

National Highways: A303 Amesbury to Berwick Down Project, Development Consent Order Application

Scheme Reference: TR010025

**Comments on National Highways Document:
Redetermination 4.1 A303 Amesbury to Berwick
Down: response to Secretary of State's letter 20 June
2022: Applicant's response to the request for
comments on Q3-6 Response Documents and**

**Redetermination 4.2– 4.8 – response to request for
comments on Q2 Response Documents**

**(re: Environmental Information Review including
cultural heritage, landscape and visual, noise and
vibration, biodiversity, alternatives and longer tunnel
alternatives)**

for

**The Stonehenge Alliance
(Reference No. 2001870)**

***Prepared by*
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August 2022

Submissions for The Stonehenge Alliance on National Highways' responses to Redetermination 4 re Secretary of State's Questions 3–6 (Environmental Information Review: including Cultural heritage, Landscape and Visual, Noise and Vibration, Biodiversity and Alternatives); and Question 2 (Longer tunnel alternatives)

1. General Introduction to submissions for the Stonehenge Alliance

1.1. The Stonehenge Alliance remains of the opinion that before the A303 Amesbury to Berwick Down Scheme is re determined, formal re-examination of the scheme needs to be undertaken. In this way it would enable the considerable amount of new information/submissions now made available, notably on longer tunnel alternatives, carbon, traffic modelling, the business case and geological and hydrogeological matters, to be placed before a suitably qualified panel of Inspectors for proper scrutiny. This would then allow the Secretary of State to receive up-to-date and fully independent advice on the A303 Stonehenge Scheme before reaching a decision and so that all of the evidence can be thoroughly tested.

1.2. Despite the considerable amount of new evidence and submissions it remains the case that key information lying behind NH's assessments is missing. Much of NH's new material amounts to unevicenced assertions. One example is the unjustified figures in the updated business case. Another example is the reasoned justification for conclusions made about alternatives. This is another reason why NH's case needs to be fully tested by way of a proper examination by an appropriately qualified independent panel of Inspectors.

1.3. Further, it is clearly necessary for a site visit or for site visits to occur to appreciate the impact of the DCO proposal and also the relevant alternatives. This will include appreciating the relationship between each scheme and its impacts on heritage assets and other environmental effects, in particular relating to the landscape and visual impact of the relevant proposals.

1.4. In responding to the latest documentation from National Highways (NH) we refer to NH's individual documents in abbreviated form. For example, "Applicant's response to the request for comments Q1, Q3–Q6 – Response document Document reference: Redetermination 4.1" is referred to as "NH R4.1", and so on.

1.5. We comment on NH's documents as appropriate and in the order of Questions asked by the Secretary of State with the exception of his Question 2 (which we leave to the end of this part of our submission); and our responses on Carbon, Traffic Modelling, the Business Case, Cumulative Impacts and (in part) Alternatives; and Geology and Soils, Noise and Vibration, and Adverse Impacts of Tunnelling Through Chalk; which are submitted separately under the names of our respective specialist authors.

1.6. We note that NH

" . . . stands by our assessment of the significance of designated heritage assets, the contribution of setting to that significance and the impacts of the A303 Scheme upon that significance. We therefore are not revising material in respect of the A303 Scheme that has been previously assessed by National Highways and provided for the DCO application, examination and in response to previous requests from the Secretary of State." (NH R4.1, para. 3.3.2; see also para. 3.3.20)

1.7. We pointed out in our earlier redetermination submissions, that the [High Court Judgment](#) on the Transport Secretary's 2020 decision to proceed with the scheme highlighted that NH's assessments of the effects of the scheme on the WHS and its OUV did not accord with those of the Secretary of State: see, in particular, Judgment para. 285 which states:

“ . . . IP1's view that the tunnel alternatives would provide only “minimal benefit” in heritage terms was predicated on its assessments that no substantial harm would be caused to any designated heritage asset and that the scheme would have slightly beneficial (not adverse) effects on the OUV attributes, integrity and authenticity of the WHS. The fact that the SST accepted that there would be net harm to the OUV attributes, integrity and authenticity of the WHS (see [139] and [144] above) made it irrational or logically impossible for him to treat IP1's options appraisal as making it unnecessary for him to consider the relative merits of the tunnel alternatives. The options testing by IP1 dealt with those heritage impacts on a basis which is inconsistent with that adopted by the SST.”

1.8. Since NH does not intend to revise its assessments despite this basic disagreement, they must continue to be considered unfit for the purpose of redetermination. Indeed, its judgements as to the relative benefits of the alternatives continue to be given by reference to its heritage impact assessment of the original scheme (see, for example, Table 3 in NH R4.2). The failure to accept the findings of the ExA and the Secretary of State has fundamentally undermined its case on the relative benefits of any alternatives. This is addressed further below.

1.9. Furthermore, National Highways has now produced alternative options for tunnelling which differ significantly from those considered at the optioneering and Examination stages (see NH R4.2, paras. 1.3.5-13), indicating that the optioneering process was seriously flawed. It also underlines the fact that the Examining Authority was presented with different longer tunnel options from those now being put forward.

2. Secretary of State's Questions 3–6: NH Response document Redetermination 4.1 ([NH R4.1](#))

2.1. Introduction

2.1.1. It is understood that NH has in this document purported to respond to our 4 April 2022 submissions, hereafter referred to as [SA Response to Env. Info. Review](#), made in response to the SoS' consultation of 24 February 2022; and to our separate submission on NH's response on [Updated Carbon Issues](#) which was submitted in June 2022.

2.1.2. As noted by NH, in our consultation response of 4 April 2022 we commented on a wide range of issues: we stand by all these submissions. We therefore ask the Secretary of State to take all our earlier submissions into account in his redetermination of the DCO application. In the present submission, we address those matters on which we are now challenged by NH, largely concerning information NH has recently supplied or not provided at all.

2.2. Secretary of State's Question 3

“The Applicant is asked to comment on the consultation responses from the consultation of 29 April 2022 where further information and/or assessments are sought. In particular, responses from: Stonehenge Alliance; Consortium of Stonehenge Experts; Wiltshire Council;

International Council in Monuments and Sites UK; Historic England. The Applicant is asked to provide additional information and/or assessments or other documents where it is necessary to deal with the matters raised in the consultation responses.”

2.2.1. With reference to **Carbon** (NH R4.1. para.3.3.4); **Traffic Modelling** (ref. NH R4.1, paras. 3.3.5–3.3.10); and the **Business Case** (ref. NH R4.1, paras. 3.3.11-3.3.15), please see our separate response submitted alongside this submission.

2.3. Environmental Information Review – cultural heritage (ref. NH R4.1, paras. 3.3.16-20)

2.3.1. At para. 3.3.16 of NH R4.1, NH states:

“The Stonehenge Alliance assert that National Highways, as the applicant, need to inform the decision-maker (i.e. the Secretary of State) of the level of potential harm the development might cause to any designated heritage asset. This is not correct.”

2.3.2. This is wholly wrong. Paragraph 5 of Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 provides that an ES must include a description of the likely significant effects of the development on the environment. This includes the risks to cultural heritage. Necessarily, that includes individual heritage assets. Paragraph 2 of the same schedule requires an ES to include a comparison of the environmental effects for any reasonable alternatives (again this includes the cultural heritage impacts upon each heritage asset).

2.3.3. Paragraph 4.15 of the NPSNN provides that an ES should ‘*identify and describe and assess effects on . . . cultural heritage*’. Paragraph 5.126 NPSNN requires that an ES should ‘*undertake an assessment of any likely significant heritage impacts of the proposed project . . . and describe these*’. Necessarily, ‘cultural heritage’ and ‘heritage impacts’ include the impact of the proposal upon each heritage asset.

2.3.4. This accords with the requirement in the NPSNN for an Appellant to address the significance of each individual asset (see para. 5.127); similar provision is made in NPPF para. 194:

“In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance.”

2.3.5. Indeed, NH has purported such an exercise in its HIA, in which the level of impact of the proposed development has been categorised for individual heritage assets: although, as pointed out by us in our [SA Response to Env. Info Review](#), para. 2.3 on p.61 of 109:

“In its NPSNN Accordance Table A1 (APP-294) NH simply makes blanket statements of less than substantial harm. For example:

‘Less than substantial harm is anticipated to affect designated and non-designated assets, including those within the WHS and this is considered below as per NPSNN Paragraph 5.134. The Scheme does not identify any instance of ‘substantial harm’ or total loss of significance to a designated asset.’ (APP-294, p.A-95, ref. NPSNN para. [5.]132).”

2.3.6. Our following paragraphs 2.4-2.6 in the same document remain particularly relevant to the present case, notably in view of NH's failure to adjust its HIA to take into account the findings of the Secretary of State concerning the impact of the Scheme on the WHS, its OUV attributes, Integrity and Authenticity (as has been set out above).

2.3.7. Furthermore, we note with concern that NH has not submitted, for IPs or the Secretary of State to consider, the "immersive virtual reality tool" prepared for presentation to the latest ICOMOS/World Heritage Centre Advisory Mission (*cf.* our para. 2.12 in [SA Response to Env. Info Review](#), p. 63 of 109). Given this evidence is available and clearly pertinent to the impact of the proposal there is no good reason why it should be withheld from the Secretary of State or Interested Parties.

2.4. Environmental Information Review – other topics (ref. NH R4.1, paras. 3.3.21-22)

2.4.1. With reference to NH R4.1., para 3.3.21, concerning **Landscape and Visual** aspects of the road scheme, we disagree with NH and stand by our submissions at [SA Response to Env. Info Review on Assessment of Setting](#): paras 2.7–2.10, pp. 62-63 of 109; and **Landscape and Visual**: paras. 3.1–3.13, pp. 64-67 of 109.

2.4.2. With reference to NH R4.1, para. 3.3.22, concerning **Noise and Vibration**, we refer the Secretary of State to our paragraphs 5.2-5.10 at pp. 71-74 of 109 of [SA Response to Env. Info Review](#), where we point to the present lack of any method for dealing with potential impacts of vibration from tunnelling on archaeological deposits and features. We reiterate our opinion that, having no expertise on the matter and in view of its earlier statements in its report, the ExA was irrational to assume that Wiltshire Council, Historic England and HMAG could devise a reliable method for dealing with such impacts without prior experience or known precedents. We stand by our view on this matter and see no reason to have confidence in these bodies' ability to devise a method of protecting archaeological remains from the effects of vibration that would be wholly effective in the peculiarly sensitive circumstances of this case. Please see also our parallel submission by Dr George Reeves on Geology and Soils, Noise and Vibration, and Adverse Impacts of Tunnelling Through Chalk.

2.4.3. We note that, e.g., for the Cut and Cover tunnel extension, it is suggested that

"Significant impacts upon archaeological monuments and deposits due to construction vibration are not anticipated. The possibility of physical and other effects on heritage assets positioned above the tunnel would be managed through the placement and operation of ground movement monitoring stations during construction works." (NH R4.4, para. 6.1.5)

Monitoring stations do not, however, "manage" physical effects of vibration and no information is supplied on how any damaging effects would be prevented.

2.5. Alternatives (ref. NH R4.1, paras. 3.3.23-28)

2.5.1. In response to NH's claims in its paras. 3.3.23-26 of NH R4.1, we would refer the Secretary of State to paras. 3.2-3.8 of [SA Response to Env. Info Review](#) at pp. 83-85 of 109, which refute assertions now made by NH and by which we stand.

2.5.2. The incomplete information which has been provided by NH on new longer tunnel alternatives is addressed at our Section 3, below. The alternatives assessment in relation to those options that

avoid the WHS (a) non-road engineering alternatives and (b) a WHS bypass continues to be materially deficient. These are both obviously material alternatives on the basis of the evidence available. This is because (a) they would obviate the permanent, major and irreversible harm which the current proposal would cause to the WHS and other heritage assets and they would not risk the WHS being de-listed; (b) they are both significantly cheaper than the current proposal: this is particularly relevant in circumstances where NH argues that cost is a reason to reject longer tunnel alternatives; and (c) they would not result in the harm which tunnelling will very likely lead to (as has been repeatedly stated by the Stonehenge Alliance and as is set out in the paper accompanying this submission by Dr George Reeves on Geology and Soils, Noise and Vibration, and Adverse Impacts of Tunnelling Through Chalk.

2.5.3. Concerning non-road engineering alternatives, mentioned in NH R4.1, para. 3.3.28, NH has neglected to consider traffic management measures and the potential for road user charging in future, both of which we had referred to and could provide alternatives to new road building at a time when reduction in road traffic is necessary to address zero carbon targets and inevitable owing to rises in fuel prices. This is more pertinent now since the Net Zero judgment¹ and the judge's emphasis on the importance of the advice from the Climate Change Committee which has highlighted the need for traffic reduction. Please see our submissions on this matter in [SA Response to Env. Info Review](#), 'Non-Expressway Alternatives' at Section 6, paras. 6.1-6.9 (and especially para. 6.9), on pp. 95-97 of 109; and on 'Transport, Carbon and Economic Issues' summarised at Section 7, notably paras. 7.2 and 7.5 (second para under this number) on pp. 42-43 of 109. Please also see our separate submission to this stage of the consultation on Carbon, Traffic Modelling, the Business Case, Cumulative Impacts and Alternatives.

2.5.4. NH's response in relation to a bypass is wholly inadequate. Paragraph 3.3.23 of Document 4.1 makes clear that NH continues to rely upon its rejection of this option during the options appraisal (in 2017). This was five years ago. The information contained in the document signposted by NH (Technical Appraisal Report Appendices G and H) amounts to five paragraphs which are said to cover all of the relevant environmental impacts. Further, that assessment was conducted at a time when NH was asserting (as it still does) that its preferred option was beneficial in heritage terms. That position is untenable following the recommendation of the ExA and the Secretary of State's decision. It can also be noted that no consideration has been given to the relative carbon impacts (including the embodied carbon in a concrete tunnel structure) of the tunnel proposal vs a surface route.

2.5.5. Paragraph 3.3.25 of NHR4.1 states that the information it is relying upon 'was a level of assessment appropriate for the early project development stage of options appraisal'. Whether or not that is the case, it is clearly not adequate in circumstances where (a) the High Court has stated that alternatives are an obviously material consideration to be taken into account in the decision as a result of the major and permanent irreversible harm of the proposed scheme; (b) the Secretary of State has explicitly asked for additional evidence on alternatives (not limited to the tunnel options); and (c) the F010 surface bypass presents an option which, *prima facie* (i) is cheaper than the proposed scheme, (ii) would take the A303 entirely away from the heart of the WHS, removing the sight and sound of traffic, (iii) is clearly beneficial in heritage terms as it would not involve any loss of fabric to the WHS and its heritage assets and would have limited impact upon its setting, (iv) would allow greater re-connection of the northern and southern parts of the WHS, (v) would improve biodiversity within the WHS and ensure better protection for Annex I protected bird species; (vi) will not risk the WHS from being de-listed, (vii) meets NH's aim of relieving congestion on the A303, and (viii) may have a lower carbon impact overall than the proposed scheme.

¹ *R(oao Friends of the Earth Ltd) v SSBEIS* [2022] EWHC 1841 (Admin)

2.5.6. In circumstances where the proposed scheme would cause major permanent adverse harm to the WHS and risks it being de-listed by the World Heritage Committee it would be irrational for the Secretary of State not to consider the southern bypass option in more detail.

2.6. Secretary of State's Question 4

"The Secretary of State notes that Stonehenge Alliance has identified that biodiversity baseline surveys and reports and issues relating to adverse impacts of tunnelling through chalk bedrock have not been provided. The Applicant is asked to respond on the accuracy of this statement, and if the statement is correct, the Applicant is asked to provide the Secretary of State with all relevant information, surveys and reports on this matter."

2.6.1. Biodiversity (NH R4.1, Section 4, paras. 4.2.1-21, pp. 56-61 of 81)

Biodiversity baseline surveys and reports (ref. NH R4.1, para 4.2.1)

2.6.1.1. The Alliance has raised concerns about two baseline surveys submitted by NH, on Butterflies and Great Crested Newts, both of which were unfit for purpose for the reasons we set out in our response in [SA Response to Env. Info Review](#), Section 4, pp. 67-71 of 109, and by which we stand.

2.6.1.2. At NH R4.1, para. 4.2.1,

"National Highways maintain that the surveys for butterflies and great crested newts are fully adequate for the purposes of the 2018 Environmental Statement, which was robust and sufficient to allow the Secretary of State to determine the Scheme".

This is clearly not the case, since no butterfly survey was undertaken prior to the 2018 ES and survey data obtained for Great Crested Newt in 2017-18 differed markedly from that obtained in 2021.

2.6.1.3. In the case of the Great Crested Newt population at waterbody 1, we highlighted NH's statement that

"Some changes in routing a water pipeline and change in the population size mean that a European Protected Species licence will be required, for the temporary site clearance in the Till valley . . ." (NH R1.4, para 5.3.32).

2.6.1.4. We suggested that,

"In view of the intended changes in preliminary works, it is necessary to know precisely where these works would take place in relation to waterbody 1, what they are and what potential disturbance they would cause to this apparently significant protected newt population. This is environmental information which should have been supplied to all interested parties for independent consideration, along with any potential licencing conditions that might be required." (SA Response to Env. Info Review, para. 4.9, p.70 of 109)

We note that NH has not yet provided any of this important information and that the HRA may need to be amended accordingly.

2.6.1.5. We have not had the resources to investigate all the biodiversity baseline surveys but inadequacies identified in scrutiny of those mentioned above clearly undermines confidence in the acceptability of other biodiversity baseline surveys.

2.6.2. Issues relating to adverse impacts of tunnelling through chalk bedrock (ref. NH R4.1, Section 4.3, paras. 4.3.1-4.3.14, pp.61-64/81). Please see our separate submission by Dr George Reeves at this stage of the consultation.

2.7. Secretary of State's Question 5

“The Secretary of State notes that Wiltshire Council has sought clarification as to how the Applicant reached its conclusion that the updated baseline assessment does not alter the outcome of the 2018 cultural heritage assessment within the Environmental Statement. The Applicant is asked to provide further information on the methodology of approach that was applied to the newly assessed assets so as to allow interested parties the opportunity to consider and provide further responses on whether the outcome of the assessment set out in the 2018 Environmental Statement on heritage matters has changed. The Applicant is asked to provide any additional evidence and documents that are relevant to fully understand any change in the assessment of heritage assets.”

2.7.1. Environmental Statement on heritage matters (NH R4.1, Section 5, paras. 5.1.1-5.2.9, pp.65-67 of 81, and tables)

2.7.1.1. The Alliance notes that notwithstanding the inclusion of newly-assessed assets in the updated baseline Archaeological Gazetteer, NH's overall conclusions on the impacts of the Scheme as being slight beneficial remain unchanged, as does the method of heritage impact assessment. No adjustment in assessments has been made to reflect the overall assessment of the Secretary of State that the Scheme would have a significantly adverse impact on the WHS, its OUV, Integrity and Authenticity. Thus the 2018 and subsequent heritage impact assessments by NH are not fit for purpose and do not properly assist the Secretary of State in his decision-making.

2.7.1.2. Furthermore, Historic England, English Heritage, Wiltshire Council and the National Trust have similarly failed to offer adjustments to their assessments of the impacts of the Scheme to assist the SoS in his redetermination.

2.7.1.3. Also, as set out in the submission by the Consortium of Archaeologists, NH continues to fail to recognise three archaeological assets as being of equivalent significance to scheduled monuments: the remains of a large Beaker-period settlement with burials, a probable Neolithic settlement to the west of it and a probable Neolithic settlement at the eastern portal. Large parts of these sites will be destroyed by the proposed scheme and therefore, undoubtedly, suffer substantial harm. The failure to recognise this amounts to a material failure in NH's assessments.

3. Secretary of State's Question 2 relating to longer tunnel alternatives (ref. NH R4.2-8)

“The Secretary of State notes that a number of consultees have raised the issue that it is not clear how the Applicant has arrived at the conclusion that the alternative tunnel routes would only have minimal additional heritage benefits over the Development. The Applicant is asked to explain fully the basis on which they reached this conclusion. The explanation should include full detail of reasoning, the matters considered and any methodology that was used and, where applicable, be cross referenced to the examination material or subsequent information provided to the Secretary of State. The Applicant should also provide any additional documents that are relevant to understand the conclusion that the Applicant reached on this matter. The Applicant is also asked to confirm whether the assessment of the

heritage impact of alternative routes has been updated to take into account the 7 additional monuments that were added to the heritage baseline and provide any additional documents that are relevant.”

3.1. The Secretary of State’s question is in two parts: the first relates to tunnel alternatives and the second to alternative routes. NH has only attempted to answer the first part of this question in its responses to the Secretary of State. We therefore assume that its paras. 1.2.1 and 1.5.2 of [NH R4.2](#), indicate that NH’s (summary) assessments of the heritage impact of alternative routes apart from tunnel alternatives remain unchanged from the DCO application stage.

3.2. Furthermore, it is not entirely correct for NH to state ([NH R4.3](#), para. 1.1.5 and [NH R4.6](#), para. 1.2.1) that *“One of the two grounds of [the 2021 legal] challenge upheld was that the Secretary of State was legally obliged to consider the merits of alternatives to the proposed western cutting”*.

3.3. The Judgment highlights that *“it has been accepted in this case that alternatives should be considered in accordance with paragraphs 4.26 and 4.27 of the NPSNN”* ([Judgment](#), para. 285); and

“The decision cited by Mr Taylor QC in First Secretary of State v Sainsbury’s Supermarkets Limited [2007] EWCA Civ 1083 is entirely consistent with the principles set out above. In that case, the Secretary of State did in fact take the alternative scheme promoted by Sainsbury’s into account. He did not treat it as irrelevant. He decided that it should be given little weight, which was a matter of judgment and not irrational ([30 and 32]). Accordingly, that was not a case, like the present one [f.n.][3], where the error of law under consideration fell within the second of the two categories identified by Carnwath LJ in Derbyshire Dales District Council (see [272] above).

*“ [f.n.][3] Which is to do with a failure to assess the relative merits of **identified alternatives.**”* (Judgment, para. 275; our emphasis)

3.4. The *“specific obligation in the circumstances of this case to compare the relative merits of the alternative tunnel options”* (Judgment, para. 287) arises since

“there is no dispute that the tunnel alternatives are located within the application site for the DCO. They involve the use of essentially the same route and certainly not a completely different site or route. Accordingly, as Sullivan LJ pointed out in Langley Park (see [246] above), the second principle in Trusthouse Forte applies with equal, if not greater force.” (judgment, para. 286).

3.5. The judgment did not, however, preclude the consideration of other alternatives. These should still be considered as they are patently obviously material to the Secretary of State’s decision, especially those that would lead to a better outcome than an extended tunnel for the protection of the WHS, its OUV, Integrity and Authenticity, along with other benefits. (See our response at our Section 2.5, above). Indeed, the Secretary of State’s Statement of Matters (30.11.21) clearly indicated that the Secretary of State requested representations on all alternatives addressed at section 5.4 of the ExA’s report. This includes non-tunnel options. There is simply no basis for limiting the consideration of alternatives only to tunnel options.

3.6. This is particularly so given the fact that NH now relies (to a significant extent) upon the cost of longer tunnel options as providing a reason for their rejection, it would be irrational for the Secretary of State not to consider cheaper options which would avoid such major harm to the WHS and not risk it being de-listed. These include the southern bypass (as set out above).

3.7. We trust that the Secretary of State will take into account our submission commenting on NH's earlier response on Alternatives ([SA Response to Env. Info Review](#), "Alternatives", pp. 75-99 of 109).

Concerning longer tunnel alternatives

Introduction

3.8. We note, at NH R4.2, para. 1.2.2-3, that NH stated to the ExA that longer tunnel options were

"rejected on the basis of a balanced appraisal of operational performance, safety and maintenance, engineering and buildability, cost, environmental impacts and heritage impacts. Consequently, a full Heritage Impact Assessment was not undertaken for this option"; that

"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"; and

"in respect of heritage benefits, they were "assessed as slightly more beneficial than the Scheme".

3.9. In providing further detail on HIAs for longer tunnel options, NH has not adjusted its assessment methodology to reflect the finding of the Secretary of State that the DCO Scheme applied for would have a significantly adverse effect overall on the WHS, its OUV, Integrity and Authenticity. Thus, the Outline HIAs undertaken for the new tunnel alternatives only just made available to us offer the Secretary of State assessments that are incompatible with his findings and therefore unfit for purpose. In particular, the conclusion that the options are only 'slightly more beneficial' is not credible when the options are set against the findings of the ExA and the Secretary of State which have been set out in the Stonehenge Alliance's previous submissions.

3.10. If a tunnel option were to be supported by the Secretary of State it is obvious that the bored tunnel extension would be materially less harmful to the WHS than the proposed scheme. It would involve much less loss of the physical fabric of the WHS. This would: (a) avoid the destruction of hugely significant archaeology including the Beaker Settlement which ought to be treated as a designated asset for the purposes of the NPSNN (see submission of the Consortium of Archaeologists), (b) avoid the most significant interruption of the spatial relationship between scheduled monuments in the western portion of the WHS, (c) allow the Longbarrow junction to be moved further west, reducing its harmful impact on the WHS.

3.11. The cut-and-cover option would be marginally less harmful than the proposed scheme, reducing noise pollution and allowing the WHS to be reconnected visually and physically once completed. It would, however, still involve the destruction of hugely significant archaeology including remains of the Beaker settlement and have significantly adverse visual and noise impacts during the construction period.

3.12. Given the fact that the proposed scheme will result in such major harm to the Stonehenge WHS such that it risks being de-listed, the increase in cost of the longer bored tunnel option would be a small price to pay. The permanent and irreversible harm which would be caused by the proposed scheme represents an enormous cost to this and future generations.

Siting of the western portals for the tunnel alternatives – heritage impact

3.13. The tunnel extension alternatives have been "refined" since they were considered at the Examination. NH states that this is largely for reasons related to engineering and operational

considerations. The Stonehenge Alliance sees these as substantial changes and more than a refinement: rather, as new options. That they are being produced after the event and the draft DCO Examination, suggests that National Highways has been anything but thorough in its pursuit of alternatives that would minimise harm to the World Heritage Site.

3.14. NH has chosen to site the western portals of both the Bored and Cut and Cover tunnel extensions c.80m west of the WHS boundary. It is unclear why NH has discounted placing the portals further from the boundary as this would clearly be beneficial to the setting of the WHS. In any event, the placing of the portals outside the WHS is evidently far less harmful than the proposed scheme which involves the physical destruction of a huge swathe of the WHS at the western end of the road. The physical destruction of part of the WHS is permanent and irreversible involving destruction of part of the asset itself.

3.15. By contrast, an option such as the bored tunnel, which does not involve physical destruction of the western end of the WHS but whose harm at that end of the WHS is limited to harm to the setting of the asset would not be permanent and irreversible. The setting could, potentially, be restored in the future.

3.16. With regard to visual impact, NH claims that:

“Visual impacts of the Bored Tunnel Extension are therefore likely to be at least comparable to the DCO Scheme for visual receptors within the WHS.” (NH R4.7, para. 5.2.15)

This is clearly wrong. The visual impact of a significant stretch of road in cutting and a tunnel portal within the WHS would patently be much more harmful in visual impact terms to those within the WHS than a portal which is sited outside the WHS itself. NH’s assessment is simply not reasonable, as NH R4.7, paras. 5.2.12 and 5.2.14 indicate.

Longbarrow Junction

3.17. The new longer tunnel options involve siting the Longbarrow Junction in a more westerly location. NH states that this would lead to new significant adverse impacts in terms of its visual impact (see Table 4 and Table 6 of NH R4.2). However, this has failed to engage with the findings of the ExA and the Secretary of State in relation to the current proposal. The following paragraphs of the ExAR (in the landscape and visual impact reasoning) are particularly pertinent:

‘5.12.112. The removal of the A303 as a surface road, and of the Longbarrow roundabout, would benefit the existing landscape character and appearance. However, its replacement, the Longbarrow Junction, cutting and portal, would represent a significant alien intrusion into this part of the landscape because of its vast scale, its disruption of the landform, and the reflection of its layout within the land surface.

5.12.113. It would far outsize any other element within the WHS and its setting, altering the landform radically, through the depth and width of excavation exposed. This would be so despite the presence of Green Bridge 3, which would span the main excavation for the Longbarrow Junction, despite Green Bridge 4 with its extended width, which would span the approach cutting to the tunnel, and despite the cut and cover element of the tunnel. The overall layout of the Longbarrow Junction would be transposed onto the land surface through the shallow cuttings and continuous hedgerows either side, intended to mask the sight of vehicles, which would trace the widely arcing geometry and scale of the junction onto the surface.

5.12.114. *The result would be entirely at odds with the existing landscape character. This character comprises continuous land surfaces of small dry valleys or open hillsides, into which landscape elements such as field boundaries, byways, and clumps of trees settle according to the topography, in an informal rectilinear or forking arrangement. Moreover, the increased scale of the road layout, and its increased capacity, would adversely affect tranquillity.*

5.12.116. *The visual impact would also lessen to an extent over time but would remain severe. . .*

5.12.119. *Overall, the effect on landscape character and visual amenity within this section of the Proposed Development would be significantly harmful.'*

3.18. The fact that NH has wholly failed to engage with the findings of the ExA in relation to the current proposal's visual impact of the Longbarrow Junction (which rejected NH's original assessments) means that its conclusion that the alternative would bring new significant adverse visual effects cannot be accepted.

3.19. Further, NH notes some heritage benefits over and above those of the proposed scheme (see e.g. para. 1.8.8 of NH R4.2). However, the assessment of these relative benefits and impacts is compared with its original DCO application HIA assessments. This demonstrates how the failure to engage with the findings of the ExA and Secretary of State undermine its conclusions on the relative benefits and impacts of the alternatives. The findings of the ExA and Secretary of State in relation to the heritage impact of the Longbarrow Junction included the following:

- a. *'The Longbarrow Junction would fall firmly within the settings of the WHS as a whole and of [Asset Groups] AG12 and AG13' (ExAR 5.7.241). Seen from above, the Longbarrow Junction would 'dwarf all other individual features, including the Stones' (ExAR 5.7.243 and adopted by SoS at DL[10]). Further, its broad geometric outlines would be evident at surface level and would 'appear at odds with the surrounding smaller scale morphology of rectilinear fields and small groupings of traditional buildings' (ExAR 5.7.244 and adopted by SoS at DL[10])*
- b. *'The Junction, together with the cutting leading to the western portal, represents a single, very large, continuous civil engineering undertaking, spanning the western boundary of the WHS. Given the arbitrary nature of the boundary and the underlying expansive and unified character of the cultural landscape, the junction would have effects on the OUV similar to those described for the cutting and western portal.'* (ExAR 5.7.245 and adopted by SoS at DL[10])
- c. *'The harm [caused by the Longbarrow Junction] reflects that caused by the cutting on the OUV, including a continuation of the harm to the Wilsford/Normanton dry valley. Also, the harm to the overall assembly of monuments, sites, and landscape through major excavations and civil engineering works, of a scale not seen before at Stonehenge. Whilst the existing roads could be removed at any time, should a satisfactory scheme be put forward, leaving little permanent effect on the cultural heritage of the Stonehenge landscape, the effects of the proposed junction would be irreversible.'* (ExAR 5.7.247 and adopted by SoS at DL[10])

3.20. Clearly, moving the Longbarrow Junction further west would be beneficial to the WHS in both landscape and visual and heritage terms, although the proximity of the tunnel portal to the western WHS boundary would bring some visual intrusion, notably with light spill at night, noise of traffic and permanent damage to archaeological remains within the WHS's setting. This would, in any event, be obviously better than the proposed scheme which sites a large road and the portal within the WHS itself.

Cost

3.21. The most significant reason NH argues that the longer tunnel routes should be rejected is cost. It can be noted that the figures provided by NH in relation to cost are opaque and have not been justified by the provision of any detail.

3.22. Further, NH claims that the additional expenditure would only achieve a 'slight increase in heritage benefits'. For the reasons set out above this is clearly nonsense and is unsustainable in light of the views of the ExA and the SoS on the proposed scheme. It is further unsustainable in light of comments by the World Heritage Committee that the proposed scheme may result in the WHS being placed on the list of WH in danger. This is a preliminary step prior to the de-listing of a World Heritage Site. When weighing up costs, the Secretary of State must consider the value of the WHS to this and future generations. This is not only in monetary terms (through visitor numbers) which would undoubtedly be affected by the Site's de-listing, it is also in terms of (a) research value to this and future generations, (b) the cultural importance of the WHS to the United Kingdom itself and to future generations of the whole world, (c) the emblematic value of Stonehenge being a WHS which is renowned around the world, and (d) the reputation of the United Kingdom in demonstrating to the World that it cares for its WHSs and respects its obligations as signatory to the WH Convention. If cost is to be factored into the Secretary of State's decision, then all of these considerations must play a part in that assessment.

3.23. NH continues to build its business case on the basis that its scheme is beneficial in heritage terms. The updated business case at 3.3.13 of NH R4.1 relies upon a figure of £955,000,000 for the 'value of removing road from WHS'. Such an approach is untenable given the findings of the Secretary of State that the proposal would result in overall harm to the WHS (even where the benefits are taken into account). In truth, the CBR for the proposed scheme is strongly negative. That may not be the case with a scheme which does not cause such major permanent and irreversible harm to the WHS even if it is more expensive than the current proposal. Please see the Stonehenge Alliance's parallel submission on the business case (in Section 4 of our parallel response on Carbon, Traffic Modelling, the Business Case, Cumulative Impacts and Alternatives) which sets out our concerns over the economic case underlying the proposed scheme in more detail.

A360/A303 junction

3.24. Despite the potential for a tunnel portal some 600m west of the WHS boundary, NH now rejects this (earlier) suggestion on the grounds that a lower capacity junction would be required "which would not be compliant with standards for the volumes of traffic which would be using the A303" (NH R4.2, paras. 1.3.9-10). NH's traffic volume predictions are over-inflated and as such, the assertion that the western tunnel portal cannot be located further away from the WHS boundary is not robust. Please see our response on Carbon, Traffic Modelling, the Business Case, Cumulative Impacts and Alternatives for further detail in regard to this.

3.25. The setting of the Winterbourne Stoke barrow group would improve by realignment of the A360. It is suggested that realignment of the A360 would result in additional traffic on local roads

(NH R4.2, para. 1.3.12-13, 1.8.16, 1.9.17 and 1.10.6) but such activity could easily be discouraged using traffic management measures.

Impacts on the eastern side of the WHS

3.26. The tunnel portals and other elements of the Scheme on the eastern side of the tunnel would remain as for the DCO application. NH R4.4, para 8.3.79, which is applicable to all tunnel suggestions, states:

“ . . . adverse impacts would persist with the Cut and Cover Tunnel Extension, as with the DCO Scheme, in the eastern part of the WHS landscape, in the vicinity of the Eastern Portal, eastern approach road, and the Countess roundabout and flyover.”

3.27. NH emphasises that these works would have an adverse impact on integrity (NH R4.4, para. 8.3.66) and Authenticity (NH R4.4, para. 8.3.73). Similarly adverse impacts would arise from the DCO Scheme and the Cut and Cover tunnel extension on the western side of the WHS. It is particularly relevant that the 2021 World Heritage Committee [Decision](#) (item 7) drew attention to the adverse impacts on the OUV and Integrity of the WHS of both eastern and western cuttings:

“ . . . as previously advised by the Committee and identified in the 2018 mission report, the part of the A303 improvement scheme within the property retains substantial exposed dual carriageway sections, particularly those at the western end of the property, which would impact adversely the Outstanding Universal Value (OUV) of the property, especially affecting its integrity” (WHC Decision (2021), Item 7).

3.28. Therefore, although the bored tunnel extension would result in improvements for the western portion of the WHS it is important not to forget the eastern portion of the WHS which would still be subject to significant physical destruction and harm. This lends further weight to the need to consider options which would also obviate this harm such as the southern bypass.

Overall Conclusion on the longer tunnel alternatives

3.29. It is clear that all of the tunnel options, including the present scheme, will bring some harm to the WHS, notably, physical destruction within the eastern portion of the WHS. This militates in favour of considering options which do not involve tunnelling, including the southern bypass (a case for which has been made above). However, of all of the tunnel options the proposed scheme is materially more harmful than either of the alternatives posited by NH. It involves major, permanent and irreversible harm to the WHS at its western and eastern ends and risks its designation as a WHS.

3.30. The bored tunnel extension would avoid significant loss of the fabric of the WHS at the western end. This is clearly a preferable option in heritage terms. It also involves siting the Longbarrow Junction further west which would be beneficial in terms of its heritage and landscape and visual impact. The additional cost could be considered a small price to pay given the disastrous implications which the proposed scheme has for the WHS.

3.31. NH's continued support for the proposed scheme is blinkered and NH has wilfully blinded itself to the findings of the ExA and the Secretary of State. It states:

“The DCO application Heritage Impact Assessment [APP-195] for the DCO Scheme concluded that ‘Overall, the Scheme is assessed to have a Slight Beneficial effect on the OUV of the WHS as a whole’ (paragraph 12.4.5). Compared to the DCO Scheme, the Bored Tunnel Extension and the Cut and Cover Tunnel Extension alternatives would offer potential

additional benefits for cultural heritage assets and Asset Groups (see the Environmental Appraisal (Heritage) for each alternative, Re-determination 4.5 and 4.6). The overall assessment of the Outline Heritage Impact Assessment for the Bored Tunnel Extension (Re-determination 4.3) is that its impacts would be Moderate beneficial. The overall assessment of the Outline Heritage Impact Assessment for the Cut and Cover Tunnel Extension (Re-determination 4.4) is that its impacts would be Slight/moderate beneficial. Therefore, the difference in impact between the DCO Scheme and each of the tunnel extension alternatives, in heritage terms, remains that the alternatives are slightly more beneficial than the DCO Scheme.” (NH R4.2, para. 1.10.4)

And concludes:

“In conclusion, this response to question 2 of the Secretary of State’s 20 June 2022 letter demonstrates that the DCO Scheme remains the preferred scheme to deliver the benefits, and to resolve the large adverse effect of the existing A303 on the OUV of the WHS. In carrying out a balanced appraisal of the benefits and disbenefits relating to heritage, environment, traffic, programme and cost, we conclude that the additional cost of each alternative over and above the DCO Scheme would not deliver meaningful additional benefits to the WHS that would justify either alternative being taken forward.” (NH R4.2, para. 1.10.9)

3.32. This conclusion is based upon a refusal to accept the findings of the ExA and Secretary of State. As Mr Justice Holgate stated in the High Court judgment:

“ . . . this is not a case where no harm would be caused to heritage assets (see Bramshill at [78]). The SST proceeded on the basis that the heritage benefits of the scheme, in particular the benefits to the OUV of the WHS, did not outweigh the harm that would be caused to heritage assets. The scheme would not produce an overall net benefit for the WHS. In that sense, it is not acceptable per se. The acceptability of the scheme depended upon the SST deciding that the heritage harm (and in the overall balancing exercise all disbenefits) were outweighed by the need for the new road and all its other benefits . . . ”. ([Judgment](#), para 282)

3.33. The refusal of NH to engage with the fact that its claim that its proposal would be beneficial in heritage terms has been rejected by the ExA and SoS means that its conclusions on the relative benefits/disbenefits of alternatives (including the bored tunnel alternative) cannot be relied upon.

3.34. Traffic Appraisal – Bored Tunnel and Cut and Cover Extension (NH R4.2, Section 8)

Please see our response on Carbon, Traffic Modelling, the Business Case, Cumulative Impacts and Alternatives.

4. In conclusion

4.1. The Alliance continues to object to the current DCO application, for the reasons given in our earlier submissions.

4.2. We await the report of the latest (2022) Advisory Mission to Stonehenge which will inevitably have implications for the DCO application and alternatives to it. Our submissions are necessarily incomplete without sight of this report. We would request the opportunity to comment upon that report once it becomes available.

4.3. We find NH’s continued support for the DCO application is blinkered and wilfully blind to the findings of the ExA and the Secretary of State. Once the permanent, major and irreversible harm of the proposed scheme is understood it is clear that there are a number of preferable alternatives. Foremost amongst these are those which do not involve loss of the physical fabric of the WHS. The southern bypass is an obvious contender and is also cheaper than the proposed scheme. Despite this, NH has simply refused to assess it more fully. Even if the consideration of alternatives could be limited to tunnel options (which is not accepted for the reasons set out above) then the bored tunnel extension is clearly a preferable alternative as it would avoid the loss of the fabric of the western part of the WHS. The cut and cover extension, albeit more harmful than the bored tunnel extension, would still be preferable to the proposal which is promoted by NH.

4.4. We continue to hold the view that a new Examination is needed for any redetermination of the A303 to Berwick Down Improvement Scheme, so that fully qualified independent advice may be given to the Secretary of State on the mass of new information that has come forward since the Scheme Examination in 2019 and his decision in 2020.

Appendix

Documents provided by NH in response to the Secretary of State’s 20 June 2022 letter

| Document name | Document reference |
|---|---|
| Q1, Q3–Q6 – Response document | Redetermination 4.1 |
| Q5 - Environmental Statement on heritage matters - Figures | Redetermination 4.1 Figures |
| Q2 - Conclusion on alternative routes – Overarching response | Redetermination 4.2 |
| Q2 - Conclusion on alternative routes Outline Heritage Impact Assessment – Bored Tunnel Extension | Redetermination 4.3 |
| Q2 - Conclusion on alternative routes Outline Heritage Impact Assessment – Bored Tunnel Extension - Figures | Redetermination 4.3 Figures |
| Q2 - Conclusion on alternative routes Outline Heritage Impact Assessment – Cut and Cover Tunnel Extension | Redetermination 4.4 |
| Q2 - Conclusion on alternative routes Outline Heritage Impact Assessment – Cut and Cover Tunnel Extension – Figures | Redetermination 4.4 Figures |
| Q2 - Conclusion on alternative routes Environmental Appraisal (Heritage) – Bored Tunnel Extension | Redetermination 4.5 |
| Q2 - Conclusion on alternative routes Environmental Appraisal (Heritage) – Bored Tunnel Extension – Figures | Redetermination 4.5 Figures |
| Q2 - Conclusion on alternative routes Environmental Appraisal (Heritage) – Cut and Cover Tunnel Extension | Redetermination 4.6 |
| Q2 - Conclusion on alternative routes Environmental Appraisal (Heritage) – Cut and Cover Tunnel Extension – Figures | Redetermination 4.6 Figures |
| Q2 - Conclusion on alternative routes Environmental Appraisal – Bored Tunnel Extension | Redetermination 4.7 |
| Q2 - Conclusion on alternative routes Environmental Appraisal – Cut and Cover Tunnel Extension | Redetermination 4.8 |