. and 14.) above. Site 35 Rollestone Corner will not be subject to Strip, Map and Record [see DAMS submitted at deadline 9; Table 11-4].
- 20. The Applicant has responded to this point at point (18.) above.
- 21. The Applicant refutes the CBA's comments that the strategy as set out in the DAMS is 'deeply flawed', 'biased towards investigating what has already been discovered'. See response (13.) above.
- 22. The Applicant has taken a precautionary approach and considered what potential archaeology may be uncovered by the Scheme, what research questions that archaeology could address and what investigative methods need to be applied and where in consultation with Wiltshire Council, Historic England and HMAG (including Wiltshire Council, Historic England, the National Trust and English Heritage). The sampling approach is reflexive and iterative and will be the subject of on-site monitoring and consultation with heritage consultees.
- 23. Regarding 100% sampling, see 18.2.2 (9.) above. The ploughzone artefact sampling will enable the recovery of a suitable sample to enable the recovery of diagnostic artefacts in terms of chronology, typology, function, source, spatial patterning and scale of activity. The strategy will be developed with a specific emphasis on the Archaeological Research Agenda and how the artefactual resource within the ploughzone can contribute to and identify specific research questions that they have the potential to answer. A research-led approach will also be taken in decision-making on site about the sampling of other archaeological features and deposits based on their significance.



18.2.4

• Para 6.3.22 – Should decisions regarding cleaning by hand be made by the Contractor or by others?

24. For a World Heritage Site and its environs where small subtle features and indistinct deposits are to be expected, it ought to be the norm (and has been for research excavations) that careful cleaning by hand is the base standard, not an extra requirement.

25. Even the provision for areas of 'Archaeological Excavation and Recording' does not fulfil this standard, stating that following topsoil stripping:

"The resulting surface will be cleaned by hand, where required, for the acceptable definition of archaeological remains: this is of particular importance where Neolithic or Early Bronze Age settlement traces may be present, since most evidence of domestic structures will take the form of stake-holes and small post-holes, the successful identification of which is critical. Areas where hand cleaning is likely to be required will be identified in the SSWSI: decisions regarding where hand cleaning is required will be made on site by the Archaeological Contractor in consultation with the TPA, Wiltshire Council and Historic England and, for sites within the WHS, HMAG"

- 26. This has two deep flaws: the phrase 'where required' presupposes that it will be possible to be certain in advance of cleaning where it is 'required'; the double decision-making of defining this in advance in a SSWSI and then on site involving all four supervising bodies is plainly hopelessly bureaucratic.
- 27. For this type of excavation, complete hand cleaning of the stripped surface is a normal standard anyway doubly so in a WHS not only for the reason given, but also because features dug into chalk that are backfilled with almost exactly the same material can be

24. The Applicant has responded in its Written Summary of Oral Submissions made at ISH8 [REP8-016; agenda item 5.4(i), page 1-37] regarding hand cleaning and who should make the decisions regarding this:

"In all areas, the sample excavation strategy would be applied as part of an iterative (reflexive) approach, responding to the form, extent and significance of archaeological remains revealed. This will include decisions regarding the extent of hand cleaning necessary to identify archaeological remains following machine stripping. The iterative or reflexive approach would be applied in consultation with Wiltshire Council and Historic England and, for sites within the WHS, HMAG, through the mechanism of the on-site monitoring meetings as outlined in section 8.1 of the DAMS. Initially, hand cleaning requirements identified in the approved SSWSI will be implemented by the Archaeological Contractor, these will be reviewed and agreed through the monitoring meetings."

- 25. See response (24.) above.
- 26. The Applicant refutes the CBA's comments that its approach is 'flawed' or 'hopelessly bureaucratic'. The DAMS provides a framework that will be developed in the SSWSIs. It is obvious that necessary decisions regarding the level of hand cleaning required need to be made on site, in consultation, as some machine drivers are better able to leave a clean surface for archaeological purposes than others. It is not possible to fully define or make decisions on the level of further hand cleaning that is required until the site has been stripped.
- 27. The Applicant does not agree with the CBA's comment that 'complete hand cleaning of the stripped surface is a normal standard anyway'. Please see the Applicant's response at point (26.) above. The Applicant acknowledges that there may be features backfilled with natural chalk, including burials, but that decisions on the level of hand cleaning are best made on site, in consultation, and once the site has been stripped.
- 28. The Applicant states that as for areas for Archaeological Excavation and Recording, areas defined as for Strip, Map and Record will require similar decision making on site, in consultation, once the site has been stripped, noting that these areas are outside the WHS.



	very hard to find without cleaning but may include important features such as burials. 28. The same issue arises for 'strip map and record' areas (draft DAMS section 6.4) where there is NO provision for hand cleaning of the stripped surface although there is no clear basis for assuming that the areas selected for this approach will have any less potential to contain the kinds of archaeology referred to as requiring hand cleaning (see below for further comments). 29. For areas earmarked for 'archaeological monitoring and recording' (draft DAMS section 6.5) there is also NO provision for hand cleaning of the stripped surface. There is no clear basis for assuming that areas selected for this approach will have any less potential to contain the kinds of archaeology requiring hand cleaning (though some of these areas are related to minor works, not large-scale stripping). 30. Within the WHS and areas outside it where it is clear there is significant potential for remains that contribute to its OUV, the default position should be that all stripped surfaces should be hand-cleaned. 31. Overall, this further illustrates how, far from being predicated on 'highest practicable standards' (as claimed), the draft DAMS is based on a far more limited business-as-usual, damage-limitation approach. As a result, the decision-making process is geared to having to tighten and upgrade the general business-as-usual standards to something nearer (but still short of) the 'highest practicable standards.' A far better, more precautionary approach would be to set the standard at the genuine 'highest practicable' (established to be 100%) and then relax that standard to some less demanding but still effective level IF it becomes manifest that nothing is to be gained	29. The Applicant states that as for areas for Archaeological Excavation and Recording, areas defined as for Archaeological Monitoring and Recording will require similar decision making on site, in consultation, once the site has been stripped. 30. The Applicant does not agree with the CBA's comment that 'within the WHS and areas outside it where it is clear there is significant potential for remains that contribute to its OUV, the default position should be that all stripped surfaces should be hand-cleaned'. See point (26.) above. Decisions should be made on site, in consultation, following stripping of the site. 31. The Applicant has responded at 18.2.1 (2.) above to the CBA's comments regarding 'highest practicable standards' and at 18.2.1 (4. And 6.) regarding its comments that the DAMS is 'business as usual' and at 18.2.3 (17.) regarding its comments that the DAMS is a 'damage limitation' approach. Regarding 100% sampling, see 18.2.2 (9.) above.
40.05	and there is no significant risk of unintended loss by applying a somewhat less demanding standard.	
18.2.5	• Para 6.3.44 to 6.3.48 – Changes to the sampling strategy would mean a revised SSWSI, subject to Wiltshire Council's approval.	32. The Applicant addressed this point clearly in its Written Summary of Oral Submissions made at ISH8 [REP8-016, agenda item 5.4(i), page 1-39] where it stated that:



- 32. Here again the problem arises because the less than 'highest practicable' standard being proposed means that instead of relaxing the standard if appropriate, the whole decision-making process is geared to tightening and upgrading the assumed standards from what the archaeological contractor may have allowed for in costing the work. This not only reinforces the point that the default standard as set by the draft DAMS is NOT the 'highest practicable', but also involves further potential complexities of time, programming and cost, potentially including contractual disagreements.
- 33. The baseline assumption for the purposes of paragraph 6.3.44 to 6.3.48 should be reversed, assuming 100% sampling as the default and only reducing this where it is demonstrable that sufficient diagnostic artefacts and palaeo-environmental and dating samples ecological samples have been recovered to enable ALL relevant research issues to be addressed as fully as possible in terms chronology, function, source, spatial patterning and scale of activity, including the recovery of rare but highly informative material.

Para 6.3.50 – Agreement required on the proportion of tree hollows excavated.

- 34. Mr Lambrick's presentation ([AS-075]) demonstrated that care is needed to ensure that an integrated approach is developed towards the sampling of the ploughzone, tree hollows, buried surfaces and deliberately dug features.
- 35. As he showed, and as was also clear from Professor Parker Pearson's presentation, the qualities and value of evidence from these sources are complementary and differ in their respective potential and qualities as evidence to shed light on past societies and the environment.
- 36. As Mr Lambrick indicated, apart from their potential use as shelters and occasional places for deliberate 'special' deposits, tree hollows tend to trap up-rooted samples of the prehistoric (or later) ground surface before it was incorporate into the ploughzone, resulting in better preservation than survives in the present agricultural soil but only in small haphazard areas.

"Paragraphs 6.3.44 to 6.3.48 of REP6-013 deal with the approach to excavation and recording of specific types of archaeological deposits, for which it is not relevant to specify a minimum sample size: excavation of these features or deposits will follow an iterative process to be applied in consultation with Wiltshire Council and Historic England and, for sites within the WHS, HMAG. This approach requires the agreement of the sample size through the mechanism of the on-site monitoring meetings as outlined in section 8.1 of the DAMS."

With regard to the CBA's comment on 'the less than 'highest practicable' standard, see 18.2.1 (2.) above.

The reflexive and iterative approach is research-led and allows decision-making on site to have regard to the significance of the archaeological remains. The Applicant is aware of the contractual implications of this approach and this will be reflected in the way the work is tendered.

- 33. The Applicant has responded to CBA's comments with regards to 100% sampling at item 18.2.2 (9.) above, and the CBA's other points at 18.2.1 (4.) (rare material); 18.2.2 (10.) (palaeo-environmental) and 18.2.3 (23.) (diagnostic artefacts, chronology, function, source, spatial patterning and scale of activity) above.
- 34. The Applicant agrees with the CBA that 'care is needed to ensure that an integrated approach is developed towards the sampling of the ploughzone, tree hollows, buried surfaces and deliberately dug features.' The Applicant assures the Examining Authority that this is precisely what is set out in the DAMS (as submitted at deadline 9) and agreed with Wiltshire Council, Historic England and, within the WHS, HMAG.
- 35. The Applicant has no comments to make on this point.
- 36. The Applicant has no comments to make on this point.
- 37. The Applicant states that its approach to ploughzone artefact collection as set out in the DAMS (as submitted at deadline 9) takes into account tree hollows and the evidence that they contain [see the Applicant's deadline 3 submission Archaeological Evaluations. Review of Ploughzone Lithics and Tree Hollow Distributions, REP3-024].



- 37. Over a large area with reasonably numerous tree hollows, the absence of artefacts or charcoal and other signs of burning may indicate an absence of the sort of activity that results in such material being left on the ground. But as Mr Lambrick's presentation showed, this is not reliable (especially for individual hollows); but where coupled with intensive ploughzone recovery, the strength of both lines of evidence strengthens, potentially indicating where and when activity was taking place before or after general clearance of trees.
- 38. But to detect such patterns especially in relation to chronological variation requires a high level of sampling: certainly not the very meagre level proposed which is predicated only on only characterising the tree hollows themselves not addressing broader questions when coupled with intensive ploughzone sampling.
- 39. The various iterations of the DAMS have been ambiguous about the sampling procedure for tree hollows, leaving the approach substantially unclear. For those areas where full 'Archaeological Excavation and Recording' is proposed (DAMS section 6.3) but nowhere else, it has been stated from the beginning (currently paragraph 6.3.37) that Within the WHS, pits, post-holes and other isolated features (including natural features such as tree throws that have potential to contain archaeological remains) will normally be completely (100%) excavated. Outside the WHS, these types of feature will normally be completely (100%) excavated; half-sectioning of features may be adopted, in consultation with Wiltshire Council, subject to the significance of the remains." [added emphasis]
- 40. But since revision 1, this has been qualified by a statement (currently 6.3.42- 6.3.43) referring to
 - "• archaeological excavation of a sample of confirmed tree hollows; and
 - recovery of a sample of 150 litres of the fill of excavated tree hollows to be sieved for small artefact / ecofact recovery.

- 38. The Applicant refutes that the level of sampling put forward in the DAMS is 'very meagre' with regards to tree hollows; the level of sampling will be based on the significance of the archaeological remains as uncovered on site. See also point (37.) above regarding ploughzone artefact collection in relation to tree hollows.
- 39. The Applicant refutes the CBA's comment that the approach for sampling tree hollows, as set out in the DAMS (as submitted at deadline 9; paragraphs 6.3.51-6.3.53) is ambiguous or unclear. The sample minimum is 12.5% for 100% excavation. The strategy will adopt a reflexive approach such that the sample size may be revised in response to the results of the systematic sampling, in order to ensure the sample remains representative and areas of high potential for meaningful interpretation are maximised. The sampling undertaken in Strip, Map and Record areas and Archaeological Monitoring and Recording areas will follow those as set out in Archaeological Excavation and Recording and in consultation with Wiltshire Council and Historic England [for example see DAMS submitted at deadline 9; para. 6.4.8 (last sentence) and 6.5.14].
- 40. See the Applicant's response at point (39.) above.
- 41. The Applicant refutes the CBA's claim that 'only examples judged in advance to contain archaeological remains are to be excavated, and these are to be selected as a 'representative sample' judged against pre-set criteria'. This is incorrect see point (39.) above.
- 42. See the Applicant's response at point (39.) above and regarding Rollestone Corner see the Applicant's response at 18.2.3 (19.) above.
- 43. The Applicant refutes that its approach is 'bureaucratic'. Regarding the CBA's comment on the 'highest practicable' standard, see 18.2.1 (2.) above and on contractual issues, see point 18.2.5 (32.) above.
- 44. The Applicant notes the CBA's comment regarding best practice regarding procurement and successful archaeological outcomes. These aspects have been a part of the Applicant's philosophy for some time in its development of the delivery programme for the archaeological mitigation works (as set out in the draft DAMS) and its approach to procurement.



	"The following factors will be considered in identifying a representative sample for excavation:." [added emphasis]	
	41. Taken together, this makes it clear that only examples judged in advance to contain archaeological remains are to be excavated, and these are to be selected as a 'representative sample' judged against pre-set criteria (currently set out in paragraph 6.3.43).	
	42. Although these criteria for choosing which tree holes to excavate might seem quite wide at first sight, they are once again heavily biased towards investigating areas of activity known from other indications and would only investigate the tree hollows that reflect such activities at the stripped surface. There is no explicit figure for what proportion this would be, but the reference to Highways England's review of ploughzone and tree hole archaeology ([REP3-24] p.13) implies that its recommendations would act as the baseline. Far from being 100% as might be inferred at first sight from paragraph 6.3.37, this would be more likely be 10%- 12.5% (as assumed for CBA's comments in response to ExA Questions 2, [REP-084] p8) – as is reflected in the proposals for site 35 Rollestone Corner (now downgraded from Archaeological Excavation and Recording to Strip Map and Record – see draft DAMS rev 3 p306).	
	43. This bureaucratic approach does NOT resonate as being to the 'highest practicable standards' and sets the seeds for wrangling over what has been costed for rather than how relevant research objectives can be met.	
	44. As Mr Lambrick noted, and previously referred to in CBA's comments on ExA Questions 2 ([REP-084] pp 28, 29, 35) achieving a high standards, avoiding delays and dealing with 'unexpected' discoveries all need a very progressive procurement process such as that used for Terminal 5.	
18.2.6	ii. Strip, Map and Record	45. The Applicant notes the CBA's comments. The Strip, Map and Record technique will not be deployed within the WHS.
	 Para 6.4.4 – Agreement required on a baseline percentage for the proportion of features excavated. 	46. See the Applicant's response at point (45.) above.



- 45. The 'strip map and record' technique was developed in the 1990s as a compromise approach whereby much larger areas would be stripped under archaeological control to facilitate identification of the main archaeological features for general purpose characterisation, usually in the context of types of remains that are far more identifiable than those being sought between the upstanding monuments in the Stonehenge WHS.
- 46. It is inherently unsuitable for the Stonehenge and Avebury WHS where, as indicated in paragraph 6.3.22, important remains may be sparse and hard to find, and 'the successful identification of which is critical.' This issue applies just as much to areas of Strip Map and Record as it does to areas earmarked for Archaeological Excavation and Recording.
- 47. The distinction between Archaeological Excavation and Recording and Strip Map and Record is fundamentally a decision to recover the main characteristics of the area excavated, not a full record. By not hand cleaning the stripped surface, small and indistinct features may not be seen or recorded (let alone sampled). By lowering the percentage of features and fills excavated, the method aims only to recover sufficient archaeological material to give and approximate date and some indication of subsistence activity or environmental conditions, not the full picture.
- 48. The whole basis of strip map and record is to enable larger areas to be covered at a significantly lower standard of sampling and recording. It is thus by definition NOT the "highest practicable standard" in archaeological terms but is ONLY adopted where either resources and time to do more are unavailable, or where archaeological potential has been deemed very low relative to the urgency of need for delivering a development.
- 49. It is inherently NOT suited to addressing the complete loss of archaeological materials in and around a WHS such as the Stonehenge and Avebury landscapes, and does NOT represent an approach representing 'highest practicable standards'.

- 47. Regarding hand cleaning in areas where Strip, Map and Record are deployed, see 18.2.4 (28.) above. Regarding sampling levels in areas where Strip, Map and Record will be deployed, see 18.2.5 (39.) above.
- 48. Regarding 'highest practicable standard', see 18.2.1 (2.) above. Strip, Map and Record is not deployed as a 'significantly lower standard' for sampling and recording. Compared to Archaeological Excavation and Recording, it is typically employed to provide a more flexible approach in areas of more extensive archaeological remains with few or no apparent foci of activity, or areas where the assessed significance of the archaeological remains is lower as recognised by the Archaeological Research Agenda. Its deployment has nothing to do with resources, time or programme.
- 49. Regarding 'highest practicable standard', see 18.2.1 (2.) above. Regarding its deployment within the WHS, see point (45.) above.



18.2.7	 iii. Archaeological Monitoring and Recording Para 6.5.10 - Agreement required on a baseline for the quantum of excavation. 50. This approach is well-suited to areas of extremely limited spatial impact where prior excavation is not possible or accessibility too limited to be effective, but this should not lower the standard that is applied to excavating significant deposits. 51. Once again a very high level of recovery should be the objective within the WHS and its environs where remains contribute to its OUV. 	50. Archaeological Monitoring and Recording is a programme of observation, investigation and recording of archaeological remains undertaken in specific areas where the presence of, or moderate potential for, archaeological remains has been demonstrated or can be predicted, but where detailed investigation prior to the main construction programme is unfeasible due to safety or logistical considerations, or undesirable due to environmental or engineering constraints. Regarding standards and levels of sampling – this will follow those as set out in Archaeological Excavation and Recording [see DAMS submitted at deadline 9; para. 6.5.14]. 51. Regarding levels of sampling, see point (50.) above.
18.2.8	 i. Para 8.5.1 – Consultation on SSWSIs, etc and para 8.6.1 – Approval of Documents by Wiltshire Council. Are these arrangements acceptable, including the time periods allowed? ii. Para 8.6.5 – Appeals. Should such procedures also apply to disagreement with a decision of Highways England? 52. The whole approach proposed is far too bureaucratic, potentially wasting time and resources that would be better applied elsewhere. The procedures are designed to limit rather than maximise the archaeological response and instead of setting the "highest practicable standard" and allowing departures from that it sets a more or less business as usual standard putting the onus on Wiltshire Council to try to crank this up to something more closely approaching the highest standard practicable. 53. There should not need to be any 'appeal' mechanism: the whole approach should be unashamedly driven by the fundamental objective of carrying out the archaeological investigation and recording to the highest standard currently available and to the greatest thoroughness required to address ALL relevant research objectives, both wide and site specific. Instead of appealing a strengthening of the standards, the boot should be on the other foot: 	52. The Applicant refutes the CBA's comments that the 'whole approach proposed is far too bureaucratic. The approach allows decisions-making to be made based on the significance of the remains as uncovered on site in a reflexive and iterative approach in consultation with Wiltshire Council and Historic England and, within the WHS, HMAG. The Applicant has a good working relationship with these bodies, having worked with them closely from before the application was submitted, and throughout the Examination, in particular on the development of the DAMS, and the Applicant expects that to continue throughout the construction of the Scheme. The Applicant has responded to CBA's comments regarding 'highest practicable standard at 18.2.1 (2.) above and 'business as usual' at 18.2.1 (4. And 6.). 53. The Applicant agrees with the CBA's comment that an 'appeal' mechanism should not be needed, but has incorporated this into the DAMS, following consultation with Wiltshire Council, Historic England and HMAG, in order to provide a mechanism in the unlikely event that a dispute should arise.



	any relaxation of that standard should be a matter for request and approval.	
18.2.9	 5.7 Part 3 – Tables, figures and references ii. Table 11-3: Summary of proposed mitigation areas and actions. Are the parties satisfied with these proposals, including treatment of stockpile areas? Should other areas be covered? iii. Table 11-4: Areas excluded from archaeological mitigation. Are the parties satisfied with the list, including the exclusion of proposed working areas? 54. For the reasons given above, the CBA does not accept that these tables of areas and actions, or several of those excluded represent an adequate response – or even a sensible approach. 55. As previously explained, the whole approach is based on a far too narrow site- specific response that treats the results of evaluation and survey as if they reliably define the limit of what might be found. By failing to test the reliability of the geophysics compared with trenching or make any extrapolations form these results and previous discoveries, the approach adopted is far too dogmatic, divided down to small limited parcels related more to what is known than what could be discovered, with no allowance for design modification within the limits of deviation. 	54. The Applicant refutes the CBA's comment that 'these tables of areas and actions, or several of those excluded represent an adequate response – or even a sensible approach.' The Applicant stands by the comprehensive approach to archaeological mitigation as put forward in the DAMS (as submitted at deadline 9), which is supported by Wiltshire Council, Historic England and members of HMAG (Wiltshire Council, Historic England, the National Trust and English Heritage). 55. The Applicant has previously refuted the CBA's comments with regards to a narrow approach [REP8-013; items 2.1.3 and 2.1.8]; reliance on the archaeological evaluation results [REP8-013; item 2.13]; failure to test the reliability of geophysical survey results [REP8-013; item 2.1.5]; targeting only known archaeology with the mitigation strategy [REP8-013; item 2.1.8]. With regards to the CBA comment that there is 'no allowance for design modification within the limits of deviation', this is in correct. The Main Works Contractor has the ability, through the development of the detailed design, to modify the design of the Scheme within the limits of deviation, but must adhere to both the requirements as set out in the DAMS and the principals, actions and commitments as set out in the OEMP. The DAMS (as submitted at deadline 9) is drafted to be responsive to the detailed design of the Scheme – see for example paragraph 5.2.2, 6.1.3 and 6.3.2 of the DAMS.
	56. For issues of safety Highways England works to very high design standards and permits relaxations or departures where appropriate. The same should apply here, especially within the WHS and other areas contributing to its OUV. By setting a much higher broad-brush standard for whole areas of the scheme it would be far more flexible to adapt and deviate where it was agreed that the highest standard could be relaxed without any serious loss of evidence for any aspect of research.	56. The Applicant notes the CBA's comments, but states that relaxations to Highways design standards are to do with road engineering design and not archaeological mitigation. The Applicant stands by the comprehensive approach to archaeological mitigation as put forward in the DAMS (as submitted at deadline 9), which is supported by Wiltshire Council, Historic England and members of HMAG (Wiltshire Council, Historic England, the National Trust and English Heritage).



18.2.10

- 5.8 Part 4 Appendices
- i. Appendix A: Flowcharts
- A1 Should the HEMP be the product of three bottom section elements, rather than just the Main Works, HMP and Method Statement?
- 57.YES It might need to be an updated document in the light of what the main contractor proposes. It will be noted that different archaeological contractors may well be involved which would be a further unhelpful procurement/management complication.
- 58. Appendix A.2 does not the potentially separate archaeological contractor brought in for the main works. Nor how the two contractor would collaborate for the Public Archaeology and Community Engagement Programme.
- A4, A7, and A9 Should the headings indicate approvals by statutory bodies as in A3, A5, A6, and A8?

59. YES

60. These flow charts do not distinguish between the Preliminary Works Archaeological Contractor and the Main Works Archaeological Contractor, or show at what stage this handover would happen.

ii. Appendix D: Action Areas Comments and discussion.

61. See comments above (paragraphs 54-57) and comments previously submitted (CBA comments on ExA 2nd Questions [REP-084] pp 9, 25, 35, 37, 39, 40]). The whole approach to this overarching DAMS is based on a far too narrow site-specific, damage limitation response that treats the results of evaluation and survey as if they reliably define the limit of what might be found, rather than being a very incomplete indication of the full archaeological potential of the areas affected by the scheme.

57. The Applicant responded in its Written Summary of Oral Submissions made at ISH8 [REP8-016; agenda item 5.7 (iii), page 1-43], regarding the flowchart and the HEMP, advising that Appendix A1 was incorrect and would be amended (this was undertaken in the DAMS submitted at deadline 8 [REP8-008]).

A mechanism has been provided in the DAMS [REP8-008; para 5.1.12] to manage the handover process between the Preliminary Works Contractor(s) and the Main Works Contractor.

- 58. The Public Archaeology and Community Engagement will be delivered by the appointed Archaeological Contractor(s). See point (57.) above regarding the handover between the Preliminary Works Contractor(s) and the Main Works Contractor, which will also include the handover of the Public Archaeology and Community Engagement Strategy (DAMS, Appendix E).
- 59. The Applicant explained in its Written Summary of Oral Submissions made at ISH8 [REP8-016; agenda item 5.7 (iii), page 1-43], that Appendices A4, A7 and A9 do not relate to activities or processes where an approval is required, rather they refer to implementation and monitoring of DAMS fieldwork (A4 and A7) and development of the post-excavation assessment report and updated archaeological research strategy (A9). This is why the headings do not refer to approvals by statutory bodies.
- 60. See response to point (57.) above regarding handover mechanisms between the contractors and [the DAMS submitted at deadline 9; para. 9.3.1] regarding the different lines of publication and reporting by the contractors.
- 61. See the Applicant's response at 18.2.9 (55.) above.



18.2.11

APPENDIX A

Response to Highways England's Previous Criticisms of CBA's Account of Relevant Heritage Policy

This Appendix is included to make clear the CBA's continuing views on the relevant policy considerations that apply to the loss of archaeology for which the draft DAMS sets out proposals for avoiding, reducing or offsetting harm arising from the scheme.

Part I: Paragraph 5.139 of the NPSNN

A1. In response to submissions made by the CBA in relation to paragraph 5.139 of the NPSNN (Main submission [REP2-070] paragraph 43, p16; [REP2-075] paragraph D10; Oral submission hearing 5th June 2019), the Applicant has claimed that the wording of the paragraph should not be taken as written, but interpreted in terms they propose ([REP4-030] Deadline 4 8.30.2 - Written summaries of oral submissions put at Cultural Heritage hearings on 5th and 6th June 2019 Appendix B), which they claim reflect the judgment of Mr Justice Kerr in Hayes v York City Council ([2017] EWHC 1374 (Admin) – though NOT it should be noted, his actual words.

A2. While the language of NPSNN (2014) is very similar to the preceding NPPF (2012) there are whole sections that do not appear in NPPF at all, and various policies (including this one) are not identically worded. It cannot therefore be assumed that any differences in wording are accidental. However, it is equally reasonable to assume that overall policy is intended to be consistent.

A3. Where the interpretation of the words is an issue, if policies have NOT been clarified or changed in revisions published subsequent to a relevant court judgment, it cannot be assumed that the policy was wrong and the interpretation of the court automatically correct. This especially applies if the judicial interpretation is subject to caveats in respect of the breadth of its application.

The Applicant refers to their response set out in item 18.1.1 above, as well as their previous submission on this topic provided in REP8-016. The Applicant is not persuaded by the additional points raised by the Council for British Archaeology in this Appendix A and considers that the CBA has failed to address the rebuttal made by the Applicant in REP8-016. Moreover, the CBA's interpretation of the Hayes v York CC is not supported by the facts.

Taking in turn the points made by the CBA:

A1 – For the avoidance of doubt, the Applicant relies upon the verbatim dicta of Mr Justice Kerr, the key paragraph of which is quoted below for convenience:

"[81] This difficulty can only be overcome, in my judgment, once it is recognised that a non sequitur crept in when PPS 5 replaced PPS 16, and then found its way into the language of NPPF paragraph 141. In my judgment, the last sentence of that paragraph only makes good sense if interpreted so that the words "should not be a factor" are taken to bear the meaning "should not be a decisive factor", in deciding whether the harm to the asset should be permitted."

A2 – The Applicant does not quite understand the meaning of this comment. Generally, however, the Applicant agrees with what it takes to be the CBA's meaning, which is that whilst different policy documents can be, by their nature, drafted with slightly different wording, it is reasonable to assume that overall policy is intended to be consistent. In this instance, the CBA has not provided evidence to support that the NPSNN should be interpreted differently from the very similarly worded provision of the NPPF. The Applicant considers that there is no such reason to interpret them differently.

A3-A7 – The Applicant considers that the approach to interpretation as suggested by the CBA is one which, if correct, would represent a serious departure from the accepted approach to the question of interpretation of policy and law. Moreover, the Applicant considers it to be a quite remarkable statement by the CBA that "...it cannot be assumed that the...interpretation of the court [is] automatically correct".

Firstly, it should not be overlooked that the sources of law and policy applicable in the UK are, as relevant to this matter, authoritative statements of



A4. Where new Government guidance clarifies the policy as written, it is that which should be assumed to be the correct reading rather than any interpolation offered by the judgment.

A5. In this case, paragraph 85 of the judgment effectively limits its wider application beyond the case at hand, which was one where all parties agreed that it concerned 'less than substantial harm' arising from 'an already justified development.' The judge stated that,

"The distinction between public benefits weighed in the scales in the balancing exercise and mitigation measures which attenuate the detriment caused by an already justified development, must therefore be rejected on the facts of this case, even if (which I doubt) it has any intrinsic validity."

This makes it clear that while Justice Kerr doubted if the policy as written had any intrinsic validity, he was only making the judgment on the case at hand – any wider application in different circumstances that were not considered in this case, would need to be assessed on merit.

A6. There have been two updates of NPPF since the Hayes v York City Council judgment, and during consultation prior to the main revision in 2018 archaeological policies were discussed, but the opportunity to alter or clarify paragraph 141 (now 199) in the light of this judgment was NOT taken.

A7. Since then Planning Policy Guidance on the historic environment has recently been updated (https://www.gov.uk/guidance/conserving-and-enhancing-the-historic- environment Paragraph: 002 Reference ID: 18a-002-20190723 July 23rd 2019) serves to re-emphasise the policy as written:

Part of the public value of heritage assets is the contribution that they can make to understanding and interpreting our past. So where the complete or partial loss of a heritage asset is justified (noting that the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted), the aim then is to:

policy such as the NPPF and NPSNN as interpreted by the Courts, where the Courts have been asked to opine on matters of interpretation. It is not open to anyone to choose not to follow the dicta of a Court on the assertion that the judgment was incorrect, or that a policy maker may – in future – issue different policy. This is particularly the case here where, as noted at item 18.1.1 above, the recently updated PPG contains the same wording as that interpreted by the Court in the Hayes v York CC Case.

The law of the UK is contained within Acts of Parliament, statutory instruments, and case law interpreting policies such as the NPPF and NPSNN etc. Judgments are an integral part of the law; they are not subordinate to it.

The legal position relative to this question is set out by the NPPF as interpreted in the Hayes v York CC case. This is what the Applicant has previously commented upon in its response at REP8-016 and above at item 18.1.1.

A5 (in respect of the general applicability of the Hayes v York CC judgment) – again, the Applicant notes that our position is set out in our previous submission at REP8-016. The CBA has failed to engage with our points made in that submission which are, briefly, that, particularly in the context of this judgment where Lord Justice Kerr explicitly noted that his was the first judicial ruling on this section of the NPPF, were the entire ruling to be confined to the facts of the case this would have been clearly articulated. Instead, Lord Justice Kerr's judgment signposts his dicta: there is a portion of the judgment answering the question as to the general approach to interpretation of paragraph 199, then, secondly (from paragraph 83 – after the key paragraph 81 noted above) the portion of the judgment dealing with the particular case before him.

We consider that this is the common sense – and correct – interpretation of the judgment and is supported by the wording of the judgment. In any event, we note that paragraph 85 quoted by the CBA is in the section of the judgment which, we agree, deals with the specific case before the Court on that occasion.

The CBA has not engaged with the Applicant's position as set out in REP8-016; and as noted in item 18.1.1 above the publication of PPG subsequent to



- capture and record the evidence of the asset's significance which is to be lost
- interpret its contribution to the understanding of our past; and
- make that publicly available (National Planning Policy Framework paragraph 199)

A8. On this basis, the CBA stands by its original account of policy and Mr Lambrick's oral submissions and invites the ExA to take special note of the new clarification of policy in the updated PPG as of July 23rd 2019.

the Hayes v York CC judgment that contains the same wording as the disputed NPPF in that case supports our position that the law is that set out in Hayes v York CC.

18.2.12

PART II - Future Generations and the Precautionary Approach

A9. This part of the submission covers the Applicant's response to the CBA's main written submission about the need to take account of NPSNN paragraphs 5.122 and 5.129 relating to conservation benefitting future generations ([REP2-070]; [REP2-075] paragraph D4), and in oral evidence (June 5th 2019) about how this relates to the need for a precautionary approach.

A10. Reiterating verbatim a response ([REP3-013] paragraph 21.4.4) on the CBA's main written Submission and appendices about the need to take account of NPSNN policies towards conservation for future generations, the Applicant commented ([REP4-030] p 2-16):

"It is an unpersuasive position to assert that the Scheme should be prevented from being progressed in the face of a speculative argument that future technology may discover more information in this area of the WHS. This is particularly the case having regard to the technology which is already available now, the comprehensiveness of the assessment undertaken and the mitigation measures in place in the Detailed Archaeological Mitigation Strategy (DAMS) [REP2-0381."

A11. This is taken out of context and misrepresents the CBA's position. Neither in its written submissions nor in Mr Lambrick's oral evidence has the CBA asserted that the Scheme should be prevented from being progressed because future technology may discover more information in this area of the WHS. The whole point

With respect to paragraphs A9 – A13, the Applicant has carried out its assessment of the cultural heritage impacts of the Scheme (Heritage Impact Assessment [APP-195] and Chapter 6 of the Environmental Statement [APP-044]) and has prepared its Detailed Archaeological Mitigation Strategy (DAMS) (a final version of which is submitted at deadline 9) in a thorough, comprehensive manner, having full regard to and in full compliance with the cited requirements of the NPSNN, adopting a precautionary approach as necessary.

As set out at item 18.1.2 above, the assessment undertaken, particularly with respect to the WHS as reported in the HIA, has been extremely thorough and comprehensive. The HIA has been undertaken in line with the ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS 2011) and following the method and approaches set out in an HIA Scoping report that the UNESCO/ ICOMOS Mission 2018 deemed to be appropriate. HMAG members agree that the HIA has been undertaken in accordance with the HIA Scoping Report and with the ICOMOS Guidance 2011. The HIA has been undertaken with a full appreciation and understanding of the importance of the WHS and its OUV.

The Scheme has been subject to a comprehensive archaeological evaluation programme which provides a robust baseline against which the Scheme impacts on heritage assets have been assessed (in the ES [APP-044]) and the impacts of the Scheme on the Attributes of OUV, Integrity and Authenticity of the WHS have been assessed (in the HIA [APP-195]).



is that in the context of national and international policy obligations this is a consideration that has particular bearing on how the precautionary principle should be applied.

- A12. Mr Lambrick's overall key point was that in the context of a World Heritage Site an especially precautionary approach is needed in the light of NPSNN paragraphs 5.124, 5.129, 5.131 and WHS Management Plan 2.3.1
- 5.124 Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.
- 5.129 In considering the impact of a proposed development on any heritage assets, the Secretary of State should take into account the particular nature of the significance of the heritage asset and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspect of the proposal.
- 5.131 When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be. Once lost, heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Given that heritage assets are irreplaceable, harm or loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including World Heritage Sites, Scheduled Monuments, ... should be wholly exceptional.

As stated elsewhere in this respect and in previous submissions, in terms of the approach to mitigation (as set out in the Detailed Archaeological Mitigation Strategy (the final version of which is submitted at deadline 9)) the Applicant has taken a precautionary approach and considered what potential archaeology may be uncovered by the Scheme, what research questions that archaeology could address and what investigative methods need to be applied and where in consultation with Wiltshire Council, Historic England and HMAG (including Wiltshire Council, Historic England, the National Trust and English Heritage). The sampling approach is reflexive and iterative and will be the subject of on-site monitoring and consultation with heritage consultees.

In relation to the paragraphs of the NPSNN cited, the compliance of the Scheme with those requirements is set out at Appendix B of the Case for the Scheme and NPS Accordance [APP-294] (an updated version of which is submitted at deadline 9). The HIA includes consideration of the ways in which the Scheme delivers against the aims and polices of the 2015 WHS Management Plan (see Section 12.3). With respect to paragraph 2.3.1 cited in the submission, the assessment carried out in the HIA has concluded that the Scheme will sustain the OUV of the WHS and have a slight beneficial effect on the WHS overall.

In terms of the references to compliance with the World Heritage Convention, as referred to in paragraph 2.3.1 of the WHS Management Plan, the Applicant has addressed this point in previous submissions: the Applicant's response to Written Question G.1.1 [REP2-021]; the Applicant's Written Summaries of oral submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030] (specifically agenda items 3(i), 3(v), 3(vi) and Appendix A to that document); the Applicant's response to item 11.2.25 in the Comments on any Further Information at Deadline 4 [REP5-003]; and the Applicant's Written Summary of Oral Submissions made at the Issue Specific Hearing on 21 August 2019 [REP8-016] with respect to agenda item 3.1(i) and 3.2(ii).

See item 18.1.1 above for further detail, and paragraph 8 of the response to Written Question G.1.1 specifically with respect to the requirement to present and transmit cultural heritage to future generations:

"In terms of the requirements of Articles 4 and 5(d) to present and transmit to future generations the cultural heritage of the WHS, the Scheme will create opportunities for greater public access, and appreciation and enjoyment of



2.3.1 The UK Government is accountable according to the World Heritage Convention for the protection, conservation, presentation and transmission to future generations of its sites on the World Heritage List in order to sustain their Outstanding Universal Value (OUV). According to the UNESCO Operational Guidelines, OUV is 'cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity'.

A13. To this might be added the reference to the value that heritage assets hold for future generations in NPSNN 5.1.22, and many more references in the WHS Management Plan.

A14. The Applicant's position that it is 'speculative' to suppose 'that future technology may discover more information in this area of the WHS' is extraordinarily hubristic and short-sighted when policy requires consideration of the needs and opportunities of future generations. We benefit today from centuries of inventiveness in applying new technologies to archaeological endeavour. We are not working to the ideas and techniques available to pioneers of archaeology such as William Stukeley; archaeologists have embraced the core value of stratigraphy; they have used radiocarbon dating to rewrite prehistory; in recent years we have seen the use of isotopes to show that people cremated at the Stones may have come from a similar locality to the Blue Stones, that cattle were being driven to the Stonehenge area from all over Britain to feed hoards of labourers at Durrington Walls, and that the Amesbury Archer came from Europe; ancient DNA has been extracted to show that a nearby burial may be the remains of his son or some other relative. Within the lifetime of active living archaeologists many of these and other techniques were not available earlier in their careers.

A15. It is far more absurd to suggest that future technology might NOT be capable of discovering more information in this area of the WHS.

A16. The Applicant makes the position worse by boasting that their criticism is validated as "particularly the case having regard to the technology which is already available now, the

the WHS through increased connectivity of key monuments and monument groups north and south of the existing A303. The scheme will enable beneficial opportunities for transmission of OUV and for increasing the public's awareness, understanding and perception of the OUV of the WHS in a local, regional, national and international context. The Detailed Archaeological Mitigation Strategy (DAMS) submitted at Deadline 2 (secured by paragraph 5 of Schedule 2 of the draft Development Consent Order [APP-020]) requires that a comprehensive publication and dissemination programme be developed in parallel with the strategy for Public Archaeology and Community Engagement, to deliver a lasting legacy from the archaeological investigation and recording works undertaken for the Scheme. The publication and dissemination programme will be developed in consultation with the Heritage Monitoring and Advisory Group (HMAG) and the public archaeology strategy will link to the work of Highways England's A303 Benefits and Legacy Forum and Benefits Steering Group, which will look to work with partner organisations to develop the Scheme legacy and benefits as the Scheme develops, tving in to the priorities set out within the 2015 WHS Management Plan (see section 8.2, Outline Publication and Dissemination Proposals, and Appendix F, Public Archaeology and Community Engagement Strategy of the DAMS)."

The rest of this response is also relevant in terms of the presentation and transmission of heritage in the future.

In response to paragraphs A14 – A16, the Applicant's position is very much not dismissive of the potential of future technology and more innovative practices in the future. The Applicant responded to the CBA on this point at deadline 8 [REP8-013], item 2.1.30, stating:

"However, in responding to this comment, the Applicant considers that the quoted passage has been misinterpreted and taken out of context. The Applicant acknowledges that research in archaeological science is constantly evolving and respects the advances that have been made. Moreover, (and as was stated by the Applicant in text from REP4-030 Appendix B which has not been quoted by the CBA) the Applicant has built into the Scheme via the DAMS the ability to allow for archaeological remains that are excavated as part of the Scheme works to be preserved for future analysis. Moreover, the thorough fieldwork upon which the Scheme is based and will be adopted



comprehensiveness of the assessment undertaken and the mitigation measures in place in the Detailed Archaeological Mitigation Strategy (DAMS) [REP2-038]"

- a) "The technology which is available now" only exists because enterprising archaeologists and scientists have speculated sufficiently to realise the potential of new approaches and methods to be developed, often adapting and applying science and technology in other fields.
- b) But not all such technology is being used or proposed for use to its full potential applicability.
- c) The CBA has shown that the assessment undertaken to date is a very long way from being 'comprehensive' either in methods applied or its analysis, failing entirely to make any prediction, based on what is supposed to be meaningful scientifically based sampling, of what the archaeology totality of the scheme footprint might be
- d) The CBA and others have equally shown how very far short of the claimed 'highest practicable standards' the draft DAMS still falls – even after two further iterations.
- A17. A less self-satisfied, and far more precautionary approach is needed.

throughout the operation of the Scheme takes an appropriate and proportionate approach to currently available technology whilst also preserving excavated remains for future analysis if relevant advances in archaeological science and techniques are made.

The Applicant respectfully states that the point being made in REP4-030 Appendix B, and reiterated here, is that if we are to always hold off from progressing developments on the hypothetical possibility that future research might lead to more information then no infrastructure would ever be delivered, despite the identified and recognised need for it."

Further, as noted at item 10.1.7 of REP8-013, the Applicant's DAMS (the final version of which is submitted at deadline 9) has been prepared in order to facilitate the use of highest practicable standards of mitigation and innovative approaches:

"The draft DAMS (submitted at deadline 8) recognises at para 1.2.2 that: 'The Scheme passes through a landscape of high archaeological significance, both inside and outside the WHS. Accordingly, the intention of the Strategy is to apply the highest practicable standards of mitigation, employing innovative approaches to address a question-based research strategy that places the significance of the archaeological resource at the centre of decision-making both at design and implementation phases.' "

Other criticisms of the Applicant's approach set out in A16 are addressed elsewhere in this respect at items 18.1.1, 18.1.7 and 18.2.1.



19 British Horse Society (REP8-033 and REP8-034)

19.1	Intended representation at ISH9 regarding traffic and transportation	
	Matter Raised	Highways England's Response
19.1.1	As I have previously commented in a written representation, byways 11 and 12 are major routes up onto the WHS, and with the new, off-road routes proposed over the WHS for walkers, cyclists and horse riders, some way has to be found to ensure that there is as little conflict as possible between motorised users and NMUs on these byways. If this is not done, walkers, cyclists and horse riders may feel less able to access and enjoy the new routes over the WHS as a result of ground conditions and crowding and vulnerability fears on byways 11 and 12.	The Scheme proposals do not change the status of Byways 11 and 12, as changing the status of the existing BOATs is beyond the scope of the Scheme. It simply removes the link between Byways 11 and 12 for vehicular users. The Scheme promotes a number of non-motorised user only routes which will enable walkers, cyclists and horse riders the ability to enjoy the WHS.
19.1.2	My comments are as suggested in my previous written representation) that motorised users and non-motorised users are segregated on byways 11 and 12 along their entire length, thus preserving their enjoyment for everyone.	Changing the status of the existing BOATs is beyond the scope of the Scheme as the DCO does not provide Highways England with the powers to undertake this work. This is a matter for Wiltshire Council.
19.1.3	Also that the TRF's proposed motorcycle-only link between byways 11 and 12 will be difficult to police and that there will still be 4WDs turning at the dead-end junction of byway 11 and the restricted byway formed from the old A303, creating the chaos anticipated by the TRF. In addition, some 4WD users will inevitably attempt to use the restricted link.	As stated in the Applicant's written summaries of oral submissions put at Traffic and Transport Hearing on 13 June 2019, section 4.9, the Applicant has balanced a number of factors – the aims of the World Heritage Site Management Plan (WHSMP), potential impact of the loss of a link in terms of the Outstanding Universal Value (OUV) and other heritage matters, and the consideration of other assessment disciplines, in bringing forward proposals which do not include a link (for motorbikes or other motorised vehicles) between Byways 11 and 12. Please see that submission also for the Applicant's submissions regarding the design of the end point of Byway 11.



19.1.4	And also that if the byways are to remain open to motorised traffic, it would be better to provide a full byway link of byways 11 and 12, on a separate route alongside the short section of the old A303, with motorised users segregated from the RB, and perhaps with a one-way system in place, for instance up byway 11 and onto byway 12.	As stated in the Applicant's written summaries of oral submissions put at Traffic and Transport Hearing on 13 June 2019, section 4.9, the Applicant is bringing forward proposals which do not include a link (for motorbikes or other motorised vehicles) between Byways 11 and 12. Changing the status of the existing BOATs is beyond the scope of the Scheme as the DCO does not provide Highways England with the powers to undertake this work.
19.1.5	I am against the use of the length of the old A303 for small capacity motorised vehicles including motorcycles. I personally feel that the use of motorised vehicles is inevitably detrimental (a) to the tranquility of an area, and (b) to the peace and security of NMUs using off-road rights of way. One of the legacies of the proposed expensive and controversial transformation of the WHS should be tranquility, where it can be provided.	See response to paragraph 19.1.3 above. The Scheme does not include any proposals for motorised vehicles including motorcycles on the section of the old A303 within the World Heritage Site (WHS). The only exception will be authorised agricultural, maintenance and emergency service vehicles.
19.1.6	NMC-06: I note that the amendment downgrades part of the originally proposed new restricted byway (from the new Longbarrow Roundabout and Green Bridge 4 north as far as the old A344) to a shared use cycleway (cyclists and pedestrians) over its most northerly end. Highways England has described equestrians and carriage drivers coming to the end of the restricted byway at its northerly end as exiting onto the A360 and proceeding round Airman's Corner roundabout to the course of the old A344, but HE does not explain how it will be ensured that horses and carriage drivers are safely to exit onto the A360, nor the fact that this route brings vulnerable users into direct conflict with busy visitor and local traffic as it approaches	See responses to paragraphs 4.8.1 and 4.8.10 in the Proposed Non-Material Changes Consultation report [REP8-015].
	Airman's Corner (see 9.5.4, p41 Proposed Changes Consultation booklet).	



	In the same safety vein, neither Option A nor Option B addresses the obvious danger of cyclists and pedestrians crossing directly over the entrance to the visitor centre car park.	
19.1.7	NMC-06: I find the NMC-06 amendment to be poorly thought out in its practicality, leaving aside its impact on excluded equestrians and carriage drivers. I would recommend that HE think again about the merits of compulsory acquisition to lead a new restricted byway round the south side of the car park and the east side of the visitor centre to join the course of the restricted byway formed by the old A344. (See 9.1.2–4 p35 Proposed Changes Consultation Booklet).	See response to paragraph 4.8.2 in the Proposed Non-Material Changes Consultation report [REP8-015].
19.1.8	In the case that HE decide not to put in the route round the car park and visitor centre via the use of CA (which I submit would be a missed opportunity in the overall scheme of things) walkers, cyclists and pedestrians would still benefit from a way onto the WHS from the Visitor Centre car park that does not involve entering the Visitor Centre. The new restricted byway, if extended to the southern end of the car park, could provide this. It should be a restricted byway so that equestrians and carriage drivers can enjoy its use even if they have to turn back the way they have come at the A360.	Please see the Applicant's summary of case at ISH9 [REP8-017], which considered this point. The Applicant's Proposed Non-Material Changes Consultation report [REP8-015] in Section 2.4 explains that although the proposed non material change NMC-06 would require a small amount of 'additional land', it does not involve the need for compulsory acquisition powers, as Highways England did not wish to engage the Compulsory Acquisition Regulations, nor was there sufficient time remaining in the Examination in any event for the consultation process required by the Compulsory Acquisition Regulations to be completed. The proposed public right of way to Stonehenge Visitor Centre (NMC-06) is shown as Figure 5.3 [REP8-015] (Revised Excerpt from General Arrangement Drawings, Sheet 14 showing the substitute to Option B within Order limits). Appendix A1 of [REP8-015] explains that this new proposed public right of way will be a shared-use cycleway (for pedestrians and cyclists). This is clarified further in submission [AS-107]. The Examining Authority will make a decision regarding whether this NMC (with the other NMCs) is accepted into the Examination on 27 September 2019 [PD-016].



19.2 Written summary of oral submission

Matter Raised

Highways England's Response

The Applicant's Written Oral Submission for ISH11 [REP8-019] has responded to the points made by the British Horse Society in REP8-033. Additional points raised are detailed below.

19.2.1

I submit that entire length of the route Bridleway Z, Cycleway out of Winterbourne Stoke, round the new Longbarrow roundabout and on east over Bridleway Z must retain the designation Bridleway.

In REP4-034, agenda item 4.6. Highways England explains that over the sections of the originally proposed Bridleway route parallel to the old A303 into Winterbourne Stoke, (now shown as brown Cycleway on the General Arrangement Drawings sheets 4 and 5), there 'is insufficient width between the existing hedge and edge of carriageway to accommodate a shared use route suitable for pedestrians, cyclists and equestrians. While the existing A303 carriageway could be reduced in width by up to a metre to reflect its change in status, this would still not provide sufficient width.' It goes on to explain this lack of 'sufficient width' by noting that 'for routes used by equestrians the separation of the route from the carriageway should be a preferred minimum of 1.8m (Cl. 7.23) which would not be able to be provided at this location.' It seems to be for this reason alone that HE have decided to use the designation Cycleway rather than Bridleway in this location. However, the route in question is still to be provided for equestrians as a 'shared use route' even where the 'preferred minimum' distance from the carriageway is less than 1.8 metres. If horse riders are expected to pass over this length of right of way as part of their rights over the Cycleway, there is no reason why it cannot be designated as a Bridleway - the minimum separation distance is a 'preferred' rather than a mandatory guide.

The Applicant's Written Summary of Oral Representations provided at the Traffic and Transportation Issue Specific Hearing on 13 June 2019 [REP4-034] in section 4.6, explains that Highways England wishes to ensure that the Scheme is integrated within the existing public rights of way network and, where the opportunity exists, creates legacy benefits for non-motorised users in accordance with its Strategic Business Plan and Roads Investment Strategy.

The references to "...insufficient width between the existing hedge and edge of carriageway "relate to an alternative Interested Party proposal to move the proposed bridleway from the north to the south side of the existing hedge. The bridleway Z will be retained as proposed in the Application.

The proposal for Bridleway Z is to provide a grass strip for equestrian use adjacent to the hedgerow and retaining the existing hedge will improve the amenity for bridleway users. Bridleway Z will provide a key off-road route for non-motorised users travelling east and west with links to existing north-south routes, providing legacy benefits to non-motorised users.

Relevant to other cycleways, Highways England has clarified the right of equestrians to use these by an amendment to the draft Development Consent Order. This was included in the updated draft Development Consent Order (Rev 5) Part 1, Section 2 on page 6, which was accepted as an Additional Submission at the discretion of the Examining Authority [AS-095]. This defines a "cycleway" as follows - "cycleway" means a way constituting or comprised in a highway, being a way over which the public have the following, but no other, rights of way, that is to say, a right of way on pedal cycles (other than pedal cycles which are motor vehicles within the meaning



		of the Road Traffic Act 1988) with a right of way on foot and a right of way on horseback or leading a horse." This is clarified further in submission [AS-107].
19.2.2	It is moreover unclear how long the affected section of route is; Highways England state that there is an intervening highway verge which equestrians could be 'allowed' to use <i>parallel</i> with the proposed shared use Cycleway. The DCO needs to provide for a Bridleway where equestrians are expected to pass and repass.	Bridleway Z is 840 metres long as set out in Schedule 3 of the draft Development Consent Order [REP8-004]. The cycleway which is within the proposed highway boundary of the new link between Winterbourne Stoke and the southern Longbarrow roundabout (providing a right of way on pedal cycles (other than pedal cycles which are motor vehicles within the meaning of the Road Traffic Act 1988) with a right of way on foot and a right of way on horseback or leading a horse) is 600 metres long.
19.2.3	No query has been raised or comment made about the lack of space to provide sufficient division between horse riders and traffic in the Cycleway currently shown leading around the roundabout (Sheet 5 of the General Drawings). Therefore there is no reason why this right of way round the new Longbarrow roundabout should not continue to be designated as a Bridleway, not a Cycleway.	A bridleway cannot be designated in an existing highway, hence the adoption of the term "cycleway" as defined in the updated draft Development Consent Order (Rev 5) Part 1, Section 2 on page 6, which was accepted as an Additional Submission at the discretion of the Examining Authority [AS-095]. This defines a "cycleway" as follows - "cycleway" means a way constituting or comprised in a highway, being a way over which the public have the following, but no other, rights of way, that is to say, a right of way on pedal cycles (other than pedal cycles which are motor vehicles within the meaning of the Road Traffic Act 1988) with a right of way on foot and a right of way on horseback or leading a horse." As such, it is intended that horses will be able to use this route.
19.2.4	There is no indication on the DCO as to the space allowed for the accommodation of NMUs waiting to use the two road crossings involved at the Longbarrow roundabout. The provision of such space should be clearly indicated on the DCO.	The design of the Pegasus crossing (which is committed to in the OEMP at item D-LAN5 [REP8-006]) and the associated waiting area will be developed during detailed design.



20 Classmaxi Ltd (REP8-035)

20.1	Written summary of oral submission	
	Matter Raised	Highways England's Response
The Applicant's Written Oral Submissions for ISH9 [REP8-017] have responded to Classmaxi Ltd comments received at deadline 8. Additional comments are addressed below:		
20.1.1	In response to Classmaxi's procedural submission, Reuben Taylor QC , on behalf of HE , disputed CMLs objection in relation to the fairness of the consultation submitting that that any decision by HE to take forward the proposed non-material changes would only be made after the consultation had closed. On that basis, Mr Taylor did not accept that there was any breach of the Gunning Principles.	The Applicant maintains their position as stated in the Written Summary of Oral Submissions put at ISH9 [REP8-017].
20.1.2	As to CMLs oral representations in relation to the alleged defective notices, Mr Taylor , indicated that HE were not in a position to respond to these representations orally at the hearing but HE would do so in writing.	The Applicant has responded to this point on pages 1-4 and 1-5 of the Written Summary of Oral Submissions put at ISH9 [REP8-017].



21 Stonehenge Alliance (REP8-051 to REP8-054)

21.1	Comments on Deadline 7 comments [REP7-021]	
	Matter Raised	Highways England's Response
21.1.1	AL.1.11 HE argument: Longer route with increased journey time relative to D061/D062	The Applicant notes that Stonehenge Alliance agree with the point made regarding AL.1.11, para 25 [REP2-024]; that F010 is a longer route with an increased journey time relative to D061/D062.
SHA response: Agreed, but it is still significantly faster than Do Minimum according to HE's modelling, and would provide all the journey time reliability benefits which HE claim are a key driver for the alleged need for the project. NB this is included in the Benefit: Cost Ratio (BCR) below, so they are double counting this argument. Stonehenge Alliance are miss	The Applicant has made clear in paragraphs 24 and 25 of the response to Written Question AL.1.11 that the longer journey time for F010 feeds through to the economic benefits for the scheme and the calculation of the BCR for the options.	
		Stonehenge Alliance are misrepresenting the information provided by stating that the Applicant is double counting this argument.
21.1.2	AL.1.11 HE argument: Likely higher NOX emissions than D061/ D062 SHA response: Preferred route has a total local air quality benefit of £300,000 (Combined Modelling and Appraisal Report, Table 5-7). If F010 is less beneficial, the difference is unlikely to be significant in the overall appraisal.	With reference to F010, a disbenefit in NOx emissions was calculated due to longer distances travelled by vehicles. This disbenefit was factored into the overall appraisal process in line with WebTAG approaches; a specific significance of this disbenefit was not applied.
21.1.3	AL.1.11 HE argument: Lower BCR (0.3) relative to D061 (0.4) and D062 (0.5) SHA response: All the options would be rejected on the basis of these BCRs. When HE included the results of the Contingent Valuation Study and also sought to monetise the negative	Please see response to item 55.1.7 in the Comments on Written Representations Report submitted at deadline 3 [REP3-013] which explains that a full options appraisal was carried out for the A303 Scheme. To demonstrate the Value for Money that the Scheme offers, the costs of the Scheme must be compared with the expected positive and negative impacts. The appraisal approach has been designed to capture these impacts as fully as possible, in a way that is proportional. In some cases, this approach involves assigning monetary values to the benefits. However, there are some



	environmental impacts of F010 outside the WHS, the BCRs became: D061: 1.3 to 1.5 D062: 1.4 to 1.6 Fo10: 1.4 to 1.7	impacts where there is no reliable approach to assigning monetary values, or indeed to assigning any form of quantifiable value, this should not be interpreted as the impact having no value. To form a holistic view on Value for Money for this Scheme, all sources of benefits and disbenefits (including indicative monetised impacts and nonmonetized impacts) have and should be considered. The BCR is just one factor that informs the VfM assessment and the economic case.
		The Applicant's response to Written Question AL.1.12 [REP2-024] summarises the relative merits of the options and explains that, on balance, Route Options D061 and D062 would deliver a better fit against the relevant local and national planning, transport and economic policy objectives than Route Option F010.
21.1.4	AL.1.11 HE argument: Lower accident benefits SHA response: The accident benefits of the preferred option are only £4.4 million (Combined Modelling and Appraisal Report, Table 5-6) so this would not be decisive. NB this is included in the BCR above, so they are double counting this argument.	Whilst the ComMA [APP-298] separately identifies each benefit and where appropriate the monetary value associated with the impact, there is no double counting; WebTAG was designed to avoid such duplication between appraisal criteria.
21.1.5	AL.1.11 HE argument: Viaducts over Rivers Till and Avon SHA response: Unclear if this is a cost or environmental factor. If it is a cost, it is included in the BCR. If it is an environmental issue it is included in the adjusted BCR and needs to be weighed against impact of D061/ D062 on WHS.	See response to paragraph 21.1.6 below.
21.1.6	AL.1.11 HE argument: Greater impact on rural landscape SHA response: It is included in the adjusted BCR and needs to be weighed against impact of D061/ D062 on WHS.	In line with Government Guidance, individual benefits should not be weighted in the calculation of a Benefit-Cost Ratio (BCR). The appraisal process for each option subtracts the benefits (and negative impacts) in the Do-Something from those of the Do-Minimum to generate a value for benefits. These are discounted in each of the 60 years of the



		appraisal period and summed for comparison against the costs of providing the Scheme including any costs or values associated with mitigating adverse impacts to create the initial benefit to cost ratio. Options are not compared to each other – each option is compared to the Do-Minimum for value for money and contribution to the client scheme objectives. To form a holistic view on Value for Money for this Scheme, all sources of benefits and disbenefits (including indicative monetised impacts and nonmonetized impacts (including environmental) have and should be considered. The BCR is just one factor that informs the VfM assessment.
21.1.7	AL.1.11 HE argument: Greater impact on biodiversity ("very large negative") relative to "large negative" for D061/ D062 SHA response: This is a judgement and this is more an issue about whether the project should be approved at all rather than a determinant of the preferred option.	As detailed within the Technical Appraisal Report (PCF) Stage 1 [REP1-031], the aim of the report was to undertake a very high-level report on potential alternative sustainable solutions for this section of the A303, detailing the identification, sifting and appraisal of route options to determine which should be taken forward for Public Consultation. The report is not detailed enough to provide a full impact assessment and should not be read as such, as detailed within 18.3.59 "For biodiversity, mitigation through design development is predicted to result in a reduction in the scale of impact." This reduction in scale of impact has been achieved through further assessments and suitable, effective, and proportionate mitigation design measures, that have been embedded into the Scheme, as detailed within all of the subsequent reports, most notably Chapter 8 of the Environmental Statement [APP-046].
21.1.8	 AL.1.11 HE argument: Poorer alignment to Client Scheme Requirements SHA response: "Transport: to create a high quality route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the South West". F010 was scored "2" while the other options were scored "3". Even if one accepts the logic for the project – which The Stonehenge Alliance does not – this is a disproportionate difference between the options, given the small difference in journey time savings. 	The assessment of routes D061, D062 and F010 against the Client Scheme Requirements is detailed in the Technical Appraisal Report (TAR) [REP1-031] and in TAR Appendix G [REP1-088]. The assessment methodology is described in section 9.2. Paragraph 2.3.1 of the TAR explains how the overall transport objective was expanded to cover (i) design standards, (ii) issues relating to congestion, resilience, reliability and impacts on local roads. and (iii) road safety. The justification for a score of "2" against the CSR transport objectives for the F010 route is recorded in Appendix G, table 3: "However, this option would be longer than the existing A303, resulting in smaller journey time savings in comparison to options in Corridor D. In 2031, the largest decrease in average end-to-end journey times would be approximately 7 minutes eastbound in the AM peak. In 2051, the largest



- "Economic growth: in combination with other schemes on the route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the South East and the South West peninsula". Again, F010 was scored "2" while the other options were scored "3". It is even less plausible that there would be a difference in the alleged economic benefits which appear to be substantially about journey time reliability due to a small difference in journey times.
- "Cultural heritage: to contribute to the conservation and enhancement of the WHS by improving access both within and to the site". F010 is scored as "3" compared to "2" for the other options. We consider this is unduly favourable to D061/ D062, given that they involve the construction of sections of surface road and approach cuttings within the World Heritage Site.
- "Environment and community: to contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the route, and to provide a positive legacy to communities adjoining the road". F010 was scored "2" while the other options were scored "3". Clearly F010 performs best against the first part of this requirement and we are not convinced that the lower overall score is justified.

Given the above, we do not consider that the assertion that F010 performs less well against the Client Scheme Requirements is valid.

For the avoidance of doubt, The Stonehenge Alliance is not advocating the adoption of Option F010, but we do consider that the option assessment process was flawed and it should have been taken forward to public consultation. This would have provided a wider choice of options and elicited the public's views on issues including the balance between impacts within and outside the World Heritage Site, which is clearly an important matter.

decrease would be approximately 9 minutes, also eastbound in the AM peak. There is also the potential that the longer route option could result in an increase in operating costs relative to the do minimum scenario, which could limit the benefits for users, particularly freight user."

In addition, Table 4: Client Scheme Requirements, indicates "The risk of traffic diverting onto local roads is less with Corridor D options than with option F010, which is further away from the A303." Table 11-7, provides economic quantification of the journey time benefits for the various options, indicating £575m (D061), £645m (D062) and only £323m (F010) of journey time benefits; supporting why F010 was scored "2" while other options were scored "3".

The justification for a score of "2" against the CSR economic growth objectives for the F010 route is recorded in Appendix G, table 3:

"... However, this route option is longer than the existing A303, resulting in smaller journey time savings in comparison to options in Corridor D, and may have the potential to result in an increase in operating costs relative to the do minimum scenario. While this option would improve connectivity between the East and South West, this could limit the benefits for users - particularly freight users – and therefore the extent to which improved connectivity supports growth in jobs and housing across the region."

Table 11.8 indicates the Wider Impacts are £97m (D061), £103m (D062), and £66m (F010). Finally, Table 11-10 indicates £357m (D061), £395m (D062) and £198m (F010) of combined Long Distance Productivity Benefits and SGCE Effects; supporting why F010 was scored "2" while other options were scored "3".

Paragraph 2.3.1 of the TAR explains how the overall cultural heritage objective was expanded to cover (i) down-grading of existing road for NMUs, (ii) new strategic route and its impact on archaeology and OUV, (iii) access and signing from A303 to WHS, (iv)iconic identity of proposals in the WHS (v) learning associated with any excavation in the WHS. The justification for a score of "2" against the CSR cultural heritage objectives for routes D061 and D062 is recorded in Appendix G, tables 1 and 2 respectively:

"A tunnel would remove the existing A303 and the sight and sound of associated road traffic noise from a key part of the Stonehenge WHS.



[each] option would reduce severance within the Stonehenge WHS, providing a significant improvement on the setting of Stonehenge and other related monuments, and the outstanding universal value of the WHS. The eastern tunnel portal would also be to the east of the Avenue, a scheduled monument of high importance and currently severed by the existing road. [Each] option would allow the WHS to be reconnected whilst maintaining access for Non-Motorised Users (NMUs) to the existing A303 and improving visitor experience and access. These are very notable benefits that when balanced against the adverse effects resulting from the introduction of major new infrastructure into the WHS and the impacts on important assets and key attributes of the site's OUV, would result in a Slight/Moderate [for D061 or Moderate for D062] Beneficial effect on the WHS.

"[Each] option would also relieve congestion and improve traffic conditions for users of the A303. It is likely that improvements in local traffic conditions would result in improvements in access to the site."

Paragraph 2.3.1 of the TAR explains how the overall environment and community objective was expanded to cover (i) land use in WHS, (ii) Biodiversity, (iii) impact of Winterbourne Stoke Bypass, (iv) disruption to road users, (v) learning and employment opportunities and (vi) Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL) rating of excellent.

The justification for a score of "2" against the CSR environment and community objectives for the F010 route is recorded in Appendix G, table 3:

In terms of the historic landscape, this option would remove the existing A303 and sight and sound of associated road traffic from the entirety of the Stonehenge WHS, protecting and enhancing the setting of Stonehenge and other Scheduled Monuments, and restoring the landscape and reconnecting features of high importance to the wider landscape that would substantially benefit the OUV of the Stonehenge WHS. There would be limited visibility of the option from the southern fringes of the Stonehenge WHS, and the setting of some designated assets would be slightly adversely affected. However these adverse effects would be outweighed by the scale of the benefit for the Stonehenge WHS



contributing to a Large Beneficial effect on the WHS and improving biodiversity.

In terms of biodiversity, however, this option would have the potential to impact directly and indirectly on a number of European and nationally designated sites, including the River Avon SAC and River Avon System SSSIs (which overlap with the River Avon SAC). The length of the route option also has the potential to result in significant loss of priority habitats and associated biodiversity.

The impact of traffic in Winterbourne Stoke would be reduced: however, this option and the closure of the existing A303 between Countess and Longbarrow roundabouts would encourage traffic to divert on to local roads, increasing traffic flows through communities to the north of the A303, and resulting in adverse severance effects. It is therefore less clear than for options in Corridor D that this route option would resolve existing traffic issues in communities currently affected by 'rat running' such as Shrewton and Larkhill. There is also the potential for adverse severance effects for communities to the south of the existing A303 in the Avon and Till valleys. It is expected, however, that this option would result in a large net benefit in terms of reducing noise, due to the reduced noise impact of the existing A303 on Amesbury. There is also the potential for a net improvement in local air quality due to a reduction to exposure of concentrations of particulate matter, although there is an increase in NOx emissions across the scheme area. There would also be the potential for a range of slight to very large adverse impacts on landscape character, including very large adverse impacts on the Upper Avon Narrow Chalk River Valley and large adverse impacts on the Larkhill and Winterbourne Chalk Downland and Till Narrow Chalk River Valley Landscape Character Areas".

An overall summary of the assessment of the three routes against the Client Scheme Requirements is provided in TAR Appendix G at Table 4. This is then summarised TAR paragraphs 9.3.1 to 9.3.6 all of which supports the conclusion in paragraph 9.4.9:

"In overall terms, Route Options D061 and D062 align more closely with CSRs and relevant national and local policy objectives than Route Option F010." The Applicant maintains its position that the options identification and



21.1.9	Paragraph 6.2.1 – range of photomontages and choice of receptors Our comments as set out here, concerning photomontages and dynamic views of the Scheme within the WHS remain as stated, irrespective of Highways England's comments on them.	selection process was full and proportionate. Refer to response to Written Question AL.1.4 [REP2-024]. The also maintains its position on the reasons for rejection of route F010 and other routes to the south of the WHS as given in the Applicant's responses to Written Questions AL.1.10 to AL.1.15 [REP2-024]. The Applicant also maintains their position regarding this point.
21.1.10	Paragraph 6.2.2 – extent of modelled area The Stonehenge Alliance agrees that the maps in Road Investment Strategy 1 show similar levels of congestion on the M3 and M4 and that this does not necessarily imply any shift between them, although this could occur depending on precisely how congested each route has become. However, Highways England's case for the scheme includes a shift from the M4 to the M3. This would further increase congestion on the M3 and, in reality, this could prevent some or all of this transfer occurring. Highways England refer to REP 3-013. In this document they clearly state that they have applied fixed speeds (in a specific forecasting year) outside the fully modelled area. While these speeds represent the forecast background level of congestion in that year, journey times do not vary with traffic flow in that year. Accordingly, the modelling in the buffer and external areas, is not sensitive to switching between the M4 and M3. The Stonehenge Alliance considers this to be an outstanding issue of concern.	The Case for the Scheme [APP-294] does include impacts as a result of some shifting of traffic between the M4/M5 corridor and the A303/A358 corridor as a result of the A303 Amesbury to Berwick Down scheme being implemented. However, as demonstrated in Table 5-16 of the Transport Forecasting Package (Appendix C to the Combined Modelling and Appraisal (ComMA) report) [APP-301] this element of re-routeing is small, with around only a 1,000 vehicle reduction in two-way Annual Average Daily Traffic (AADT) on the M4 near Swindon. This is not a material amount in an individual hour and would not be expected to have a material effect on congestion on the M3. The use of fixed speeds to represent travel conditions in the External Area is in full accordance with guidance given in the Department for Transport's (DfT) Web-based Transport Analysis Guidance (WebTAG) unit M3-1 paragraph 2.4.9. In light of comments also made by Stonehenge Alliance in its paragraph 2.12, we would also refer them to our response in paragraph 21.1.33 below where we have clarified the extents of the simulated network on the M3. The Applicant maintains its position as given in paragraph 6.2.3 and 6.2.4 of 'Comments on any further information requested by the ExA and received at Deadline 5 and 6' [REP7-021] that the uncertainty around the accuracy with which congestion is represented on the M3 may affect around 2% of traffic using the A303 past Stonehenge and that this would not have any material impact upon the conclusions drawn from the modelling work undertaken.



21.1.11

Paragraph 6.2.3 - extent of modelled area

Highways England's response on this point is set out in three paragraphs. The first paragraph simply repeats their argument from REP 4-034. The Stonehenge Alliance text to which they are responding shows that this argument is not valid. The second paragraph refers to model results for high and low growth scenarios. This is irrelevant because it is based on modelling based on fixed speeds to the east of the fully modelled area. The third paragraph states that there is no basis to "explain let alone sustain the conjecture that congestion [on the M3] would extend to a material extent over the course of the day." It is self-evident that, as traffic flows rise, congestion will occur in additional hours, even if the traffic profile remains the same. Moreover, it is well known that increases in peak period congestion result in "peak spreading", where some drivers re-time their journeys to the shoulders of the peak to avoid the worst congestion. In turn, some existing shoulder peak journeys may also shift. Clearly, the effect of this will be to further increase the number of hours in which congestion occurs.

The Applicant maintains its position on all three paragraphs referenced by Stonehenge Alliance.

Uncertainty around the congestion on the M3 may affect around 2% of traffic using the A303 past Stonehenge, this is within the bounds of acceptable forecasting uncertainty and is unlikely to have any material impact upon the conclusions drawn from the modelling work undertaken.

The explanation provided by the Applicant for High and Low growth scenarios is valid and not irrelevant as claimed by Stonehenge Alliance.

The Applicant maintains that Stonehenge Alliance's assertion that delays will "extend over a much longer period of the day" is conjecture and has not substantiated this from any evidence. Even if this was the case and the 2% of scheme-related traffic currently assessed to be affected by M3 congestion were to increase, as explained in Tr.2.1 [REP6-032] and reiterated in 6.1 Response to Stonehenge Alliance's Comments on Tr.2.1 [REP8-013], the sensitivity analysis undertaken demonstrates that the traffic impacts arising from the Scheme would not be materially affected.

21.1.12

Paragraph 6.2.4 - extent of modelled area

The Stonehenge Alliance's understanding is that Highways England's position is that approximately 30% of traffic using the A303 at Stonehenge also uses the M3; 20% could potentially switch to the M3, but no more than 2% would do so. From this it is clear that traffic to and from the M3 is not of minimal relevance. It is clearly essential to the case for the scheme – without this traffic, the already very weak and uncertain case would be non-existent. This is distinct from Highways England's argument that only 2% of traffic might switch to the M4. The reasons why this assertion is not robust are set out in REP 5-021 and in the comments above. The Stonehenge Alliance also disputes Highways England's assertion that they have provided sufficient detail for stakeholders to have a clear understanding of the validity or otherwise of their modelling. If Highways England is

The Applicant refutes Stonehenge Alliance's assertion that the case for the Scheme is "very weak and uncertain". The rationale for the Scheme has been set out in The Case for the Scheme [APP-294], which provides a compelling and robust rationale for intervention.

The Applicant has at no point stated that traffic on the M3 is not relevant to the Scheme assessment, we have clearly stated that 30% of the traffic using the A303 at Stonehenge also uses the M3. The Applicant maintains its position as given in paragraph 6.2.3 and 6.2.4 of 'Comments on any further information requested by the ExA and received at Deadline 5 and 6' [REP7-021] that the uncertainty around the accuracy with which congestion is represented on the M3 may affect around 2% of traffic using the A303 past Stonehenge and that this is too small to have any material impact upon the conclusions drawn from the modelling work undertaken.



unwilling to provide access to the model database or to allow stakeholders to interrogate it under their supervision, they could at least provide trip matrices – in MS Excel format – together with a zone plan to enable stakeholders to better understand the relevant movements.

As previously noted in paragraph 6.2.4 of [REP7-021], few stakeholders have either the access to or the expertise to use specialist software that the transport models have been implemented in and the standard practice is for detailed documentation to be provided as part of the DCO application. Similarly, 'trip matrices' comprise many millions of individual matrix cell values that it would not be practical to process using Excel software. The Applicant refutes the notion that it has not provided sufficient detail for stakeholders to have a clear understanding of the validation of the modelling. As can be clearly seen from the agreed positions on Traffic Impact set out in the Statement of Common Ground with Wiltshire Council [REP7-015], there are no challenges to the traffic modelling and general agreement on forecasting assumptions that have been used. This demonstrates that sufficient detail has been provided to stakeholders via the DCO application documents.

21.1.13

Paragraph 6.2.7 – variable demand modelling

The Stonehenge Alliance cannot comment on whether the Variable Demand Model has been calibrated and validated in accordance with WEBTAG Unit M2 as claimed by Highways England. This is because we have not had access to the calibration and validation report for the South West Region Traffic Model (SWTRM), and especially the variable demand modelling element of it. From the very limited information provided in Highways England's response, we understand that they are claiming that national parameters defined in guidance were found to be appropriate to the regional traffic models and that the evidence of sensitivity of these parameters is based on national not local sensitivities. From this it is hard to escape the conclusion that the variable demand modelling element of SWTRM was based on national, not regional or local, responses. In any case our original concern was that the model was calibrated on data for the whole of the South West rather than local data; and might not reflect the responses of potential future users of the A303. Therefore calibration at either regional or national level is a concern.

The Applicant notes that it has dealt with the subject of Variable Demand Modelling in its response to item 6.2.10 in the Comments on any further information requested at Deadline 7, submitted at deadline 8 [REP8-013].

Highways England has complied with guidance throughout the development of the transport model suite developed for assessment of the scheme. This is evidenced in detail in the Combined Modelling and Appraisal (ComMA) report [APP-298] and its four appendices [APP-299 to APP-302]. With specific reference to the WebTAG unit M2 guidance on variable demand modelling, the Applicant would draw attention to paragraph 5.6.3, which states that "Whatever values are selected, whether from local knowledge or based on the illustrative values, it is essential to conduct "realism" tests (see Section 6.4) to ensure that the actual behaviour of the model against variation in travel times and costs accords with experience". Paragraph 6.4.3 notes that where illustrative values have been used it is "important to check that the behaviour resulting from these parameter values is plausible in their new context".

This process has been followed and the Applicant does not therefore respond to each of Stonehenge Alliance's points individually. The realism tests are presented in chapter 12 of the Transport Modelling Package (Appendix B to the ComMA) [APP-300] appropriately meet the guidance given in WebTAG unit M2. It can therefore be concluded that (as stated in WebTAG unit M2 paragraph 6.4.1) the variable demand model used for assessment of the



Highways England stress that they have complied with the guidance in WEBTAG Unit M2. However we note that this document states:

- a) "Variable demand models should be <u>calibrated on local</u>
 <u>data</u>, to reflect the local strengths of the choice
 mechanisms, or where this is not possible; <u>the illustrative</u>
 <u>parameter values presented in this unit may be used</u>"
 (Para. 1.3.1, DfT emphasis). It appears that the
 - "illustrative" values have been used by Highways England, although they have provided no evidence that using local values was "not possible".
- b) "No matter how carefully the model has been constructed and coded, if the parameter values are wrong the appraisal will be wrong" (Para. 5.6.2); "locally calibrated parameters should be used wherever possible" (Para. 5.6.3). We agree with both these statements.
- c) "The [illustrative] parameter values for main mode choice and destination choice have been derived from "Multi-Modal Data Provision" by MVA, dated June 2005. Information was also obtained from Rand Europe PRISM model of the West Midlands.......These illustrative parameter values represent the current best estimates but are necessarily uncertain" (Para. 5.6.4). We agree that they are uncertain but they are also dated. The models assessed by MVA for their 2005 report must have been calibrated prior to their study, based on data collected even earlier. Accordingly they do not reflect the important changes in travel behaviour over the past 15 years, as discussed in our original Written Representation [REP 2-129].

scheme "behaves 'realistically'" and that the "overall demand response accords with general experience.

The Examining Authority should therefore take comfort in noting that the model development has been undertaken in accordance with guidance and that the Variable Demand Model element of the model is appropriate.



	We also note that the illustrative parameter values for main mode choice and destination choice are based on a small number of studies, as shown in Tables 5.1 and 5.2 of Unit M2. These range from 7 studies for commuters' destination choice to only one study for mode choice for non-home based employer's business.	
21.1.14	Paragraph 6.2.8 – traffic growth forecasts Highways England provide no new information in their response. They have assessed the robustness of the project within a narrow range of traffic growth forecasts and it is therefore not surprising that this does not have a "material impact" on the results.	The Applicant has previously responded to Stonehenge Alliance's concerns about the range of traffic growth forecasts, explaining that the application follows guidance in accordance with NPSNN paragraphs 4.6 and 4.7. The Applicant notes again Stonehenge Alliance's agreement in [REP7-048] Comments on Second Written Questions responses, Tr.2.1 that the DfT does not yet mandate the use of new scenario-based forecasts. Whilst the Applicant repeats that the DfT has not incorporated the revised approach in the May 2019 update to TAG Unit M4 Forecasting and Uncertainty. The Applicant refers the Stonehenge Alliance to paragraphs 6.1.1 to 6.1.4 in [REP8-013] regarding Written Question Tr.2.1, which sets out further information on the range of traffic forecasts and the role of High and Low growth scenarios as defined by WebTAG Unit M4 and DfT National Road Traffic Forecasts 2018 forecast scenarios. The nature of the traffic impacts of this scheme are not particularly sensitive to forecasting uncertainty.
21.1.15	Paragraph 6.2.9 – frequency of busy days The Stonehenge Alliance is well aware of the data that were used to calibrate the traffic model and our concerns in relation to the model are set out in detail in REP 2-129. While we have concerns about the modelling, the issue that we raised is that the Trafficmaster data has been presented to the Inquiry in a way which starts from an unrealistic baseline – in effect free flow conditions – and therefore exaggerates the alleged need for the project. We also think that providing additional information would promote informed debate, as noted previously. Regrettably this no longer appears possible within the timescale of the Inquiry.	The Applicant refers the Stonehenge Alliance to paragraph 6.1.5 in [REP8-013] regarding Written Question Tr.2.2 which indicates the Applicant's reasons for presentation of information related to the fastest days of the year and indicates the existing information presented within the examination documents on journey times, negating the need for the further analysis requested by the Stonehenge Alliance.



21.1.16	Paragraph 6.2.10 – option assessment The Stonehenge Alliance disagrees with Highways England's repeated assertions that the option assessment process has been undertaken in an objective and proportional way, or that adequate public consultation has been carried out, as required by the National Policy Statement on National Networks. Specifically in relation to Option F010, please see Paragraphs 2.3 to 2.5 above.	The Applicant also maintains its position regarding this point as set out in paragraphs 6.2.10 to 6.2.12 of [REP7-021].
21.1.17	Paragraph 6.2.12 – option F010 Highways England state that "the longer distance and alignment of F010 make this option less attractive for local movements than D061 / D062 and it is more likely that trips making local movements, including HGVs, will use the local roads north of the A303." Highways England's own modelling shows that forecast flows on these local roads are relatively low in the Do-Minimum and even lower with Option F010 (as noted in Paragraph 2.6 above). We acknowledge that the modelling does not include the impact of drivers diverting on to local roads if there is a blockage on the A303. However this is <i>less</i> likely to occur with Option F010 than Options D061/D062 because it moves the A303 further to the south.	The Applicant refers the Stonehenge Alliance to paragraph 6.2.27 in [REP8-013] regarding Option F010.
21.1.18	Paragraph 6.2.13 – option F010 Please see Paragraphs 2.6 and 3.13 above. We note that, first, Highways England have still failed to provide their definition of rat running or to respond to the paragraph they quote, apart from repeating arguments that The Stonehenge Alliance has previously shown to be invalid or doubtful, based on information provided by Highways England.	The Applicant refers the Stonehenge Alliance to paragraph 6.2.27 in [REP8-013] regarding Option F010, which responds to the point on rat running.
21.1.19	Paragraph 6.2.15 – economic and cost benefit assessment As the Application documents make clear, the economic case for the scheme is very weak, with a benefit: cost ratio of only 1.08. The	Detailed and robust responses on methodological concerns raised on the CVR are contained throughout its submissions, including in part 13 of its Comments on Written Representations [REP3-013] and in the Applicant's



findings from the Contingent Valuation Study (CVS) account for over 70% of the benefits. If this is not included the monetised costs greatly exceed the benefits and there is therefore no economic case for the scheme to proceed. In their response on this point Highways England argue that the economic benefits exceed the costs, yet they argued at the Issue Specific Hearing (and in Paragraph 6.2.16 below) that the benefits from the CVS do not form part of the economic case. Either the benefits from the CVS are included in the economic case, in this situation it is weak and uncertain, or they are not, in this situation it is non-existent. This seems to be a case of Highways England seeking to "have their cake and eat it".

deadline 4 submissions in response to the deadline 3 submissions of Paul Gossage and the Stonehenge Alliance [REP4-036]. These issues were raised again at deadline 5 and comprehensively answered in [REP6-032].

The overall economic appraisal of the Scheme shows it has beneficial impacts on all journey purposes and a beneficial impact on the wider economy. The contingent valuation study does not seek to say that its results are the economic benefits deriving from the Scheme, but instead seeks to quantify the heritage benefits for valuation purposes. The explanation of the Cultural Heritage Valuation captured by the contingent valuation survey has been very clear that it is only values the enhancement to the tranquillity, visual amenity and landscape severance associated with removing the road from the WHS. Given the importance of the WHS it would be inappropriate not to include it the assessment.

In 2015 the Department for Transport published guidance setting out its commitment to ensuring public resources are invested to enhance the UK's transport network and provide the greatest benefits to society, in the most efficient way. The Guidance sets out the importance of investment decisions being based on clear and robust value for money advice. The value for money framework sits alongside WebTAG and explains how to use the appraisal results to provide value for money advice. The guidance is clear that following the Green Book principles it is preferable for impacts to be measured in monetary values (monetisation) but recognises that not all benefits (and costs) can be monetised. The final stage of the value for money assessment requires consideration non-monetised impacts. For non-monetised impacts, WebTAG recommends using a seven-point scale to denote the magnitude and nature of the impacts, ranging from large adverse to large beneficial.

The culmination of a value for money assessment is the value for money category. This is a succinct summary of the overall assessment, considering monetised and non-monetised impacts. The guidance is clear that it is not just the BCR that informs value for money and there is no requirement for monetised benefits to outweigh monetised costs.

Please also see the Applicant's response to Written Question Tr.2.3 [REP6-032].



21.1.20	Paragraph 6.2.16 and 6.2.17 – economic and cost benefit assessment Highways England seek to make a distinction between impacts to the economy and impacts on cultural heritage, expressed in money terms. They argue that the latter is not relevant to the Examining Authority's assessment. However the purpose of the economic appraisal is to assess the overall impacts on social welfare, not just direct impacts on the economy. The Treasury Green Book¹ makes it clear that "economic appraisal is based on the principles of welfare economics – that is, how the government can improve social welfare or well-being" (Para. 2.3). Subsequently it states "social CBA [cost benefit analysis] requires all impacts – social, economic, environmental, financial etc. – to be assessed" (Para.2.10), although it recognises it may not be possible to monetise some impacts. Given that Highways England have monetised the alleged cultural heritage benefits (unreliably in our view), there appear to be no grounds for excluding them from the appraisal, especially as they are essential to their overall case. Moreover a substantial proportion of the other alleged benefits of the project, for example journey time savings for non-business travellers, have no direct economic impact and these too are monetised using social welfare principles. It is inconsistent to include some alleged social welfare benefits and exclude others. As we have noted previously, the economic case for the scheme is highly relevant to the Examining Authority's assessment of the project, as set out in Paragraph 4.5 of the National Policy Statement for National Networks.	This point was comprehensively answered in the Applicant's response to Written Question Tr.2.3 [REP6-032]. Also, see the response to paragraph 21.1.21 below.
21.1.21	 Paragraph 6.2.18 – economic and cost benefit assessment We note that Highways England has not responded on the issue of cost uncertainty highlighted in the National Audit Office report. In relation to the benefits, described as Willingness to Pay (WTP) by Highways England, we cannot find the source for 	The National Audit Office report highlighted that other large projects have suffered some degree of cost uncertainty and felt this area could, if unmanaged, be a risk to maintaining the projects' value for money assessment. Highways England has addressed this in a number of ways. Firstly, Highways England has set a budget for the project that includes robust allowances for all risks associated with the project. Secondly,



	the claimed range of £1.1 to £1.5 billion and note that even Highways England are not confident that the project's monetised benefits exceed the costs of £1.206 billion at the 95% confidence level. We also note that, in this response, they are including the cultural heritage benefits despite claiming they are not relevant to ExA's assessment. In any case, standard statistical tests allow for uncertainties arising from factors such as the use of sample data, but not systematic biases in data collection nor in the design of surveys. The Stonehenge Alliance believes that both of these are present in the Contingent Valuation Study as set out previously, including in REP 2-129 (section 4.5), REP 2-130 and REP 4-055 (Paragraphs 15 to 18 of the section concerning Issue Specific Hearing 6). In our view this makes the results of the Contingent Valuation Survey much more uncertain than standard tests would imply, and probably overstated.	Highways England has developed a Commercial and Procurement strategy for this project using the lessons learned from a large number of complex projects delivered in similar challenging environments. These lessons have helped define the commercial model and shaped the way the contractor will be procured to ensure cost certainty. The model has been developed to avoid unsustainable aggressive commercial bidding and to encourage collaboration that will ensure the effective management of costs going forward. Highways England is therefore confident that the current cost estimate offers a high degree of cost certainty. 2. Application Documents [APP-298] and [APP-302] set out the approach to modelling the impacts and, where appropriate, the monetised values of the impacts. The Willingness to Pay survey (Contingent Valuation) deals only with monetising the cultural and heritage benefits that come from removing the road from the WHS. The confidence interval relates only to the results of the Contingent valuation survey and not the full range of monetised benefits and are presented in para 6.16.2 of APP-302. However, even at the lower end of 95% confidence interval for the cultural and heritage benefits the BCR would still be above 1 (benefits outweigh costs). 3. See the response to paragraph 21.1.20 above.
21.1.22	Paragraph 6.2.19 – economic and cost benefit assessment Highways England may disagree with the Stonehenge Alliance comment that 'this project has major negative impacts, for example on archaeology' but we see no reason to change our minds. The damage to archaeology and the WHS itself cannot be denied and is endorsed in the evidence put before the ExA, notably from independent specialist archaeologists and ICOMOS-UK whose views are supported by the 2019 Decision of the World Heritage Committee.	The Applicant does respectfully disagree with Stonehenge Alliance and maintains their position regarding this point.
21.1.23	Paragraphs 6.2.20-22 – effects on Stone Curlew and Great Bustard and adequacy of proposed mitigation measures	The Applicant also maintains their position regarding this point, such that the measures proposed are appropriate and sufficient having regard to the legal tests. Natural England and RSPB are content with the measures proposed by the Applicant. In addition, the Construction Environmental Management Plan



	The Alliance's views set out in our REP5-021, paras. 2.1.2, 3.1.2 and 4.1.2, on the competent authority's legal requirement for certainty of no adverse effect on Stone Curlew and Great Bustard during Scheme construction and operation, remain unchanged. Measures to ensure certainty should be provided at the DCO stage and not left to the contractor's employees to decide later.	required to be prepared under the Outline Environmental Management Plan is also required to be submitted and approved by the Secretary of State under Requirement 4 of the DCO, providing a further level of oversight.
21.1.24	Paragraph 6.2.23 – effects on water environment We have not denied that a closed face TBM would be required. Highways England is unable to assure Interested Parties that dewatering would not be needed (it has provision for it in the OEMP); nor has it explained how contamination arising from grouting would be avoided. What happens if, once tunnelling has started, dewatering and pollution are unavoidable? Assurance is also missing that there would be no contamination of the Avon from untreated road runoff. The decision-maker needs certainty, beyond reasonable scientific doubt, that there will be no adverse effects on the SAC. This appears impossible, at present.	See response to paragraph 6.2.5 in submission 8.49 Comments on any further information requested by the ExA and received to Deadline 7, submitted at deadline 8 [REP8-013]. Although dewatering is sought to be minimised, it will be controlled through the regulatory regime for such activities.
21.1.25	Paragraph 6.2.24 – agenda item 8: in-combination effects on protected birds Highways England has not addressed the issue we raised. There will be <i>additional</i> in-combination effects from increased recreation of occupiers of new army housing. This has not been taken into account and assessed by Highways England. Would two new plots for Stone Curlew be sufficient mitigation? The "clarification note" (REP6-039) referred to by Highways England does not state unequivocally that the proposed new nesting plots will be "in the vicinity of the scheme".	It should be noted that Section 2.4 of the Habitat Regulations Assessment (HRA) Likely Significant Effects Report [APP-264] presents the criteria for the identification of relevant projects for consideration as part of the incombination assessment, of which the Army Basing Programme is included and this is also identified as a source of 'in combination' effects in the Statement to Inform Appropriate Assessment [APP-266]. The increase in the local population discussed in the recreational disturbance section of the HRA took into account all sources of an increased population including the Army Basing Programme, the Wiltshire Plan and other sources. Therefore, it is not correct to state this was not taken into account by Highways England.
	Will the Statement to Inform the Appropriate Assessment be revised as we suggest?	As detailed within 6.18 and 11.1.4 of 'Comments on any further information requested by the Examining Authority and received to Deadline 7' [REP8-013], for the purpose of Habitat Regulations Assessment, it is not necessary



to provide mitigation against the possibility of future disturbance of individual pairs of stone curlew, but rather to ensure that the Wessex population of stone curlew, for which the Salisbury Plain SPA is designated, should be maintained by ensuring no reduction in the opportunities for nesting and thus no consequential effects on the population of the SPA itself.

As stated within item 3.6 of the RSPB Statement of Common Ground [REP7-013], in the absence of any opportunity to deliver enhanced fencing at Normanton Down itself, the provision of two additional stone curlew plots (along with the plot at Winterbourne Down) elsewhere within 5km of the SPA will achieve this objective by providing a net gain of stone curlew nesting opportunities.

The provision of the additional plots is considered to provide confidence beyond reasonable scientific doubt that there would be no loss of nesting opportunities for the stone curlew population in the event of any possible incombination impacts from increased recreational usage of the existing byways adjacent to Normanton Down RSPB Reserve. Thus, there would be no adverse effect on the integrity of the SPA and two additional plots (along with the plot at Winterbourne Down) are considered sufficient.

The commitment by Highways England to provide these additional plots has been agreed with Natural England (please see 3.15 of the Statement of Common Ground with Natural England [REP7-011]) and the RSPB (please see section 3.6 of the Statement of Common Ground with the RSPB [REP7-013]).

With regards to the clarification note [REP6-039], it is not considered essential by Highways England, RSPB or Natural England that the additional plots are located within the vicinity of the Scheme itself in order to ensure no net reduction in nesting opportunities for stone curlew since the target for protection is the overall population around this part of Wessex rather than individual pairs. All of the additional potential breeding plot locations that are



		being considered (and have been approved by RSPB) are within 5 km of the Scheme.
		With regards to the Statement to Inform the Appropriate Assessment, the following documents: Likely Significant Effects Report [APP-265], Statement to Inform Appropriate Assessment [APP-266] and supplementary information and signposting such as the clarification note [REP6-039] and Appendix A of the Statement of Common Ground with Natural England [REP7-011], provide all of the information required to inform and are in line with the Habitat Regulations Assessment process. It is therefore not necessary to revise the Statement to Inform the Appropriate Assessment.
21.1.26	Paragraph 6.1.1-3 - insufficient understanding of groundwater conditions The Alliance maintains its position as set out. Dr Reeves' current opinion is that Whitway Rock is present but not fully identified and that it could have a profound impact on groundwater movement in tunnelling. The Stonehenge Alliance suggests there is evidence to show that the Whitway Rock horizon is present and not entirely above the tunnel elevation: this could substantially change the situation as given by Highways England. Clarity on this issue is vital to the viability of the Scheme and to those areas affected by groundwater movement.	See response to paragraph 6.2.4 in the submission 8.49 Comments on any further information requested by the ExA and received to Deadline 7, submitted at deadline 8 [REP8-013] and also Appendix A in the Written Summary of the Oral Submission from ISH10 [REP8-018].
21.1.27	Paragraph 6.1.4-10 - obligations under the World Heritage Convention Highways England has simply reiterated its position without addressing the specific points raised by the Alliance. Our position remains as set out.	The Applicant also maintains their position regarding this point.
21.1.28	Paragraph 6.1.11 – rejection of 4.5 kilometre tunnel option In their response on this point, Highways England refer to their reply to the Examining Authority's question Al. 1.29. Firstly, this relates solely to a western extension to the tunnel section and ignores the	The Applicant's position regarding the option identification and selection process remains as described in response to Written Question AL.1.4 [REP2-024]:



fact that the project, as currently proposed, includes surface sections within the World Heritage Site, at both the eastern and western ends of the tunnel. They state that the "locations of the eastern and western tunnel portals have been identified as the optimum locations when all environmental, technical and economic considerations are taken into account." However this optimisation process took place in the context of a prior decision to construct a tunnel of approximately 2.9 kilometres under part of the World Heritage Site. Irrespective of whether this optimisation work was undertaken correctly, it simply did not consider options with no surface road construction within the World Heritage Site, because "long tunnel" options had already been discounted. Accordingly the "long tunnel" solution was not subject to development work to optimise it, or public consultation, or a full appraisal. In their response to Al. 1.29, Highways England acknowledge that a full heritage impact assessment was not undertaken for the 4.5km "long tunnel" or indeed a longer tunnel option beneath the whole WHS. This is very significant, given that impact on cultural heritage would be the main potential benefit of such options. Highways England claim that there is no evidence that a longer tunnel would have greater cultural heritage benefits, but we consider this is implausible. If the partial tunnel option has a benefit with a Present Value of £955 million (which we doubt), a full tunnel option should logically have a greater value, as well as potentially eliminating direct impacts on the archaeology of the World Heritage Site The

Stonehenge Alliance's position remains that the "long tunnel" option was dismissed too early and this is one of a number of significant flaws in the option assessment process. This is not withstanding our current view, based on emerging information about the geology and hydrogeology of the tunnel route, that any tunnel could be an impractical solution.

"...that, the options appraisal undertaken is a full options appraisal and a proportionate option consideration of alternatives, not only following the WebTAG and PCF processes normally used to assess road schemes, but going further during PCF Stage 1 by introducing additional stages in order to take account of the number of options requiring consideration. The Applicant notes that paragraph 4.27 of the NPSNN states that it is not necessary for the Examining Authority and the decision maker to reconsider this process. However, as evidenced above and in the SAR and TAR, the Examining Authority and decision maker can be satisfied that the assessment was undertaken"

The Applicant also maintains its position regarding the longer tunnel options. This remains as given in response to Written Question AL.1.29 [REP2-024]:

"The locations of the eastern and western portals in the proposed Scheme have been identified as the optimum locations when all environmental, technical and economic considerations are taken into account. There is no evidence that the additional investment required to extend the tunnel length would deliver meaningful additional benefits to the WHS that would justify the additional cost."

In terms of comments about the cultural heritage impacts from longer tunnel options, it is incorrect to assert that the Applicant has said that "there is no evidence that a longer tunnel would have greater cultural heritage benefits". The response to AL.1.29 records that the longer tunnel would be slightly more beneficial in terms of impact on OUV, however (emphasis added), "There is no evidence that the additional investment required to extend the tunnel length would deliver **meaningful** additional benefits to the WHS that would justify the additional cost." The comments from Stonehenge Alliance attempt to suggest the Applicant's assessment of alternatives is lacking because it has not undertaken a "full heritage impact assessment" of the longer tunnel; to be clear, the Applicant has not undertaken a "full heritage impact assessment" of the longer tunnel as it has done for the Scheme (i.e. a 700+page comprehensive assessment), however it has considered the heritage impacts, as set out and explained in response to AL.1.29.

An eastern extension of the tunnel was not described in response to Written Question AL.1.29 because no viable option has been identified for any significant change to the location identified in the Preferred Route



		Announcement. This view was supported by the WHC/ICOMOS advisory mission in March 2018. The final report on this mission [REP1-008] includes the following summary regarding the location of the eastern Portal: "The Mission therefore considers that eastern portal has been positioned in the least impactful location available and close to the WHS boundary, given the constraints imposed by the attributes of the WHS, other significant sites in the vicinity (including Vespasian's Camp and Blick Mead) and local topographic and environmental conditions" Extension of the tunnel to the east, beyond the boundary of the WHS, is precluded by the topography of beacon hill which would require an extension of 4km or more to the tunnel.
21.1.29	Paragraph 6.1.12 – impacts of option F010	The Applicant refers Stonehenge Alliance again to the response provided to paragraph 11.1.3 in [REP4-036], which outlines that WebTAG advocates an
	Highways England misrepresent The Stonehenge Alliance's position by claiming that we have stated that "the option F010 route has been rejected on traffic grounds alone". This is not our position and The Stonehenge Alliance argument that they quote at Paragraph 6.1.15 clearly demonstrates this.	approach to Scheme appraisal that is proportionate to the stage of assessment, with Chapter 10 of the TAR [REP1-031] describing the traffic modelling undertaken in compliance with WebTAG requirements for this stage of assessment.
	However, traffic considerations have been an important part of the argument put forward by Highways England in support of the rejection of this option and we challenge the validity of their position. As we have stated previously, we do not think the traffic analysis is robust nor that it supports Highways England's conclusions. While we do not have the resources to review all aspects of Highways England's assessment, the shortcomings of the traffic analysis inevitably raise concerns about the validity of the process as a whole.	
21.1.30	Paragraph 6.1.13 – impacts of option F010	The Applicant refers the Stonehenge Alliance to paragraph 6.2.27 in [REP8-013] regarding Option F010, which responds to the point on rat running.
	As set out above, the Stonehenge Alliance is not "seeking to pursue a course that misrepresents the selection procedure for F010 by presenting traffic issues as the central argument." It is however an important part of Highways England's submission, including in	The decision-making process for not proceeding with F010 has been documented at length. The 'A303 Stonehenge SWRTM (DCO) model referred to by Stonehenge Alliance as the 'final DCO model', has been used to assess



relation to the environmental impact on villages north of the existing A303. We note that Highways England have not sought to respond on the issue of rat running nor have they produced evidence based on the final DCO model. They have not provided a substantive answer to our comments on their response to question Al. 1.11 [REP3-063 Section 3.2]. This showed that, in relation to the relevant roads north of the A303:

- The modelling is not very robust;
- Forecast traffic flows are relatively low in the Do Minimum, suggesting that congestion is not a major problem on these roads;

Far from increasing traffic, Option F010 reduces total traffic on each route section, and it is hard to argue that it would result in unacceptable traffic volumes.

the impacts of the DCO application scheme. It is not proportionate or necessary to assess options which have already been discounted using the 'final DCO model'.

The Transport Assessment [APP-297] Section 6.3.11 sets out the forecast traffic impacts on the local road network. This forecasts that by 2041 there will be a 1600 vehicle (two way, 24 hr Annual Average Daily Total) traffic reduction on the B390 west of Shrewton, a 1650 reduction on London Road east of Shrewton and a 4100 vehicle reduction on the Packway; providing traffic relief to the local communities along these routes.

Stonehenge Traffic Action Group's (STAG) Written Representation [REP2-127] highlights local communities concerns over the volume of traffic using the local road network north of the A303. As stated in the Case for the Scheme [APP-294] paragraph 2.5.7, use of routes north of the A303 currently results in severance, increases the risk of safety problems, reduced air quality and increasing noise levels for the local communities.

The discussion here relates to the relative performance of the corridor D options and that of F010. As repeatedly stated most recently in paragraph 6.2.27 in [REP8-013], corridor D is more effective at reducing traffic levels on local roads north of the A303 than Option F010.

21.1.31

Paragraph 6.1.16 – value for money estimates

Highways England do not respond to The Stonehenge Alliance's point, which is that the transport benefits of the scheme would be unlikely to outweigh its costs, even if the project was not located in the World Heritage Site and a surface option was feasible. This implies that the uncertain alleged benefits to cultural heritage are required not only to counteract the extra cost of the tunnel but also to counteract the probably negative Net Present Value of the scheme if "normal" conditions applied and to create the very marginally positive Benefit: Cost ratio. This further demonstrates that the case for the project is very weak.

There has been no option appraisal for a route which would not meet the Client Scheme Requirements, including with regard to the WHS, and whether the benefits of such a route would outweigh its costs, so such an implication as is suggested by SHA is not agreed.

To form a holistic view on Value for Money for this Scheme, all sources of benefits and disbenefits (including indicative monetised impacts and non-monetised impacts) have been considered. The benefits to the WHS of removing the road are real, alongside the transport benefits, and have been monetised through the contingent valuation process to aid their inclusion in the Value for Money assessment.



21.1.32	Paragraph 6.1.17 – archaeology along the route options Highways England's response to our comments is incorrect. The boundary of the Stonehenge part of the WHS was drawn not simply for ease of defining it but primarily because contained within it are all the elements or attributes necessary to convey its OUV, integrity and authenticity, as required under UNESCO Operational Guideline 99 concerning WHS "Boundaries for effective protection": "The delineation of boundaries is an essential requirement in the establishment of effective protection of nominated properties. Boundaries should be drawn to incorporate all the attributes that convey the Outstanding Universal Value and to ensure the integrity and/or authenticity of the property."	The Applicant stands by its response [REP7-021]. The need for a boundary review for the Stonehenge part of the WHS is noted in the WHS Management Plan 2015 (Simmonds & Thomas 2015; http://www.stonehengeandaveburywhs.org/assets/2015-management-plan_low-res.pdf) which states: 'At Stonehenge the boundary will be reviewed to consider the possible inclusion of related, significant monuments nearby such as Robin Hood's Ball, a Neolithic causewayed enclosure.' (WHS Management Plan 2015, page 27). See also page 92 'Stonehenge Boundary Review' in the WHS Management Plan 2015. The Applicant does not agree with the Stonehenge Alliance's statement that
	What lies within the WHS boundary does indeed relate to the extent of significant archaeology that may contribute to the OUV of the WHS.	'What lies within the WHS boundary does indeed relate to the extent of significant archaeology that may contribute to the OUV of the WHS.' Not all heritage assets within the WHS contribute to OUV, and some assets outside the current WHS boundary do.
		At agenda item 6 (ii) [REP4-030], 'responding to comments made about assets outside the WHS boundary and a buffer zone, Chris Moore (representing the Applicant) explained that in the HIA the Applicant has taken account of assets outside the WHS that contribute to and convey attributes of OUV, such that, in accordance with ICOMOS Guidance, if a buffer zone was established the Applicant would have assessed the impact on such assets that would fall within the buffer (see also the Applicant's response to written question CH.1.58 [REP2-025]).'
		With regards to the boundary review and setting study, further detail is provided in the Applicant's response to Written Question CH.1.58 [REP2-025] and in the Issue Specific Hearing for Cultural Heritage on the 5 and 6 June 2019 [REP4-030; agenda item 3 (v)].
21.1.33	Paragraph 6.1.19 – extent of model area We thank Highways England for clarifying that the model extends as far as M3 Junction 4 at Frimley. However this appears to be inconsistent with Figure 3-2 of the Combined Modelling and	Figure 3-2 of the ComMA [APP-298] shows both the Region of Focus (RoF) of the SWRTM model and the 'Intermediate Area'. The detail of modelling reduces through the intermediate area. The Applicant's response explains that to the West and South of Junction 4 (Frimley) along the M3, within the intermediate area, the model explicitly represents delay arising from traffic



Appraisal Report, which seems to show the limit of the fully modelled area as being south of Basingstoke.

Could Highways England confirm that the section of the M3 between Junctions 4 and 8 is within the area where traffic flows are "fully simulated including junction modelling" (Combined Modelling and Appraisal Report, Paragraph 3.2.10)? If yes, why is this not shown in Figure 3-2?

congestion and to the east of this the model does not represent this effect. There is no inconsistency as suggested by Stonehenge Alliance.

21.1.34

Paragraph 6.1.21 – distribution of delays

Highways England address the issue of the distribution of business user time savings as a result of the project. Section 6.6.2 of the economic package (App- 302, not App-602 - which does not exist as incorrectly stated by Highways England) sets out the forecast time savings on the A303 as a result of the project and shows them to be 2 to 3 minutes in each of the forecasting years (not just in the opening year as asserted by Highways England). We agree that a saving of 2-3 minutes is not imperceptible, but it is not dramatic or transformational either. It would not be very significant in the context of a longer distance journey, such as from London to Exeter. In any case, this misses the point that The Stonehenge Alliance was making. Our understanding is that the economic appraisal takes account of changes in journey time across the modelled network (with the exception of some irrelevant movements that were masked out). These changes result not only from faster journeys on the A303: Highways England have now provided new information which shows the majority of the benefits derive from savings of between 2 and 5 minutes. This is not a dramatic time saving. We also note that only 12% of business user time saving benefits relate to goods vehicles and therefore it is not surprising that Highways England's own assessment of the Wider Economic Benefits to the regional economy shows that these would be small.

The Applicant notes that Stonehenge Alliance now agrees that the time savings are not imperceptible.

Table 6-5 of the economic package [APP-302] summarises journey time savings forecast on neutral weekdays. Paragraph 6.6.1 explains that this is for a journey along the A303 between the A34 to the east and the A3088 near Yeovil to the West. The Traffic Forecasting Package Table 5-22 [APP-301] similarly shows forecast travel time savings using the A303 (between M25 and M5) [Route 2], also illustrating that average time savings on Busy Days are forecast between 8 and 9 minutes in the opening year. As shown at paragraph 3.1.9-12 in the data package [APP-299] there is considerable variation in delay experienced by drivers on busy days; there would be much larger savings experienced by some drivers that are not represented in the average period conditions represented in the traffic models.

These time savings are assessed in the user journey time economic benefits arising from the scheme have been clearly set out in sections 6.4, 6.5 and 6.6 of the Economic Package [APP-302].

Highways England's own assessment of the Wider Economic Benefits as referred to by Stonehenge Alliance has been undertaken in accordance with WebTAG, using DfT's WITA program. This considers impact on the national economy and not just the south west regional economy. As reported in Economic Package paragraph 6.15.5 [APP-302] there are benefits realised across the South West, particularly in Devon, Cornwall and western Somerset. The Applicant notes, in particular, the continued support for the scheme from Councillor Andrew Davis of Devon County Council [REP4-061] based on their broader assessment of business impacts: "I represent many



		constituents and businesses in the South West Peninsula who wish to see this scheme completed and reap the benefits of all the work that has been undertaken so far".
21.1.35	Paragraph 6.1.22 - benefits to business We are pleased that Highways England agree that the full range of monetised and non-monetised benefits should be taken into account in assessing the project. In their response Highways England restate their position on the overall strategic case for the project. The Stonehenge Alliance disagrees with this as set out in detail in our Written Representation on Transport Planning and Economics Issues [REP 2-129].	The Applicant also maintains their position regarding this point, i.e. that there is a strategic case for this Scheme, as set out in the Case for the Scheme and throughout the Examination.
21.1.36	Paragraph 6.1.23 – funding availability The Stonehenge Alliance remains of the view that there is considerable uncertainty about funding for the project, as set out previously.	The Applicant also maintains their position regarding this point, namely that the Government remains publicly and clearly committed to fund the Scheme, see the response to Written Question CA.2.13 [REP6-026].
21.1.37	Paragraphs 6.4.12-14 – objectivity of statutory bodies and expertise Our observations were intended to be factual unless stated otherwise. Highways England refutes a number of our concerns but fails to be specific, for example, on the expertise of HMAG members that might exceed that of members of the Scientific Committee specifically set up to advise them. As Professor Parker Pearson indicated at ISH 8, the majority of the Scientific Committee	The Applicant maintains their position as set out in 6.4.13 of the deadline 7 Comments on any further information requested by the ExA Report [REP7-021] that the HIA [APP-195] has been undertaken by recognised experts in the archaeology of the WHS and who have previously written HIAs related to other developments within the Stonehenge, Avebury and Associated Sites WHS. See specific detail in this respect set out in the Applicant's response to submissions received at Deadline 4 [REP5-003], item 34.1.1. The Scientific Committee members hold their own independent views with
	are opposed to the Scheme as it stands. We understand that the HIA for the Stonehenge visitor centre was undertaken by Chris Blandford Associates. Archaeologists with relevant expertise were employed by Highways England to undertake the HIA for the Scheme and elsewhere in the WHS but, while we do not accept that the HIA meets the	regards to the Scheme as set out in the Scientific Committee's Terms of Reference and are, of course, entitled to express those views. The views of the Scientific Committee have been sought throughout the Scheme development and the development of the Detailed Archaeological Mitigation Strategy. The Applicant notes that not all members of the Scientific Committee are opposed to the Scheme, some support it, and have provided written submissions in that regard to the Examination.



	requirements of ICOMOS, UNESCO and UK planning policy, this is not relevant to the question asked by the ExA.	With regards to the HIA for the Stonehenge Visitor Centre, Chris Moore wrote the HIA for Chris Blandford Associates. The Applicant thanks the Stonehenge Alliance for its comment that the Applicant has employed 'Archaeologists with relevant expertise' but refutes that the HIA does not meet the requirements of ICOMOS, UNESCO and UK planning policy, and stands by its HIA [APP-195] and the Case for the Scheme and NPS accordance [APP-294]. Regarding the objectivity of statutory bodies and their expertise we stand by our statement in REP7-021; paragraph 6.4.12.
21.1.38	Paragraph 6.3.1 – general principles Our views as set out here also apply to Section 2.2.3 in the dDAMS Rev. 3 (REP7-019) and remain unchanged. Archaeological evaluation work in the area of the western cutting continued well after the HIA was submitted with the DCO application documents. The concentrated flint scatters in this area are obviously of more than "limited value" as independent specialists in the archaeology of the WHS have pointed out and there can be little doubt that, by defining all that may be left of discrete "associated sites" in terms of OUV, they may be counted as attributes of OUV.	The Applicant also maintains their position regarding this point. Also see response to paragraph 6.3.2 in the Applicant's Comments on any further information requested by the ExA and received to Deadline 7, submitted at deadline 8 [REP8-013].
21.1.39	Paragraph 6.3.2 – detailed principles We consider it highly significant that the wording of the bullet point under para.2.3.1 of the dDAMS at Rev.1 was changed in the version submitted by the Applicant at Deadline 6. The original wording read: "Do not harm the integrity or authenticity of the WHS or the assets that contribute to the OUV of the WHS" We naturally commented that this principle is not being followed by Highways England in respect of the Scheme. If it is being followed as the Applicant asserts, why has the bullet point (now bullet pt.10) been changed to read:	As explained in response to 6.3.2 of the Applicant's Comments on any further information requested by the ExA [REP7-021], the Applicant has updated the principles in the draft DAMS submitted at deadline 6 [REP6-013] following consultation with HMAG, which now states: "Avoid and minimise harm to the integrity or authenticity of the WHS or the assets that contribute to the OUV of the WHS." The Applicant disagrees that this principle has not been adopted so far in the design of the Scheme and that this principle would not carry on being applied during the preliminary works and main works phases. The Applicant disagrees with the Stonehenge Alliance's statement that the change of the updated wording gives 'greater leeway for damage to the WHS by the Scheme.' The wording was amended following consultation with HMAG. The Detailed Archaeological Mitigation Strategy (DAMS) along with the OEMP (a final version of both documents will be submitted at deadline 9)



"Avoid and minimise harm to the integrity or authenticity of the WHS or the assets that contribute to the OUV of the WHS"?

The new wording, by providing choices, appears to give greater leeway for damage to the WHS by the Scheme. As we pointed out in our response to the dDAMS Rev. 2 (REP7-050), the wording now makes little sense as it stands in the context of what is required, since it is essential that all of these aspects of the WHS be protected, not just one or another. Bullet point 10 would benefit from redrafting: this also applies to bullet pt.10 in para. 2.3.1 of the dDAMS Rev.3 submitted at Deadline 7 (REP7-019).

provide a comprehensive set of parameters and principles for the contractors to adhere to. The implementation of the documents by the Scheme will be monitored by the Applicant as well as by Wiltshire Council, Historic England and, within the WHS, HMAG to ensure these are met.

21.1.40

Paragraph 6.3.3 – archaeological research strategy

New evidence *has* been produced as a result of evaluation, some of it after the HIA was compiled. It is clear that members of the Scientific Committee who are *independent specialists in the archaeology of the WHS* do not agree that remains that will be removed as a result of the Scheme do not make a significant contribution to the OUV of the WHS. There may well be, in addition, unknown remains such as burials, still to be identified. We stand by our comments under our paras. 2.1–3 in this section, which also apply in the case of the dDAMS Rev. 3, Section 3.

The Applicant refutes the Stonehenge Alliance's statement that 'New evidence has been produced as a result of evaluation, some of it after the HIA was compiled'. This statement is incorrect. The Applicant maintains its position as set out in its deadline 7 response 'Comments on any further information requested by the Examining Authority and received at Deadline 5 and 6' [REP7-021; item 6.3.3].

See above at 21.1.37 regarding the Scientific Committee - their individual, independent views with regards to the Scheme and the fact that not all members of the Scientific Committee are opposed to the Scheme, some support it, and have provided written submissions in that regard to the Examination.

Regarding the archaeological remains that will be removed by the construction of the Scheme and their contribution to the OUV of the WHS, the Applicant has responded to this point previously in its deadline 7 response 'Comments on any further information requested by the Examining Authority and received at Deadline 5 and 6' [REP7-021; item 6.3.3]. The remains that will be removed by the construction of the Scheme do not 'make a significant contribution to the OUV of the WHS' such that the integrity of the WHS would be diminished by the removal of these remains.

Regarding burials, there is no evidence for any dense burial groups, flat grave cemeteries, burial monuments/ other monuments of Neolithic or Early Bronze Age date within the Scheme construction footprint for the western portal or the approach cutting [REP5-003; item 11.2.37 and REP3-013; item 12.3.189].



		Comprehensive evaluation has not identified any evidence for funerary monuments or burial contexts within the area of the eastern portal [REP5-003; item 34.1.4].
21.1.41	Paragraph 6.3.5 – Appendix E We see no reason to change our opinions expressed under this section. It is obvious that implementation of the Scheme would signal the acceptability of permanent and severe damage to a WHS in the face of specific planning policy and guidance and UNESCO's reminders concerning HMG's obligations under the WH Convention. The clear message of the Scheme is that HMG no longer cares enough about the protection of our national heritage of the highest significance. The implications are, therefore, a serious loss of confidence in those bodies responsible for heritage protection; and that it will be acceptable for possibly less important heritage assets valued by local communities throughout the country not to be protected as they should be.	The Applicant maintains its position and its response to the Stonehenge Alliance's comments on Appendix E in the Applicant's deadline 7 response 'Comments on any further information requested by the Examining Authority and received at Deadline 5 and 6' [REP7-021; item 6.3.5]. The Applicant refutes the Stonehenge Alliance's comment that the 'implementation of the Scheme would signal the acceptability of permanent and severe damage to a WHS in the face of specific planning policy and guidance', as the Scheme has been carefully and sensitively designed to limit landtake both within and without the WHS and in order to integrate the Scheme into the existing landform and to remove the sight and sound of traffic from much of the WHS landscape, a key aspiration of the 2015 WHS Management Plan. The HIA [APP-195] assesses a Slight Beneficial effect on the OUV of the WHS as a whole. The Case for the Scheme and NPS accordance [APP-294] sets out the Scheme's alignment with national planning policy.
21.2	Written Summary of Oral Submissions	
	Matter Raised	Highways England's Response
The Applicant's Written Oral Submissions for ISH8 [REP8-016] and ISH10 [REP8-018] has responded to the points made by the Stonehenge Alliance in REP8-052 and REP8-053 respectively. Additional points raised are detailed below.		
21.2.1	ISH8 3.1 Approvals/agreement/consultation If the Secretary of State is to decide on vibration control measures and ground movement monitoring, presumably he/she would also need to be satisfied with the methods forprotection of archaeology should problems arise with vibration and subsidence. We have not	The Applicant responded to this point in its 'Written Summary of Oral Submissions put at Cultural Heritage, Landscape and Visual Effects and Design Hearing on 21 August 2019' [REP8-016; agenda item 4.1 (i)] where it stated:



seen a full description of what would be done, just some 'Highways England proposes that the DCO is amended to provide that the suggestions: who will decide what should be done if these problems CEMP, and the management plans under it...be subject to Secretary of State approval.' arise? This would include the Ground Movement Monitoring Strategy (MW-CH8) and the Vibration control measures included in the Noise and Vibration Management Plan (PW-NOI3 and MW-NOI3). The Applicant agrees that the Secretary of State would need to be satisfied that the methods proposed would achieve the necessary outcomes (in order to protect the archaeological remains above the tunnel) and detail what mitigation measures would be taken, in tunnel, to ensure that this is achieved. Further detail with respect to monitoring of ground movement and vibration is also set out in REP8-016, in relation to agenda item 4.3(iv). 21.2.2 ISH8 4.4 Design It is inevitable that the Scheme will remove the view of the Stones for vehicle users, and this has been set out in Chapter 13 People and Communities. iv Design Principles Various visual interpretations of the design vision and principles relating to If the scheme is agreed, certain parameters will be set within which the portals and green bridges are included in Annex A.4 of the OEMP [REP8the design has to work. However, at the present stage, some of the 006]. The OEMP design principles will enable a Scheme to achieve the vision aims appear to be impossible to achieve, e.g.: of exemplary design unique to the WHS. P-PW S01 ("Tunnel portals, retaining walls and other structures"): The Scheme intent through the WHS is to reduce the presence of vehicles "design to be sympathetic to the surrounding landscape"; and and therefore they are either in tunnel or deep cutting and as such they will not have views of landscape features as per existing views. To address this, P-PW S04 "The tunnel to be designed to enhance the user the OEMP sets out principles to ensure the design of the retaining walls, experience and become a new point of reference when travelling portal and tunnel will enhance their journey through its design. along the A303." The pedestrian experience within the WHS has been prioritised over that of Where will signs be placed to show travellers they are entering a vehicles users, so that vehicles are not visible to the extent which they WHS? if the WHS is entered through an underpass or a cutting and a presently are. The ability for drivers to stop and visit the area will remain and tunnel, what kind of experience of the WHS landscape will people intended visitor access will be enhanced by the Scheme. have? This is a serious issue if the scheme goes ahead. The Alliance would not propose an above-ground route for the improved A303 as an alternative. The experience of the WHS landscape from the existing road is widely acknowledged to be important to a great many people who are unable to stop on their journey. At present they know



they are passing through a special landscape. With the scheme in place they would have little idea of the WHS they were travelling through. To suggest that it would be possible to design the scheme so that it would fit into the landscape and that going through the tunnel would somehow replace the present amazing experience of anticipation of seeing the henge (which would be completely lost to future generations), is bizarre.

21.2.3 **ISH8**

The **views produced at Deadline 7** do not alter our opinions previously given. We note, for example, that the view north-west from Vespasian's Camp (Fig.7.106) has been taken with trees in leaf (the trees may not always be there and more of the Scheme would show in winter); similarly, the view north from Blick Mead (Fig.7.107).

Highway England's dynamic view 3 (Fig. 7.97), dynamic view 4 (Fig. 7.98) and dynamic view 6 (Fig. 7.100) are taken with Green Bridge 4 in the foreground obscuring sight of the western cutting. Since people move within the landscape, there seems little point in supplying views from locations which best disguise the impact of the Scheme.

Views Fig 7.102 and 7.101 (for which we had asked) amply serve to illustrate the incongruity of the massive highway cutting within the WHS landscape;

Dynamic view 6 (Fig. 7.99) is taken from a viewpoint that would not be much used by the public and is again produced to show the Scheme to best advantage.

Photomontage "PROW on the line of the old A303" produced in **Annex 4 of the OEMP** is again misleading, owing to its having been taken from a viewpoint which hides the new road, presumably with Green Bridge 4 in the foreground. The view should have been taken from the embankment of the present A303, visible in photomontage "Tunnel west portal approach" (also in Annex 4 of the OEMP) which

The view from Vespasian's Camp and from Blick Mead were requested during the examination process and therefore it has trees in leaf because this was the condition of the vegetation at the time of taking the requested images.

The Applicant considers that the trees will be present as they are part of the Registered Park and Garden and if they were to be removed by the landowner then it would inevitably increase views of the existing A303 and/or the Scheme (see the Applicant's response to Written Question CH.2.8 in this respect [REP6-022]).

In terms of the views when the vegetation is not in leaf, the density of the existing vegetation, even when not in leaf will filter views. The Scheme will be on the opposite side of a cutting in relation to the view from Vespasian's Camp. As noted in the Environmental Statement Appendix 6.9 – Cultural Heritage Setting Assessment [APP-218, page 75], and the Applicant's response to Written Question CH.2.8 [REP6-022] the proposed Scheme would adopt a nearly identical surface alignment to the existing A303 dual carriageway that is situated directly adjacent to the north side of this heritage asset. The portal entrance would be lower than intervening ground levels and therefore there would not be views of traffic emerging from eastern portal.

Views from Blick Mead will reflect the context of existing views of vehicles on the existing A303, which are largely filtered even in winter conditions due to the density of the vegetation.

The dynamic views are taken from the publicly accessible route across Green Bridge No. 4 and are representative of how the Scheme could look applying the principles of the OEMP. There would not be public access beyond the path, and Green Bridge No. 4 would therefore be in the foreground.



would overlook the new cutting and tunnel portal. The map/plan ZTV for this area (REP7-025, 'Western Cutting' ZTV, Fig..4) indicates that you wouldn't see the cutting from the byway: inexplicably, the ZTV of the proposed A303 in REP7-025 is of the *road surface* and not the cutting and tunnel portal!

Again, it would have been helpful to have had a moving image, over this western cutting section from Stonehenge to the present Winterbourne Stoke roundabout and vice versa, from the height of a walker along the proposed A303 byway.

The location of the path has been indicated as being central to Green Bridge No. 4 specifically for the purpose of reducing foreground views of the cutting, which is acknowledged by the comment from Stonehenge Alliance. Whilst people move within the landscape, the Scheme still proposes 'fixed' routes for moving across Green Bridge No. 4, like any use of an existing footpath, where the user is required to remain on the path.

The suggestion that the cutting is incongruous with the landscape has to be considered in the context that this part of the WHS is already crossed by the A303 and the cutting is a design option to reduce the land take from the WHS. Placing the road and vehicles below the surface level of the landscape, as opposed to existing views of vehicles on the A303 across the WHS, will be an improvement in the visual context of the WHS when viewed from the wider landscape.

Dynamic View 6 is figure no. 7.100. This view will be well used by the public as it is from the existing A303 which is proposed to be reverted to a restricted byway and at the junction to the proposed route across Green Bridge No. 4.

Figure 7.99 is taken from the proposed path network across Green Bridge No. 4 and therefore would be used by the public. It shows the Scheme as one way it could come forward with the applied principles of the Outline Environmental Management Plan.

The images in Annex 4 are CGIs rather than photomontages. The image is not misleading because it illustrates a view from the existing A303 which will be highly used as a restricted byway and demonstrates the application of the design principles in the OEMP. The very top of the cutting at the western portal is visible and the road and traffic would not be visible due to being in cutting beneath the ground levels.

The ZTV [REP7-025] illustrates the road surface and vehicles. These are the appropriate features of the Scheme to model and were undertaken in response to requests from Wiltshire Council.

The Applicant considers that sufficient illustrative material has been provided in the DCO and during the examination and the context of a moving image is presented by the dynamic photomontage views.



21.2.4

ISH8 8. Blick Mead Hydrology

If monitoring (and any associated remediation) is required for groundwater levels at Blick Mead during construction and operation, how should this be secured?

a) Through the OEMP?

George Reeves, for the Alliance, said that he could explain why there are springs at Amesbury Abbey and Blick Mead. He has visited the site and spent a considerable amount of time studying the borehole records, borehole logs, the geophysical logs, and the groundwater data such as it is, going west from the Blick Mead/Amesbury Abbey springs. The spring line lies on and arises from the Whitway Rock formation and that is highly relevant the whole way west through all the borehole records from which, if you look at them carefully, you can see the evidence. A zone of elevated permeability is lying above the equivalent horizon to what is called the Whitway Rock/Barrois sponge bed and the Stockbridge Horizon. The Whitway Rock affects the whole tunnel route largely below the horizons which will be excavated but will have a profound effect, in Dr Reeves' opinion, on the groundwater system through the proposed tunnel route.

Groundwater monitoring shall be defined within the Groundwater Management Plan (GMP) required by item MW-WAT10 of the OEMP [REP8-006]. An additional point has been included within this item to ensure that Blick Mead is considered within the GMP, as follows:

f) In respect of all of the above matters, the Plan must specifically indicate how Blick Mead and private water supplies are to be considered.

A detailed response to Dr Reeves' submission is set out at Appendix A of deadline 8 submission - 8.52.3 - Written Summary of Oral Submissions put at Flood Risk, Groundwater Protection, Geology and Land Contamination Hearing on 29 August 2019 [REP8-018]. Highways England and Dr Reeves are using the same information, but the Applicant disagrees with the interpretation put forward by Dr Reeves.

It is agreed that the Whitway/Stockbridge Rock is mapped by the British Geological Survey in the Seaford Formation approximately 5 to 10 m below the base of the Newhaven Chalk Formation. The Stockbridge Rock is not however recognised or mapped to the north of Great Durnford around Amesbury and Stonehenge as shown by the geological map presented by Dr Reeves. It is agreed that there is evidence in some of the A303 ground investigation boreholes of hard bands. Highways England does not agree that the hard bands are continuous or that they affect the whole tunnel route.

21.2.5

ISH8 8. Blick Mead Hydrology

If monitoring (and any associated remediation) is required for groundwater levels at Blick Mead during construction and operation, how should this be secured?

g) Through an additional requirement?

The Alliance agrees with what George Lambrick has said regarding the need for a multidisciplinary team for [bespoke] monitoring at Blick Mead. It seems a little precipitate to proceed when it appears there is not yet full knowledge of the ground rock/groundwater situation. As Dr Reeves has briefly pointed out, there are very strong implications

With regard to monitoring, please refer to the above response to paragraph 21.1.45.

Highways England is monitoring the water environment at Blick Mead and provision for ongoing monitoring is provided for in MW-WAT10 of the OEMP [REP8-006]. During the development of the Groundwater Management Plan, 'the main works contractor shall consult with the Environment Agency and Wiltshire Council with regard to the groundwater flood risk component and any heritage implications to Blick Mead' so there is provision for a multi-disciplinary approach.

Please see response to paragraph 21.1.45 regarding the interpretation of Dr Reeves.



re building of the tunnel within this particular unique ground rock that will have a bearing on what Highways England and Wiltshire Council are now being asked to consider.	Groundwater level trends are typical of chalk aquifers and do not suggest there are specific fracture controls on flow to Blick Mead. Regarding bespoke monitoring at Blick Mead, please see item 6.1.1 in Comments on any further information at Deadline 5 and 6 [REP7-021].
ISH10 3.2 Road drainage strategy i) a and b The Alliance is concerned about untreated road drainage, potentially from a chemical spillage or other, passing across Blick Mead into the Avon SAC, with potential for damage to environmental material at Blick Mead and contamination of the SAC. Although this is the current situation, we consider that increased traffic together with the flyover and joining slip roads could make road accidents involving possible pollution events at this location more likely than at present. Highways England's proposals for culverts for untreated road drainage over the Blick Mead Site are inadequate to ensure no adverse effects on the SAC beyond reasonable scientific doubt. We share the concerns expressed by the EA and WC on the lack of explicit detail on the control of pollution from road drainage but do not consider, in respect of the SAC, that detailed design should be a matter for agreement with the EAWC at a later stage or that reference is simply made in the DCO documentation to the need for additional measures beyond the DRMB requirements. Nor do we consider this a matter to be agreed at a later date with the SoS (or the contractor) following the advice of the EA and others "further down the line"; rather, the Statement to inform the AA should state that, beyond reasonable scientific doubt, there would be certainty of no adverse impact on the SAC as a result of a chemical spill or similar incident which would require additional storage capacity for contaminated fluids (including water) over and above that required for DMRB standards owing to the sensitivity of the environment of the Scheme.	The Road Drainage Strategy of the Environmental Statement defines several pollution control measures within the highway drainage networks that utilise part of the existing highway drainage network and existing outfall into the Avon River. It is important to note that the detailed design of the drainage must be based on this strategy, as per Requirement 10. These control measures include: The tunnel drainage system includes, an impounding sump in addition to the outfall to the surface water drainage network. The tunnel drainage would be pumped to a point east of the tunnel where a gravity system would then convey the flow to either the impounding sump or the proposed highway network depending on water quality. A diverter valve would allow the flows to directed to the correct system, any polluted water would be contained in the impounding sump prior to being removed and disposed in a safe manner. Our response to Written Question Fg.2.14 [REP6-028] has described the "failsafe" provision of the diverter valve, explaining that if power were lost, the valve would move to a previously agreed "safe" position, which would direct water to the impounding sump. In addition, our summary of oral presentation at ISH10 [REP8-018, agenda item 3.2.ii] explains why loss of power of either incoming electrical supply will not cause a failure in that pumping system. The eastern section of the highway drainage includes eight new Drainage Treatment Areas in the form of linear ponds located within the highway boundary adjacent to the slip roads at Countess roundabout. These ponds would replace the existing unlined ditches to which the runoff from the carriageway currently outfalls. The ponds would be lined, planted with reeds and contain permanent water to provide treatment prior to discharge and enhance biodiversity opportunities.



With reference to MW-WAT6 and MW-WAT7, the Alliance considers that measures for protection of the SAC (already overpolluted) should include regular monitoring, on a daily basis, during construction and, perhaps on a less regular basis, for some time during operation of the Scheme. Regular monitoring is also needed before work begins to obtain baseline data for heavy rainfall periods and periods of dryer weather.

- Particular attention has been given to the catchment adjacent to Blick Mead, as part of the proposals the ditch would be lined with a filtration treatment system to treat the runoff.
- Penstocks would also be provided in the chambers immediately upstream of the ponds to provide additional spillage containment.

On the basis of the application of the mitigation measures, all highway surface runoff will be subject to treatment prior to discharge to ground or watercourses and also have cut off mechanisms (penstocks) to minimise the risk of any detrimental environmental impact from accidental spillages. These are all matters of detailed design that will be able to be resolved through the Requirement 10 process. The Secretary of State will be determining if the design is appropriate for this Scheme, taking account of the local environment.

It should also be noted that, as reported in the Chapter 11 of the Environmental Statement [APP-049], on the basis of the mitigation set out in the Road Drainage Strategy, the assessment concluded that there would be no likely significant effects on the water quality of the River Till and the groundwater, and a likely significant beneficial effect on the water quality of the River Avon.

21.2.7

Highways England said, re Dr Reeves' complaint about non-provision of requested data, notably 2018 ground investigation work, that this comprises c.4000 pagers of borehole information which it does not intend to submit to the Examination since it is not required for the ES. Highways England also said that it would be wholly inappropriate to release **that volume of material that hasn't been subject to analysis**. This is a matter of concern. Not only would Dr Reeves have been content to study 4,000 additional pages of data (having already studied some 5–6,000 pages earlier supplied by Highways England), but it is also very surprising to learn how much data remains to be analysed, especially since we have highlighted the inadequacy of information in the DCO application documentation on geology and groundwater in particular.

The ES was based on the geotechnical information presented in the Preliminary Geotechnical Information Report (PGIR) which was appended to the ES [APP-273]. The PGIR includes summary and interpretation of the GI undertaken up to February 2018. The factual data from the 2018 ground investigation did not inform the Environmental Statement and therefore is not pertinent to the Application.

The design process is iterative. At each stage in the process, as the design progresses from the outline to the detailed stage, ground investigations are undertaken, to address issues identified in earlier phases of investigation, to increase the designer's knowledge of the ground conditions and to inform a more detailed design. Decisions are made at various stages in the development process, which do not require the detailed design to be complete. The DCO design has been developed to a sufficient level of detail



	to inform the environmental impact assessment and DCO decision, with neither requiring the detailed design to be complete.
	The 2018 (and subsequent) GI data will be used to inform the next stage of the design (the detailed design).



22 Roger Upfold (REP8-061)

22.1 Written Summary of Oral Submissions		
	Matter Raised	Highways England's Response
The Appl	licant's Written Oral Submissions for ISH11 [REP8-019] respond Rodger I	Upfold's comments received at deadline 8. Additional points raised are detailed
22.1.1	In the Outline Environmental Management Plan (OEMP) 8.47 it states that "PRoWs to have a bound surface where appropriate to their use": This is too vague as cyclists of all types must have as good a surface to ride on as the existing/new roads, using routes with minimal diversion, particularly where understandably they may not on safety grounds be permitted to ride, eg through the tunnels in any case most NMUs do not want to use the tunnels, preferring to be safely away from the dual carriageway with quiet views of the landscape and its heritage.	See Highways England's response to agenda item vi in the Written Summary of Oral Submissions put at draft Development Consent Order Hearing [REP8-019] which, in summary, explains that Highways England has developed the design to a level that enables it to identify the Scheme's land requirements and to assess its environmental impacts. However, the detailed design of the Scheme will follow, if development consent is granted, with the appointment of a contractor. This is the industry standard approach to developing significant highways projects. The response also explains that in addition to key commitments regarding PRoW surfacing, the OEMP sets out further design principles including P-PROW1 which states that "Public Rights of Way (PRoW) and Private Means of Access (PMA) to have a surface that is appropriate to their use, and location, developed in consultation with SDCG". As set out in the OEMP, ultimately the surface will be agreed with the adopting authority following that consultation, which is appropriate as they will be the body responsible for the long-term maintenance and management of those public rights of way.
22.1.2	The OEMP also says: Surface of PRoW to be agreed with adopting authority. We wish to see that the DCO/OEMP sets objectives consistent with the previous submissions made by the cycling groups/representatives, so this detail is not left to re-interpretation by others at a later stage.	Highways England considers that the measures identified within item D-CH26 and P-PRoW1 of the OEMP [REP8-006] are sufficient to secure an appropriate surface on PRoWs and appropriately restricts any future interpretation by others. As the adopting authority, it is not in Wiltshire Council's interest to agree to a surface which is not appropriate for its intended use.



22.1.3	Additionally, the OEMP states a maximum 3m wide bound surface: However, where possible, eg the new restricted Stonehenge Byway on the alignment of A303, we seek 4m out of the 8-10m available to allow for some degree of vegetation encroachment whilst leaving adequate width to avoid any user conflict, and permit shared use by statutory utility vehicles and those with private means of access, yet still leaving room for cyclists to pass a vehicle whilst remaining on the bound surface.	The 3m width of bound / unbound surfaces of the PRoWs has been agreed in consultation with the heritage stakeholders to reduce their impact within the WHS. As such, the proposed 4m width is not agreed.
22.1.4	Further, for all new PRoWs, there should be a commitment on drainage to minimise damage, reduce the ongoing maintenance burden, prevent flooding/ponding and to minimise risk from ice in winter (as manageable adverse effects on all NMUs, but especially cyclists), not least to take account of the greater likelihood of more extreme weather events as a result of climate change.	Item D-CH26 of the OEMP submitted at deadline 8 [REP8-006] provides that all PRoWs within the WHS must be suitably drained. The detail of drainage will be considered in consultation with SDCG and agreed with the adopting authority as part of the discussions on surfacing. Through the measures set out in the OEMP, Highways England is confident that appropriate mechanisms will be in place to ensure that public rights of way are constructed to a standard appropriate for their users and that Wiltshire Council will be in a position to maintain them as such.
22.1.5	Finally, the DCO/OEMP should cover PRoW road crossing points, and specifically where and what type of traffic controlled crossings are to be provided (eg Pegasus, essential at Longbarrow) to minimise severance for all NMUs, especially as traffic flows are likely to increase over time? In summary, on behalf of NMUs we wish to see these matters covered by the DCO or OEMP, and defined as objectives and specific detailed commitments, rather than just as principles.	See Highways England's response to item vi in the Written Summary of Oral Submissions put at the draft Development Consent Order Hearing [REP8-019] which, in summary, explains that Highways England requires a proportionate degree of flexibility to develop the detailed design. This is the industry standard approach to developing significant highways projects. Public rights of way are shown within the DCO application, including a new right of way between Amesbury and Winterbourne Stoke which will be a key benefit for non-motorised users. In addition to documents within the DCO application, Item D-LAN5 of the OEMP [REP8-006] secures a Pegasus crossing at Longbarrow on the A360 southern link and the link to Winterbourne Stoke.



Wilsford-Cum-Lake Parish Council and the Amesbury Museum and Heritage Trust (AS-102)

23.1	Additional Submission	
	Matter Raised	Highways England's Response
23.1.1	I'm a little concerned that the specialists are claiming there will be no effects on the proposed scheme as I understand from speaking with the farm manager from the Bailey estate the other day that they were completely unaware of the severity of the flooding within our parish and have only in these last few days seen the extent of the damage that is caused when shown photographic evidence. I believe they have also taken copies of the photographs as reference so I'm not sure they already have a realistic grasp on actual events that occur in the area and I hope are reviewing the situation further. I have included some visual reference of my own below [see original submission AS-102] to show you the effects the groundwater has on the parish. I would also like to send you some video footage showing the huge volume of traveling water a little further up towards Lake Rising if you are happy to accept a link. This all occurred 4 years ago from the direction of the A303/Salisbury Plains and Wilsford Cum Lake is located just a couple of miles from your proposed works.	The Applicant is well aware of areas of flooding and confirms that there is no significant impact as a result of the proposed Scheme. Appendix 11.4 [APP-282] of the Road Drainage and Water Environment chapter of the ES shows existing areas of flood risk around Wilsford-cum-Lake in Figure 3.10. Section 1.3.3 of Appendix 11.4 states: 'Several communities in the study area have had historical records of possible groundwater flooding: a) within the River Till Catchment: the Till Valley, Tilshead, Orcheston, Shrewton, Salisbury Plain Military Camps, Winterbourne Stoke, Berwick St James and Stapleford. b) within the River Avon catchment: Enford, Haxton, Netheravon, Durrington, Wilsford-Cum-Lake, Woodford (both Upper and Lower).' Dates of flooding in 2003 and 2014 are referred to in Chapter 4 Conceptual Model. The effects of the Scheme on flood risk are shown in Figure 4.2. There is no change in the vicinity of Wilsford-cum-Lake. The February 2014 groundwater flooding event is used to represent the peak groundwater level/flow condition and is a worst case for flood risk (paragraph 4.1.3). There is no significant change in flow in any reach at peak flows in the River Avon or the River Till (paragraph 4.1.8) and further details are given in



paragraphs 4.1.10 and 4.1.11. Predictions of water level rise at boreholes are provided in Table 4.1 for peak (flood) groundwater conditions. Wilsford-cum-Lake is down gradient of the proposed scheme so any change in water levels would be a fall which will not increase flood risk.
The Groundwater Risk Assessment [APP-282] Annex 1 describes model simulations of the effects of the tunnel at extreme low water level conditions, average, and extreme high conditions. The modelling approach has been reviewed and considered appropriate by the Environment Agency and Wiltshire Council's peer reviewers.
This was confirmed in the email correspondence seen at [AS-102].



Stonehenge and Avebury World Heritage Site Coordination Unit (REP8-065) 24

24.1 **Written Summary of oral submission Highways England's Response Matter Raised** The Applicant's Written Oral Submission for ISH8 [REP8-016] has responded to the points made by the Stonehenge and Avebury World Heritage Site Coordination Unit in REP8-065. Additional points raised are detailed below. 24.1.1

Harm to the OUV of the WHS

The comments in relation to this item on the agenda remain the same as those provided in response to the first hearing when the weight given to the protection of OUV was discussed. No changes in application or new evidence form the developer have appeared in the interim to alter this position. The issue relates to the weight given to international obligations to prioritise the protection of WHS's and how far damage to an area of a cultural landscape can be offset by enhancement to another

The Applicant responded to agenda item 3 (i) at ISH8, as recorded in its Written Summary of Oral Submissions [REP8-016; page 1-2] where it explained that:

'Highways England has addressed compliance with international obligations (with respect to the World Heritage Convention) fully in writing. Mr Taylor QC directed the ExA to the Applicant's response to the Examining Authority's Written Question G.1.1 [REP2-021], the Applicant's Written Summaries of oral submissions at Cultural Heritage Issue Specific Hearings (ISH2) [REP4-030] (specifically agenda items 3(i), 3(v), 3(vi) and Appendix A to that document), and items 34.1.47 – 34.1.62 of the Applicant's response to comments submitted at deadline 4 [REP5-003].'

Highways England is fully aware of its obligations with respect to the WHS and its OUV, and the application has been prepared with due regard to the obligations under the World Heritage Convention. In full recognition of its obligations under the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO 1972) (the World Heritage Convention) the Government is making a substantial investment in funding a tunnel past Stonehenge to bring extensive benefits to the WHS.

The protection and conservation of World Heritage Sites, in line with the World Heritage Convention, is integrated into the comprehensive UK legal and policy framework in connection with the assessment and consideration of harm to heritage assets. As a result, great weight is given to harm to World Heritage Sites. The application by the Secretary of State of the planning balance envisaged by this framework and, in particular, the NPSNN is in



accordance with the World Heritage Convention. Further detail is provided in relation to the obligations under the World Heritage Convention and how they're complied with in response to Written Question G.1.1 [REP2-021].

With regards to the comment by the WHS Coordination Unit regarding 'how far damage to an area of a cultural landscape can be offset by enhancement to another', the Applicant has responded previously to this in comments by the Stonehenge Alliance [REP5-003; item 11.2.26] where the Applicant stated:

'In terms of balancing the harm and benefits to attributes of OUV as a result of the Scheme, in order to arrive at an overall effect on the WHS as a whole, the Heritage Impact Assessment has been prepared following ICOMOS guidelines

(https://www.icomos.org/world_heritage/HIA_20110201.pdf). The scope and approach of this assessment, which is reported in ES Appendix 6.1 [APP-195], was endorsed by UNESCO/ICOMOS in their report from their third advisory mission on the scheme early in 2018

(https://whc.unesco.org/en/list/373/documents/). The Applicant considers that the HIA has been carried out accurately and with a full appreciation and understanding of the importance of the whole WHS and its OUV. It considers the approach to balancing the impacts of the Scheme on attributes of OUV in order to reach an overall conclusion in terms of the impact on the OUV of the WHS is appropriate, and necessary in order to inform the tests required to be undertaken by the Secretary of State.'

At ISH2 agenda item 3 (vi) [REP4-030; pages 2-4 and 2-5] the Applicant:

'referred the Examining Authority to the Applicant's response to written question G.1.1 [REP2-021] which dealt with the implementation of the requirements of the World Heritage Convention into the UK's legislative and policy framework. [The Applicant] explained that one of the key aspects to be understood comes from the ICOMOS Guidance, which identifies that the process of assessing the impact of the Scheme on the WHS requires consideration of harm against benefits. [The Applicant] cited paragraph 2-1-14 of the guidance which refers to "[b]alanced and justifiable decisions", and to paragraph 2-1-5 which provides that



		"[u]ltimately, however, it may be necessary to balance the public benefit of the proposed change against the harm to the place.'
		'[The Applicant] referred to paragraph 5-9 of the guidance which provides the example of removal of a road from the vicinity of a building which conveys OUV as a major beneficial effect. Paragraph 6-2 reiterates that "Ultimately, however, it may be necessary to balance the public benefit of the proposed change against the harm to the place."
		'[The Applicant] submitted that a balancing exercise is to be undertaken in the decision-making process. An HIA has been undertaken, and it weighs adverse and beneficial impacts on the attributes of OUV against each other, and concludes that overall the Scheme will have a slight beneficial effect on the OUV of the WHS. The balance undertaken in the HIA is limited to heritage considerations and is not the overall balancing that is required of the Examining Authority and Secretary of State. That overall balancing exercise and how the Applicant considers all the benefits and impacts of the Scheme should be weighed against each other is set out in the Case for the Scheme and NPS accordance [APP-294].'
24.1.2	The slight beneficial impact on the OUV of the WHS could very well be an overstatement of the overall impact of the scheme. This could affect the assessment of its value for money.	Highways England is confident that the appraisal process is accurate and robust in heritage terms within the HIA, and in the value for money assessment process. It notes that a change in the impact on the OUV would not change the value for money assessment, which did not seek to specifically monetise the OUV impact.
24.1.3	Outcomes [of the HIA] have appeared too late to effectively influence design and a limited approach to stakeholder involvement has constrained the effectiveness of the process. The WHS governance structure had little opportunity to influence assessment or design. Ideally an HIA should be produced very early in the scheme design with a wide range of stakeholder involvement as advised in the ICOMOS guidance. It should be an iterative process aimed at producing a scheme that best protects the WHS and its OUV.	ICOMOS Guidance on HIA for Cultural World Heritage Properties notes that: 'It is important to identify possible negative impacts very early on in the process, in order to inform both the development design and the planning process in a pro-active rather than reactive manner' (ICOMOS 2011, p.5). The A303 HIA [APP-195] and its predecessor HIAs were developed alongside design and heritage considerations that have influenced the scheme design and have fed back into the design process. The assessment of alternatives in ES Chapter 3 [APP-041] also illustrates that the OUV of the WHS was considered as part of decision making with reference to the development of the outline design. Representatives from Historic England,



English Heritage, Wiltshire Council and the National Trust also attended design workshops and advised during the development of the Scheme design. It is therefore not correct to state that the HIA has appeared too late to effectively influence design.

With regards to the Stonehenge and Avebury WHS Coordination Unit's comments stating that the project has taken 'a limited approach to stakeholder involvement [that] has constrained the effectiveness of the process' the Applicant has responded to this comment previously in [REP3-013; para. 55.2.5]:

'The WHS Partnership Panel, WHS Committees, the Avebury and Stonehenge Archaeological and Historical Research Group and the WHS Coordination Unit have been consulted throughout the Scheme development. They were involved in and responded to the public consultations held on route options in early 2017 before the preferred route was chosen and in 2018 following preferred route announcement. They were also consulted during the development of the Heritage Impact Assessment – attending an extraordinary meeting on 30 July 2018 to discuss ongoing matters following the 2018 statutory consultation and the developing HIA.'

The Applicant stands by its HIA and the iterative design that it has undertaken for the Scheme. The conclusion of the HIA [APP-195] is that:

'Overall, the Scheme is assessed to have a Slight Beneficial effect on the OUV of the WHS as a whole.

The Scheme has sought to avoid or minimise adverse impacts on Attributes of OUV, Integrity and Authenticity wherever feasible. There are no Large or Very Large Adverse effects on Attributes of OUV.

The OUV of the WHS would therefore be sustained overall by the construction of the Scheme and would create opportunities for greater public access, appreciation and enjoyment of the WHS, through increased connectivity of key monuments and monument groups north and south of the existing A303. The Scheme would enable beneficial opportunities for the transmission of OUV and increasing public awareness, understanding and perception of the OUV of the WHS in a local, regional, national and international context.' [APP-195; paragraphs 12.4.5 – 12.4.7].'



24.1.4	The WHSCU has been asking for digital modelling that better reflects the impact on people's ability to experience the WHS cultural landscape throughout the process of development of the scheme. This has still not been supplied. We continue to request visualisations that reflect the experience of moving through the landscape and across the green bridge so it is possible to adequately assess impact on the WHS and advise on mitigation. It remains regrettable that the most advanced modelling is photomontage from fixed points. For one of the most preeminent sites in the world it remains difficult to understand why no interactive immersive environment has been produced to robustly assess the impacts of the proposed scheme on people moving through the landscape.	The Applicant respectfully states that the volume of information which has been presented in the DCO Application and during the DCO examination process is more than enough to assess the impact on the WHS and advise on mitigation. Photomontages have been submitted by the Applicant [REP7-032, REP7-033, AS-079, AS-080 to 084], to provide the experience of moving through the landscape and across Green Bridge No.4. Whilst these are from fixed points, as is required for their production, viewed in sequence they do provide a moving and 'dynamic' representation of the Scheme. The Applicant has set out in [REP4-030], Written Summaries of oral submissions at ISH — Cultural Heritage, 5(iii), that the model: - Was developed as necessary to inform the consultation materials, assessments and design drawings required for the DCO submission. - Is a 3D model of the Scheme only, not a 3D model of the wider landscape. - Represents a working tool rather than a fully comprehensive complete model of every single component of the Scheme. Given the purpose for which the model was produced and utilised, the Applicant does not propose to release the 3D model. These reasons were set out again in the Applicant's Written Summary of Oral Submissions from ISH8 [REP8-016] in relation to agenda item 6.2(iv). People moving through the landscape, i.e. existing receptors within the WHS or on publicly accessible routes, have been included within the Environmental Statement, for example recreational users on permissive open access land close to Normanton Gorse [APP-225, page 13, visual receptor no.16] or visitors, tourists and recreational users where the Avenue crosses King Barrow Ridge [APP-225, page 16, visual receptor 23]. The impacts of the Scheme have therefore been robustly assessed within the Environmental Statement.
24.1.5	The discussion of fences and the possible additional requirements for safety in this iconic landscape were concerning. Intensive high fencing on the green bridges and above the line of the cutting would	The visualisations are illustrative of one way in which the principles of the OEMP could be brought forward at the detail design stage. However, the



	have a harmful effect on the landscape character. It was of some concern to note the number of fences alongside PROW in the landscape in the photomontages provided. This which will reduce the benefits of the open landscape sited as a valuable outcome of the scheme.	actual detail design is still to be achieved, with the Section 4 of the OEMP [REP8-006] setting out the mechanisms for this. With regard to fencing, there are a number of controls within the OEMP including D-CH14 and para 4.5.3, which require its design to be consulted upon with SDCG, D-CH24 which controls its appearance, D-CH25 which requires fencing on top of the cutting to be no higher than the ground level at the top of the cutting alongside which the fencing runs, principle P-SL04 which provides that fence heights will generally be 1.2 metres high except when a different height is required to comply with the standard minimum for adjacent land use e.g. higher for equestrians.
24.1.6	The WHSCU welcomes the invitation in the week of the hearing to be involved in agreeing the Design Principles. This should continue as the principles evolve. It is important that input is sought from a wider range of stakeholders than those represented on HMAG. We have a governance structure for the WHS that has been accepted by UNESCO and all endorsing bodes as representing key stakeholders. We have a committee for each half of the serial WHS and a WHS Partnership Panel which deals with strategic matters across the WHS. These stakeholders should be consulted. Highways England should not be only the deciding authority.	The WHSCU attended a Design Principles workshop where the Design Principles were discussed at length and agreed in principle. These are set out in Section 4 of the OEMP, the final version of which was submitted at deadline 9. Highways England can confirm that various stakeholders outside of the members of HMAG, including the WHSCU, the Environment Agency, Natural England, National Farmers Union, local landowners and numerous bodies, groups and members of the public, have inputted into the development of the OEMP. Following the consultation process set out within the OEMP, the Secretary of State is to be approver of the CEMP and the plans identified within item MW-G7 of the OEMP [REP8-006] are to be approved by either the Secretary of State or Wiltshire Council, as appropriate. In terms of design, it is considered appropriate that Highways England is the ultimate approver - Wiltshire Council has confirmed that it is content with the proposed arrangement for the approval of detailed design [paragraph 1.2.5 of REP8-028] and National Trust has explicitly confirmed that they considered it acceptable that Highways England is the approving body for design [paragraph 1.4.1 of REP8-50].
24.1.7	It is important that the Design Principles explicitly incorporate the Vision agreed in the World Heritage Site Management Plan. Key terms in the Vision include the need for a tranquil, rural and ecologically diverse landscape. The Vision is attached at Appendix	The Design Principles in the OEMP have been informed by the Design Vision for the Scheme which is set out in section 4 of the OEMP. As set out in the text explaining that vision, it has sought to give due consideration to the aims



	A. and objectives of the WHSMP. This is also reflected in print Design Principles.			
		Although Highways England considers that is not appropriate to fully incorporate the WHSMP Vision, which deals with a far wider range of matters above and beyond the intervention provided by the Scheme, it is the case the Scheme design and the principles and commitments set out in the OEMP will improve tranquillity by removing the sight and sound of traffic from a large part of the WHS. Furthermore, principles such as P-PWS02 and P-LE02 provide for the Scheme to reflect the surrounding landscape character, which is predominantly rural. Through the creation of chalk grassland and other measures set out in the OLEMP, an ecologically diverse landscape is also promoted. As such, these matters are already considered.		
24.1.8	When tenders are assessed quality should be of paramount importance. Truly innovative and effective design approaches need to be sought. These should not be hampered by overly constrained budgets or mitigation of harm will be harder to achieve.	As is set out at paragraph 4.2.5 of the OEMP [REP8-006], the Design Vision for the Scheme will guide the tender and detailed design process for the Scheme. This, taken with the need to comply with the OEMP pursuant to requirement 4 of the DCO, means that the statements set out in the Vision and the principles will inform the contractor's detailed design. Highways England will therefore need to assess tenderer's ability to develop the Scheme in light of the vision and the principles.		
24.1.9	It is important to ensure that all measurements of noise and emissions reflect the experience of the visitor in the landscape particularly where the impacts will be most marked near portal entrances and the cutting. Standard locations required by environmental assessment such as nearest dwellings must not be relied on when assessing impacts on visitors' experience of the WHS landscape.	The Noise and Vibration assessment completed for the Environmental Statement (ES) [APP-047] included consideration of a number of non-residential receptors. The baseline noise survey and the construction noise and vibration assessment both included Stonehenge. The operational traffic noise assessment considered the change in traffic noise levels across the whole of the wider operational traffic noise study area of 1km from the scheme and existing A303, as illustrated for the opening year in Figure 9.4 [APP-167]. The assessment methodology and baseline survey were agreed with Wiltshire Council as reported in the Statement of Common Ground [REP7-015]. The Outline Environmental Management Plan (OEMP) (a final version of which has been submitted at deadline 9) sets out the proposed approach to monitoring during construction (PW-NOI5 and MW-NOI6). Monitoring locations will be set out in the Noise and Vibration Management		



		Plan (NVMP) required for the preliminary works (PW-NOI3) and the main works (MW-NOI3). The NVMP will set out monitoring protocols, methods for publishing the results and the process for implementing corrective actions. The contractor is required to adopt Best Practicable Means (BPM) (PW-NOI1 and MW-NOI1) to minimise the generation of noise and vibration throughout the works, including through the World Heritage Site (WHS), which will ensure the impact on visitors' experience will be minimised. At this stage a specific commitment to monitor vibration during construction has been made (MW-NOI6) at Stonehenge, due to the level of interest in the stones, Stonehenge Cottages due to their proximity to the route of the tunnel and the Stonehenge Visitor Centre at the request of the English Heritage Trust. The NVMP will be developed in consultation with Wiltshire Council and Historic England and will be approved by the Secretary of State. As detailed in section 9.8 of the Noise and Vibration chapter of the ES [APP-047], the performance specification of specific operational mitigation measures, including the design of the surface finish of the retaining walls at the tunnel approaches to reduce the reflection of noise and the noise absorbent finish inside the entrance/exit of the tunnels and Green Bridge No. 4, would be confirmed at the detailed design stage to ensure the performance assumed in the assessment is achieved.		
		In respect of emissions, paragraph 5.9.45 seq. of Chapter 5 of the ES: Air Quality [APP-043], sets out that the emissions of air pollutants from the Scheme tunnel portals are not considered to be potentially significant for air quality sensitive receptors outside the tunnel. Additionally, the air quality effects of the scheme around the tunnel portals and approaches were considered within the response to Written Question AQ.1.12 [REP2-023]. The response identified that air quality around the Scheme approaches and tunnel portals is good and that significant air quality effects were not expected.		
24.1.10	No matter how comprehensive and exemplary the methodology there will still be destruction of the archaeological record which will to limit the potential for understanding the cultural landscape both now and in the future.	See responses to submissions made at deadline 7 [REP8-013], for example in relation to items 2.1.4, 2.1.8 and 2.1.30.		



24.1.11

The Management Plan contains policies and actions related to the management of byways. These refer not only to protection of archaeology but to the creation of a tranquil environment in which visitors and residents are encouraged to explore and understand the wider WHS landscape. It is unclear how allowing continued motorised access to current BOATs will achieve this. The byways within the WHS should be closed to all motorised traffic except where access is required.

Works to public rights of way, including byways, will be subject to archaeological mitigation measures in accordance with the OEMP and DAMS.

Changing the status of the existing BOATs is beyond the scope of the Scheme as the DCO does not provide Highways England with the powers to undertake this work. This is a matter for Wiltshire Council.



25 The Turner Family (REP8-064)

25.1 V	Written summary of oral submission				
N	Matter Raised	Highways England's Response			
The Applicant's Written Oral Submissions for ISH10 [REP8-018] respond to The Turner Family's comments received at deadline 8. Additional points raised are detailed below.					
	The risks of the scheme upon private supplies of water have been presented earlier in the process. The tunnel and processing activities proposed constitute an extremely significant risk to private water supplies that cannot be fully removed. We respectfully request that the Examining Authority impose within the DCO an express obligation upon the applicant, to provide an auxiliary mains water supply to the affected farms (of suitable capacity). We request that a categorical undertaking is provided by the applicant that if / when the 'back up' mains system is relied up, that the standing and meterage costs are reimbursed. A legal protection by virtue of DCO condition to enshrine the provision of a capable auxiliary supply is we believe entirely reasonable and proportionate to the concerns and uncertainties of the scheme. We request that enlarged and appropriate exclusion zones are applied to the land surrounding the points of abstraction and for clarity these are marked on all scheme plans.	As set out at ISH8 [REP8-018], Highways England considers that the OEMP provides a suitable level of protection in respect of water supply. Through a requirement for water supply statements that are discussed with landowners, the main works contractor will be able to work with landowners to agree the suitable and appropriate form of replacement water supply (where required), that is appropriate for that landowner during the detailed design of the Scheme (including its location). Requiring one form of supply across the whole Scheme that may not be appropriate in form or necessity would be disproportionate. Suitable protections are in place for abstraction zones through item MW-WAT11 of the OEMP [REP8-006].			



25.1.2 Water supply pipes through Compounds:

My client would be happy to consider having a new borehole established (at the expense of Highways) that can be linked to the pre-existing supply route and allow the abstraction point to moved further away from the Compound. For reasons unknown to us, this proposal has been resisted against. We therefore formerly ask the Planning Inspectorate that this provision is insisted upon. For the avoidance of doubt, this provision would need to be in addition to the auxiliary mains supply required.

The potential provision of a new borehole would be covered through the development of a Water Supply Statement developed with landowners required by provision MW-COM6 in the Outline Environmental Management Plan (OEMP) [REP8-006] as follows:

'Water Supply Statements: The main works contractor shall produce Water Supply Statements for landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These shall identify how water supply is to be maintained in the unlikely event that existing supplies are adversely affected as a consequence of the works. The statements shall be produced and provided to landowners / occupiers and The Authority prior to works commencing and include, as a minimum:

- a) Details and locations of existing boreholes which supply the landowner / occupier;
- b) Recorded results from groundwater monitoring undertaken by the main works contractor (as part of the Groundwater Management Plan) that are relevant to those boreholes;
- c) How an emergency will be reported if water is contaminated;
- d) The procedure for getting water to a farm and how it will be distributed to animals and residential properties if water is affected on a temporary basis; and
- e) The procedure for getting a new supply of water whether from a borehole, mains supply or combination of both to a farm if the water from the boreholes is contaminated on a permanent basis.'

25.1.3 Comments on the OEMP:

MW-WAT11 Para C:

This provision is intended to deal with the response of the Contractor in the event of an impact on water quality. It is inadequate as it does not expressly deal with a loss of supply as well as an impact in quality. The provision states that Contractor will put in place emergency measures that could include tankered water. Clearly, this is impractical in the context of distribution across a farm network.

Regarding MW-WAT11, Highways England notes this comment and takes this opportunity to state that it recognises the importance of maintaining private water supplies to landowners / occupiers. The OEMP [REP8-006] item MW-COM6 has been updated and now includes for pre-construction water supply statement to be provided to landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These will identify how water supply is to be maintained (and distributed) in the unlikely event that existing supplies are adversely affected as a consequence of the



Neither does it take account of interruptions in supply for long duration or periods of extreme weather (when access is unfeasible). Water provision would need to be available almost immediately and vague contingency plans are wholly inappropriate given the level of risk arising.

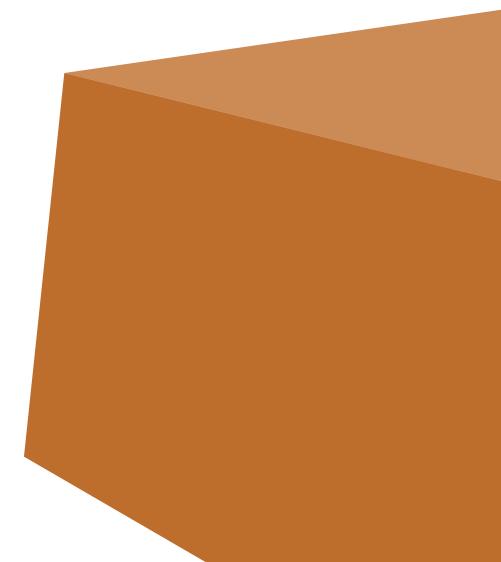
MW-COM6

We welcome increased recognition in this Statement relating to water provision from private abstractions. However, in the context of the proximity of Manor Farm's main water abstraction point to allocated compounds for processing. It would be appropriate for a clear agreement to be provided that an auxiliary mains supply will be provided. Such a supply will be required to facilitate the construction work and tunnel use.

works. This will be developed in liaison with landowners so that the most appropriate form of alternative supply is provided.

Regarding MW-COM6, Highways England notes this comment, however the Groundwater Risk Assessment [APP-282] found no <u>significant</u> change to groundwater levels <u>and groundwater quality</u> as a result of the Scheme in the area of Manor Farm's abstraction point. As such, Highways England does not propose to provide an auxiliary mains supply. As stated above, a preconstruction water supply statement shall be produced to ensure the feasibility of providing an alternative supply in the unlikely event that the current supply is adversely affected.

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