Response to former Secretary of State's invitation to comment upon National Highways' response to his letter of 26 August 2022

The former Secretary of State for Transport (SST), on receiving a copy of the Final Report on the joint World Heritage Centre / ICOMOS / ICCROM Advisory Mission to Stonehenge, Avebury and Associated Sites (c.373bis) 19-21 April 2022 (hereafter "the UNESCO report"), invited the Applicant (National Highways) by letter of 26.8.22 to provide its comments on the findings and recommendations in the UNESCO report.

National Highways' (NH) response was set out in tabular form attached to a covering letter from Derek Parody, its A303 Stonehenge Project Director, dated 9.9.22, and I now wish to bring to the new SST's attention a number of troubling aspects apparent not only from that response, but from the approach adopted by NH (in both its current and previous guise) both throughout and in particular since the High Court's clear and unambiguous condemnation of the present scheme, which led it to quash to previous SST's decision to approve it.

The decision of the High Court

To add some clear context, let me repeat the key conclusions of Mr Justice Holgate in July 2021:

- 1. The SST "...was not given legally sufficient material to lawfully carry out the 'heritage' balancing exercise required by paragraph 5.134 of the NPSNN and the overall balancing exercise required by s.104 of the PA 2008. Those balancing exercises required the impacts on significance of all affected assets to be weighed by the SST" (paragraph 180).
- 2. "the additional effect of that legal error is that the planning balance was not struck lawfully" (paragraph 284).
- 3. The SST had made an error of law by failing to consider alternatives to the scheme, such as a longer tunnel, which may have been less damaging to the WHS, despite the World Heritage Committee raising alternatives as a vitally important issue in relation to a heritage asset of international importance.
 - In reaching his judgment, Mr Justice Holgate said: "In this case the relative merits of the alternative tunnel options compared to the western cutting and portals were an obviously material consideration which the SST was required to assess. It was irrational not to do so" (paragraph 277).
- 4. Mr Justice Holgate further found that, given the independent Planning Inspectorate panel found that substantial harm would be caused to the Stonehenge WHS, it would be wholly exceptional (emphasis added) to treat that level of harm as acceptable (paragraph 264).

The former SST was in the process of re-determining his quashed decision, in light of the requirements set out by the Court, when he was replaced by the current SST. Nevertheless, it is clearly incumbent on the new SST to have full regard for the fundamental criticisms raised by Mr

Justice Holgate when she comes to re-determine the decision on the scheme; anything short of that is likely, I would suggest, to attract both incredulity and further disapproval from the Court.

NH have had crystal clear instructions from the Court as to what was required for the Scheme to find approval from the Planning Inspectorate, from the SST, and potentially once more from the Court. Their cards were clearly marked, and there can be no excuse if NH have failed to heed the Court's judgement.

The UNESCO Advisory Mission findings

While the former SST was engaged with raising further questions of NH, receiving responses and inviting comments on those responses from other Interested Parties, UNESCO and ICOMOS sent a further Advisory Mission to visit the WHS in April 2022, to assess what changes had been made to the scheme to meet its own previous consistent criticisms. The UNESCO report was duly produced before the end of August 2022, and its findings and recommendations have been considered by NH, albeit not very carefully, it would appear. The response of NH and of Mr Parody is of interest when assessing to what extent NH have taken heed of the criticisms of the Court.

To describe Mr Parody's short covering letter as "gloss" would be being exceptionally charitable. Anyone reading it without taking the trouble to read the UNESCO report itself could be forgiven for forming the view that UNESCO is, subject to a few further tweaks, happy to endorse the current scheme. In the body of the report, its authors have, one assumes for the sake of diplomatic politesse, dispensed the odd congratulatory remark, such as praising the co-operation between transport and culture agencies, the establishment of a Scientific Committee to guide the planners on heritage and archaeological issues, and for the "remarkable 3D virtual models". That said, the UNESCO report was clear in maintaining its opposition to the scheme:

Extracts from Section 3.2:

- "The proposed scheme would adversely and irreversibly impact on the integrity of the WHS"
- "Additional weight should be given to avoiding impact on the Property, in view of the obligations of the State Party under the WHC".
- "The 2018 Advisory Mission found that surface routes outside the WHS to the south... could have substantial benefits for the WHS".
- "Despite the SST's invitation of 30.11.21, and recent WHC decisions, no further consideration or analysis of alternatives have been offered by NH".

The above findings are naturally unwelcome to Mr Parody and other NH directors, who have seized upon the few crumbs of comfort they can take from the report, and presented these as though they were not merely being damned by faint praise. Whilst it is unlikely that the SST will not have read the UNESCO report in full for herself before she re-determines her predecessor's decision on the Scheme, the same cannot be said for members of the public who might be in attendance at local and parish council meetings hosted by MH to provide updates on the scheme. It is worrying to note that Marcia Daniels, Senior Communication and Engagement Manager for NH, who conducts such public meetings as part of the general NH public relations operation, has recently (26.8.22) contacted independent members of the Scientific Committee to announce that "almost all of the scheme is totally acceptable to UNESCO". She is either deluding herself or the public.

To re-iterate UNESCO's stance, which has not wavered since the scheme was announced, its preferred option is for the A303 to be re-routed outside the WHS; failing that it would prefer the tunnel to start and finish outside the boundaries of the WHS; failing that it requires as a minimum that the western portal be moved closer to or beyond the western boundary of the WHS.

Mr Parody has in his letter of 9.9.22 acknowledged only that UNESCO had concerns about the western portal approach, but he considered this could be addressed by "refinement of the DCO scheme... to minimise adverse impacts". However, the UNESCO report concluded that there would be an "unacceptable and inappropriate adverse impact on the setting of the Winterbourne Stoke Barrow Group", and that the scheme should not proceed without "substantial amendment to avoid this

impact". It further acknowledged that the extension to the proposed tunnel that would be required would probably require a new public consultation and examination process. It would also of course cost more. This stipulation by UNESCO was made in the context of its 3rd and least preferred option, and on any view, undertaking it could not be described as a mere "refinement".

The operation of the Scientific Committee

Elsewhere in his letter, Mr Parody noted that UNESCO "praised the work and unfettered advice of our independent Scientific Committee, which has been key to ensuring experts guide our development at every stage". With all due respect, this is a nonsense, and one can only assume the UNESCO inspectors were misled on this issue during their visit. I attach the submission of Prof Mike Parker-Pearson, a senior and independent member of the Scientific Committee, and one of only 13 individuals who sit on it who can claim to have archaeological expertise, which was submitted to the Planning Inspectorate on 26.9.20, during the Re-determination process. His (and others') advice on archaeological issues may well be "unfettered", but where it conflicts with NH policy, where it would lead to delay or further expense, it is simply ignored.

Let us be honest, NH neither wanted the expense of nor the interference from an independent Scientific Committee (SC); its arm was twisted to add such resource to the project by UNESCO after an early advisory mission, but it does no more than pay lip-service to the views of the majority of the archaeological experts on the committee whenever they conflict with its own priorities. A case in point is the firm advice of the majority of experts on the SC that in the WHS context, there should be 100% sampling of topsoil within the western and eastern portal footprints (and any other surface areas likely to be disturbed by the scheme). This advice, leading as it would to delay and extra expense incurred to archaeological contractors, is routinely and consistently ignored. I attach a copy of the submission of Prof Parker-Pearson to the Examination when invited to comment upon the then draft Detailed Archaeological Mitigation Strategy, released on 26 July 2019. The boast of Mr Parody that the SC advice "has been key to ensuring experts guide our development at every stage" and that working with the SC would, if the DCO is granted, ensure the scheme "is delivered with heritage and the Outstanding Universal Value of the WHS at the heart of every decision made", is sadly an empty one.

The adequacy of the NH response to the High Court decision

It is easy to become lost in the voluminous responses provided by NH to straightforward enquiries, tangled by their misleading assertions and lop-sided conclusions, mired in the references to myriad previous submissions and papers filed in the Examination. It is however all smoke and mirrors. Mr Parody and his colleagues at NH are essentially civil engineers – they want to build the tunnel, they have committed a huge amount of their own professional time developing the scheme, they may even feel some professional credibility is now riding on the completion of the scheme. They do not seem to have any real regard for the damage the scheme will do to the heritage assets in the WHS; this is not, despite what they say, their priority. No one should be surprised by this, but that is why the final decision is not theirs, and why we have a democratic process allowing planning experts to determine whether the scheme should be approved, in which members of the public can have their say; the final recourse for appeal is (still) judicial review by the courts – a necessary safeguard built into our unwritten constitution to protect us from rogue or illegal decisions by maverick ministers of any political hue.

In concluding therefore, let me keep this as simple as possible. NH's response to the criticisms in the High Court has been, in general, to seek to side-step those criticisms while keeping the scheme on track. More specifically:

1. The requirement to weigh impacts on the significance of **all** (emphasis added) affected assets in the path of the scheme within the WHS has been avoided. I refer you to the attached joint submission from the Consortium of Stonehenge experts and the Blick Mead project experts, filed in response to the NH response to the SST's letter of 20.6.22. This submission speaks for itself. The policy adopted by NH in this regard is underhand, transparent, and a flagrant disregard of the ruling of the Court in July 2021.

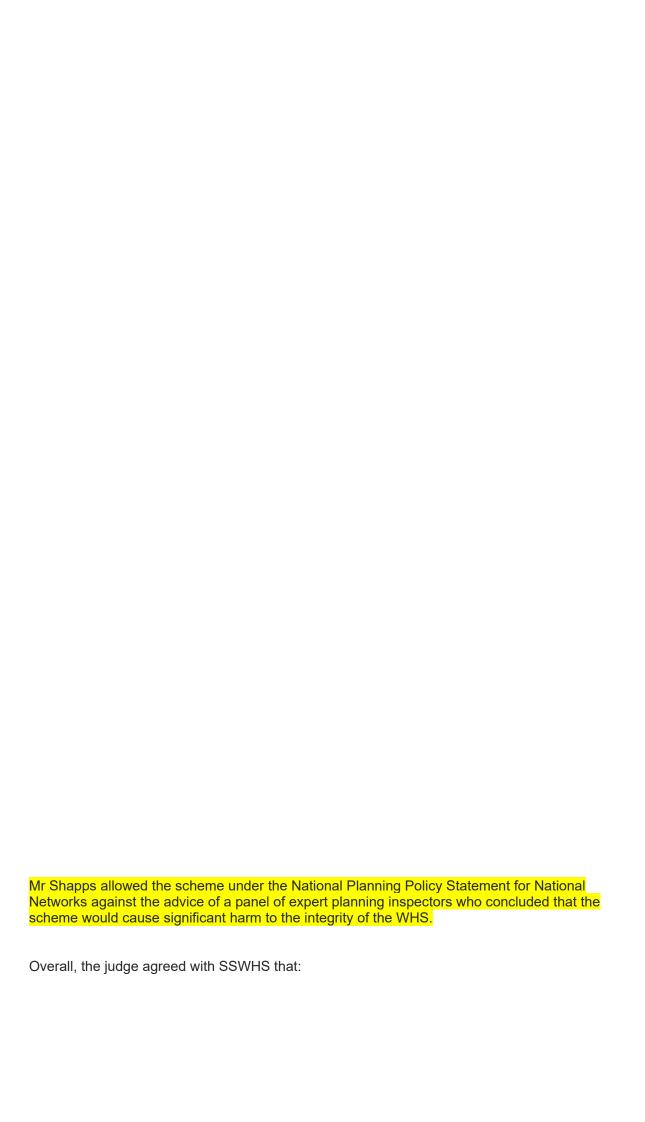
2. The requirement to properly assess alternative route options has always been avoided by NH. Indeed no alternatives were ever put to the public during the early consultation phase. Instead, NH simply advised that it had considered alternative land routes beyond the WHS, and satisfied itself they were not viable. The "tunnel" option was presented as, in effect, the only option. The other option of a longer tunnel has always been discounted as carrying a price tag that would make the whole scheme poor value for money. As UNESCO stated in their recent report, and despite any and all protestations from NH to the contrary, "no further consideration or analysis of alternatives have been offered by NH".

If, despite the arguments raised against the scheme by the Planning Inspectorate, by UNESCO, by the majority of experts on its own Scientific Committee, and in the High Court, the scheme is approved in its current form, it is not difficult to anticipate the view that is likely to be taken by the next High Court judge who is asked to set aside that approval.

I would urge the new SST to have no hesitation in distancing herself from this hugely controversial scheme, the benefits from which have yet to be satisfactorily demonstrated, even to the National Audit Office. More deserving projects could well benefit from the funds that could be re-allocated as a result. Above all, please stop wasting public money on pursuing this discredited scheme, and instead use it to properly assess the alternatives for the benefit of the local population, the City of Salisbury, and to preserve the continuing Outstanding Universal value of this most iconic of World Heritage Sites.

Mark Bush

28.9.22



- Harm to each heritage asset within the project should have been assessed individually rather than by way of considering the "historic environment" as a whole and
- He left out of account a mandatory material consideration, specifically the existence of a potentially less damaging alternative in the form of a longer tunnel

We the undersigned are alarmed that many of the representations by Highways England and supporters of the Stonehenge Tunnel either explicitly or implicitly claim support from the Scientific Committee. (Hereafter, and for the avoidance of any doubt, all references to the Scientific Committee are understood to refer to the independent experts forming the Scientific Committee, and not to any wider definition)

The majority of the A303 Scientific Committee oppose the whole scheme due to the fact that it will undoubtedly harm the significance of the World Heritage Site and its OUV. The majority also opposes the scheme in relation to its archaeological mitigation in advance of construction within the WHS. We stress that, by sitting on the Scientific Committee, we are not endorsing the scheme but have sought and continue to seek to mitigate the damage if it cannot be stopped.

The Scientific Committee consists of 13 independent experts, including a Chair, and was formed by the Highways Agency on the recommendation of UNESCO. We meet together with representatives of Highways England and members of HMAG, drawn from the heritage bodies involved in the A303 proposed scheme. Our role is entirely advisory, and it has been evident throughout the course of discussions and amendments to the DAMS that our advice is not always followed. No system of voting is employed by the committee. It is entirely at the discretion of Highways England to follow or ignore our suggestions or directions. As a result, some crucial aspects of the scheme have not been approved by the Scientific Committee, contrary to what may be claimed by a number of parties who support the Scheme.

A key issue in which the Scientific Committee's advice has not been followed is that of ploughsoil sampling. At the last meeting of the Scientific Committee in July 2019 there was a clear majority of 7 (out of 13) who were not satisfied with the low percentages proposed for ploughsoil sampling and which have subsequently appeared in the DAMS. In contrast, two members appeared to be in favour, two appeared uncommitted, and two did not attend the meeting.

Response to further specific assertions made by the applicant and the heritage agencies concerning the function of the Scientific Committee:

Assertions made about SC approval	Our response
"It must be remembered that the Outline	This is false. It was never approved by the
Mitigation Strategy was discussed and	majority of the Scientific Committee.
approved by the A303 Scientific	
Committee", (Wiltshire Council submission,	
13.8.20, paragraph 2.3)	
"The Council is very confident the	This ignores the programme of ploughsoil
evaluation programme of comprehensive	sampling which is neither comprehensive
geophysical surveys and trial trenching has	nor to a high enough standard, and has
been carried out to a high standard and to a	

strategy approved by the A303 Scientific	been considered as not fit for purpose by
Committee", (WC, para 2.5)	the majority of the Scientific Committee.
"The mitigation strategy set out in the DAMS is already comprehensive. If any unexpected discoveries are made within the boundaries of the Developmentthen these processes should be followed and informed by further consultation with the SC", (Eng. Heritage, 13.8.20, Conclusion 5) "The DAMS provides for a proportional approach to sampling with natural features that have been shown to contain archaeological remains to be completely excavated (100%)", (Hist. Eng, 13.8.20,	This is false, see above. A proportional approach is not satisfactory since sampling of natural features should be 100% to reveal the total number containing archaeological remains (not just those revealed by 'proportional' sampling
para 2.5.9)	which is likely to be well below 100%).
"Within the WHS, HE have also sought the advice of HMAG and the A303 SC (an independent panel of experts) in relation to the archaeological evaluation, the drafting of the DAMS and the scoping of the HIA", (NT, 13.8.20, para 6.1.2)	Whilst HE have sought the advice of the SC, they have not always adopted it. This is particularly problematic for ploughzone artefact recovery and 100% sampling of natural features which the majority of the SC recommend but is not being followed in the DAMS.
"Within the WHS, HE is being held to high and unusually expensive standardswe expect a higher proportion of remains to be fully investigated than is often the case. The archaeology is overseen by an independent specialist committee", (Pitts, 12.8.20, page 3)	This is false. The archaeology is not overseen by the Scientific Committee. The SC merely provides advice which has been adopted on occasions and not followed on others.
"the archaeological evaluation strategy was developed in consultation with HMAG and the SC. Specific contributions from members of the SC in respect of ploughzone artefact sampling were adopted as part of the evaluation strategy. The draft Archaeological Evaluation Strategy Report and its accompanying Overarching Written Scheme of Investigation were provided to the SC for comment. (Footnote here adds the final approved versions of the above documents are available through the SC website), (HE Overarching response, July 2020, para. 2.2.2)	Some specific contributions were indeed adopted as part of the evaluation strategy but the wider issue of ploughzone artefact recovery has not been resolved to the satisfaction of the majority of the Scientific Committee who deem the resulting loss from the WHS of up to half a million artefacts as unacceptable.

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Professor Vincent Gaffney MBE FSA Anniversary Chair in Landscape Archaeology School of Archaeological and Forensic Sciences University of Bradford

Professor Joshua Pollard, Archaeology, University of Southampton

Professor Nicky Milner, Professor and Head of Department of Archaeology, University of York

Professor Oliver Craig, Professor of Archaeological Science, Director of Bio-Archaeology, University of York

Dr David J Field, Formerly Senior Archaeological Investigator, English Heritage

Comments on the updated dDAMS (draft Detailed Archaeological Mitigation Strategy) released on 26 July 2019)

A303 Amesbury to Berwick Down 8 TR010025 Deadline 6 8.11 (Rev 2) – Draft Detailed Archaeological Mitigation Strategy (DAMS) (TRACKED CHANGES version)

- 1. The strategy proposed for ploughzone artefact collection (pp. 84-85, sections 6.3.11-6.3.18) is still wholly inadequate and would result in the loss of approximately 500,000 artefacts and the associated information about the prehistoric activities from which they derive. This is an unacceptable loss for the WHS.
- 2. This matter was discussed at length at the Scientific Committee meeting of 2 July where the committee were overwhelmingly in favour of 100% sampling of topsoil within the western and eastern approaches within the WHS. Yet this recommendation has not been taken up in the updated dDAMS.
- 3. At paragraph 6.3.15, the dDAMS states that 'statistical analysis of the distribution of the artefacts recovered in the 1% evaluation test pit sample... will be developed to inform the identification of a representative sample size and distribution'. Yet previous archaeological excavations west of Stonehenge in 2008 by the Stonehenge Riverside Project have demonstrated that any sampling of less than 50% across entire excavated areas has an insufficient probability of recovering enough diagnostic artefacts to allow characterisation and dating of the human activities that survive only as these distributions of stone tools and other artefacts in the ploughzone. Only 100% sampling provides full recovery of the diagnostic lithic artefacts. These make up less than 2% of the lithic assemblage; without a suitable sample of these diagnostic stone tools, the dating and characterisation of the human activity is simply not possible. These ploughzone assemblages are predominantly the only surviving prehistoric remains in these affected areas of the WHS.
- 4. The current requirement for 100% sampling of ploughsoil on 1m grids in areas of high potential within the Stonehenge and Avebury WHS, enforced by archaeological curators (County Council, Historic England, National Trust), should apply to all work within the WHS, including development projects. In addition, no one area within the road's footprint in the WHS is any less important than any other. We cannot have one rule for research excavations and another rule for others within the WHS.
- 5. Highways England appears to be unwilling to meet the required archaeological standard of 100% ploughzone recovery in the WHS. Since this has been standard practice in both Stonehenge and Avebury areas of the WHS for the last ten years, they should have known all along and should have planned for this from the beginning. Their preparations have been totally inadequate, lacking adequate early consultation on this standard practice within the WHS. The scale of the work required is indicative of the enormous extent of the destruction proposed within the WHS. HE probably sees the huge scale of 100% ploughzone recovery as unfeasible. Yet we do not accept that they have carte blanche to destroy archaeological evidence in circumstances where any other archaeologist would be required to meet the industry standard, simply because of the huge size of the area affected.

Consortium of Stonehenge experts' submission on National Highways' response to Redetermination 4

Secretary of State letter 20 June 2022 Applicant's response to the request for comments Q1, Q3–Q6 – Response document Redetermination 4.1

SoS Question 1_The Secretary of State notes in response to his consultation letter dated 24 February 2022 that the Consortium of Stonehenge Experts identified that four assets are not included in the Applicant's assessment. The Applicant is asked to confirm to the Secretary of State whether these assets have been included in the assessment and, if so, to specify in the material where the assessment of those assets is set out. If an assessment has not been undertaken, the Applicant is asked to provide the necessary assessment on these assets so the Secretary of State can appropriately consider them.

National Highways' response

Sixteen points (1.2.1–1.2.16) were made in NH's response to the Consortium. Those that are of substance are summarized here:

- The three archaeological sites highlighted by the Consortium are not identified in the HER (consulted in December 2021) and therefore are not recognized as heritage assets (1.2.4).
- The archaeological remains identified comprise a small number of subsurface archaeological features (small pits) and scatters of worked flint flakes (1.2.7).
- The Heritage Impact Assessment takes account of the nature of the material and the lack of association with subsurface features; these remains are not schedulable under the 1979 Act nor are they considered to be of equivalent significance to SAMs and of national importance (1.2.8).
- The Detailed Archaeological Mitigation Strategy provides for a comprehensive programme of archaeological excavation and recording of the archaeological remains within the footprint of the scheme (1.2.9)
- The Blick Mead site will not be physically impacted by the Tunnel Scheme, nor will the groundwater levels at the Blick Mead Site change due to the construction and operation of the Scheme (1.2.13).
- The Examining Authority report (2020) was satisfied that the Tiered Assessment of Blick Mead conducted by National Highways was adequate (see Recommendation Report paragraph 5.9.106) (1.2.15).
- "The Outline Environmental Management Plan, as updated in May 2020 in response to the Secretary of State's request, required in measure MW-WAT10 that the Groundwater Management Plan sets out how Blick Mead is to be considered to safeguard the groundwater levels associated with the preservation of archaeological remains at the Blick Mead site" (1.2.16).

Points 1.2.10 – 1.2.16 concern the archaeological site of Blick Mead and are addressed below in the second half of this document.

Submission of the Consortium of Stonehenge experts

The four points (1.2.4, 1.2.7–1.2.9) are specious and can be shown to be erroneous.

1. Failure of NH to recognize archaeological sites as heritage assets (1.2.4) The three sites are: remains of a large Beaker-period settlement with burials, a probable Neolithic settlement west of it, and a probable Neolithic settlement at the eastern portal. The remains of the large Beaker-period settlement were described and mapped in a peer-reviewed archaeological paper (Pollard *et al.* 2017). Knowledge of this substantial site has thus been in the public domain for five years. There has clearly been a failure or a lack of resources to update the HER. Secondly, attention has been drawn to this site and its significance throughout the Public Examination process, so that to deliberately not recognize it as a heritage asset is to adopt a knowingly and prejudicially blinkered approach. It is not acceptable to deny the existence of a large and significant archaeological site because it has not been entered – for whatever reason – onto the Swindon & Wiltshire HER.

Paragraph 124 of the NPSNN states that '[N]on-designated heritage assets of archeological 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.'

Footnote 98 states 'There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.'

It can be noted that there is no requirement in the NPSNN for an asset to be included on the HER in order for them to be considered as an 'asset of archeological interest that [is] demonstrably of equivalent significance to Scheduled Monuments...'. As set out in the Consortium's previous submission, the asset is undoubtedly of archeological interest and of equivalent significance to a scheduled monument. This is also addressed in the next section.

2. Nature and significance of the archaeological remains (1.2.7)

This very substantial Beaker-period site can be divided into two zones. Its northern area is c. 1,400m N–S by c. 300m E–W and its southern area is c. 800m E–W by c. 300m N–S. NH have also sampled part of this southern area with a 1% sample of artefacts from topsoil. Considering just this southern area of c. 240,000sq m, which would be dissected by the road cutting proposed outside the western portal, field evaluation for NH has revealed subsurface features consisting of five pits and two human burials. These derive from a 2% trenching programme within c. 50,000sq m of the sampling corridor where it crosses the archaeological site.

NH have not properly considered the implications of this systematic sampling, from both trenching (2%) and test-pitting (1%), for the total 'population'. To scale up to the total area of this archaeological site of 240,000sq m would infer the presence of as many as 1,200 Beaker-period pits and well over 100 Beaker burials for this one site. Within the *c*.50,000sq m of the sampling corridor this sample indicates a probable total of 250 Beaker-period pits

and 100 burials still preserved, many of which must lie within the proposed road line. Such remains of small pits and burials do not appear to have been identifiable from geophysical survey.

Such a density of pits (one per 200sq m) is not unexpected and is less than the density encountered at the Neolithic settlement of Durrington Walls. With just two burials (an adult and a neonate) found during trenching, scaling up of their likely density is more difficult. Yet this is known to be a portion of the Stonehenge landscape with a high density of Beaker burials from barrows and flat graves: 14 more Beaker burials are known from within the area of this site (Bowden *et al.* 2015: table 3.2), an unusually high concentration of Beaker burials in national terms (Garwood 2012: fig. 3.9).

It is clear that this meets the definition of being an 'asset of archeological interest that [is] demonstrably of equivalent significance to a scheduled monument'. The site is of a rare type: not only are Beaker and Early Bronze Age settlements far less well known than those of any other later prehistoric period but to be of this size is also exceptional. The combination of numerous burials alongside settlement remains on this site is also exceptional. Its proximity to Stonehenge and the round barrow cemeteries of Winterbourne Stoke Crossroads and Normanton Down as well as to Stonehenge raise the possibility that it may have been where the mourners and barrow-builders lived while burying the dead and where the megalith-builders of Stonehenge's stages 3 & 4 lived.

3. Schedulability and national importance of the archaeological remains (1.2.8) It is true that the wording of the 1979 Act allows only structures, works *etc.* to be scheduled as ancient monuments so this does exclude the dense scatter of lithics, accompanied by Beaker pottery, within the ploughsoil above the pits and burials. However, these Beakerperiod pits and burials are structures and are thus included within the meaning of the 1979 Act. In any event, the NPSNN and NPPF provide that where archeological assets which are not designated (i.e. scheduled) but are demonstrably of equivalent significance to Scheduled Monuments they should be subject to the same policies which apply to designated assets. Scheduling is also discretionary in that the criteria do not require all nationally important remains to be protected. The OUV requirements relate to key issues of significance and any physical evidence relating to those is inherently included. Both in national planning policy and international heritage standards that apply here, remains of this type are not by their nature excluded from being of national or international importance.

By the criteria for judging national importance (finds, rarity, period, survival, diversity, potential, fragility and vulnerability, group value), this Beaker-period site, with its high potential for buried structures in the form of pits and burials, is exceptional: together with its northern neighbour, it constitutes the largest known Beaker-period settlement in Europe. It is also unique in combining burials with settlement remains. Most importantly, it appears to have formed a major focus of settlement perhaps replacing the earlier settlement at Durrington Walls, in an east-to-west shift in Neolithic–Early Bronze Age settlement around Stonehenge (Pollard *et al.* 2017). NH's attempt to deny that these archaeological remains are not nationally important, without providing any rebuttal of our claims from actual evidence simply does not stand up.

4. Comprehensiveness of archaeological recording of the remains (1.2.9) The mitigation strategy is not comprehensive, as stated in numerous 2019 submissions by the Consortium/Blick Mead team, the CBA, and in a separate submission on the DAMS by Paul Garwood. As set out in the Consortium's previous representation of April 2022, some 370,000 flint artefacts will be lost without record and c. 1700 sub-surface features will be destroyed without excavation on the three identified archaeological sites. Such archaeological losses are simply unacceptable for the Stonehenge World Heritage Site. The CBA has also further highlighted the limitations inherent both in the identification of areas of significance (especially for non-linear features) and also in the proposed sampling mitigation strategy.

Conclusions: National Highway's failures to adequately address SoS's Question 1

- 1. National Highway's failure to recognize important archaeological sites, one of them published in a peer-reviewed paper (Pollard *et al.* 2017), as heritage assets is unacceptable. It is not good enough to use the excuse that these sites had not been entered into the local HER by 2021 to claim that they do not exist as heritage assets.
- 2. In characterizing the remains from these archaeological sites, National Highways have failed to consider the difference between a sample and what it is a sample of. Their characterization of the archaeological remains found during their very limited sampling as 'a small number' of features underplays the potentially enormous number of sub-surface structures and buried artefacts that lie within these archaeological sites and within the proposed road line that would cut through them. As a sample, the finds represent just 1%-2% of the likely total of below-ground structures and artefacts, numbering probably in the hundreds and thousands. In the case of the very substantial Beaker-period site, this may number over 1000 pits and over 100 burials. The unscientific approach adopted is contrary to basic EIA principles of describing the character and extent of the heritage asset inferred from sampling, not just a description of the sample obtained.
- 3. National Highway's bald claim that these archaeological sites are not of national importance is unsupported and indefensible. In particular, the Beaker-period site is formed of the remains (pits, burials, artefacts) of a likely settlement larger than any known from this period in Europe. It ranks highly on all the criteria used for assessing archaeological sites in England. Survival of sub-surface structures, probably over a thousand, would make this particular site equivalent in importance to a Scheduled Ancient Monument.
- 4. National Highway's claim that their mitigation strategy is comprehensive does not square with the fact that hundreds of thousands of artefacts and over a thousand sub-surface features will be left uninvestigated within these sites if the scheme goes ahead.

Recommendations

- 1. The current scheme will cause profound damage to archaeological remains, to the WHS, and also to the spatial relationship of monuments as set out in the Consortium's previous submissions.
- 2. The cut and cover extension would do little to obviate this as it would still involve significant loss of the physical fabric of the WHS.

- 3. If a tunnel is to be chosen then the bored tunnel is the better option as it would involve much less loss of physical fabric of the WHS including the archaeological remains and would be less harmful in terms of the interruption of the spatial relationship between monuments.
- 4. However, a tunnel is not the only available alternative. It is necessary to re-consider a southern bypass around the WHS. This would not affect the physical fabric of the WHS. NH have provided insufficient information on this option and it must be revisited.

Who we are

The Consortium of Stonehenge Experts is a group of 22 senior scholars who have carried out internationally recognised research within the Stonehenge WHS within the last ten years or more. Most of us are employed by UK universities; many were employees of various universities or of English Heritage when doing that research. Seven of us are independent members of the Scientific Committee of the A303 Stonehenge – Amesbury to Berwick Down scheme. We are:

Prof. Mike Parker Pearson FBA FSA FSA(Scot) MCIfA PhD University College London

Dr Umberto Albarella PhD University of Sheffield

Dr Mike Allen FSA PhD Allen Environmental Associates

Dr Barry Bishop PhD University of Buckingham

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Blick Mead Project experts' submission on National Highways' response to Redetermination 4

By David Jacques (University of Buckingham) and Tony Brown (University of Southampton) for the Consortium

Secretary of State letter 20 June 2022

Applicant's response to the request for comments 1.2.1 D,1.2.10-1.2.16 – Response document Redetermination 4.1

National Highways' response

Six points (1.2.10–1.2.16) were made in National Highways' response to the submission from the Blick Mead Project. Those that are of substance are summarized or quoted below here:

- The Blick Mead site will not be physically impacted by the Tunnel Scheme, nor will the groundwater levels at the Blick Mead Site change due to the construction and operation of the Scheme (1.2.13).
- The Examining Authority report (2020) was satisfied that the Tiered Assessment of Blick Mead conducted by National Highways was adequate (see Recommendation Report paragraph 5.9.106) (1.2.15).
- "The Outline Environmental Management Plan, as updated in May 2020 in response
 to the Secretary of State's request, required in measure MW-WAT10 that the
 Groundwater Management Plan sets out how Blick Mead is to be considered to
 safeguard the groundwater levels associated with the preservation of archaeological
 remains at the Blick Mead site" (1.2.16).

Submission of the Blick Mead Project experts

The claims by NH in points (1.2.13, 1.2.15 and 1.2.16) fail to address the SoS question 1 in relation to Blick Mead.

1. The ExA report stated -

"The final version of the OEMP [AS-129] requires, in MW-WAT10, that the Groundwater Management Plan sets out how Blick Mead is to be considered. This would positively require the Plan to address the Blick Mead site. However, the ExA remains concerned that this does not provide adequate detail to ensure suitable monitoring (and mitigation if required) (5.9.109).

The ExA report also advised that -

"When the archaeological importance of the Blick Mead site is considered together with the alteration or destruction of the deposits which could arise, if groundwater flows were adversely affected, the ExA is of the view that specific monitoring for this site is required. This would be necessary to ensure that the heritage asset is conserved" (5.9.108).

There is yet to be "specific monitoring" at Blick Mead other than that recorded by just two water meters which were placed in wrong areas of the site without consultation with the Blick Mead Project's experts in 2017. The ExA report's stress on the need for there to be "adequate detail to ensure suitable monitoring" (5.9.108) at Blick Mead has therefore yet to be met. ExA point 5.9.110 additionally recommends that:

To ensure monitoring (and potential mitigation) is adequate the ExA considers that it would be necessary to specifically require monitoring of groundwater and soil moisture levels, the approval of trigger levels below which remediation would be necessary and the approval of a remediation plan. The ExA therefore recommends that R4 in the dDCO is amended to specifically require this as part of the Groundwater Management Plan. The proposed wording has been included in the ExA's recommended DCO".

Despite the concerns raised by the ExA, NH has not conducted **any** additional monitoring of the Blick Mead site.

As has been explained in numerous submissions to the Secretary of State (including by Dr George Reeves on behalf of the Stonehenge Alliance) the tunnel proposal brings a significant risk of dewatering in the area. As is set out below, and as has been repeatedly stated by the Blick Mead Project Team, de-watering would be disastrous for the preservation of Mesolithic remains at Blick Mead. The failure of NH to definitively show that the proposal will not lead to de-watering and thereby substantial harm to Blick Mead means that the scheme should be refused on this basis alone.

Further, the draft OEMP still suffers from the flaws which were identified by the ExA. In the event that any DCO is granted it will be necessary for there to be a requirement which seeks to protect Blick Mead as far as possible in accordance with the recommendation of the ExA.

2. National Highways' response does not acknowledge that the Examining Authority's report in 2020 was produced before the publication of a peer-reviewed international journal (Hudson, Pears and Jacques *et al* 2022), which details how Mesolithic eco facts have survived at Blick Mead due to the water table levels. Specifically, this work confirmed the presence and extent of prehistoric horizons at Blick Mead dating from the very Late Upper Palaeolithic/Early Mesolithic, c.9160 BC (*the earliest ever date recovered from the Stonehenge World Heritage Site*), to the very Late Mesolithic period. These layers were found sealed beneath plough soil and terraces dated to the mid-Bronze Age, and, crucially, *no contamination of aDNA or pollen was evident from later human activity in this sequence.* Above the Bronze Age plough soil, the environmental time-slices continued through to the present day. *Astonishingly, Blick Mead thus provides an environmental archive of this part of the World Heritage Site which spans the whole of the Holocene. It is the only place in Western Europe to have produced such a sequence.*

The article makes it plain that without the survival of sedaDNA and pollen from Blick Mead, maintained by water-table levels over millennia, the new insights the Project has gained into the development of this part of the Stonehenge landscape during the Mesolithic and into the early Neolithic, and beyond, would have been lost. Blick Mead's wider environs, however, have not been explored, and any chance to do so will be lost if tunnel works disturb the water table and interfere with the local hydrological regime. Neither have been

measured adequately (see above). It is therefore entirely wrong for NH to rely upon the fact that the ExA was satisfied that the tiered assessment in 2020 was "appropriate" without acknowledging the discoveries detailed in the peer reviewed journal in 2022 which provided an entirely new data set to factor in. That data-set emphasises the sensitivity of the site and therefore that a Tier 4 assessment ought to have been conducted (as set out in previous submissions).

A note on the importance of the water table levels being maintained at the Blick Mead Site

Modern archaeology includes the analysis of organic remains preserved in sediments and soils as well as artifacts and structures (Brown et al. 2022). Traditionally these are pollen, snails, beetles etc. but increasingly they include molecular 'fossils' such as aDNA and also lipid biomarkers (fats etc.). This is a revolution in archaeology. However, the preservation of these molecular fossils requires the sediments to remain within the permanently saturated, or at least seasonally, saturated zone. We know that they are best preserved under of low REDOX conditions and where there is no or minimal leaching (as happens above the water table). This makes understanding the hydrological conditions at Blick Mead of critical importance.

Specifically, the main areas of concern with NH approach remain:

- 1. A lack of understanding and modelling of the horizontally elevated permeability associated with the Whitway/Stockbridge Rock/Barrois Horizon zone as highlighted by Dr G.M. Reeves (Submission to planning Inspectorate Ref. TR010025). This causes uncertainties in the effects on the springs not only at Blick Mead but also to the south.
- 2. A lack of modelling of shallow groundwater flows both before and after the works incorporating the full design of drainage works and any infiltration or runoff ponds.
- 3. A lack of appropriate modelling at high sensitivity to model seasonal water table fluctuations at the site and groundwater levels below 68m OD which would damage the archaeological resource (as per ExA report 5.9.108-110 above). This should also include climate change scenarios as changes in precipitation and evapotranspiration may also make the site more vulnerable and cannot be divorced from the changes to the hydrological catchment caused by the tunnel and associated works.
- 4. A failure to undertake a Tier 4 assessment despite the uncertainties revealed in NA's assessment (Highways England 2018) and in light of the peer reviewed recently published discoveries (Hudson, Pears, Jacques *et al* . 2022).

Most of these points were made in the Report to the Planning Inspectorate in 2018 by Professor Brown (University of Southampton) and Dr Bradley (University of Birmingham). It remains a fact that the appropriate monitoring of the site, at the correct spatial and temporal scales, has not been undertaken and so we cannot be any more assured of a lack of hydrological impact than was given in the report of 2018. It is therefore wrong for NH to highlight that ExA was satisfied that the tiered assessment in 2020 without mentioning the concerns it raised in the same report (5.9.08-10). NH responses also do not acknowledge

that the ExA's report was published before the internationally important results from Blick Mead in 2022.

To conclude, monitoring by NH at Blick Mead, as stipulated in the ExA report and Outline Management Plan, has, to-date, been completely inadequate. This should already have been addressed in order to assess any hydrological impact at this important site because, without it, NH lacks the necessary information about the significance of and impact on the Blick Mead asset as required. What is also clear, is the continuing impact of this site on our understanding of the Stonehenge landscape, and on how its environment — and human use of this environment — changed in prehistory.

Taken together the inadequacies in NH response to the Blick Mead submission condemn it to fall far short of the requirements needed to satisfy key policy and legal tests.

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