

AS-25: Station Road, Moreton

Submission by ID: 1148225, Mr John Wickenden

Questions 147 to 157

My name is John Wickenden BSc(Hons) Physics, FInstP (retired). I am a resident of Moreton for 15 years and grown to respect the environment that the ancient estate of Moreton represents. AS25 is a huge site within the Estate running to the heart of the village. This written submission is a personal statement.

147. Can the “Very significant adverse impact” (Category A) identified in the Site Assessment on criterion C13 –surface waters, and the SA identified Strong Negative Impact on the historic environment (ob.6) be adequately mitigated?

C13 Surface Water

Station Road is known locally as the Avenue as it is lined on both sides by trees planted by James Frampton in 1751. AS25 contains a number of ancient field systems farmed today under a sensitive environmental stewardship programme. Farmers over centuries drained the land to facilitate farming and today the ancient drainage networks are still essential to reduce surface water flooding.

Extracting minerals from AS25 will not only destroy the field systems but also the ancient drainage networks and over 2 km of ancient hedgerows and veteran trees which contributes so greatly to the natural environment, the historic amenity of the area and water management (reference x).

Destruction of the drainage network and up-rooting of trees and hedges will affect the water table and lead to flooding around surrounding properties built of cob construction (ie very sensitive to surface water flooding, see reference ix). In winter it is common for surface water flooding in fields and on the surrounding roads, even in the summer the water table is remarkably high. It is also evident that iron exists in the ground (red stain in the ditches) and disturbance on the scale of AS25 operations (ie de-watering) could lead to significant pollution into streams running through the village feeding the River Frome (SSSI) and Poole Harbour RAMSAR site.

An Environment Agency report called “An assessment of the relative environmental sustainability of sub-water table quarries” (Reference xi) describes the impact of quarrying sub-water table which will be the case for AS25.

Extracts from report:-

These operations have potential to impact upon the quality, levels and flow regime of groundwater and surface water resources. In general terms, the deeper and more extensive the quarry, the greater is the likely requirement for water management, and the greater is the potential for adverse impact on water resources.

Potential environmental impacts as a result of sub-water table quarrying result due to:-

- dewatering - the consequence of this is limited in low permeability strata but can be significant in moderate to high permeability strata where the volume of water affected is high and water resources are most valuable. The impacts may include loss of groundwater resource; derogation of abstractions and groundwater fed watercourses; contamination of watercourses and damage to associated flora and fauna; reduction in water levels in wetland areas; modification of groundwater flow regime; groundwater contamination due to induced saline intrusion or drawing in of*

contaminated groundwater to the workings; or inadequate control of groundwater rebound leading to ground instability, flooding etc.

Another concern is the suggestion that through restoration lakes will be created. Reference viii concludes that flooded sand and gravel pits impact on natural aquifers in a negative fashion and any disturbance of the water table will have an impact on properties and infrastructure in the area.

The overall impact is therefore alarming and whilst the site assessments have identified “very significant adverse impact” which is correct, there has been no professional study or report to identify true impact of AS25 operations on surrounding properties and infrastructure or offer any possible mitigation. The inclusion of AS25 for this reason is therefore unsound.

Historic Environment

Please see responses by Dr Simon Collcutt of Oxford Archaeology.

The assessments fail to recognise the impact of quarrying AS25 on the historic setting of Moreton Estate, the adjacent Moreton Conservation Zone and the village’s historical significance which is contrary to the Listed Buildings and Conservation Areas Act of 1990 regarding “setting”.

The assumption in the SA is that the impact is “temporary” which is a complete fallacy (“The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.”). Experience of sand and gravel extraction sites in the area mean decades of unsightly, noisy and dusty operations. Restoration is not done in a timely or effective manner and seems un-policed by the DCC.

The assessment is therefore erroneous and the inclusion of AS25 in the Minerals plan is unsound and I believe illegal.

148. [Should the DGs provide more direction on the mitigation measures required for these identified Category “A” effects and Strong Negative Impacts?](#)

There are no mitigation methods possible. The DGs should state clearly what criteria must be met.

149. [Have all significant matters been properly taken into account in these assessments and, if not, what matters require further consideration?](#)

The Landowner proposed AS25 at the “eleventh hour” before the 2015 consultation such that DCC was forced to delay the consultation for a few weeks to allow the residents and other objectors to have their say. It was obvious at this time that virtually none of the required investigations had been done by the landowner or his agent which is contrary to the DCC’s Minerals Strategy requiring landowners to provide the case for quarrying. Since then statutory consultees and the DCC have conducted desk-based assessments which have failed to recognise the special nature of AS25 and its extremely close association with the Village of Moreton, its conservation area and the Avenue approach to the village (aka Station Road). They have failed to understand the water table issues, impact on the River Frome SSSI and Poole Harbour RAMSAR, the proximity of the site to heathland, the threat to the protected species (Blue Lobelia), the impact to the historic setting of the ancient estate of Moreton, the loss of good quality farmland and importantly the impact on humans both living around the site and to tourist visitors. Recent landowner agent reports are misleading concerning the visual impact on adjacent properties and in one case completely ignores the impact on Moreford Hall which has a raised aspect overlooking the whole site.

It is my contention therefore that all significant matters have not been taken into account and if the work had been conducted according to DCC's own strategy document (and the NPPF) then the site would have been rejected as others have been with similar characteristics. The 2015 draft plan mentions 7 sites not taken forward at that stage with the wording:

"Impacts of working the site include nature conservation, hydrology/hydrogeology, amenity and recreation, access and landscape/visual. At this time other sites are considered to be more suitable for supplying aggregate."

I fail to see the difference between AS25 and any of these rejected sites: AS10 Moreton plantation, AS14 Henbury Farm, AS21 Came Home, AS23 Gore Heath, AS24 Purple Haze?

The assessment for AS25 is therefore unsound and may be illegal.

150. Has the impact on the nearby community been adequately assessed and, in particular, on "Employ My Ability", the college catering for people with learning disabilities?

AS25 cuts to the heart of the ancient estate of Moreton. It is internationally known for its many tourist attractions: TE Lawrence's grave, Church with Whistler windows, River Frome Ford, Gardens, Tea Rooms, Cob Cottages and equestrian centre. At the north-eastern corner of AS25 lies the impressive new village hall and playing field (50m distance) which is an extremely popular venue for wedding receptions, parties and club events.

The B3390 and Station Road traverse around the west and southern boundary of AS25. These two roads are the most common route into the village for residents and tourists alike. Station Road, known to locals as the Avenue, is tree lined and is an important feature acting as the gateway to the village. Station Road is also part of the National Cycle Route crossing at the junction of the B3390. Pedestrians from Moreton railway station commonly walk to the village along this route and horse riders enjoy the tranquillity and panorama afforded by the fields on the south, that is AS25.

The special nature of the village and its setting is the main reason Moreton's conservation area was extended to include much of Station Road and the Common. The cottages, some listed, mostly date from the 1800's built for estate farm workers (and other trades) and in many cases constructed from cob and thatched. Many of these cottages today are still leasehold rented out by the landowner. Residents living in properties adjacent to AS25 will be directly impacted. This fact has been completely played down in the various assessments.

Much of the community is associated with farming. It is surprising that the effect of taking out AS25 and AS26 from farmland for ever has not been economically assessed. It is possible the whole farming enterprise in the area could become non-viable. Can the DCC prove otherwise?

The village is downwind of the proposed quarry operations for AS25 and thus will be subjected to noise and dust. It is known from other residents living with quarries that bunding and tree screening does not reduce the impact to a satisfactory level. Any operator will certainly fail to keep within acoustic noise planning constraints given the tranquillity of the area. Any such tests have not been conducted under the assessments and technically it is not difficult to predict the outcome. As a physicist I'm confident that this issue should have been classified as a "show-stopper".

If today you travel along Puddletown Road and along Redbridge Road where there are existing quarries and mineral operations it is obvious that there are impacts to the roads and surroundings particularly from loss of views across the River Frome Valley, from dust and lorry movements. If this happens to the Avenue (aka Station Road) it will impact on the number of visitors to Moreton's attractions so prized by Dorset County Chiefs. It is not hard to envisage loss of business to Moreton Gardens where "Employ My Ability" scheme operates and to the Tearooms.

151. The Historic Assessment (Context One) refers to numerous heritage assets within the vicinity. Does this Heritage Assessment adequately cover the potential impacts on the significance of all heritage assets, including features and buildings associated with TE Lawrence?

Please refer to Dr Simon Collcutt's (Oxford Archaeology) report for AS25 for an accurate historic and cultural description of the area surrounding the proposed site. Dr Collcutt's report represents a professional in depth and on-site study unlike the Context One report which was merely a desk-based effort commissioned late-in-the-day by the DCC.

Please also refer to

1. TE Lawrence Society's response to the consultations and the public meeting in 2016.
2. Purbeck District Council's Conservation Officers assessment (in examination library).
3. Moreton Conservation Appraisal Document (Appendix (a) and map (appendix (b))).

It is my conjecture that the historic assessment fails to implement guidance in the Listed Buildings and Conservation Areas Act of 1990 which states: *66.—(1) In considering whether to grant planning permission for General duty as development which affects a listed building or its setting, the local respects listed planning authority or, as the case may be, the Secretary of State shall have buildings in special regard to the desirability of preserving the building or its setting or exercise of any features of special architectural or historic interest which it possesses.* The assessment is therefore unsound and not legal.

152. Can the potential harm to the significance of the Moreton Conservation Area and Listed Buildings adjacent to the site be adequately mitigated?

Experience from residents and councillors representing those affected by mineral extraction state that mitigations such as bunding and tree screening are not effective. Excessive noise levels are commonly suffered as is dust that pervades properties. The DCC is not an effective authority in policing these issues.

Station Road (aka The Avenue) does not adequately screen AS25 from visual impact along its full length particularly in winter (growth is mainly deciduous).

Quarrying AS25 sub-water table means the land cannot be restored economically back to farmland which means the "setting" of Moreton is lost forever.

153. Should more direction on mitigation of potential harm to heritage assets be given in the DGs?

See response to Qu 148.

155. Has the potential impact on nature conservation/biodiversity been adequately addressed and in particular any potential effects on the River Frome SSSI?

No, this is a serious flaw in the assessments by the DCC and the Environment Agency. There are gross inconsistencies in the assessments where on the one hand the agencies say that there will be a reduction of nitrates entering the River Frome which is an admission that there is a “path” between AS25 and the River Frome and then on the other hand completely ignoring the impact of de-watering, iron & sediment contamination and other water table effects on the River Frome SSSI and Poole harbour RAMSAR.

The River Frome is a rare chalk stream containing many rare species including until recently a little known variant of the “chalk stream salmon” which is genetically unique (Jan 2018). There are many learned journals from Environment Agency and Natural England (references i, ii, iii) that state how important it is to protect the River Frome and habitats. The waterways running off AS25 alongside the road to Moreton flow through Moreton Gardens and enter the River next to Moreton Church. Together with Moreton Ford and the river itself these waterways are an important feature of the village.

Through personal communication with a planning professional elsewhere in England, he has stated that ignoring the River Frome SSSI and Poole Harbour RAMSAR (EU designations) is leaving the DCC wide open to challenge. This has repeatedly been pointed out to the Minerals Authority to no effect.

Another important omission on the impact to wildlife is the potential impact on the rare and protected Blue Lobelia species bordering, and quite likely within AS25 or in fact the impact on nearby heath lands. Hurst Heath is a site of nature conservation interest (SNCI) where it is known the rare Blue Lobelia (*Lobelia Urens*) is found (a protected species). The heath straddles the B3390 such that it borders both AS25 and AS26. A learned thesis by Dr Janet Dinsdale (reference vi) highlights the existence of the plant in the surrounding borders of fields. The plant is protected under Section 8 of the Wildlife & Countryside Act (1981) and it is listed under the NERC Act 2006 as a Species of Principal Importance in England and the UK Biodiversity Action Plan (UK BAP) as a Priority Species. Blue Lobelia is a meadow plant, reliant on a high water table and vulnerable to de-watering. (See also reference v).

Additionally the Dorset Heathland Planning Framework (reference iv) states that buffer zones of 400m should be respected and maintained without exception. The assessments for AS25 & AS26 do not state any impact on either Hurst Heath or the Blue Lobelia.

EA’s own report into sub-water table operations states clearly that:-

Potential environmental impacts as a result of sub-water table quarrying result due to:-

- *dewatering - the consequence of this is limited in low permeability strata but can be significant in moderate to high permeability strata where the volume of water affected is high and water resources are most valuable. The impacts may include loss of groundwater resource; derogation of abstractions and groundwater fed watercourses; contamination of watercourses and damage to associated flora and fauna; reduction in water levels in wetland areas; modification of groundwater flow regime; groundwater contamination due to induced saline intrusion or drawing in of contaminated groundwater to the workings; or inadequate control of groundwater rebound leading to ground instability, flooding etc.*

The conclusion must be that there will be an impact on this protected species.

The loss of over 2km of ancient hedgerows and trees will impact on habitats and wildlife corridors across the Estate for many species. This is not an example of extending biodiversity (reference vii).

156. Are any issues relating to bats, the River Frome SSSI and/or Poole harbour Ramsar site capable of mitigation to an acceptable level?

Bats:

Yes, there are issues with bats. Bats can be seen flying around AS25 and surrounding gardens at dusk. Many have roosting sites in and around surrounding properties.

Mitigation:

No. There are too many impacts identified to risk upsetting the delicate natural balance of the River Frome SSSI and surroundings (references i, ii, iii). Standard mitigations used at existing quarries are for all to see inadequate.

157. Are there any other details that should be added to the DGs, including issues raised by statutory consultees and other representors?

Yes regarding the need for AS25 minerals and the development timelines. It has been stated by DCC in the plan that AS25 and AS26 would not be simultaneously worked and that the processing plant would be sited on AS26 (not AS25). The tonnages predicted for AS26 and the time it will take to extract and process the minerals means that AS25 cannot be worked within the timeline of the plan. Additionally the tonnages stated for AS25 are not required to meet the DCCs quota for sand and gravel.

So I and many objectors have demonstrated that there are indeed very significant impacts on a river SSSI, the environment, the cultural heritage, the water management, biodiversity and at the end of the day AS25 cannot be worked in the timeframe of the plan anyway. Therefore what possible justification is there that AS25 should be retained in the plan?

John Wickenden, Fir Tree Cottage, Moreton
September 2018

Appendices

- (a) Moreton Conservation Appraisal
- (b) Moreton Conservation Zone Map

References:-

- i) River Frome SSSI Diffuse Water Pollution Plan, Natural England
- ii) Rehabilitating the River Frome SSSI, Natural England and Environment Agency
- iii) Poole Harbour Catchment Initiative, catchment plan, May 2014
- iv) The Dorset Heathlands Planning Framework 2015-2020 SPD
- v) DCC Biodiversity Paper (summary of directives and Dorset SSSIs and SNCIs) Jan 2008
- vi) The conservation and ecology of the heath lobelia, *Lobelia urens* L. by Janet Mary Dinsdale, University of Plymouth
- vii) Government circular: BIODIVERSITY AND GEOLOGICAL CONSERVATION – STATUTORY OBLIGATIONS AND THEIR IMPACT WITHIN THE PLANNING SYSTEM

- viii) The Hydrogeological behaviour of flooded sand and gravel pits and its implications on the functioning of the enclosing aquifers, Catherine Gandy et al, University of Newcastle upon Tyne, 2004
- ix) Cob Walls in East Dorset, Care & Repair East Dorset District Council Planning Guidance Policy Planning June 2008
- x) STANDING ADVICE FOR ANCIENT WOODLAND AND VETERAN TREES, Natural England and Forestry Commission, April 2014
- xi) An assessment of the relative environmental sustainability of sub-water table quarries, R&D Technical Report P2-173/TR/2 Authors: A Stuart et al, Environment Agency 2002