

M & R HOSIER COMMENTS ON 8.18 - APPLICANT'S COMMENTS ON WRITTEN REPRESENTATION
SUBMITTED BY M & R HOSIER

40.1 Agriculture

Key Issue

40.1.1 Land take

40.1.2 The scheme takes land from our holding over and above that required for the new road infrastructure, when the area could remain within our ownership being farmed under prescriptive management to deliver the same biodiversity benefits. Having transformed arable land around the barrows into the Normanton Down Nature Reserve with management agreements with RSPB, we have experience to do this.

40.1.3 Overall a total of 16.82 hectares (41.56 acres) of land (not including subsoil) owned by M&R Hosier has been identified for compulsory acquisition by the applicant. The land required forms part of the western tunnel portal together with a cutting running from the tunnel portal to the Longbarrow Roundabout. In addition, land is required for the creation of a green bridge for a new bridleway over the new carriageway and various ecological requirements.

40.1.4 All of the plots listed above are identified on the Land Plans as being required for Permanent Acquisition of Land which references in Article 19(1) of the Draft DCO as giving the undertaker the ability to acquire compulsorily so much of the Order land as is required for the authorised development, or to facilitate, or as is incidental to it.

40.1.5 Save for the land required for the road carriageway and 'hard' infrastructure M&R Hosier are of the view there is no justification for the excessive use of CPO powers to acquire for the purposes of setting out land for ecological mitigation.

40.1.6 It is not considered there is a compelling case to acquire these areas as M&R Hosier is a competent and willing farmer with a track record of managing similar areas of conservation and ecological importance across their farm. M&R Hosier would enter into an agreement with the Applicant to manage these areas on an ongoing basis. However due to the ongoing confusion as to who will be responsible for the management of these areas it is not possible to progress with the agreeing of accommodation works around these areas such as appropriate fencing, gate widths/positions etc.

Highways England response

40.1.7 The land identified for permanent acquisition around the tunnel has been reduced to the minimum required in order to construct, operate and maintain the tunnel. It does, however, include a Limit of Deviation, within which the tunnel will be located following detailed design. Highways England will only acquire that land that is identified as required for permanent acquisition once the final detailed design is confirmed. With reference to the Environmental Masterplan [APP-059], some land has been identified for essential mitigation around the tunnel to enable the portals to be set below ground levels or replicate ground levels as far as practicable and integrate the approach to the portals for landscape and visual integration, in combination with areas of new species rich chalk grassland for nature conservation and biodiversity.

M & R Hosier response

No information has been provided on the limits of deviation and whether that includes deviation of the length of the tunnel and the width of the carriageway. What is the width of area of the chalk grassland creation to the south of the tunnel? It appears that it will be another awkward area of land to manage that will be an added cost to the ongoing maintenance of the scheme, for questionable benefits.

40.1.8 The approach to integrating the new road into the existing landscape is set out in the Design and Access Statement [APP-295]. As secured by paragraph 8 of Schedule 2 to the draft development consent order [REP-003], the appointed contractor will be required to develop a landscaping scheme which is based on the landscaping approach set out in the DCO. This approach includes the provision of bunds and false cuttings, with sympathetic regrading of earthworks to match the existing natural rolling landform, along with planting of trees, where appropriate to the landscape character, hedgerow, shrub and extensive chalk grassland areas. The approach is described in the Environmental Statement (ES) Chapter 7, Landscape and Visual [APP-045] section 7.8, Design, Mitigation and Enhancement Measures and is shown indicatively on the Environmental Masterplan in Appendix 2.1 of the ES [APP-059]. Responsibility for subsequent land management is a matter which Highways England is willing to discuss with relevant landowners with a view to reaching agreements that would avoid the need to exercise powers of compulsory acquisition. However, until such agreements are concluded it remains necessary for Highways England to seek the full powers of acquisition necessary to secure the delivery of mitigation essential to the delivery of the Scheme.

M & R Hosier response

We disagree that The Applicant needs to purchase the area of land for chalk grassland creation around the tunnel. The area can remain within our ownership and be managed according to HE prescription under our environmental stewardship scheme. This, in our opinion, is a more cost effective approach. To date the Applicant has not engaged at all in terms of land acquisition

required for the Scheme. It is untrue for the Applicant to refer to “agreements” as they have not produced any such agreement. Therefore, the use of CPO is both disproportionate and premature.

Key Issue

40.1.9 Pig Enterprise

Currently an outdoor pig breeding unit rotates within the area proposed for the western portal and the deep cutting. The enterprise adds natural fertility to this area of the farm and forms part of the crop rotation.

40.1.10 The reduction of land within the area may not seem large, but in conjunction with awkward positioning of Green Bridge 4 and the addition of the new A360 bridleway. These will be biosecurity and welfare issues on the unit, which will affect its performance. Issues of trespass, dog attacks and spread of diseases as well.

40.1.11 With no guarantee that our water supply will not be compromised and with no proposals for an alternative water supply, the risk of animal welfare issues to the herd means that we would no longer be able to continue to operate the pig unit.

40.1.12 Due to the risks of there being a compromised water supply together with the likely increase in pedestrians and dog walkers in proximity of livestock areas it is unlikely the existing pig enterprise can be maintained on the farm.

40.1.13 Pig enterprise was introduced into this 89ha block of farm to improve soil fertility naturally providing benefits to the business in terms of enhanced yield, grain quality with reduced need for inputs. The 750 sow unit rotate around approx. 29 ha of the block over a 6 year cycle, to provide optimum health status.

40.1.14 The loss of the pig enterprise will lead to a reduction of income and soil productivity and crop yields.

Highways England response

40.1.15 Potential construction impacts will be minimised as far as reasonably practicable through the implementation of a Construction Environmental Management Plan (CEMP) based on the Outline Environmental Management Plan (OEMP) [APP-187], a revised version of which is being submitted at Deadline 3 of the examination. If the pig enterprise is demonstrably adversely affected by the scheme, compensation may be claimed.

M & R Hosier response

We have not noted any points within the Outline Environmental Management Plan (OEMP) [APP-187] that refer to minimising the construction impact on the pig enterprise. Please can you direct us to these references.

HE has not shared with us a feasibility study of providing either temporary or permanent water to our farm should it be required. As such, we believe they are not taking seriously the potential impact that this would have to our business.

40.1.16 However, as set out in ES Chapter 11, Road Drainage and the Water Environment [APP-049], the assessment shows no significant changes to hydrology, surface water quality or groundwater quality during either the construction or operational phases of the Scheme. During the assessment, there was extensive engagement with the Environment Agency and Wiltshire Council. The extent of agreement with these organisations will be set out in the Statements of Common Ground. Monitoring of boreholes to inform detailed design is on-going. During construction, the contractor will be required to comply with the general and topic-specific principles and requirements for the control, mitigation and monitoring of potential construction impacts, including in relation to the protection of private water supplies, hydrology, land drainage, and sewage disposal from construction compounds set out in the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3). The OEMP is presented in the ES Appendix 2.2 [APP-187], is being updated at Deadline 3 of the examination, and is secured through Paragraph 4 of Schedule 2 of the draft development consent order [REP2-003]. During operation, the magnitude of impacts from the Scheme's Road Drainage Strategy have been assessed as a moderately beneficial residual effect for water quality in the River Avon as a result of improved treatment and prevention of pollution from road runoff, compared with the current situation. The Environment Agency agree that this benefit is likely, which will be recorded in the Statement of Common Ground being developed with the Environment Agency, to be submitted to the Examination in due course. New measures as described in the Road Drainage Strategy, ES Appendix 11.3 [APP-281] (compliance with which is secured pursuant to schedule 2, paragraph 10 of the draft development consent order [REP2-003]), will include systems to isolate any spillages and treatment basins to improve the quality of the runoff so there will be no significant adverse effects on either groundwater or the Rivers Till and Avon. The existing road has minimal pollution control and in places none at all. The Road Drainage Strategy was developed in consultation with Wiltshire Council and the Environment Agency and compliance with it is secured pursuant to schedule 2, paragraph 10 of the draft development consent order [REP2-003].

M & R Hosier response

We remain unconvinced that the implications of flooding of the River Till have been fully assessed in respect to the potential contamination of water quality within the aquifer in this area.

The Applicant admit they have no flow data for the River Till

TR010025 Environmental Statement Appendices Appendix 11.5 Level 3 Flood Risk Assessment

5.3.5 There's a significant gap in quantitative calibration and verification data within the River Till catchment, as the watercourses entirely ungagged within the study area. As such, a quantitative assessment of the accuracy of the model outputs for this water course has not been possible, and liaison with stakeholders has been used to confirm that modelled outputs replicate as closely as possible to flood events experienced.

On the 11th June 2019 hearing the Applicant, ruled out the 1841 flood and ignored that of autumn 2000.

The flood in 1841 was due to the melting snow which resulted in waters 7-8 feet deep in the valley of the River Till. The Applicant have not used this data in their model dismissing the 1841 flooding as being irrelevant.

Annex 2 Part A – River Till Hydrological Analysis

2.7.6 "The historic flood of 1841 was attributed to a combination of cold weather, snowmelt and heavy rainfall. Whilst flooding of this type is noted, this historic event was within the 'Little Ice Age' period circa 1300 – 1850 AD where climatic conditions do not reflect the current conditions of milder, wetter winters. The flood record is not considered to be stationary and the use of earlier records should not be used to assess present day flooding. Furthermore, a review of the Met Office 'Days of Snow Lying' annual average for the period 1961 to 1990 against the period 1981 to 2010 indicates that there is a decrease in snow lying days. The River Till catchment receives 5 to 10 days of snow lying on average and this is likely to decrease with climate change based on Kay (2016) (Ref 6).

2.7.5 The likelihood of the coincidence of significant snow depths combined with heavy rainfall and frozen ground is considered to be very low and not considered further within this analysis.

1. 1841 flood appears to have been due presence of snow and it's very rapid melting. The aspect which the Applicant ignores is the rapid melting of the snow produced rapid flow of water into the River Till.
2. What the Applicant has ignored is snow drift. The valley of the River Till comprises a large number of long valleys running east west with steep sides dissecting the southern end of Salisbury Plain. The River Till has a high stream density per unit area and therefore can trap large amounts of snow in drifts which had been blown southwards over the Salisbury Plain. Consequently, it is not the depth of snow which has fallen across the valley of the River Till but that which had been blown across Salisbury Plain and accumulated as drifts.
3. Warm weather would have come from the south west. Rapid melting of the snow would have produced water at the base of the snow drifts. The combination of steep sides of river valleys and water at the base of the base lubricating grass would have resulted in very low coefficients of friction would have meant the snow could have slipped down slope. If takes one valley at NGR (SU) 508100 14260 the slope is 20m in 100m which is 1 in 5 or 11.3 degrees which is sufficiently steep to cause snow to slip down over wet grass. Also there

needs to be an assessment of the percentage of the River Till where valley sides exceed slopes of 8 degrees and where the grass is sufficiently long so it lies flat on the ground surface which increase run off.

The Applicant admits they have no flow data for the River Till as per paragraph 5.3.5, but:

1. The flash flood occurred at about 5pm on Saturday in January when the farm workers would have been at home, not in the fields and therefore being able to observe the rapidly melting snow and possible slumps. The dry valleys with their sufficiently steep slopes feed into the Till Valley above Winterbourne Stoke cover a wide area.
2. Another aspect which has been ignored is that the steepness of the valley sides could have caused cambering of the strata within the Chalk. Consequently rain and snow water would have flowed along the top surfaces of marl layers into the valleys. Cambering of geological strata is common where stronger more brittle layers overlay softer cohesive layers which deform creating dips into the valley. Also the formation of putty Chalk or called Dm Grade would have reduced infiltration of water and increased run off.
3. Consequently snow drifts rapidly melting to form which water which ran off the steep valley sides and then slumping into the valley bottoms, would have caused the flash flood.

The Applicant have also ignored the autumn 2000 Flooding. Quote from ANNEX B – Historical Flood Record “2000 Flooding within the wider River Till catchment – no further information available on extent, properties affected or source of flooding although likely to be a combination of high groundwater levels coupled with rainfall causing out of bank flows on River Till.”

1. The Applicant has not spoken to people living in Winterbourne Stoke and used the marks left on a willow tree to measure the elevation of the flood water. Photographs show the flood water on a willow tree to be 1.5m above the bank of the River Till. The heavy rain of autumn 2000 falling on steep valley sides, where the geological strata dipped due to cambering, possible putty Chalk at the ground surface produced flash floods.
2. What needs to be assessed is the overall area of steep sided dry valleys in the River Till Catchment. Many dry valleys are only 600-700m apart and comprise steep slopes. The Coal Industry in its technical guidance, that on a slope of 0.2 with short grass even on sandy gravel the run off coefficient can be as much as 0.3. Long flattened wet grass would aid run off.
3. What may have been missed in the assessment of the flooding of the River Till's the stream density, which is length of stream channel per unit area. The River Till has a large number of dry valleys which will produce water flow after heavy rain. Consequently,

the presence of cambering (para 7), steep slopes to the side of the valley, in excess of 8 degrees and long grass which had been flattened (para 11) and high stream density (para 12) would have produced greater run off than standard models.

As a consequence of this, the engineering works as a result of this Scheme, will reduce the ability of the valley of the River Till to transmit and increase the amount of discharge of water into it. Quote “10.3.1 *River Till viaduct*: the introduction of piers into the River Till floodplain has potential to interrupt flood flows and create a local backwater effect.”

The Applicant admit the piers in the River Till will interrupt flows but there are other aspects that HE have not considered:-

- a. The construction of the foundations in the ground and piles of the bridges bridge will reduce the storage capacity of the hyporheic zone of the River Till and its ability to transmit water southwards. This will cause the groundwater to rise and increase risk of flooding.
- b. The road embankment on the eastern side of the River Till reduces the width and flood storage in the flood plain.
- c. The weight of the road embankment will cause compaction, closure of the fissures in the Chalk and so reduce storage and permeability of the ground.
- d. Runoff from the A303 will be discharged via ponds into the valley of the River Till and will increase the risk of groundwater flooding and pollution.

The questions which needs to be asked are:-

- a. Whether the Figure 5.2 River Till Flood Depth 15AEP Plus Climate Change 40% produces flood levels which are lower or higher than recorded in Autumn 2000 as shown by the mark on the willow tree and 1841.
- b. What will be the impacts of the engineering works mentioned in relation to the piers in the River Till on increasing the height of flood waters. Flooding always carries the risk for pollution should house drains be filled to capacity, causing dirty water to enter the groundwater.

40.1.17 It is anticipated that where necessary to address the potential for trespass and related issues), fencing would be provided both during the construction period (as required by the OEMP) and subsequently.

M & R Hosier response

As previously stated, fencing has already shown itself not to be a deterrent to trespass into our farm. The close proximity of byways to our holding bringing an increase in numbers of general public into the area will impact negatively on our farming business.

Key Issue

40.1.18 Soil and Protection of Soils

40.1.19 There is a significant risk that soils will be damaged during the construction period. Mitigation needs to be set out clearly by the Highways Agency and agreed with the landowners to show how the valuable and productive soil will be protected during the construction period.

Highways England response

40.1.20 Mitigation to limit or avoid impacts on geology and soils receptors has been inherent within the design and development of the scheme and has been informed by comprehensive baseline studies, including ground investigations. Protection of geology and soil resources during construction, including in relation to the removal, handling, and storage, as well as reinstatement, will be delivered through measures contained in the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3).

M & R Hosier response

MW-TRA7

The Applicant has not assessed the impact of lorries on the Chalk when it is wet. The haul roads can only be designed when the weight of the lorries, area of the tyre in contact with the ground, acceleration and de-acceleration and frequency of their travel on them are known. To prevent damage to archaeological remains which could occur down to a depth of 1.5m below ground level, it may be necessary to construct haul roads with a thickness of 1.5m above existing ground level. In winter, ruts of up to 300mm are created along the tracks by 4 wheel vehicles, weighing 2 Tonnes. Lorries could weigh 117 T. The most damage to the ground is produced when lorries accelerate and brake as it causes rucking. Also it will not avoid compaction of the Chalk when wet and reduction of percolation, hence meaning restoration to free draining pasture will not be possible.

40.1.21 The primary mechanism for this protection will be the Soils Management Strategy (SMS) (MW-GEO3), which the main works contractor will be required to produce, and which will identify the nature and types of soil that will be affected and the methods that will be employed for stripping soil and the restoration of agricultural land. In producing the SMS, the contractor shall follow the guidance in Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009) when handling agricultural soils. Further, as part of the SMS, the contractor will be required to develop a Soils Handling Strategy, with reference with reference to BS3882: 2015 Specification for Topsoil and the Construction Code of Practice for the Sustainable Use of Soils on Construction Site, and a Soil Resource Plan (MW-GEO7). Compliance with the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3) is

secured through paragraph 4 of schedule 2 of the draft development consent order [REP2-003]

[M & R Hosier response](#)

MVCOM4 and MW GE03 ES Chapter 10 Section 10.8

The Applicant has not undertaken tests to ensure that Chalk after vehicles have been driven over it and spoil deposited upon it, can return to free draining pasture. Chalk, when wet and trafficked, becomes a slurry and low shear strength spoil from the TBM will seep into the fissures and seal them. Appendix 10.1, Preliminary Ground Investigation Report pages 105 to 110 discusses the extent and properties of structureless Chalk and Figures 6-35 and 6-36 PSD curves shows the fines content of Chalk graded at Dm and Dc see Figures 9 and 10. Most of the samples of Dm and Dc Chalk have fines contents greater than 10 %, so they will be susceptible to becoming slurries when their moisture content approaches their Liquid Limit.

40.1.22 Further information on the can be found in ES Chapter 10, Geology and Soils [APP-048], which reports that there will be no significant effects in relation to geology and soils, section 10.9.

Key Issue

40.1.23 Soil and Protection of Soils

40.1.24 There has not been any formal identification of the differing land grades. This needs to take place to ensure that a minimum of the best and most versatile agricultural land is taken for the scheme, and to guide how these areas can be protected. The land grade plans that appear to be used by the applicant for the purpose of identifying land quality should only be used as a guide and further investigations should be carried out on the ground by a professional.

Highways England response

40.1.25 Detailed field surveys and analysis of soil physical characteristics (topsoil and subsoil) have been undertaken and these have informed the preparation of Figure 13.1 Agricultural Land Classification Plan [APP-179]. Further surveys were carried out in 2018 to cover additional areas of land that would be affected.

[M & R Hosier response](#)

No one has carried out any comprehensive baseline studies on our soil unless it has been done without our permission and knowledge. Please supply the dates that these surveys were carried out so we can check with our survey records.

Have the detailed baseline surveys carried out only been desk top ones?

When will we be provided with the baseline study data of our various soil parcels.

The inherent fertility within the soil, as a result of years of the pig enterprise adding to the nutrient content of the soil need to be taken into account. We have not been told how this information has been incorporated into the survey.

We will compare this data with our own SOYL land mapping of our farm within the area of the Scheme for reference.

Soil characteristics are only as good as the reinstating programme. We remain unconvinced that HE are taking due care to minimise the impact of compaction on our land.

40.1.26 The surveys provide the basis of the agricultural land classification and will inform the preparation of the Soils Management Strategy, which the main works contractor will be required to produce, and which would identify the nature and types of soil that would be affected, and make provision for the restoration of agricultural land (item MW-GEO3 of the OEMP). Compliance with the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3) is secured through paragraph 4 of schedule 2 to the draft development consent order [REP2-003].

M & R Hosier response

The Applicant is passing all responsibility for numerous areas of the Scheme onto the mains work contractors. The Soils Management Strategy is one of many items under their remit. Item MW-GEO3 of the OEMP has scant information in relation to how the soil nature and types will be assessed and no details of what the methods for stripping soil or restoring the agricultural land will be. We are just expected to leave all these critical aspects to the mains work contractor that knows nothing about our farm land and probably using very little base line data.

More detail is required please.

Key Issue

40.1.27 Soil and Protection of Soils

Bringing soils back to agricultural use after the construction of a major infrastructure project is very difficult. Therefore the way soils are stripped and stored is very important, as is the method of decompaction of tracked areas. Soils will take many years to recover from this sort of treatment and it can take a very long time before combinable crops are able to be grown to the same yield and quality as before.

Highways England response

40.1.28 Protection of geology and soil resources during construction, including in relation to the removal, handling, and storage, as well as reinstatement, will be delivered through measures contained in the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3). The primary mechanism for this protection would

be the Soils Management Strategy (SMS) (MW-GEO3), which the main works contractor would be required to produce, and which, as explained above, would identify the nature and types of soil that will be affected and the methods that will be employed for stripping and storing soil (with topsoil and subsoil being stored separately (where present)) and the restoration of agricultural land. Compliance with the OEMP is secured through paragraph 4 of schedule 2 of the draft development consent order [REP2-003].

[M & R Hosier response](#)

There is too little data in MW-GEO3 for us to assess the suitability of the measures proposed for stripping, storing and restoring the soil to the landscape. But we have concerns that the full understanding of the chalk subsoil has not been taken into account.

40.1.29 It is acknowledged that agricultural land restoration takes time but it is necessary to strip and store soils temporarily to enable the construction of the scheme. Provided the restoration is undertaken following good practice and soils are monitored during the aftercare period and remediated as required, the agricultural land should be restored to a satisfactory condition. Where financial loss is incurred the District Valuer will be involved and will assess any claim for compensation in line with Statute.

[M & R Hosier response](#)

This paragraph provides no information and just requires us to trust that the Mains Work Contractor will deliver a good service. Will we, as the farmers of the land be consulted on reinstating measures? Will we even be provided with a copy of the Soil Management Strategy for our farm?

Key Issue

40.1.30 Soil and Protection of Soils

40.1.31 Highways England (and their appointed contractor) should be required to:

- **Fund an aftercare period to ensure full soil restoration, structure and fertility**
- **Take soil samples to record the base line of agricultural soils disturbed**
- **Survey and Sample soils after construction and reinstatement and continue to do so annually until the soil is back in a condition capable of providing a similar yield to that provided before construction**
- **Improve the condition of the soil structure through the application of organic content and muck through mole ploughing and field drainage as appropriate**

[Highways England response](#)

40.1.32 The detail, development and implementation of the design of the Scheme and its mitigation measures will be secured by requirements within the DCO, which will be binding on Highways England and any of its contractors in the construction, operation and maintenance of the scheme. Highways England will separately ensure compliance with relevant requirements via contractual obligations on main and sub-contractors, as described in paragraphs 2.3.61 and 2.3.62 of the Environmental Statement (ES) [APP-040].

40.1.33 The Soils Management Strategy, which the main works contractor will be required to produce, will identify the nature and types of soil that will be affected and the methods that will be employed for stripping and storing soil (with topsoil and subsoil being stored separately (where present)) and the restoration of agricultural land.

M & R Hosier response

This statement provides us with no depth of information, and requires us to trust that HE has identified the relevant issues, as well as ensured this is passed onto the contractors who are obliged to adhere to various contractual obligations.

We would expect to be provided with a copy of the Soil Management Strategy that will be implemented for our holding.

40.1.34 In terms of the specific points:

- Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3) MW-COM4 requires that the main works contractor shall undertake inspections of restored agricultural land with the landowner/tenant and Highways England's soils experts (and valuer, if required) to assess the progress of the restoration. Should there be any concerns these will be assessed by all parties and appropriate remedial actions or compensation agreed within the parameters of the compensation code and/or any previous agreements made at the time of acceptance of the initial restoration works and handover to the landowner/tenant;
- Detailed field surveys and analysis of soil physical characteristics (topsoil and subsoil) have already been undertaken and these have informed the preparation of Figure 13.1 Agricultural Land Classification Plan [APP-179]. OEMP MWG7 requires the preparation of the Soils Management Strategy (SMS) and MW-GEO3 requires the SMS to include a record of the nature and types of soil that will be affected; the field surveys and analysis data will inform the production of these documents;
- As set out above, OEMP MW-COM4 requires that the main works contractor shall undertake inspections of restored agricultural land with the landowner/tenant and Highways England's soils experts (and valuer, if required) to assess the progress of the restoration; this will necessarily require sampling soils;
- Soil structure takes time to repair and appropriate remediation actions will

be deployed as required under the review processes described above. Whilst it is not possible to specify the particular actions and measures that will be required (such as the application of organic matter and muck through to mole ploughing and field drainage) at this stage, as set out in MW-COM4 and MW-COM5 the restoration process is intended to proceed in full consultation with the landowner/tenant.

[M & R Hosier response](#)

The points referenced give far too little detail around the issues. We have concerns that matters are continually placed as the responsibility of the mains work contractor with the Applicant taking no responsibility and seeming to provide sketchy data for the mains work contractor to work with.

40.1.35 A revised version of the OEMP is being submitted at Deadline 3 of this Examination. Compliance with the OEMP is secured through paragraph 4 of schedule 2 of the draft development consent order [REP2-003].

Key Issue

40.1.36 Within Environmental Statement Appendices Appendix 2.2 Outline Environmental Management Plan at Page 24 there are references to Natural England applying for badger sett closure licences and blocking up existing setts to prevent badgers from using them. There is a concern that badgers will be displaced across the wider farm and may interact with cattle causing a risk of TB infection spreading across the herd which is currently TB free.

[Highways England response](#)

40.1.37 Surveys for badger were carried out to inform the environmental assessment and are reported in the Environmental Statement Appendices 8.16 A and B [APP-265] and [APP-257] (confidential). As stated in the Environmental Statement Chapter 8 Biodiversity [APP-046] paragraph 8.9.173, no main setts would be lost to the scheme. Some outlier and subsidiary setts would have to be closed, the number of which depends on the detailed design and the usage of setts at the time of construction. Closure of these setts would not cause displacement of badgers across the wider landscape, because each social group is based at a main sett which is continuously used, whilst uses of other setts (outlier and subsidiary) within the territory of the social group is on an intermittent basis. Therefore closure of a subsidiary sett will not lead to the re-location of the social group.

40.1.38 The Applicant notes that on the land farmed by M&R Hosier, there are several main setts already in existence on the farm, none of which would be closed due to the Scheme. The Applicant does not therefore consider that the closure of setts as anticipated for the Scheme will change the TB risk.

[M & R Hosier response](#)

With the deep cutting within the landscape, there is the potential to sever social group of badgers



With such major construction works taking place along the length of the Scheme project, there is the strong possibility for this to impact on the badger population within the area. The suggested movements of badgers through the landscape as a result of creating green bridges will also make new territories available with the potential to spread TB to new areas. The real consequence of the tunnel scheme will be assessed by the results of annual TB testing and the level of increased damage to the scheduled monuments that seem to attract the badger populations. Nothing seems to be put in place to prevent further damage to archaeology by the increasing number of badgers.

Key Issue

40.1.39 M&R Hosier currently have direct access from the A303 for servicing the top extent of their farm. This is currently used by visiting vets, livestock husbandry and ecological monitoring for the Normanton Down RSPB Reserve. Current access is both for agricultural vehicles and standard motor vehicles.

40.1.40 It is not clear from the draft DCO how access will be maintained for M&R Hosier from the existing A303 which is understood will become a restricted byway and private means of access. There are plans identifying Kent Gates in various locations along the existing A303 but it is not clear how these will work in practice and how they will be maintained/controlled.

[Highways England response](#)

40.1.41 Kent Carriage Gaps would be provided at access points to restricted byways, preventing entry by mechanically propelled vehicles. A field gate will be provided alongside the Kent Carriage Gap and this would be kept locked, with keys being provided to authorised users only, such as landowners who had been granted rights of vehicular access over the restricted byways in order to use the new private means of access benefitting their land. Specific details will be subject to detailed design and discussions with Wiltshire Council.

[M & R Hosier response](#)

We remain concerned as to the suitability of proposed access arrangements for our farming business. In the absence of detailed drawings we are not able to assess whether the width of the new A303 byway (noted as 4m wide) and the placement of the Kent Carriage Gates will provide adequate turning circle for us to get a tractor with livestock trailer/stock lorry into this area of the

farm if it is needed for animal welfare concerns. Currently we can bring livestock into the far part of the farm using the existing A303 with no restrictions.

40.2 Cultural Heritage

Key Issue

40.2.1 Western Portal and deep cutting

The placement of the western portal and the deep cutting within the WHS does not deliver a scheme fit for a WHS as initially proposed within consultation documents or in accordance with ICOMOS and UNESCO reports.

40.2.2 The road scheme should not be enhancing the setting of a single monument (Stonehenge). It should be about protecting and enhancing the OUV of the whole of the WHS. The site is enscripted under cultural heritage being Stonehenge, the monuments and the associated landscape that together show our cultural development as depicted by the funeral monuments within the landscape.

40.2.3 Connecting the landscape in one area and then putting in more lanes of tarmac deep within the archaeology in another area does not connect the landscape for understanding.

40.2.4 Standing on Green Bridge 4, it is most likely that you will be looking at the western portal and 4 lanes of traffic emerging into the WHS. This does not help understand our cultural beginnings or bring inspiration. Excavating the area of the western portal and cutting and removing archaeology is not protecting and understanding the WHS. The artefacts are part of the OUV of the WHS and as such should remain in situ.

40.2.5 In addition, removal of cremations and burials (which through their placement within the landscape show our cultural heritage) is disrespecting the funeral monuments of our ancestors that shaped the WHS landscape. Placing the cremations and grave goods behind glass is not protecting the WHS. We do not remove burials from our modern graveyards and put them in museums, so why is this practice considered acceptable for our bronze age ancestors.

40.2.6 I question the time available to fully excavate the area of the western portal and the carriageways prior to road construction. This would be the only opportunity for investigating this area so full consideration would need to be given to the time to do this to research to WHS standards and not to general infrastructure criteria.

40.2.8 Methodology for excavations should be agreed with the Scientific Committee.

40.2.0 Although its members have no direct authority within the scheme, they are a collective of British archaeologists with the most experience within this prehistory period, so are therefore best placed to give appropriate advice.

[Highways England response](#)

40.2.10 The removal of the existing A303 surface road from the WHS landscape will result in extensive benefits for the World Heritage Site (WHS) including beneficial effects to many heritage assets within the WHS. The cultural heritage assessment for the Scheme can be found in the ES, Chapter 6 [APP-044]. Detailed consideration of the assessment of the scheme in the context of the OUV of the WHS can be found in ES Appendix 6.1, Heritage Impact Assessment (HIA) [APP-195].

40.2.11 Table 3 in the HIA shows the effects that the Scheme would have on the WHS in relation to its Attributes of OUV, Integrity and Authenticity. The table also shows how the Scheme would benefit the WHS in comparison with the effects of the existing A303. Overall, the Scheme is assessed to have a Slight Beneficial effect on the OUV of the WHS as a whole. The OUV of the WHS would be sustained.

[M & R Hosier response](#)

The attributes of OUV, Integrity and Authenticity are in relation to the whole WHS, so to damage one part of the site cannot be mitigated to enhance the setting of another part of the site. This statement demonstrates a lack of understanding of OUV and the inscription of the WHS as a whole. This point was well debated during the Issue Specific Hearing on Cultural Heritage.

As such, I disagree that there will be a slight beneficial effect on the OUV of the WHS as a whole, or that the OUV of the WHS would be sustained. For this statement to be true there needs to be no portals or deep cutting approach roads within the WHS.

40.2.12 The preferred route was carefully chosen to minimise effects on archaeology, and a comprehensive programme of archaeological evaluation surveys has informed the Scheme design to limit direct physical impacts as far as practicable, including limiting impacts on archaeological remains that

contribute to the OUV of the WHS. The design has been carefully chosen in order to preserve archaeological remains along the 2 mile section of tunnel, improve the setting of many heritage assets and asset groups in the central part of the WHS including the Avenue, Stonehenge itself and the Winterbourne Stoke barrow group; remove the intrusive sight and sound of traffic from the existing A303 as far as possible within the WHS; and design a scheme that is minimally intrusive in both the western and eastern parts of the WHS, including in key views from asset groups that contribute to the OUV of the WHS. Examples of how the design has been developed to limit impacts on archaeology include, but are not limited to, the choice of a northern bypass of Winterbourne Stoke, the reduced footprint and land take for Rollestone Corner, and the design and placement of the western and eastern tunnel portals and portal approaches in areas that have been shown to have limited archaeological remains within their footprint. Further information can be found in the Assessment of Alternatives, ES Chapter 3 [APP-041] and in ES Chapter 6, Cultural Heritage [APP-044]. Section 6.8, Table 6.9. The cultural heritage assessment, reported in ES Chapter 6, identifies the effects on known archaeological features whilst recognising the benefits that the tunnel will deliver for the WHS landscape as a whole.

M & R Hosier response

The area from the western portal and the deep cutting within the WHS is an area within the WHS that has remained undisturbed by modern infrastructure. The importance of this area has been confirmed by the archaeological surveys carried out. This showed the area has been in continual use over the Mesolithic, Neolithic and Bronze ages, so is a unique demonstration of how each era has respected the previous inhabitants yet built on the site introducing their developing culture as shown by the funereal monuments and evidence of every-day life. The western and eastern portals should not be in the WHS for the scheme to benefit the OUV.

We disagree that the scheme is minimally intrusive in western and eastern portals and approaches. Just because the deep cutting approaches cannot be seen from a few positions does not mean that they are not carved deep into the archaeology. Their presence can never be removed from the WHS as the current road can, therefore the damage is irreparable. The Scheme strips the whole of a section of the WHS adjacent to the Winterbourne Stoke barrows of all archaeology, as such, it is destroying the WHS and not protecting it.

We disagree that the Scheme improves the setting of the Winterbourne Stoke Barrow Group. There will still be the sight and sound of the road from green bridge 4, and the barrow group will still be severed from the opposite side of the WHS by a road as is the case currently.

References to limited archaeological remains within the footprint of the tunnel are obviously disregarding the longbarrow and barrow G1 that are in the location where the tunnel boring machine will be rising to the surface. The unknown damage that vibration of tunnelling will cause on these heritage assets has yet to be assessed. Once damage has been done to the structure and placement of items within the barrows it cannot be put back. We struggle with the idea of monitoring as what will be done should it be shown that there is damage caused by the tunnel boring machine in this area? More information is needed.

40.2.13 The Scheme includes measures to facilitate the sharing and understanding of archaeological discoveries. Archaeological remains would be excavated and recorded during the preliminary works phase, in advance of the construction of the Scheme. The Outline Archaeological Mitigation Strategy (OAMS) [APP-220] also identifies areas to be protected in-situ. A Detailed Archaeology Mitigation Strategy (DAMS), submitted at Deadline 2 of this Examination, will include resourcing and arrangements for publishing results and storing/displaying finds, and is being developed in consultation with Wiltshire Council Archaeology Service and the Heritage Monitoring Advisory Group prior to the end of the Examination. The DAMS is secured by paragraph 5 of Schedule 2 of the draft development consent order [REP2- 003]. The Scientific Committee have been advising the Heritage Monitoring Advisory Group and inputting into this process. The project archive of reports and archaeological finds would be deposited in a local museum once the archaeological excavations have been analysed and published.

M & R Hosier response

Just because the archaeological finds will be recorded and displayed does not justify the destruction of this area of the WHS. Research and understanding are good, but not when they come as a result of destroying part of the WHS.

Preliminary works phase archaeological excavations would require 100% evaluation of the topsoil. The importance of the topsoil for understanding the WHS has been demonstrated on numerous occasions. All current independent survey work carried out in the WHS has a 100% evaluation of topsoil, so this would be standard practice for this scheme. This is the only opportunity to find out all we can about the people who constructed the monuments on the WHS, on whom our cultural heritage is based. The Scientific Committee have also put forward the need for 100% evaluation of topsoil.

40.2.14 The publication of the archaeological results and the deposition of the archive would be appropriately funded.

40.2.15 The draft DAMS submitted at deadline 2 [REP2-038] has been prepared following review and comment by members of HMAG and WCAS, as informed by advice provided by the A303 Scientific Committee. The draft DAMS will be developed further in consultation with HMAG and WCAS during the examination period, to allow a final version of the DAMS to be submitted to the Examining Authority by the close of the Examination. It is intended that the DAMS will be a certified document, with its implementation secured by a DCO Requirement.

Key Issue

40.2.16 Effects of tunnelling on archaeology

40.2.17 Plans show that a number of the burial mounds are directly above the tunnel alignment. As such they will be at risk from the construction vibrations.

40.2.18 Scheduled monument 10477 (G1) is within our holding and in the location of the western portal. Out of respect to the numerous burials found in previous archaeological surveys within this location, we did not feel it appropriate to allow further archaeological investigations within the area during the 2018 archaeological survey.

40.2.19 At the location of G1 and the proximity of the western portal, the tunnel boring machine will be nearing the surface of the ground. There will be unknown vibration and stress put onto the area of G1 which have the potential to damage the surrounding area and also its relationship within the soil strata.

40.2.20 The scheme was promoted to protect archaeology yet there will be at least two barrows that have the potential to be damaged within the construction of the tunnel (that was intended to protect archaeology of the WHS).

[Highways England response](#)

40.2.21 The potential for impacts on archaeology is set out in the Environmental Statement (ES), Chapter 6, Cultural Heritage [APP-044] which includes consideration of the mitigation embedded within the bored tunnel design and the assumptions taken into account, which lead to an avoidance of direct physical impacts on archaeology. An Outline Archaeological Mitigation Strategy (OAMS) (Appendix 6.11 of the ES [APP-220]) outlines the principles of archaeological mitigation and also identifies areas to be protected in situ, including the placement of ground movement monitoring stations above the line of the tunnel. A Detailed Archaeological Mitigation Strategy (DAMS) was submitted at Deadline 2 of this Examination [REP2-038] and is being developed in consultation with Wiltshire Council Archaeology Service and Heritage Monitoring Advisory Group and its implementation is secured by paragraph 5 of Schedule 2 to the draft development consent order [REP2-003].

[M & R Hosier response](#)

No indication is given as to what measures will be taken should the ground movement monitoring stations show that there is a notable disturbance in the ground at the location of the scheduled monuments G1 and the long barrow in the line of the tunnel. It is not possible for the tunnel boring machine to go deeper to avoid these monuments, so how will potential damage be mitigated?

40.3 Biodiversity, ecology and biodiversity

[Key Issue](#)

40.3.1 Normanton Down reserve

40.3.2 The farm has had pairs of breeding Stone curlews since 1960's, which used the tightly managed grassland within our farming system. Now we have a number of plots managed specifically for the birds needs, all of which are bred on yearly.

40.3.3 During public consultations, the southern part of the WHS has been promoted for roaming and exploring the landscape and monuments. As three quarters of the land in the southern part of the WHS is privately owned, the roaming and exploring will only be possible via the network of byways within the area. This was not made clear within the consultations.

40.3.4 As such, the scheme has already put the area of Normanton Down Reserve under pressure from additional people visiting the area (to roam and explore). There is the potential for this extra recreational pressure to disturb the schedule 1 breeding stone curlew pairs that breed within the Reserve.

40.3.5 In addition, the second consultation document showed a map of the central part of the scheme with the map legend placed over the top of Normanton Down Reserve! The Reserve itself was only mention in a couple of statements referring to the adverse effects of the scheme on the Stone Curlew breeding population.

40.3.6 Currently the A303 provides a physical barrier between the two contrasting halves of the WHS with their very different characteristics. In my opinion, this works well and already delivers the great variety of WHS experiences that are available for all types of visitor to the area. The open access areas of the north of the site provide the country park experience for roaming and exploring. In contrast, the southern part of the site is tranquil, providing unique habitat for wildlife and ecology A303 Amesbury to Berwick Down Deadline Submission 3 – 8.18 Comments on Written Representations - May 2019 40-614 Return to Index that is enjoyed by those visitors wishing a quieter more natural experience.

40.3.7 In my opinion, the mitigation proposed for the protection of the Normanton Down breeding stone curlews is inadequate. Highways England documents have even noted that the recreational pressures on Normanton Down are unknown. There is no certainty as to whether the byways 11 and 12 will be downgraded to pedestrian use only. Even if this happens, it will not prevent the pedestrian pressures on the Reserve which are the greatest threat to the breeding birds. The proposed mitigation plot at Winterbourne Downs RSPB

40.3.8 Reserve does not follow the mitigation criteria applied to Winterbourne Stoke and is not in proximity to Normanton Down for use by any displaced breeding pairs.

Normanton Down:

40.3.9 M&R Hosier are not satisfied that the proposed scheme meets the Habitats Regulations in relation to the SPA population of Stone Curlews that nest in Normanton Down Reserve. The potential that once the scheme is in operation that the increased pressures from people in the landscape will have the possibility of negative effects from recreational pressures on Normanton Down breeding Stone Curlews.

40.3.10 M&R Hosier has worked with Tracey Williams an experienced and dedicated conservation biologist with over 20 years' experience in nature conservation to jointly prepare a detailed report of the potential detrimental impact to Normanton Down and the population of Stone Curlews. A copy of this report is attached at Appendix 1.

40.3.11 In the Second consultation booklet dated Feb 2018 at page 25 the Normanton Down Reserve is obscured by the map legend, and there is little mention of Normanton Down Reserve within the booklet except page 56, Biodiversity Construction Stage which states “Temporary adverse effects of construction activities on Stone curlews” and Biodiversity Operational Stage “Local adverse effects on Stone curlew south of the A303 due to the increased public access across the WHS enabled by the proposed scheme”. However there is no proposed solution or mention of possible mitigation works to offset these adverse effects.

Highways England response

40.3.12 It is not agreed that the materials suggest the whole of the WHS would be available for exploration, including within private land. The applicant considers that the consultation materials did not imply that private land would be accessible. Where Public Rights of Way designations were unclearly labelled in the consultation materials for Statutory Consultation, these were clarified as part of the supplementary consultation.

M & R Hosier response

We disagree with this statement.

Misrepresentation of private land

At no point does the consultation booklet make it clear that access will only be via the network of byways existing and new as a consequence of the Scheme. Access to the southern part of the WHS is just promoted as a result of the scheme. As such, the Applicant has themselves put the Stone curlew breeding population within this area under threat. The NT land at the northern part of the WHS is known to be open access land by the general public, as such, it is available for roaming and exploring. It would follow that general public could interpret that the whole of the WHS would be available once the Scheme is in operation.

With lack of clear reference to byways being the only form of access, the inference being that the A303 is the barrier at the southern part of the WHS, so removing the barrier the area becomes readily available.

The choice of words *roaming and exploring* used in the booklet is incorrect. *Roaming* means to walk without boundaries, so when used in conjunction with the word *exploring*, gives the impression that the whole of the southern part of the WHS is available for the general public.

The vast majority of the monuments in the southern part of the WHS are in privately owned land. So encouraging them to explore the monuments is inaccurate. There is no mention of this within the consultation literature.

The Applicants literature has not stated that the monuments within the southern part of the WHS are only available for viewing via a network of byways as they are under private ownership and do not form part of the EH or NT holdings.

Clarification of public rights of way at supplementary consultation

The Applicant provided clarity on public rights of way, with their status of use, ie BOAT/pedestrian/bridleways. But the booklet did not state that the byways would be the only

means by which the southern part of the WHS would be available. If this was the intention then this should have been clearly stated. There was no statement that the land in the southern part of the WHS was privately owned.

NT land in the northern part of the WHS is open access but it still has public rights of way through it. The general public would easily assume that the whole of the southern part of the WHS would be made available once the road is removed into a tunnel.

No mention is made that the only access to the southern part of the WHS is only via the byway network.

40.3.13 Once the tunnel is in place, a key objective of the Scheme is to enhance public access and connectivity to and through the WHS. To achieve this, the scheme is creating a number of new restricted byways, including along the route of the old A303, while maintaining the existing network. Beyond the creation of new byways, the scheme is not seeking to alter existing byway designations, nor is it seeking to provide access on to or through private land. For reference, the existing Public Right of Way network is illustrated on ES Figure 13.2 [APP-180] and the proposed new restricted byways on ES Figure 13.3 [APP-181].

M & R Hosier response

Enhancing public access and connectivity has the potential to clash with another scheme objective to enhance biodiversity and wildlife within sensitive areas.

We do not think that this clash of objectives has taken into consideration the current tranquil habitat of the southern part of the WHS which nurtures species rich biodiversity.

40.4.14 The assessment and approach to mitigation for stone curlew is described in ES Chapter 8, Biodiversity [APP-046] and the assessment has concluded that no likely significant effects, including from recreational disturbance, would result on breeding birds, as set out in paragraph 8.9.35. The assessment and approach to mitigation and enhancement for stone curlew has been developed in consultation with the RSPB and Natural England.

M & R Hosier response

The Applicant is failing to meet the Habitats Regulations, as they are not addressing the potential adverse impacts to Schedule 1, Annex 1 breeding birds at Normanton Down Reserve. No mitigation has been proposed. There is a lack of evidence provided by the applicant to “dispel all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned as well as the unknown impact of recreational pressures once the Scheme is in operation”.

Biodiversity [APP-046] does not conclude “that no likely significant effects, including from recreational disturbance, would result on breeding birds”.

To Quote *8.9.35 Established stone curlew plots at Normanton Down are south of the Scheme and more than 500m from the area of works at the western portal and the landform already provides some screening relative to nest plots. Even if there is no closer nesting, there is the potential for birds to be disturbed on occasions if they are foraging in the area. With only low frequency of occurrence such disturbance would be minor and would not be likely to reduce breeding success*

and recruitment to the population. Mitigation measures have been provided in the OEMP to avoid the temporary indirect impacts of disturbance on breeding pairs of stone curlew, including the use of visual barriers. The bored tunnel would be constructed more than 10m below ground and noise and vibration from construction would be minimal at the surface and it would not be likely to cause any disturbance to stone curlew or other breeding birds at Normanton Down or in other locations near the route of the bored tunnel.

Therefore, the references in 8.9.35 have been taken out of context and are in respect of disturbance at construction activity, noting a requirement of visual barriers for mitigation. 8.9.35 is not in relation to recreational disturbance and continues into para 8.9.36.

In addition, we challenge the stated low frequency occurrence of foraging disturbance to the Stone curlews nesting at Normanton. Stone curlews will travel up to 9 miles to forage for their young whilst they are rearing the chicks, so references to distances in excess of 500m for foraging disturbance are inaccurate.

Indeed ES Chapter 8, Biodiversity [APP-046] 8.6.15 (see below) Under Future Baseline Construction year baseline (2021) draws attention to the unknown applications and associations in relation to the increased residential dwelling and visitor pressures on the area, rather than the “no likely significant effects” stated in the Applicants response.

8.6.15 The majority of the land to be impacted by the Scheme has been classified as agricultural land and associated linear boundaries. As such, the biodiversity baseline is unlikely to change significantly by 2021, unless any large-scale changes in agriculture policies and practices occur. The known applications and allocations associated with the provision of residential dwelling (cumulatively approximately 2,000 dwellings) may result in an increase in visitor pressures on the areas surrounding the WHS; this may result in increased disturbance events on breeding stone curlews within Normanton Down RSPB Reserve. The majority of other applications are unlikely to significantly change the biodiversity baseline at 2021.

Other references to disturbance under both construction and operation of the Scheme are found at:

ES Chapter 8, Biodiversity [APP-046] 8.7.5 under Construction

c) **Disturbance:** An indirect impact resulting from a change in normal conditions (light, noise, vibration, human activity) that would result in the important biodiversity feature changing its typical behaviour;

And

ES Chapter 8, Biodiversity [APP-046] 8.7.6 under Operation

d) **Disturbance:** An indirect impact resulting from a change in normal conditions (human activity) that would result in the important biodiversity feature changing its typical behaviour, such as changes in roosting behaviour.

Mitigation and enhancement for Stone curlews

We have asked for more information about the “screening” that is being proposed for mitigation. We can find no details of what the screening will be, how tall, will it be a living screen, how will the living screens be established if topsoil is removed prior to construction, how will establishment of screens be made during periods outside the growing season?

40.3.15 In the draft Statement of Common Ground between Highways England and Natural England, submitted to the Examination at deadline 2, at Issue reference 3.11, Natural England agrees there would be no disturbance of any other identified stone curlew breeding plot in the vicinity of the Scheme. In the Statement of Common Ground between Highways England and RSPB, RSPB is satisfied that indirect disturbance impacts on breeding stone curlew can be avoided with the implementation of suitable working practices during the construction phase.

Agree that there will be no disturbance of any identified Stone curlew breeding plot in the vicinity of the Scheme. But this does not take into account the juvenile Stone curlew population that will be returning to the area that may be reduced to breeding in more marginal habitat. This was demonstrated by the stone curlews that nested in the vicinity of the archaeological survey during summer 2018.

Stripping the topsoil off of the scheme area is creating a vast expanse of Stone curlew breeding habitat.

Indirect impact on breeding stone curlews may be reduced, but will only be avoided if there is no construction activity taking place in the surrounding area during the Stone curlew breeding season ie March-September.

We have asked for more details of mitigation screening methods in previous written material.

40.3.16 As set out in the Statement to Inform Appropriate Assessment (SIAA) [APP266], provision of a stone curlew plot at Winterbourne Down RSPB Reserve is considered as precautionary mitigation which would improve the resilience of the stone curlew population.

M & R Hosier response

The Winterbourne Down plot will provide additional nesting habitat for stone curlews but it will not form mitigation for any disturbance impact on Normanton Down as a result of increased recreational pressures resulting from ongoing residential building within the area. This is stated by RSPB within their Written Representation.

40.3.17 The second consultation booklet reflected the stage of development of the Scheme at that time, but the design and the environmental assessment were progressed subsequently, leading to the Environmental Statement which was submitted with the application for the Scheme. Consultation with Natural England and RSPB on stone curlew has continued via the Statements of Common Ground [REP2-016 and REP2-017]. There has also been consultation with M&R Hosier regarding enhanced fencing around Normanton Down RSPB reserve and this matter is still under discussion.

M & R Hosier response

The point we are making is that during the second consultation it appears that Normanton Down Reserve has been overlooked with its species rich ecology (Stone curlews) being ignored in favour of promoting the enhancement of Parsonage Down Nature Reserve (with the potential to attract rare birds). This is demonstrated by placing the map legend over the top of the Reserve. The orientation of the legend placement being inconsistent with the other maps in the booklet.

For a scheme to truly provide biodiversity benefits the scheme would seek to protect the ecology of Normanton Down as well as look to extend Parsonage Down. But this has not been the case, as the SPA Stone curlew population at Normanton Down has been put at risk by the clash of scheme objectives, to protect Schedule 1 birds, but to also increase the numbers of people using the southern part of the WHS.

We are unable to see where the design of the scheme has taken into account the breeding Stone curlew population at Normanton Down.

Enhanced fencing for Normanton Down

Natural England and RSPB have been in discussions with HE consultants in relation to the Stone curlew population since 2017.

We are disappointed that despite being the landowners of Normanton Down our requests for a meeting with HE ecology consultant were not granted until late March 2019. As such, we have not been able to feed into the proposed mitigation to add our years of experience working within the vicinity of Normanton Down. We respect the suggestions of the statutory organisations, but they do not understand the day to day issues, maintenance and practicality of their solutions.

We have already stated in our Written Representation that our experience highlights that enhanced fencing will not provide mitigation to Normanton Down. It would be a waste of taxpayer's money onto the already costly tunnel Scheme, and for no certain protection to the Stone curlews at Normanton Down from recreational disturbance.

The Applicant is failing to meet the Habitats Regulations, as they are not addressing the potential adverse impacts to Schedule 1, Annex 1 breeding birds at Normanton Down Reserve. No mitigation has been proposed. There is a lack of evidence provided by the applicant to "dispel all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned as well as the unknown impact of recreational pressures once the Scheme is in operation".

Key Issue

40.3.18 Great Bustards

40.3.19 Despite this species being named within the baseline report as of National Importance/High Value, there is no mention within the OEMP of measures to mitigate the potential negative effects the scheme will have on the Great Bustard reintroduction project.

40.3.21 The effects of construction on the Great Bustards and the effects that the additional byways proposed in the western section of the scheme once it is in operation, do not seem to have been picked up.

Highways England response

40.3.22 As described in the response to Written Questions EC.1.22, the potential of the proposed Scheme to affect great bustard populations was assessed in the Environmental Statement Chapter 8 Biodiversity [APP-046], paragraphs 8.9.141-8.9.144. No existing nest sites would be lost to the proposed Scheme. The potential for disturbance has been considered. Construction activity would be visible to great bustards at some locations, but measures such as the screening of construction compounds will provide mitigation and any disturbance is likely to result in a temporary adverse impact that would result in a neutral effect that is not significant [APP046].

M & R Hosier response

We note Environmental Statement Chapter 8 Biodiversity [APP-046] paragraphs 8.9.141-144. But would draw attention to the fact that table 8.7 Summary of the study area for likely important biodiversity features does not include Great Bustard.

There were no field study methods or dates of surveys recorded in table 8.8 as per other noteworthy species so we question how the population can be assessed for the effects of the tunnel scheme.

There has been a lack of communication with the GBG to learn about the behaviours and habitat of the Great Bustards, so the statement relating to disturbance are not based on fact (GBG Pers. Comm).

Statements that no existing nesting sites would be lost to the proposed scheme are incorrect. GBG tried to contact HE consultants in spring 2018 to alert them to the fact that the archaeological surveys for the junction were taking place were in the location of nesting areas, but they did not engage. (GBG Pers. comm).

We have asked for the location of where HE believe the construction compounds will be visible to the Great Bustards.

No discussions have taken place with HE consultants as to appropriate screening for the compounds. (GBG Pers. Comm).

40.3.23 Mitigation measures are included in the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3), an updated version of which is being submitted at Deadline 3 of this Examination and compliance with which is secured through paragraph 4 of schedule 2 of the draft development consent order [REP2-003]. In particular, measures to protect Schedule 1 species and stone curlew in PW-BIO5 and MW-BIO8 would also be applied in the unlikely event that great bustard (an Annex I species under the Birds Directive, that is considered to have similar legal protection to that of stone curlew) was found near the construction area.

M & R Hosier response

We are pleased to note that Great Bustards are being acknowledged to have similar legal protection as Stone curlews.

But Page 29, PW-BIO5 notes that if works were carried out at a time or location that has the potential to disturb Annex 1 breeding birds then work shall be undertaken under a method statement. Although the Stone curlews have their own specific mitigation under heading, there is no heading for Great Bustards. But, it is not possible to set out method statement for Great Bustards as there have been no discussions with GBG to establish Great Bustard behaviour and habitat.

There is also a need for survey work to be carried out to understand the requirements of this species. This has been overlooked with this scheme.

There are no reference to the fact the Great Bustard chicks are wholly dependent on their mother for 9 months as the species has an extended post-natal rearing period. This period is critical as they learn everything necessary to their survival. Mortality of young is extremely high, but once past 12 months their survival rate increases.

Preliminary works contractor (ecology) and mains work contractor ECoW should have prior experience of working with Great Bustards and specialist knowledge in this species. Liaison for monitoring and reporting would be with Natural England, Great Bustard Group as well as ECoW.

Survey work will need to be undertaken to establish the correct distance for exclusion zones around any nest. MW-BIO8 sets out measures for Stone Curlews. No survey works have been carried out to establish whether the same criteria for Stone curlews would also apply to Great Bustards.

The birds flush very readily from people on foot especially with dogs, they also move away from vehicles. But there is the potential for incubating females to be reluctant to leave the nest when the nest is directly impacted on by a vehicle, which can lead to the birds being run over. With the birds being difficult to spot when they are on nests this is of real concern.

Reference to suitable protective measures (such as visual or noise screens), this cannot be with reference to breeding birds? Must be in respect of dissuading birds from breeding in the area.

40.3.24 Furthermore, the grassland habitat creation (as secured at ref. MW-BIO2 in the OEMP [APP-187]) has potential to offer increased feeding areas for great bustard. Provisions of the Scheme such as the green bridges and diverting approximately 3km of the proposed Scheme into tunnel will also help to reduce the possible severance effects of the existing A303, and is likely to encourage dispersal into the wider landscape.

Our response

This statement shows a lack of understanding for the Great Bustard species. See M & R Hosier comments in respect of document 8.10.7 Question Ec.1.22 ii)5

40.3.25 No great bustard nesting sites or records of great bustard have been identified within the western section of the scheme (near Winterbourne Stoke) [APP-046 and APP-157]. During the operational phase should great bustards move into the area it is unlikely that there would be disturbance because the Public Rights of Way (PRoW) that would be created in the western section of the scheme would be close to the existing and new A303 and the PRoW would be fenced.

M & R Hosier response

It is not possible to say that there are no records of GB nesting within the western section of the scheme as HE have had no formal meetings with the GBG at which to present data to feed into the reports.

It is incorrect to say GB have not been identified within the western section of the Scheme as GBG approached the Applicants ecology consultants in spring 2018 to inform them that they were undertaking archaeological surveys within the nesting grounds of the birds.

APP-157 is the redacted reports for Annex 1 species and Stone Curlews. These reports I have repeatedly asked for despite containing information that is on our farm and bearing in mind our close relationship with GBG and management agreement with RSPB. We were provided with the redacted report at the end of May, but the breeding areas had been redacted we had, therefore no one is able to confirm that APP-157 holds the correct information.

[APP-046] ES 6.1 Chapter 8 Biodiversity- see M & R Hosier response from M & R Hosier in respect of Biodiversity 8.10.7 Question Ec.1.22 ii)3. There had been 2 meetings with the Applicant as noted in [App-046] one of these being when M & R Hosier invited GBG along to a meeting with the Applicant Ecology consultant as the GBG had been unsuccessful in establishing communications with the Applicant. As such GBG have never been asked to contribute information to include in the document.

Further lack of understanding for the Great Bustard species is shown by the comments "GB are already within the area of the existing A303". We believe the wording of the statement suggests the presence of fencing along the new A303, the downgraded A303 and other Public Rights of Way will prevent disturbance of the birds within the area. The Applicant have not carried out any surveys to assess the response of GB to various disturbance stimuli and have not consulted GBG for behaviour responses of the species. Similar to most bird wild bird species GB are disturbed by human presence and dogs. As such, fencing along the byway will offer no mitigation to disturbance.

There have been no measures incorporated to mitigate for the increase in number of PRow bringing more people into direct conflict with nesting and feeding Great Bustards.

40.3.26 The proposed Scheme would therefore not be a threat to the success of the project to re-establish a breeding population of great bustards.

M & R Hosier response

Due to a lack of willingness for consultation with the GBG to learn about the behaviour and breeding of the Great Bustards we fail to see how the proposed Scheme can be correctly assessed for the impact on the Great Bustard reintroduction project.

No work has been carried out the the GB species to determine what level of population is required to sustain the species. Indeed many other reintroduction programmes require population levels to be several hundred to compensate for poor breeding years.

We find it quite astounding that an Annex 1 bird has been overlooked throughout the Scheme putting emphasis instead on getting more people out into the surrounding area.

Key Issue

40.3.27 Chalk grassland creation area adjacent to the deep cutting

40.3.28 Increased biodiversity is one of the criteria within all of the consultation documents.

40.3.29 Yet there are no statements as to what this biodiversity will be. From reading the reports it seems as if biodiversity within this central part of the scheme is centred on chalk grassland flora and invertebrates that can withstand a mowing regime put forward in the OLEMP report and human disturbance. I wonder if this will meet the expectations of the general public that have been reading the documents.

40.3.30 Having co-created Normanton Down Reserve with RSPB, I question the proposed management of this area including the suitability of the proposed grassland seed mix for it.

Highways England response

40.3.31 As detailed within paragraph 8.9.237, the Scheme would result in approximately 186ha of semi-natural habitats in the soft estate and the area east of Parsonage Down, mainly chalk grassland. Over time, this would contribute to enhancing the natural environment locally by providing net gains for biodiversity, and by establishing coherent ecological networks that are more resilient to current and future pressures.

M & R Hosier response

We have asked a number of times if we can have a list of the biodiversity species that are being targeted at green bridge 4 and the area of chalk grassland creation between the current A303 and the deep cutting.

In respect of the area between the existing A303 and the deep cutting, there is already a large area of chalk grassland on NT land adjacent to the area, so question the extra biodiversity benefits of chalk grassland in this area.

Greater biodiversity benefits would have been gained from placing chalk grassland in an area of predominantly arable so bringing in new biodiversity and providing a stepping stone for species to connect within the landscape.

Porton to Plain project also notes that farmland birds are catered for in terms of all life cycles and stages including winter feeding provision. Stone curlew are amongst the farmland birds as are corn bunting and lapwing.

WHS management plan notes 8.5 Nature Conservation 8.5.4 It is important to retain the mosaic of different types of land use as this enhances its biodiversity value. Arable land is valuable as a habitat for specialist wildlife such as farmland birds, arable plants and hares. Therefore it should be an aim to balance the needs of the archaeology, habitats for rare flora and the opportunities for farmland birds, for example provide wild bird food cover, grass margins and fallow plots when looking at strategic locations for reversion whilst reflecting the primary significance of the site. (Policy 3h/Action 59)

40.3.32 The principles of creation and management of this land are set out in the Outline Landscape and Ecology Management Plan ('OLEMP') [APP-267]. Under requirement 8 of the DCO, Highways England will be required to submit a detailed landscaping scheme, which is required to be on the basis of the mitigation measures set out in the ES, which includes the OLEMP.

M & R Hosier response

It is not possible to set out an ecology management plan if you do not clarify what species of flora, fauna and invertebrate you are targeting.

We have asked for target species in relation to green bridge 4 and the area of chalk grassland to be created adjacent to the deep cutting. Are there different species targeted for different areas, this is not made clear.

As previously stated within our Written Representation, the OLEMP [APP-267] lacks information on the seeding of chalk grassland, the methods to be used and the time of year. The dismissal of brush harvested seed from Salisbury Plain Training Area and the omission of certain wild flower inclusion due to their height. Statements regarding weed wiping and non-grazing do not indicate practical understanding. For a scheme to promote invertebrate species mowing is the most destructive management tool and will not provide the “low maintenance strategy” that is referred to.

40.3.33 The objectives of the habitat creations will be to create a mosaic of early successional habitats ranging from bare ground to species-rich low nutrient swards. The selection of suitable floral species will be carried out during detailed design and the preparation of the detailed landscaping scheme, but will be informed by the Wiltshire Biodiversity Action Plan 2008 for Calcareous Grassland and Salisbury Plain SAC and SSSI citations and will include larval food plants suitable to encourage the dispersal of key invertebrate species.

M & R Hosier response

It is unclear whether the early successional habitats will remain as such within certain areas, or whether the intention is for them to develop over time to species-rich low nutrient swards. Early successional habitat is a phase of chalk grassland restoration, so it is not a final target.

Early successional chalk grassland consists of many undesirable weed species that have to be topped and managed possibly several times a year for the first three years to control. The grass height itself is not the issue, the weeds are the problem. Therefore, these habitats have the potential to produce inappropriate nesting opportunities for Stone curlews, Great Bustards, and red listed skylark and lapwing.

From experience, certain floral species are difficult to introduce into chalk grassland. Germination of seed requires both physical and chemical factors to break dormancy. It is quite possible that some species will never germinate even if introduced on a yearly basis. Chalk grassland takes many many years to establish with some species taking up to 5 years before they are detected.

40.3.34 As described in MW-BIO13 of the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3) botanical monitoring will be carried out to inform appropriate management of the chalk grassland and other habitats within the Scheme. This will inform the management action of ‘grazing, mowing, control of scrub, and specific habitat management to create or maintain conditions of characteristic species of chalk grassland and other habitats’.

M & R Hosier response

MW-BIO13 Botanical monitoring

Details of vegetation monitoring to be undertaken during the construction phase, to inform future habitat creation, shall be developed by the main works contractor in consultation with Natural England.

The ECoW (or an appropriate specialist) will undertake a programme of botanical monitoring to assess the development of mosaic of early-successional calcareous grassland and associated biodiversity within the Scheme.

Results of monitoring from the preliminary works period will be used to inform habitat creation and subsequent management. Management action informed by monitoring may include, but is not restricted to, increase or decrease in the frequency, extent or duration of grazing or mowing, control of scrub, specific habitat management to create or maintain conditions for characteristic species of chalk grassland or other habitats.

The above paragraph does not make its intentions clear. But following a discussion at Issue Specific Hearing 7, Biodiversity, we believe that it refers to monitoring of the heaps of topsoil removed from the Scheme by preliminary works that will subsequently be piled around the construction compound. The topsoil will be monitored for the early successional chalk grassland development and its associated biodiversity. This will inform habitat creation and management. If this is the correct understanding, we struggle how monitoring the development on the topsoil will inform this process as the topsoil will behave differently in a different aspect and having been extensively mixed. Arable weeds would predominate in this scenario. If no weed control is carried out on these topsoil stockpiles the weed burden on the soil will be vastly increased.

There seems to be confusion within the various documents. First the Applicant states that *Under requirement 8 of the DCO, Highways England will be required to submit a detailed landscaping scheme, which is required to be on the basis of the mitigation measures set out in the ES, which includes the OLEMP.*

But MW-BIO13 states that the ECoW will undertake vegetation monitoring to inform future habitat creation which will be developed by the main works contractor in consultation with Natural England.

Reading through documents, a lot of the final planning responsibility is being passed onto the contractors to complete rather than HE themselves. With such questionable information in the OLEMP, and the contractors not having been part of the process this approach is vulnerable to failure.

OLEMP [APP-267] notes that a landscape steering group will be set up to develop the management yet there is no mention of this within this statement from HE.

40.3.35 Example management measures which will be confirmed within the Landscaping Scheme to be submitted under requirement 8 of the DCO would include where practicable, managing chalk grassland by appropriate grazing to maximise gains in biodiversity, providing, in the areas where chalk grassland is to be managed by grazing, appropriate access for stock, fencing and stock watering facilities, as described in ES Chapter 8, Biodiversity [APP-046], paragraph 8.9.71. In addition, where areas of chalk grassland are not managed by grazing, mowing will be used to manage the grassland to achieve biodiversity and other objectives, with periodic control of scrub as necessary (paragraph 7.2.2 of the OLEMP [APP-267]).

M & R Hosier response

The Applicant has not answered our question as to what “other objectives” may be. These objectives may be critical to the land management and yet they are not provided for full understanding of the Scheme and for comment.

The Applicant has not provided a plan to show which of the chalk grassland areas will be managed by livestock and which areas will be just mowed. Although the Applicant has not directly stated, we believe that biodiversity is centred around invertebrate species, as such, we are concerned that mowing is being used for management. Rather than compromise the biodiversity by creating areas that are not suitable for livestock grazing, would it not provide greater benefits if areas were designed to facilitate grazing, otherwise the biodiversity becomes a secondary factor rather than a principal objective.

For fencing to be fit for purpose, the areas for grazing need to be confirmed and accommodation works need to be decided in consultation with livestock managers to ensure that grazing infrastructure is fit for purpose.

OEMP had references to composting mowings in areas of scrub which is counterproductive to biodiversity. No plan of where these areas of scrub will be located.

We have great concern that throughout the OEMP there are references to the contractor developing the management plans rather than HE as Scheme promoter.

Key Issue

40.3.36 Green Bridge 4

The bridge is a poor substitute for removing the whole of the A303 road from within the WHS which really would protect and enhance the OUV of the property.

40.3.37 I don't believe the current placement and size of the bridge fulfils the criteria within the consultation documents. The physical connectivity to the landscape with the monuments and its biodiversity benefits are only the 150m width of the bridge.

40.3.38 It does not allow physical connection to the monuments. It provides minimal visible connection to the monuments (a number being underground or topography inhibited) but it will provide a good vantage point of the western portal and the emerging carriageways!

40.3.39 Biodiversity benefits are limited to chalk grassland flora and invertebrates that can withstand the proposed mowing regime and new human disturbance within the area. No additional hedge planting is proposed to allow corridors for bats or a few brave mammals that are willing to expose themselves to the open.

40.3.40 M&R Hosier considers the current placement and size of the proposed Green Bridge 4 is completely inappropriate within the landscape and its ability to deliver enhanced connectivity within the WHS, intervisibility of the monuments and increased beneficial ecological connectivity is questioned;

40.3.41 Under the Supplementary Consultation Booklet July 2018 page 17 under Cultural Heritage there is a comment referring to the increase to the beneficial effects on the setting of monuments within the WHS, due to enhanced connectivity within the WHS created by the wider bridge, in particular between the Winterbourne Stoke and Normanton Down and Diamond Barrow Groups – “there will be a slight increase to the beneficial effects due to the wider bridge giving improved connectivity and greater visual screening of the new road in this part of the WHS”.

40.3.42 It is unrealistic to expect enhanced connectivity between the proposed Green Bridge and Normanton Down Barrows as they are over a mile away across arable land and within private ownership with no connecting public rights of way. In addition, the entire Normanton Down Reserve is in private ownership and so is not available for exploring.

40.3.43 There is no explanation from the applicant as to why the Green Bridge is some 150 metres in width and how they intend to manage this structure including the landscaping areas around it which are awkward in size and shape.

[Highways England response](#)

40.3.44 The Scheme has been developed to reduce the visual intrusion of new highway sections within the WHS and between monuments and monument groups (ES Chapter 6, Cultural Heritage, Section 6.8, paragraph 6.8.5). Additionally, important viewpoints for understanding the OUV of the WHS were discussed and agreed with HMAG (ES Chapter 6, Cultural Heritage, Appendix 6.1, paragraphs 5.3.38 – 5.3.40), as were the location and form of Green Bridge No. 4, which will replicate the existing topography.

[M & R Hosier reply](#)

The green bridge only reduces the visual intrusion of the new highway within the WHS for the length of carriageway that it covers, therefore, the benefit is minimal. The visual intrusion between monuments is the same as the road will still be visible from the green bridge 4.

In addition the green bridge only offers connectivity to the landscape by the small area it covers. It does not allow connectivity to monuments.

40.3.45 The principles of the implementation and management of a range of habitats are set out in the Outline Landscape and Ecology Management Plan ('OLEMP') [APP-267]. Under requirement 8 of Schedule 2 of the draft development consent order [REP2-003], Highways England will be required to submit a detailed landscaping scheme, which is required to be on the basis of the mitigation measures set out in the ES, which includes the OLEMP.

[M & R Hosier response](#)

The Applicant has neglected to answer our question as to what biodiversity species are being targeted by green bridge 4. If the target species are not stated then it is not possible to develop, manage and monitor the chalk grassland and biodiversity.

Refer to our comments on document 8.10.7 the relation to information within the OLEMP.

40.3.46 Soil and Protection of Soils

40.3.47 There is a broad mention of the control of weed species but no indication of how this will be implemented. Depending on the method used in clearing and stockpiling topsoil and subsoil this may inadvertently create stone curlew habitats (as happened during ground investigation surveys).

Highways England response

40.3.48 Appropriate management measures would depend on the condition of the soil. The contractor is responsible for the protection of geology and soil resources during construction, including in relation to the removal, handling, and storage, as well as reinstatement, will be delivered through measures contained in the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3). The primary mechanism for this protection will be the Soils Management Strategy (SMS) (MW-GEO3), which will identify the nature and types of soil that will be affected and the methods that will be employed for stripping and storing soil (with topsoil and subsoil being stored separately (where present)) and the restoration of agricultural land. Compliance with the OEMP is secured through paragraph 4 of schedule 2 of the draft development consent order [REP2-003]. Stone curlew deterrent measures will be included in the CEMP (PW-BIO5 and MW-BIO8) as specified within the Outline Environmental Management Plan (OEMP) [APP-187].

M & R Hosier response

Weed burden

This point could equally have been placed under Biodiversity heading, as the intention was to ascertain how ongoing weed control would be tackled on the top soil stock piles. Would the stockpile be sprayed with herbicide to remove all weeds, would the stockpile be mechanically weeded by turning over the topsoil? If cover crops were to be grown what weed treatment would ensure that notifiable weeds did not establish and set seed?

Stone curlew measures

OEMP [APP-187] PW-BIO5 under Stone curlew notes the necessity to deter Stone Curlew from nesting within the proximity of the scheme boundaries. Point a) refers to the use of visual screens to block line of sight to avoid disturbance outside the Scheme boundaries. This shows limited understanding of the Stone curlew species. The preliminary works clearing of the ground will create ideal habitat for breeding Stone curlews by removing all the vegetation along the area of the scheme. No mention as to whether all the area will be cleared all at the same time or whether this will be done in stages. There is no mention of the timing of the vegetation clearance in relation to the Stone curlew breeding season.

The references to visual screening to block line of sight seem to be confusing the creation of Stone curlew habitat to the screening of breeding birds outside the Scheme. From the Issue Specific Hearing 7, Biodiversity we understand that the intention is for topsoil removed by preliminary works to be landscaped around the construction compound to create a visual barrier between the compound and Stone curlews within the wider landscape.

Point b) Referring to planting temporary areas of bare ground with quick growing cover crops as visual screening. It is not possible to grow quick growing crops of any nature on an area where the topsoil has been removed (although we struggled to understand why the top soil was being removed as it would create Stone curlew breeding habitat). From Issue Specific Hearing 7, Biodiversity we now understand that the intention was not to plant the area where the topsoil had been removed from, but to plant the piles of topsoil around the construction compound. But this will not prevent the Stone curlews from nesting on the area where the topsoil has been cleared.

OEMP does not therefore indicate how the expanse of bare ground created by the preliminary contractor will prevent Stone curlews nesting on the area.

We welcome the increase of the disturbance zone around Stone curlews to 500m in accordance with Taylor Et All report.

There is a crucial need for contractor's ecology staff to have prior knowledge and experience working with the Stone curlew species. This was demonstrated by the archaeological survey in 2018 at the western portal, where stone curlews nested within the survey area and the ECoW had to call on the RSPB Stone curlew team a number of times to locate the birds. The birds are notoriously difficult to spot even when you have experience with the species.

Monitoring and reporting would need to be between Natural England but to also include the RSPB Stone curlew team, as they are the organisation that has the necessary experience working with the species.

OEMP [APP-187] MW-BIO8 Refer to comments above for PW-BIO5. If the preliminary works contractor be different to the mains work contractor, then there is a similar need for the ECoW to be experienced with Stone curlew species. Monitoring and reporting would need to be between Natural England, RSPB Stone curlew team and ECoW.

No mention is made for mitigation for Stone curlews feeding in the vicinity of the Scheme and the potential for this to negatively impact on the successful breeding of the Stone curlews.

No mention is made that the breeding cycle of the Stone curlew is 10 weeks during which time the chicks are still dependent on their parents for survival.

40.4.14 Poor consultation and engagement

Numerous errors within the Development Consent Order documents found especially within ecology data.

Highways England response

40.4.15 Consultation was undertaken in accordance with the Statement of Community Consultation, which was subject to consultation with the Local Planning Authority and Planning Act 2008 statutory requirements. Information about the scheme proposals was available online, at public events and local deposit locations. Staff were on hand at exhibitions to talk through the proposals. The material published for statutory consultation was based on the information available at that time and was sufficient to satisfy the purpose of gaining feedback on the scheme proposals and for that feedback to be taken into consideration as part of the continuing development of the scheme up to the time of submitting the DCO application. In addition to the consultation booklet, the information provided included the Preliminary Environment Information Report (PEI Report) and its non-technical summary, as well as plans of the proposals. Further details of the approach, engagement and outcomes of the consultation is presented in the Consultation Report [APP-026]

40.4.16 In deciding to accept the application, the Planning Inspectorate will have had regard to the adequacy of the consultation undertaken by the Applicant, and to the nine adequacy of consultation responses received from local authorities, who confirmed that they considered the consultation had been carried out adequately, in accordance with the relevant statutory requirements.

40.4.17 The application for development consent will now be considered via an examination by a panel of examiners appointed from the Planning Inspectorate, during which the public will be able to make representations and participate in hearings (as appropriate). The examination process allows for information to be provided by all parties, through a series of hearings, written questions and representations. Following the examination, the panel of examiners charged with examining the application will make a recommendation to the Secretary of State based upon all the information and evidence available to them.

40.4.18 A full environmental impact assessment has been undertaken and the results reported in the Environmental Statement (ES) [APP-039 – 054] accompanying the DCO application. Legislation is in place which prescribes what the ES must include in order that the Examining Authority, the Secretary of State and interested parties can understand the likely significant effects of a development. Each topic assessment in the ES for the Scheme has been carried out in accordance with the relevant legislation and policy, as set out in the Legislative and Policy Framework section of each chapter, and, where relevant, in consultation with the relevant statutory and non-statutory environmental bodies, as summarised in the Consultation section of each topic chapter. The Applicant considers that sufficient environmental information in relation to the Scheme has been provided in order to allow people to understand its likely significant effects. In accepting the application for Examination, the Planning Inspectorate will have considered the adequacy of the ES.

M & R Hosier response

The non-statutory environmental body, The Great Bustard Group has not been consulted with in regard to details of Annex 1 Great Bustards.

We have tried a number of times to facilitate a meeting for them by inviting them along to the first ecology meeting that we had with HE consultants in November 2017, but they have been continually ignored with scant information in the ES, OEMP or OLEMP.

40.4.19 The Applicant does not agree with the statement that there are "numerous errors within the Development Consent Order documents" however it is unable to address this comment any further as specific errors are not alleged.

M & R Hosier response

Throughout our consultation responses we have made references to the errors. To name a few:

Inaccurate documenting of the signage around Normanton Down Reserve – there are no entry signs and the information boards do not state that the Reserve is open at certain times of the year.

Inaccuracies within the Barn Owl report showing a number of land parcels as arable when they are grassland.

Key Issue

40.4.20 Although there have been several meetings between the Applicant and M&R Hosier the quality of these meetings together with the inability of the Applicant to issue timely and accurate meeting notes is concerning.

40.4.21 In addition M&R Hosier has requested copies of several documents referred to in these consultation meetings but to date these documents have not been provided by the Applicant. The result of this is M&R Hosier are unfairly inhibited in their ability to properly examine and consider the documentation which the Applicant is relying on to support their application for DCO.

Highways England response

40.4.22 Regular meetings and updates are taking place with the affected landowners, occupiers and asset owners. Highways England has met with those affected by its proposal to use powers of compulsory acquisition and temporary possession. Meetings have included discussion of issues raised in affected persons' Relevant Representations, such as the nature of necessary accommodation works, the acquisition of land through agreement, and arrangements relating to ongoing survey access requirements for the Scheme.

M & R Hosier response

Our grievances are numerous, but outlined below are a few references:

Minutes of meetings have been inaccurate and not provided until months later.

Requests for meetings between a scheme hydrogeologist and our independent hydrogeologist to allow discussions to allay our concerns with our borehole water supply had been ignored. Instead, we were provided with a last minute meeting with a GI survey hydrogeologist, and a last minute meeting with the water modelling consultant to which we were unable to bring our hydrogeologist.

Request for meeting with the ecology team was initially rebuffed having being told only the Applicant had the authority to grant meetings.

Meetings when granted are months, or even years later from initial requests.

There have been no meaningful engagement between ourselves and the District Valuer for negotiations on land take. No terms have been issued nor any indication of instructions to proceed with negotiations.

No account has been taken of our farming calendar or management practices in relation to surveys. Rather than plan surveys ahead at suitable times of year, surveys have taken place at critical stages of the year, causing at great destruction to our crops and a vast cost to the taxpayer. This could have all been avoided by better planning and engagement.

No account is taken of our years of experience in this area of the landscape. No account has been taken of our local knowledge. This has been demonstrated by the proposed use of dirt byways as access for archaeological surveys during the winter months.

Failure of the Applicants consultants to fully understand the layout of the WHS in relation to access for surveys that led to the damage of scheduled monument SM10317. This has been overlooked.

Clauses in survey licence agreements have been continually broken.

Payment for invoices relating to survey work carried out by HE consultants have to be constantly chased and are often overdue.

40.4.23 Additional information including reports that are publicly available have been provided on request.

M & R Hosier response

Reports that are publically available have been provided but only after considerable delays and numerous requests. Typically, reports are received after the deadline date for responding to information. Other stakeholder organisation have been supplied with links to documents.

Information that is not publically available, ie requests for information to fully understand survey works (to prevent any further damage to our farm property or inconvenience for both parties) are a constant source of frustration. Rather than providing specific answers to our questions, we are given answers to questions we have not asked. In addition rather than providing answers we are

served with Section 172 Voluntary or Final access notices. We have made it clear that we are not preventing surveys from taking place, we just need to ensure all issues are resolved ahead before they commence.

To mention a couple of other points, but by no means is this a complete list:

We have had to ask for pre-condition and post condition survey reports which HE fact sheets note as being provided for surveys. Often reports have taken months to arrive.

Pre and Post condition reports have been of such poor and inconsistent quality as to not be fit for purpose.

40.4.24 This engagement will continue as the Scheme is progressed, to ensure that those individuals' requirements are met wherever reasonably practicable

40.5 Flood risk, groundwater protection, geology and land contamination

Key Issue

40.5.1 Water supply

Our farm business and two cottages are supplied by two boreholes. There is no mains water supply and the nearest connection point is two miles from the centre of the farm and all up gradient.

40.5.2 We have concerns that during the construction of the tunnel and deep cutting at the western portal and in the operational phase, our ground water aquifers will be compromised for both quality and quantity.

40.5.3 No base line data or characterisation of our boreholes has been carried out or tracer tests to confirm that there is no link between our boreholes and the placement of the tunnel within the water table. There seems to be no recognition that our water supply is at drinking water standard.

40.5.4 Although it cannot be proved that our water supply will not be compromised, we have not been made aware of any emergency plans to reinstate our water supply either in short or long term should it be compromised for quality or quantity.

40.5.5 For the security of our business, prior to the scheme commencing, we would request that Highways England, their contractor and subcontractor provide proof of public liability insurance that will cover them should our water supply be compromised.

40.5.5 M&R Hosier have serious concerns regarding the availability and quality of their groundwater supplies during construction and operation of the scheme. They are not satisfied the enough appropriate survey work has taken place to fully assess the impact on the

groundwater supplies and the data shown in the Environmental Statement is incorrect and misleading.

40.5.7 The Applicant has not considered how existing water supplies may be compromised during construction such as a pollution incident or a severing of groundwater on a temporary basis. There should be detailed investigations of connecting M&R Hosier (and other farmers) to a water mains which can be used in the event groundwater is compromised. There is no mitigation plan and the applicant seems to be convinced there will not be any issues and/or will be relying on their contractor to come up with such a plan. The detail of any mitigation plan needs to be put forward and considered as part of the examination process.

40.5.8 There has been a lack of monitoring of M&R Hosier's private water supply to ascertain adequate base line data for full assessment of any negative impact that may arise from the scheme.

40.5.9 M&R Hosier has appointed Charles Hedges of Sweetwater Resources Ltd to provide more details of the potential impact on groundwater supplies. A copy of this report is attached at Appendix 2.

Highways England response

40.5.10 The two boreholes extract water from the Chalk aquifer. The effects of the Scheme on this aquifer (quality and quantity) and on the boreholes have been fully assessed. A full EIA has been undertaken, including a detailed assessment of the potential risks to controlled water, as set out in ES Chapter 11, Road Drainage and the Water Environment [APP-049]. During the assessment, there was extensive engagement with the Environment Agency and Wiltshire Council. The extent of agreement with these organisations will be set out in the Statements of Common Ground. Monitoring is ongoing. As part of the full EIA process, an Outline Environmental Management Plan (OEMP) [APP-187] has been prepared, and a revised version is being submitted at Deadline 3, that sets out general and topic-specific principles and requirements for the control, mitigation and monitoring of potential construction impacts, including in relation to the protection of private water supplies, hydrology, land drainage, and sewage disposal from construction compounds. These works will be carried out in accordance with the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3). The OEMP will be secured through paragraph 4 of Schedule 2 of the draft development consent order [REP2-003].

M & R Hosier response

1. The EIA computer model can be broadly correct over tens of Km², but there could still be a few fissures of a few mm wide present. The evidence for fissure flow are :-

- a. Borehole B is supplied by water from two fissures. It is likely that Borehole A is supplied mainly via water flowing out of fissures. These boreholes are south of the proposed tunnel.
 - b. Blick Mead spring is supplied by water from a spring which flows at approximately 0.5m/s.
 - c. Fishermen in the River Avon saw chalk sediment enter the water at Blick Mead while boreholes were being drilled on the landscape. This was brought up at the Issue Specific Hearing 11th June in relation to Groundwater. This shows there are interconnected fissures which enables groundwater to flow southwards from the location of the proposed tunnel.
2. The Applicant has not inspected boreholes A and B and determined the nature of groundwater flow into them. This will require:-
 - a. Tracer tests to determine absence/presence of fissures between site and Boreholes A and B and if so the travel time.
 - b. Seasonal variations in water level, rest and pump water levels, any form of pumping tests to assess yield and drawdown, undertaken geophysical logging such as conductivity, temperature calliper, flow velocity (pumped and un-pumped) to determine elevation of major flow horizons.
 3. The Applicant has denied that fractures in the Chalk are connected. Water flowing from Blick Mead Spring has increased after the heavy rainfall on the 10-11th June 2019 is flowing at 0.5m/s. This demonstrates the rapid downward percolation of rain to the water table and flow via fissures. At 0.5m/s, the groundwater is capable of travelling kilometres per day. It is possible to calculate the permeability from joints, based upon their aperture width and separation (Hoek and Bray Rock Slope Engineering p131)
 - a. Coefficient of permeability $K = b^3 g / 12 \nu$
 - b. where b = width of fissure, g = acceleration due to gravity = 9.81 m/s^2 , d = spacing of joints, ν = kinematic velocity of water at 20 Centigrade = $1.01 \times 10^{-6} \text{ m/s}$.
 - c. For a 5mm wide crack, $K = 1.2 \times 10^{-1} \text{ m/s}$ and for a 3mm wide crack = $2.2 \times 10^{-2} \text{ m/s}$ which represents permeability of 9000 and 565 times that for a 50m at 1m per day travel time.

4. The Computer model uses a grid of 250m. A 5mm fissure is $0.005/250 = 1/50,000$. Modelling is accurate to at most 10%. If we divide the block into 50,000 slices with 49,999 having a permeability of 1 we can calculate what the 1/50000th has to equal to increase average by 10%.

$$(49,999 \times 1 + x) / 50,000 = 1.1$$

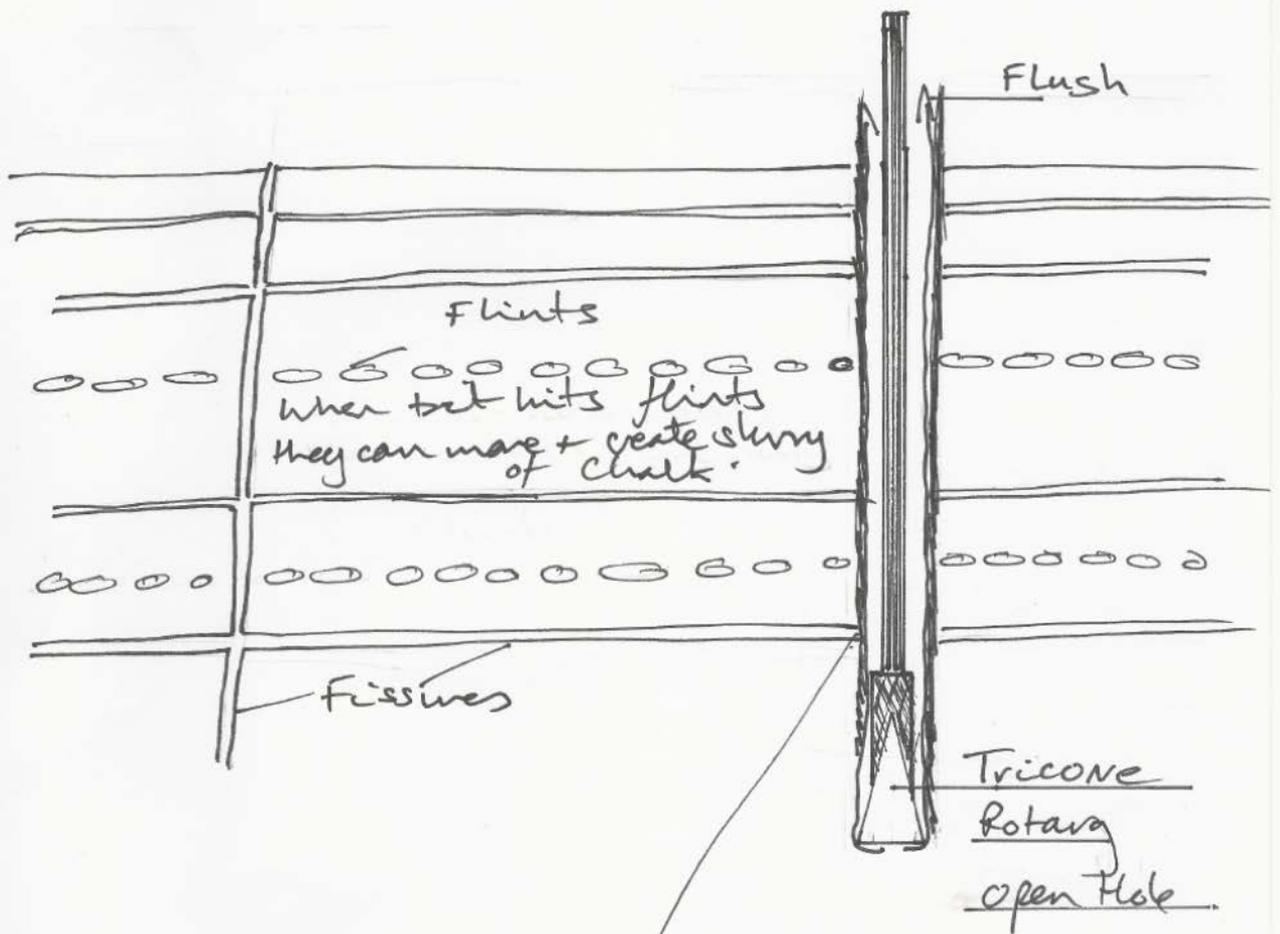
$$49,999 + x = 55,000$$

$$x = 55,000 - 49,999 = 5001.$$

Therefore a fissure 0.005m thick could have a coefficient of permeability 5001 times the other 49,999 slices and it would only increase the value of the 250m block by 10% which is within HE margin of error. Therefore the model may be correct and still ignore fissure flow.

5 As Hoek and Bray (3rd Ed 1981) state p131 the permeability of the rock is very sensitive to the opening of the discontinuities) which change with stress. Therefore permeability of rock will be sensitive to stress. Consequently the Applicant cannot state that the Stonehenge Tunnel is similar to those in London unless they state the stress, which is the overburden pressure, the width and frequency of fissures/apertures, groundwater gradient, flow rate and flow velocities.

6. The pumping tests undertaken by WJ Engineering and Structural Soils were undertaken in boreholes which were not acidized. WJ used a cable percussion rig and Structural Soils used a tricone rotary bit –open hole. Drilling smears the Chalk, producing a mud cake lines the walls of the borehole which infills the fissures. Eductors can remove some of the mud cake but to be reliable acidisation should be undertaken, as recommended by the late Dr Richard Monkhouse of the British Geological Survey. Rotary open hole methods produces a far thicker mud cake than cable percussion methods as the drilling flush is blown against the walls of the borehole and into the fissures- see Figure 1 . Figure 2 figure 6.16 from S A P test 2018 Inter'Report) below shows that the boreholes drilled by SRK produced lower Transmissivities than WJ Engineering when comparing summer results. Therefore there may be fissures present whose entrance in the borehole wall have been completely or partially closed by mudcake.



Mud cake

Mud cake 2-3mm thick

Flush can seal fissures

Fissures can be up to 5mm wide or even greater

Sketch showing mud cake from drilling in filling fissures + reducing permeability. Mud cake can be 2-3mm thick, so can block fissures of this width.

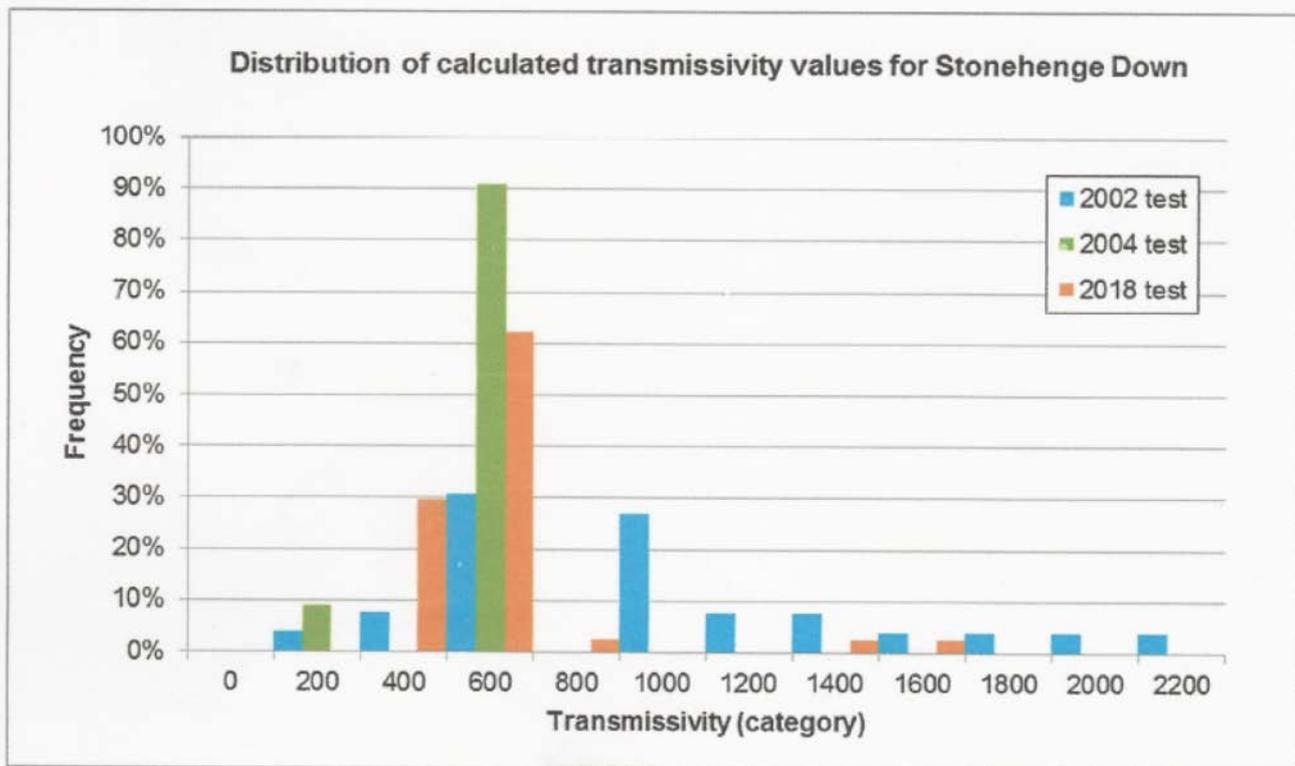


Figure 6.16 Frequency Distribution for all Transmissivity Values Calculated from W601 Pumping Test Compared with Values from W137 tests.

Figure 2

7. Stage 4 Implications of 2018 Ground Investigations to The Groundwater Risk Assessment Working Draft HE551506 April 2019
 - d. 2.3. 1 says fractures not persistent between boreholes which is East West direction, not North South.
 - e. 3.2.6 Fracture zone is not persistent in an east west band.

The report ignores the presence of dry valleys running north south and the presence of faults which run North South. The fact that springs are supplied by groundwater flowing from the north to the south shows the Applicant have ignored the presence of North South trending interconnected water bearing fissures. Grout from the TBM could easily flow southwards and either block water bearing fissures and/or cause contamination of groundwater entering Boreholes A and B. The report is concerned with assessing the presence of interconnected fissures running East West along the route of the proposed tunnel, not those running North South.

For all the above reasons we do not agree that the Scheme has been fully assessed in relation to our private borehole supply.

40.5.11 The EIA shows no significant changes to hydrology, surface water quality, groundwater quality, land drainage or private water supplies during either the construction or operational phases of the scheme. During operation, there is likely to be a moderately beneficial residual effect for water quality in the River Avon as a result of improved treatment and prevention of pollution from road run-off, compared with the current situation, as summarised in ES Chapter 11, Road Drainage and the Water Environment [APP-049], Table 11.10. The Environment Agency agree that this significant benefit is likely, which will be recorded in the Statement of Common Ground being developed with the Environment Agency, to be submitted to the Examination in due course.

[M & R Hosier response](#)

[See point 40.5.10 above](#)

40.5.12 The Hosier's boreholes are included in the baseline assessment as part of the Groundwater Risk Assessment appendix [APP-282]. Paragraph 3.8.6 refers to the summary of the private water supplies located within the study area in addition to those licensed by the Environment Agency as presented in Table 3.3. The full results of the water features survey are provided in Annex 2. Locations of boreholes are also shown on Figure 3.11 [APP-282].

[M & R Hosier response](#)

The Applicant has not sampled water according to the Private Water Supplies Act of 2016 and specifically for pathogenic bacteria. M and R Hosier have to supply potable water. There is no way of measuring pathogenic bacteria in real time. A sample has to be taken and the minimum time for results is 5 days. The Applicant has completely ignored groundwater flowing southwards along fissures. Blick Mead Spring shows groundwater flowing at 0.5m/s or even 0.1m/s which over 50 days means contamination could flow from the site of the proposed tunnel to Boreholes A (no water treatment) and B (Ultra only).

40.5.13 Further risk assessment of the effect of the Scheme on groundwater receptors is provided in Annex E of APP-282. Table E-3 assesses the effect on quality and quantity of the groundwater at licensed private drinking water abstractions including the two Hosier boreholes (table ref R7). The sensitivity of the borehole receptors is considered to be high which is in acknowledgement of the reliance on and quality of the abstracted water. No impact is anticipated. The predicted increase in groundwater level up hydraulic gradient and decrease in level down hydraulic gradient is not predicted to have a measurable impact on the operation of the abstraction even during drought periods. The effects of the tunnel as predicted in Annex 1 of the Groundwater Risk Assessment [APP-282] do not extend to these boreholes (Figure 4.6). With the use of the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3) there will be no measurable impact on the water quality at the two private water supply boreholes (Table E-3).

[M & R Hosier response](#)

See point 40.5.10 above

40.5.14 ES Appendix 11.4 [APP-282] Groundwater Risk Assessment outlines the results of installed monitoring boreholes. Table 7.1 of ES Appendix 11.4 [APP-282] also outlines the proposed programme for monitoring including during and post construction. Once a contractor is appointed they will also have an input and may change the monitoring regime. Highways England will ensure its own appointed contractors have all the information they need for their future ongoing management and maintenance of the scheme which will all be controlled under the terms of the Development Consent Order.

[M & R Hosier response](#)

The Applicant have not sampled water according to the Private Water Supplies Act of 2016 and specifically for pathogenic bacteria. M and R Hosier have to supply potable water. There is no way of measuring pathogenic bacteria in real time. A sample has to be taken and the minimum time for results is 5 days. HE has completely ignored groundwater flowing southwards along fissures. Blick Mead Spring shows groundwater flowing at 0.5m/s or even 0.1m/s which over 50 days means contamination could flow from the site of the proposed tunnel to Boreholes A (no water treatment) and B (Ultra only).

40.5.15 Highways England, as the Scheme promoter, is responsible for ensuring that groundwater resources, including the supply and quality of groundwater, are protected during the construction and operation of the Scheme. Potential impacts on water supplies will be mitigated through the implementation of measures included within the Outline Environmental Management Plan (OEMP) [APP-187] (a revised version of which is submitted at Deadline 3) (at references PW-WAT1 and WAT2, and MW-WAT1, WAT2, WAT3, WAT4, WAT5, WAT6, WAT7, WAT9, WAT10, WAT14, and WAT15), which is secured through paragraph 4 of Schedule 2 to the draft development consent order [REP2-003]. In the OEMP to be submitted at Deadline 3 water supplies are referenced (MW-COM3 and MW-COM6) including requirements for the contractor to liaise with agricultural users and make alternative arrangements in the event of disruption.

[M & R Hosier response](#)

6.3 Appendix 2.2 OEMP May 2019

MWWAT11 ES chapter 11 section 11.7 Management of impact on abstraction boreholes and MW-COM6 Statement of Common Ground Private Water Supplies

The Applicant has failed to design alternative temporary or permanent supply of water for M and R Hosier should it be needed.

The Applicant has not Assessed how M and R hosier will be supplied with water if they lose their supply. If M and R Hosier pose their borehole supply they will need to order in water via lorry. The water tanker cannot reach the farm reservoir. The closest point will require the construction of a holding tank into which the lorry can discharge the water and then a pump to move it to the farm reservoir, a distance of 1000m and 30m head. To maintain a water supply will require a 30,000L

lorry weighing 40T. It is not known whether the farm track can take a 40T lorry every day for months at a time, especially during winter. To obtain an emergency supply of potable water from Waterdirect (quote No 19-05384.2) for weekday is £1722 and for weekends is £2040 (quote 19-05384.4). To construct a holding tank, install a pump, electrical supply (perhaps 3 phase), 1000m of pipe and perhaps strengthen the road will cost £1000s and take weeks. To obtain the services of a good water well driller will take 18 weeks and to complete a new water supply borehole will take 26 weeks. Total costs will be in the order of £278,000. The farm reservoir holds 1 days' supply and after that livestock, especially in summer will suffer heat stress and even death. Waterdirect have not inspected the site and so it may not be accessible by a 40 T lorry. HE need to assess that road so it can take Lorries throughout the year.

40.5.16 The NFU Statement of Common Ground states under Matters Under Discussion that Highways England has been working with and will continue to work with Wessex Water and other statutory utility providers as required to ensure that water supplies are protected during the construction and operation of the Scheme [REP2-014].

M & R Hosier response

Wessex Water will be assessing the water impacts of the Scheme on public water supplies. They would hold scant information on our private borehole supplies, therefore would not be in a position to comment on them accurately.

40.5.17 As set out in the Environmental Statement, Chapter 11, Road Drainage and the Water Environment [APP-049], Section 11.9, the assessment shows no significant changes to hydrology, private water supply, surface water quality or groundwater quality (water supply) during either the construction or operational phases of the Scheme. Highways England has been working with, and will continue to work with, Wessex Water and other statutory utility providers as required to ensure that water supplies are protected during the construction and operation of the Scheme.

M & R Hosier response

See point 40.5.10 above.

MWWAT3 ES Chapter Section 11.Section and MW AIR 1 ES Chapter 5, Section 5.8

How will the silt sized particles be prevented from being blown off the spoil heaps. Silt is the particle size most susceptible to erosion by wind or water. Loess is a soil comprising wind-blown silt. The silt containing phosphate would be blown into the Rivers Till and Avon causing algal blooms. Silt containing phosphate could be washed into the groundwater and rivers causing growth of algae and/or bacteria. A major aspect of good soil management promoted by the Government is to prevent nutrients, especially phosphate carried by soil particles, from entering water courses to prevent eutrophication.

40.5.18 Work is ongoing to access the Hosier boreholes so that monitoring of water

levels and water quality can be undertaken before construction commences. The boreholes will form part of the ongoing programme of monitoring.

[M & R Hosier response](#)

See point 40.5.14 above.

Monitoring has yet to take place, so potentially there will only be 18 months' worth of data prior to the construction work taking place. We suggest that this level of monitoring is inadequate to supply base line data considering all other Scheme monitoring boreholes have taken place since 2017.

40.6 Landscape and Visual

Key Issue

40.6.1 Views from the existing A303 in the area of the western portal

40.6.2 As this area is part of our farm, we are able to assess on the ground and refer back to scheme plans. The ground levels in this area are not straight forward, with the existing A303 being built up from a blind hollow to a level currently seen.

40.6.3 In my opinion, the views from the downgraded A303 in this built up area would be looking directly into the western portal and onto a section of the carriageways emerging from it. Despite raising this point at meetings and asking for sectional diagrams or scheme representations that take the topography into account, I have not been provided with this information.

40.6.4 The range in current topography within the area would also mean that the deep cutting would be at different levels on either side of the road as I am told that due to WHS constraints to limit construction within the area, no additional landscaping would take place. As such, there is the potential for the cutting to also be seen from the opposite side of the carriageway, as well.

Highways England response

40.6.5 A sectional diagram of the retained cutting on the western approach to the tunnel has been provided as requested and is to be found in APP-059 section G-G1 indicating that vehicles and the road surface would be beneath the wider landscape and that the proposed slopes on the upper part of the retained cutting could be graded back into the existing landform.

[M & R Hosier response](#)

The sectional diagram was only provided on 24th May with deadline 2 being 3rd May and deadline 3 being 31st May.

The area that I was referring to is not in the location of the western approach to the tunnel as per G-G1, noted on page 5, but on page 6 in the vicinity of the western portal. The area of ground in the

location of the western portal follows the dry valley. The A303 was built up in this location in the 1970's as the blind dip in the road was an accident black spot. The current A303 is at a much higher level in the area of the western portal approach than the ground level on the southern side being considerably different height to the A303 on the northern side. There is no sectional diagram noted in the vicinity of the western portal.

From previous discussions with the Applicant we have been told that the area of land between the current A303 and the deep cutting will not be landscaped and the topography will remain as it is. We are told this is a cultural heritage decision to minimise damage within the WHS. Perhaps this has subsequently been changed as there is reference to the slopes on the upper part of the retained cutting being graded back.

40.6.6 There would be views of the retained cutting from close range, but from the wider landscape traffic and the retained cutting would not be visible.

M & R Hosier response

We believe that there would be views of the retained cutting and the traffic on the road below. There are no sectional drawings in the location of the western portal and the section just after the western portal to confirm otherwise.

Cultural Heritage Setting Assessment [APP-218] page 157 figure 8 viewpoint CH07 shows a photomontage of proposed view west, looking into green bridge 4. This photo has been taken from our landholding beyond the redline boundary for the Scheme and it clearly shows the retaining walls of the cutting and the entrance of green bridge 4.

40.6.7 With reference to the Cultural Heritage Setting Assessment [APP-218], image CH07 provides a viewpoint from the opposite side of the carriageway looking west and shows that the top of the chalk grassland slopes are integrated back into the existing landform. Image CH10 also within APP-218 illustrates a view in proximity to the downgraded A303 which also demonstrates how the slopes above the retained cutting would integrate back into the landform

M & R Hosier response

Figure 7 image CH06 provides a viewpoint of the green bridge 4 that will not be available to the general public. It is taken from the only visible barrow (longbarrow) in the privately owned Diamond Group. This intervisibility of the monuments will not be available to general public. A more appropriate viewpoint for a 360 photo would be from the location of green bridge 4.

Figure 8, CH07 is a 360' image taken from outside the redline boundary of the Scheme. The entrance of the green bridge 4 is clearly shown as well as the retaining walls of the cutting. Lighting is proposed under green bridge 4 so this will also be seen in the surrounding landscape.

Figure 11, image CH10. We struggle to understand this photograph. From Figure 1, Cultural viewpoints, page 150, the arrow marker shows that the photograph has been taken looking down along the A303. Yet the visual produced shows the traffic running from left to right, ie the photograph has been taken looking side onto the A303. Had the photograph been taken in the direction indicated we would be looking at the back of the tunnel and not into the mouth of the portal. One could be forgiven for thinking that the photograph has been taken from location CH09, but looking side onto the A303. As such, there is no representative viewpoint for CH10.

40.6.8 The constructed Scheme will improve the visitor experience by increasing landscape tranquillity and improving the visual connectivity of the many heritage features within the WHS. Overall, the Scheme is assessed to have a Slight Beneficial effect on the OUV of the WHS as a whole and the OUV of the WHS would be sustained. Further information can be found in the ES Chapter 6, Cultural Heritage [APP-044] and ES Appendix 6.1, Heritage Impact Assessment [APP-195].

[M & R Hosier response](#)

There has been no provision of views from green bridge 4. Standing on the bridge the view to the east will be onto the surface of the carriageway emerging from the western portal. The view from the west will be onto the carriageway as it approaches the longbarrow junctions.

There will be no improvement in the tranquillity within the area of green bridge 4.

Green bridge 4 does not provide visual or physical connectivity within the area.

We remain of the opinion that the scheme as presented does not benefit the OUV of the WHS. The road and portals would have to be completely removed from the WHS for this to be correct.

40.7 Traffic and Transport

Key Issue

Byways 11 and 12

40.7.1 Byways 11 and 12 are in proximity to the road scheme. Both byways join the A303 and are open to all traffic.

40.7.2 There are growing antisocial behaviours as a result of vehicles on the byway which are increasing year on year. Fly-tipping, illegal camping and damage to farm fences are all issues which we have to contend with. Little seems to be done by authorities to address these concerns despite reporting incidents.

40.7.3 Increased vehicular use has caused damage to the byways. Four scheduled monuments on byway 12 and one monument on byway 11 are being damaged, but there seems to be a lack of willingness for the authorities to do anything about this, despite being within the WHS.

40.7.4 We are in support of the closure of the byways which would help reduce antisocial behaviours that have an impact upon our farm business and help to preserve the vulnerable scheduled monuments.

40.7.5 We are not in support of a link between the byways unless the link is along the existing A303 as is. The link proposed at the second consultation is inappropriate as it will damage a hitherto untouched part of the WHS. Is it unnecessary and impractical when there are already two links between the byways (NT permissive path and the current A303). In addition, the link would likely lead to an increase in recreational activity in the Normanton Down Reserve, with potentially damaging consequences for the Stone curlew breeding population.

40.7.6 M&R Hosier agree with the proposed downgrading of Byways 11 and 12 to pedestrian only but do not agree with the proposed link between Byways 11 and 12. The proposed link will add to the footfall and antisocial behaviours in proximity of the RSPB Reserve.

40.7.7 If the Byways are downgraded then there is no need for a link.

Highways England response

40.7.8 We acknowledge and welcome the support for the identified closure.

40.7.9 In responding to the management and enforcement matters raised it is important first to set this in context. The management and enforcement of access across the WHS including byways 11 and 12 is a matter for Wiltshire Council (as the highways authority with responsibility for the public rights of way), as well as landowners, including the National Trust and English Heritage. Fences along public rights of way would be provided to prevent access onto private land, grazed grassland or the highway. Public access to bridleways would be controlled by equestrian gates which are too narrow for most vehicles to use. Public access to restricted byways would be controlled by Kent carriage gaps which are designed to prevent entry by vehicles, all embedding good design measures into the project.

M & R Hosier response

Although responsible for the management and enforcement matters relating to byways 11 and 12 Wiltshire Council are failing their responsibilities. Fly-tipping remains on site for months despite reporting. Damage to scheduled monuments is not addressed despite having brought this to the attention of Wiltshire Council and Historic England. Illegal campers are permitted to reside on the byways for 6 months plus without being moved on even after continually bringing this to their attention. I fail to see how this situation will change after the new road Scheme is in place, indeed there is every possibility that the problems will increase as there will be additional miles of byways for Wiltshire Council to enforce and manage.

As demonstrated at the ETRO on the byways 11 and 12 from summer solstice 2018 to winter solstice 2018, the trails bikes were still able to use the byways via the side gates so no doubt they will continue to do this as enforcement will be minimal.

It is highly likely that the poaching fraternity will adapt their means of transport to enable them to use the equestrian gates or traverse the Kent Carriage Gates.

40.7.10 Highways England wish to ensure that the Scheme is integrated within the

existing byway network and, where the opportunity exists, create legacy benefits for non-motorised users in accordance with its Strategic Business Plan and Roads Investment Strategy, which are aligned with Government policy to encourage walking, cycling & horse-riding through national and local policies and plans. Changing the status of the existing BOATs is beyond the scope of the Scheme. The designation of byways AMES11 and AMES12 will not change as part of this Scheme. The DCO would not provide Highways England with the powers to undertake this work.

40.7.11 Taking into consideration feedback from the statutory consultation on the Scheme proposals, the previously proposed link to the south of the existing A303 between Byways 12 and 11 was removed from the Scheme proposals. This change to the Scheme proposals presented for statutory consultation was one of three changes put forward for the supplementary consultation summarised in Chapter 6 of the Consultation Report [APP-026].

Key Issue

40.7.12 New byway along existing A360

40.7.13 Consultation documents promote roaming and exploring, however, the only roaming and exploring of the monuments within this area of the WHS is via byways with no physical connection, as the majority of the land is in private ownership

40.7.14 I question the need for this bridleway as it is not within the WHS. It is on the boundary and the inter-visibility and views of the monuments are inferior to those along byways 11 and 12.

40.7.15 A new byway in this area has the potential for Diamonds Wood (on our farm) to become desecrated, as is the case with Winterbourne Stoke clump and Normanton Gorse (on our farm). These woods are a focus for antisocial behaviours, such as illegal camping and damaging trees for firewood. They are also used as latrines!

40.7.16 M&R Hosier do not agree with the new proposed byway along the downgraded A360 as it brings new pressures and antisocial behaviours associated with byways into an area of the farm which is currently undisturbed.

40.7.17 One of the principle selling points of the scheme is to provide a link between the two sides of the WHS which have previously been severed by the A303. However, it is being overlooked that the land on the south side of the A303 is in private ownership (M&R Hosier) and the connectivity of the WHS will lead to a significant increase in footfall, trespass, anti-social behaviour and straying dogs affecting livestock

Highways England response

40.7.18 Once the tunnel is in place, a key objective of the scheme is to enhance

public access and connectivity to and through the WHS. To achieve this, the scheme is creating a number of new restricted byways, including along the route of the old A303, while maintaining the existing network. Beyond the creation of new byways, the scheme is not seeking to alter existing byway designations, nor is it seeking to provide access on to or through private land. For reference, the existing Public Right of Way network is illustrated on ES Figure 13.2 [APP-180] and the proposed new restricted byways on ES Figure 13.3 [APP-181].

40.7.19 Bridleway reference V (Sheet 15 of the Rights of Way and Access Plans) extends the connection from the existing Longbarrow junction in the north (via Route IA on Sheets 5 and 15 of the Rights of Way and Access Plans) to the junction between the A360 and existing byway open to all traffic WFOR16 (commonly referred to as "Byway 12"). As this route runs parallel to the A360 and an existing field boundary it minimises the impact on agricultural land and retains the same level of directness to Bridleway Users as the road would have provided. Being situated on the east of the A360 gives the route good views over the world heritage site therefore making it more attractive to bridleway users. From the southern end of WFOR16, byway WFOR15 and public footpaths (WFOR8 and WFOR9) are accessible.

[M & R Hosier response](#)

In order to better understand the addition of the bridleway along the A360 I walked the area to see how it compared with the views of byway 12 and 11. I was disappointed by the views along the section between the byway 12 and the current A360 roundabout. The barrow groups are not prominent along the walk, being obscured by woodland and topography. The views from byway 11 and 12 will still provide the best aspects in the southern part of the WHS.

40.7.20 The management and enforcement of access across the WHS is a matter for Wiltshire Council (as the local highway authority with responsibility for the public rights of way in its administrative area), as well as landowners, including the National Trust and English Heritage. The existing highway boundaries will remain as at present.

[M & R Hosier response](#)

We do not agree that it is our responsibility to enforce the access onto our private land. The proposed byway puts a new pressure on our farming business and woodland as it is not of our making it would be HE responsibility to ensure that adequate measures are in place to prevent trespass.

40.7.21 Fences along public rights of way would be provided to prevent access onto private land, grazed grassland or the highway. Public access to bridleways would be controlled by equestrian gates which are too narrow for most vehicles to use. Public access to restricted byways would be controlled by Kent carriage gaps which are designed to prevent entry by vehicles.

M & R Hosier response

Our experience with trespass into our farm highlights that fencing is no deterrent. General public ignore signs to private property and habitually enter woods situated in close proximity of byways for firewood, desecrating them in their wake.

Fences are also cut by poachers so livestock unwittingly escape from fields. Bringing new byways into locations of the farm in proximity to livestock and woods will spread these pressures onto new areas of our farming business.