Date: 07 June 2019
Our ref: 270099
Your ref: 17/0122/FDMAJM

Gloucestershire County Council

BY EMAIL ONLY

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

Dear Mr. Betty,

Planning consultation: FURTHER INFORMATION - Extension of Stowe Hill Quarry & Retention of mineral processing plant at Clearwell Quarry

Location: Clearwell And Stowe Hill Quarries Stowe Green St Briavels Gloucestershire GL15 6QH

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

THE WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

Following receipt of further information, Natural England is satisfied that the specific issues we have raised in previous correspondence relating to this development have been resolved, provided appropriate planning conditions and / or S106 agreement can be defined.

We consider that there is still uncertainty over the smaller proposed extension in relation to potential impacts on Slade Brook SSSI, resulting in concern regarding suitable mitigation. Subject to securing the relevant planning conditions/S106 agreement, to allow Slade Brook SSSI to be appropriately mitigated against the previously identified impacts, Natural England does not object to the proposal. It is the responsibility of the Local Authority to consider all risks and uncertainties on the designated site in deciding whether to grant planning permission and make sure all conditions are robust to prevent undue impacts.

Natural England previously responded to planning applications 15/0108/FDMAJM, (response date 22nd March 2017) and 17/0122/FDMAJM (response date 29th June 2018). Additional information has now been provided regarding the proposed extension to the existing quarry at Stowe Hill Quarry.

i. Non-technical summary dated 19/12/2018 supersedes non-technical summary 14 May 2018.
ii. Environmental Statement: Additional Environmental Information Report December 2018 seeks to address the objections made by Natural England and the Environment Agency both dated 29/06/2018.

We are now satisfied with the principle of the proposal, provided that measures necessary to safeguard Slade Brook Site of Special Scientific Interest (SSSI) and secure the delivery of the

quarry restoration can be implemented via planning conditions and / or S106 as appropriate. It will be essential to ensure that the suggested control measures are robust and valid / effective in securing that detail.

Our understanding is that various schemes of work are to be agreed prior to commencement of development, with appropriate mechanisms being put in place to ensure this happens. These include a revised restoration scheme, a monitoring scheme, a means of ensuring the control of phased working (e.g. requirements necessary for working phase 2), a karst conduit protection scheme and timescales around these elements. We are willing to be part of the discussions around the schemes of work.

Written agreement will be required, through a Section 106 or conditions or a combination of both in order to ensure the most appropriate legal and enforceable way of achieving the required outcomes.

There has also been a need for the variation of condition application to be amended (17/0110/FDMAJM), in order to make it deliverable. A separate variation application has been submitted, which now enables the restoration to be carried out.

S106 agreement

- Slade Brook SSSI is located outside of the current planning boundary, and this will form a significant part of the monitoring scheme to identify changes in the environmental conditions supporting the SSSI. It is our understanding that a S106 is the most appropriate mechanism to ensure this monitoring scheme is put in place.

- In our opinion, initially we may require more frequent meetings of MMSG to assess how the monitoring is going, rather than annually. This may be catered for through agreement of terms for the MMSG.

Response to conditions proposed

- It is essential that there are mechanisms in place surrounding the proposed conditions, in order to ensure that the designated site has robust protection.

- If it is found that the monitoring demonstrates that the proposed restoration methods (epikarst recreation) do not work, we would recommend that work should stop and either alternative measures implemented or work on the quarry cease to prevent further potential impact. Phase 2 will not be able to commence. We will need a written agreement should this scenario occur, in order to provide us with certainty.

- The phased restoration of the existing quarry (condition F) must take place within a two year period to ensure that the area of open quarry floor is minimised and that the proposed restoration scheme can be tested through implementation.

- We request that the EA sit on the proposed monitoring group.

- A review of the restoration works to date (condition G) should take place to inform a scheme for next phase of restoration

- A scheme of monitoring (condition H) should be agreed prior to commencement of development. NE will expect to be part of those discussion & recommend that the EA is also included.

- Development should not progress beyond 176mAOD (condition I) without agreement, as this relates to protection of the aquifer as well as Slade Brook SSSI.

- We are in agreement with the requirement for a karst conduit protection scheme (conditions J, K, L)

- If the conditions are not met, enforcement must be initiated by the council.

Further comments on the restoration scheme

The restoration for the proposed extension takes the form of an 'epikarst recreation scheme'. With the major impact of the quarry being that it removes the epikarst, and thus having the potential to have an impact on the hydrogeochemical environment that supports tufa formation in Slade Brook, confidence in the restoration scheme is critical to the consideration of the environmental impact of the application. This type of restoration is currently untested, primarily because the majority of the existing quarry has not yet been restored despite the extant planning conditions which apply to it. The majority of the area which has been restored consists of placing of materials against the quarry walls rather than restoration of the quarry floor.

The data submitted to date does not appear to indicate impacts on tufa formation from quarrying. However, it cannot be assumed that this will continue to be the case, as there may be some lag in the system. It is important that caution is still applied to any proposals in the vicinity of Slade Brook SSSI.

The proposed restoration methodology in the existing quarry will have a greater depth of limestone beneath the replaced material (quarry overburden mixture and soils), as the maximum depth is 176mAOD. In the proposed extension the extraction depth proposed is to 170mAOD. Given the evidence of more recent rainfall data (April 2018) there may be no unsaturated zone at times of higher rainfall, and the depth of limestone remaining will be less than in the existing quarry. This means that the starting conditions for restoration using epikarst recreation techniques will be different, with less material available to enable the appropriate hydrogeochemical conditions to develop to support tufa formation in Slade Brook. This will need to be taken into account as the restoration proposals are developed.

Timings relating to the scheme of restoration are currently unclear. The document from the applicant states that it should be agreed before development can commence and that initial phases of restoration, including the quarry floor, should be completed within two years. This is important as it will ensure that the area of open quarry floor is minimised. However, Plan 251L-01-16 indicates areas that will be restored at the end of phase 1. We believe that these areas should be restored within two years of commencement.

The monitoring of the epikarst recreation / restoration should include chemical and hydrological functioning, via proposed lysimeters for detailed monitoring but also visual inspection of the wider restoration area (infiltration being the primary concern).The monitoring should include hydrological functioning as well as chemical & gaseous monitoring. If the water doesn't infiltrate into and through the material the restoration scheme will not be working. This should be monitored throughout the life of the quarry to ensure it continues to function as intended.

Enhancement

The most recent condition assessment for Slade Brook SSSI was completed in 2009. We request that the applicant considers undertaking a condition assessment of the site, as a part of the stated commitment towards mitigation and enhancement. This would benefit the applicant by providing a baseline against which to assess changes and monitor whether the site is still in a favourable condition.

We would be happy to comment further should the need arise but if in the meantime you have any

queries please do not hesitate to contact us.

Yours sincerely

Paul Horswill
Senior Adviser