
**WRITTEN SUMMARY ON BEHALF
OF THE CONSORTIUM OF ARCHEOLOGISTS
AND THE BLICK MEAD PROJECT TEAM**

Harm to OUV and Place in Overall Acceptability

1. The international obligation in articles 4 and 5 can broadly be summarised as the protection and conservation of the World Heritage Site ('WHS'). Harm to OUV of a WHS undoubtedly amounts to a breach of these articles.
2. Ordinarily, a breach of an international convention is likely to be a very weighty and potentially decisive material consideration in a planning decision. This is the case even where the convention in question, as with the World Heritage Convention ('WHC'), has not been transposed into domestic law.
3. However, here, in relation to a decision taken under the Planning Act 2008, the WHC has been given statutory force in domestic law. Section 104(3) and (4) Planning Act 2008 state:

(3) The [Secretary of State]⁷ must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies.

(4) This subsection applies if the [Secretary of State]⁷ is satisfied that deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations.

4. The only sensible reading of those sub-sections in the context of the section as a whole is that if there is a breach of an international convention obligation then the application should be refused.
5. It is notable that the Secretary of State does not dispute that the World Heritage Convention contains international obligations for the purposes of s104(4) Planning Act 2008.
6. Further, even if the decision is to be taken without regard to s104(3) and (4) and taken in accordance with the NPS then patently harm to OUV amounts to substantial harm to a heritage asset and therefore, in line with paragraph 5.133 NPS the Secretary of State should refuse consent unless it can be demonstrated:

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

- *the nature of the heritage asset prevents all reasonable uses of the site; and*
- *no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*
- *conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and*
- *the harm or loss is outweighed by the benefit of bringing the site back into use.'*

7. We know here that the substantial harm is not necessary due to there being alternatives, including a longer tunnel that would avoid the harm. Further and in any event the public benefits are not substantial enough to outweigh the gravity of the permanent damage to a World Heritage Site.
8. Finally, even if the harm is somehow considered less than substantial and para. 5.132 NPS applies, the public benefits are not sufficient to outweigh the very significant harm to the

WHS. (The panel need only refer itself of the recent National Audit Office report of 20.5.19 in this regard).

Significance of the World Heritage Committee decision and report

9. The World Heritage Committee ('Committee') was set up by the World Heritage Convention. The UK, being a signatory to that convention can be taken to respect and accept the legitimacy and authority of the Committee.

10. The whole purpose of the Convention is to elevate the conservation of certain assets to the world stage. As article 6(1) states:

'Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned in [Articles 1](#) and [2](#) is situated, and without prejudice to property rights provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate.'

11. It is true that responsibility for compliance with the WHC rests with State Parties. However, there is nothing in the WHC that supports the view that State Parties can simply take the WHC to mean what they say it means. In particular, there is nothing to support the contention that State Parties can apply their own definition to obligations such as 'protect' and 'enhance'.

12. Significant and determinative weight must be given to the independent, specialist view of the Committee who have been advised by their expert advisors and who have made their decision following three advisory missions. The conclusion of the Committee is clear, the proposed tunnel will not protect the WHS (see last para on p.2 of the report).

Further comment upon costs

13. Article 4 of the WHC states:

*Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in [Articles 1 and 2](#) and situated on its territory, belongs primarily to that State. It will do all it can to this end, **to the utmost of its own resources** and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.’ (my emphasis)*

14. The WHC does not allow a State Party to take a position akin to: ‘well we don’t think spending the money on protection and conservation of the WHS is worth it’ having conducted a basic cost/benefit assessment. Rather, a State Party is required to do what it can ‘to the utmost of its resources’.

15. Our earlier submissions have already drawn the ExA’s attention to the *Tasmanian Dam* case where the High Court of Australia found that a party is able to challenge a Nation State where it claims that it does not have sufficient resources to meet its obligations. However, this Government has never claimed that it does not have sufficient resources to meet its obligations. Indeed, such an argument would be futile as here it is positive action by the Government which is causing the harm.

Comments on the DAMS

Dr Paul Garwood on the Archaeological Research Agenda

16. We have already submitted detailed comments on the research agenda component. In short, it is not fit for purpose from a research perspective. This is astonishing given the status of the WHS and the amount of research-driven archaeological fieldwork that has taken place in the Stonehenge landscape, and the rich and extensive interpretative literature that pertains to the area.

17. The document is profoundly impoverished in research terms, providing no sound basis for evaluating the significance of the areas impacted or the research value of potential

sources of archaeological evidence either before or during proposed road scheme works. There is, therefore, no framework for defining appropriate ‘sampling strategies’ or determining what should or should not be investigated at any stage of fieldwork.

18. There is exceptionally thin and weak consideration of national, regional and landscape-scale research frameworks relating to the WHS and to key periods of study, while significant recent research literature has no significant presence in the DAMS at all.
19. The DAMS is based almost entirely on the most recent research framework published in 2016. That is helpful in and of itself but it is very thin, and as the authors of that framework make clear, it is only intended to sit on top of a far more comprehensive and still active research framework in place since 2005 (with additional information updated by Tim Darvill in 2013). Those documents, together, provide the basis for a dedicated research framework but neither they nor the research issues and objectives they identify are used in the DAMS.
20. If we are looking at whether the DAMS is justified on the basis of research credentials then it doesn’t work at all. We have great concerns as to how research issues are being fed into method statements. Judgments about what is done on site are going to be founded upon research frameworks set in the DAMS, yet this is not fit for purpose.

Professor Mike Parker-Pearson Presentation on Sampling

21. Back in June I explained that more than ½ a million artefacts would be lost. Today I will address the loss of information which will go with them.
22. Back in 2008 we excavated 700sqm within the area marked by the red rectangle (on the slide). Hand digging was required by Historic England, the National Trust and Wiltshire Council. We had to comply, if we did not permission would not have been given to excavate. We couldn’t plead poverty, practicality or poor value for money for taxpayers

because the project was funded by the research council. In 2 weeks we excavated 4 trenches of 700 square metres.

23. Within the red rectangle there were 4 trenches. Marked in grey. Sieving every square metre we plotted the distribution of artefacts within the trenches. We were able to find not just the overall numbers of lithics but also to recover the full range of diagnostic artefacts – tools, arrowheads and others which allow us to date the scatter. These are 2% or less of the artefacts but they are absolutely vital.
24. To give you an idea of how difficult it is to gather diagnostic tools the slide shows scrapers on the left hand side. By digging and recovering the whole lot we had a concentration of tools, part of a settlement complex dating to the early to middle bronze age. Had we sampled at 16% we would have recovered none of these. If at 32% we might have picked up 1. Only at 65% did we get the slightest inkling that they represent a concentration of prehistoric activity.
25. In trench 52, 100% sampling showed a dense concentration, 16% gives no indication of that whatsoever.
26. Not all of those areas were anywhere near the density of the western and eastern corridors. Here you can see a very low density of lithics in top left – had it not been 100% we would have missed all of the diagnostic artefacts. Give us ideas of activities. May have been associated with exploitation of tree holes.
27. In third area we had relatively light scatter – what was significant here was that those beneath the plough soil had no relation to lithics in the plough soil above them. Those remains, thanks to diagnostic artefacts, were from earlier period – late Neolithic. Not a single feature associated with that period of activity was beneath the plough soil. If we had carried out less than 50% of topsoil we would have had no idea of this important era of activity represented.

28. The same goes for trench nearby – the numbers were much higher but there is the same picture of late Neolithic in plough soil and bronze age underneath. Proportions of diagnostic artefacts are there in too small proportions to ever be recovered unless at least 50% if not 100%.
29. The picture to take away from this is that there is unusual spatial diversity between these four different trenches in relatively small area. Those 700sq m represent about 150th of the area to be destroyed. We are losing the possibility of getting an idea of the fine grained nature of prehistoric activity. We may be looking at quite dispersed and differentiated areas of activity in quite close spatial proximity. There are implications for understanding the long term use of this landscape.
30. Anything less than 50% sampling is neither intelligent nor comprehensive. Only 100% gives us full recovery. 100% has been industry standard not within this WHS but also Avebury for the last decade.
31. I used to be an inspector of ancient monuments. I am well aware of the difficult situation that HMAG are in. On the one hand they want to implement best practice but they are also working for organisations heavily invested in this scheme. This is not necessarily enabling clear water between contractor and conservator. That is one reason why UNESCO recommended a scientific committee to advise HE and HMAG. At a meeting on 2 July, the scientific committee voted overwhelmingly in favour of 100% topsoil sampling. I was hoping that our views would be sufficient to make HE and HMAG think again about level of recovery that is necessary within the WHS within the topsoil. It is not acceptable to lose this quantity of artefacts and value of material.
32. The curators have known about this industry standard for more than a decade. This should have been planned from the beginning. The scale is out of proportion to the research investigations that have been required to carry out this level of recovery. That doesn't give carte blanche to destroy evidence on this scale.

Professor Mike Parker-Pearson's response to Historic England and the statistical analysis/iterative strategy

33. Even areas with low densities produced important assemblages of material – tools and artefacts demonstrating particular activities which weren't in other parts of that landscape. One of the interesting possibilities of the 1% sampling is that some of the lowest areas of density have produced distinctive artefacts which may indicate early Neolithic settlement activity. The quantities are too small to be certain – you need at least 50% to gain a better understanding.
34. You can't wait to pick up the best bits. This has to be systematic across the landscape to be destroyed. It is no good to say 'iterative strategy' – the baseline cannot be any lower than 50%. Of course it is a massive undertaking but it should surely be possible to devise some mechanised means of removing and sieving topsoil.

Additional notes on Sampling

35. The Consortium asked Historic England and the National Trust to confirm whether there were any examples of digging within the WHS within the past 10 years where those bodies had not insisted on 100% sampling. Historic England stated that they would follow this up in their written submissions.

Blick Mead Hydrology

36. The Consortium confirmed that it would provide the ExA with draft wording to be inserted into the OEMP or as a Requirement in the DCO to cover monitoring and remediation at Blick Mead. These are set out below.
37. First, Dr Chris Bradley sets out some observations on the environmental monitoring which he believes is required at Blick Mead.

Comments from Dr Chris Bradley

38. It is essential that hydrological data are collected at points that are directly relevant to the archaeology. This should include a network of shallow piezometers (8) to monitor water levels, with automated logging on 2 piezometers. This network should be supplemented by monitoring (and logging) of soil moisture at two locations.
39. While I believe these observations are necessary, it is also essential that a local hydrological model (with model cells of $\sim 10\text{m}^2$) is developed to determine moisture levels throughout Blick Mead and interpolate between the point data derived from the water level and soil moisture observations.
40. Development of the hydrological model would require a detailed ground (and geophysical) survey, to determine (for example) the lateral extent of the putty chalk, and estimate the variability of parameters such as the hydraulic conductivity and porosity across the site.
41. The model would require local estimates of precipitation and evapotranspiration (using data from existing monitoring stations). However, the model could be used in a predictive manner to quantify the additional volume of water required to maintain specific levels of saturation at key points of interest at Blick Mead.
42. For the monitoring (and modelling) to be effective, an appropriate management system would have to be designed (for data collection, processing, and to run the model). There would also need to be some consideration of how the site could be irrigated if it was anticipated that threshold moisture levels might fall below a given threshold.

Suggested Wording for OEMP and Additional Requirement

OEMP

43. Additional Requirement (potentially labelled as MW-WAT10A):

Blick Mead Groundwater Management Plan (BMGMP)

The main works contractor shall develop a BMGMP outlining how groundwater and soil saturation is to be protected and, if necessary, remediated at Blick Mead (including Site 2). The Plan shall be developed and implemented following consultation with the Blick Mead Project Team, the owner of the Blick Mead Site, the Environment Agency and the Authority. The Plan shall be approved by Wiltshire Council. The Plan shall be implemented by the main works contractor and thereafter by the maintenance contractor.

The broad purpose of the Plan is to provide for the monitoring of ground water and soil moisture levels at Blick Mead and to develop an appropriate mitigation/remediation strategy if the Scheme leads to the fall of groundwater and soil moisture below levels at which the archaeological resource is endangered.

Specifically, the Plan shall:

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

(f) ensure that the obligation to remediate/mitigate endures for the lifetime of the Scheme.

44. Note that Requirement 4(11) will need to include an additional subsection which states 'Blick Mead Groundwater Management Plan'.

Requirement

45. Suggested requirement wording:

(1) No part of the authorised development is to commence until a Blick Mead Groundwater Management Plan has been submitted to and approved in writing by the Secretary of State, following consultation with the Blick Mead Project Team, Wiltshire Council and the Environment Agency.

(2) the Blick Mead Groundwater Management Plan must:

(a) arrange for the monitoring of groundwater levels at Blick Mead through a network of at least 8 shallow piezometers with automated logging on 2 piezometers;

(b) arrange for the monitoring of soil moisture levels at (a minimum of) two locations at Blick Mead;

(c) arrange for the reporting of monitoring data to be shared with the Blick Mead Project Team, the owner of the Blick Mead Site, the Environment Agency, Wiltshire Council and the Authority;

(d) include a local hydrological model which indicates moisture levels throughout the Blick Mead site, the model should be based upon monitoring data gathered over a period of at least 6 months together with a detailed ground and geophysical survey;

(e) the Plan shall set out trigger levels relating to both groundwater levels and soil moisture content. The trigger levels shall take into account the monitoring data relating to groundwater and soil moisture levels together with the hydrological model. The trigger levels should be set at levels whereby if groundwater and soil moisture content were to fall below those levels the archaeological resource at Blick Mead would be endangered;

(f) develop an appropriate remediation/mitigation plan to arrange for the re-watering of the site should ground-water levels or soil moisture levels fall below the trigger points, the mitigation plan should take into account the heritage sensitivities of Blick Mead;

(g) ensure that monitoring and reporting of water levels and soil moisture levels continues for the lifetime of the Scheme; and

(f) ensure that the obligation to remediate/mitigate endures for the lifetime of the Scheme.

(3) The authorised development must be operated and maintained in accordance with the Blick Mead Groundwater Management Plan.

(4) The undertaker must make the Blick Mead Groundwater Management Plan available in an electronic form suitable for inspection by members of the public.

6 September 2019