Annex 2

Environmental Statement

An Environmental Statement (ES) was submitted with the planning application.

Chapter 1 - Introduces the application, states the Environmental Impact Assessment (EIA) regulations, and sets the scope of the Environment Statement (EA) and format.

Chapter 2- Gives a site description of the existing quarry and proposed extension. Also gives a brief summary of the planning history.

Chapter 3 – Gives details on the proposed development, which includes the geological context, brown ironstone mineral, proposed new landforms, new multi-purpose building, relocation of consented stone saw shed, proposed sequence and method of working for the new extension and restoration of the existing quarry. Concludes the need to create new landforms due to the large amount of excess overburden and clay on site.

Chapter 4 – Outlines national and local planning policy relevant to the proposed development.

Chapter 5 – This is a short chapter which evaluates the process of understanding 'alternatives' in terms of alternative locations and method of working. Due to the nature and locality of the mineral (brown ironstone), it would be very restricted where the mineral would be extracted in terms of alternative sites. The methods of extraction are well established on site, therefore it is not considered necessary to propose an alternative method of working.

Chapter 6 – Considers the potential environmental impacts from the development including hydrology, landscape and visual impact, ecology, agricultural quality and soil resources, arboriculture, and highways and transport. In terms of hydrology, by providing flood attenuation and clarification of surface runoff during operational phases, the scheme will prevent any deterioration to the LWS's ecology. The proposal has mitigated landscape character impact by construction of temporary bunds and landforms during the operational phases, and the planting of trees and hedgerows at the restoration phase. As mentioned with landscape impact, the loss of trees in the extension will be mitigated by additional planting to the south of the existing quarry, and to the north and south of the new extension once restored. The proposed buildings including office and multi-purpose building have been designed with high quality materials and proposed in locations well screened from the surrounding landscape.

NB A Transport Statement was later requested and submitted as an additional document. The impact arising from the traffic generated would be mitigated by restricting clay exportation during the harvest period.

Chapter 7- This chapter gives an assessment of potential cumulative impacts, carried out in line with the Scoping Opinion. The conclusion of the chapter was there will be no cumulative environmental impacts caused by the proposed development.

Chapter 8 – Summarises and concludes the ES, discussing key issues linked to the development including the impact on ecology, hydrology and landscape character.

Appendix 1- Copy of the Scoping Opinion provided and completed by Oxfordshire County Council.

Appendix 2 –Hydrogeological Impact Assessment completed by GWP Consultants.
The assessment was completed in June 2015. The report describes the local hydrogeological setting of the proposed extension and identifies the potential impacts relating to quarrying activity and subsequent restoration, on the hydrogeological baselines. Mitigation measures are proposed for each potential impact.

Consultation process requested additional information resulted in:

- Hydrological and Hydrogeological Addendum Report (December 2015)
- Summary of changes made after first Consultation (January 2016)
- Hydrological and Hydrogeological Responses (5th April 2016)

Appendix 3- Landscape and Visual Impact Assessment (June 2015)
This assessment concerns the predicted potential landscape and visual effects of the proposed development.

Consultation process requested additional information resulted in:

- Response to Environmental Strategy Officer (January 2016)
- Amendments to the Operational Phase Plans (January 2016)
- Amendments to final Restoration Scheme (January 2016)
  David Jarvis Associates Response, dated April 2016, to address comments made by the Environmental Strategy Officer, County Ecologist and matters relating to the French Drain.
- Amendments to the Operational Phase Plans (April 2016)
- Additional Ecology and Landscape information (13th April 2016)

Appendix 4 – Ecological Assessment (13th June 2015)
The assessment was completed by Philip Parker Associates. The assessment evaluates the existing ecological interest, and how the proposal will impact on the existing ecological interest for both the site and surrounding area. The assessment includes details of all the initial surveys and recommended ecological mitigation and enhancements.

Consultation process requested additional information resulted in:

- Summary of changes made after first Consultation (January 2016)

- Additional Ecological Assessment (11th February 2016)
- Response to Ecological Queries raised by Planning Authority in their Response (March 2016)
- Additional Ecology and Landscape information (13th April 2016)

Appendix 5 – Agricultural Quarry and Soil Resources (27th April 2016)
The report provides information on the soils and agricultural quality of the 16.6ha of farmland proposed as an extension. The land is dominantly of subgrade 3b agricultural quality limited by wetness, droughtiness or slope, with small areas of subgrade 3a land over limestone. The applicant plans to strip the soils in early June or early October. The different topsoil and subsoil resources will be stored separately and placed accordingly in the restoration process.

Appendix 6 – Arboricultural Impact Assessment (May 2015)
The AIA includes arboricultural assessment of the proposed extension to the existing quarry.

Consultation process requested additional information resulted in:

- Arboricultural Report (relating to office parking area) July 2015
- Summary of changes made after first Consultation (January 2016)
- Amendments to the Operational Phase Plans (January 2016)
- Amendments to final Restoration Scheme (January 2016)

Appendix 7 – Plans and Elevations of Proposed Buildings
Includes plans for proposed replacement office and Shoot Store layout and elevations.

Consultation process requested additional information resulted in:

- Elevation plans of Stone Saw Shed
- New Multi-Purpose Building

Annex 3

Conditions

i. **The development shall be carried out strictly in accordance with the particulars of the development, plans and specifications contained in the application except as modified by conditions of this permission.**

ii. **The development to which this permission relates shall be begun not later than the expiration of three months beginning with the date of this permission. The date of commencement of development shall be notified to the planning authority within 7 days of commencement.**

iii. **Extraction of brown ironstone in the western extension area (the subject of this planning permission) shall cease by 31st December 2037 and buildings, plant and machinery to which this permission relates shall be removed by 30th June 2038 or within 6 months of the completion of extraction, whichever is the earlier. Restoration shall be completed by 30th June 2039 or within 12 months of the completion of extraction, whichever is the earlier.**

iv. **Notwithstanding the provisions of part 17 of Schedule 2 of the Town and Country Planning (General Permitted Development) (England) Order 2015 (or any Order amending, replacing or re-enacting that Order), no fixed plant or machinery, buildings, structures and erections, or private ways shall be erected, extended, installed, rearranged, replaced, repaired or altered at the site without prior planning permission from the Mineral Planning Authority.**

v. **No operations associated with the mineral working, including HGVs entering and leaving the site, other than water pumping or environmental monitoring, shall be carried out at the site except between the following times:-**

    i. **7.00 am to 6.00 pm Mondays to Fridays**
    ii. **And**
    iii. **7.00 am to 1.00 pm Saturdays**
    iv. **No operations shall take place on Sundays, Public or Bank Holidays.**

vi. **No winning or working of any mineral other than brown ironstone in block form or clay shall take place on the site other than for use as aggregate for the repair of farm roads within the Great Tew Estate and of the quarry access road.**

vii. **The output of brown ironstone in block form from the site shall not exceed a level of 24,500 tonnes per annum.**

viii. **No crushing of reject stone shall take place within the application area.**

ix. **Crushing of reject stone shall not take place on more than 8 weeks of any calendar year to produce aggregate. This aggregate material shall be only used for the repair of the internal farm roads of the Great Tew Estate, as shown outlined in blue on the Site Location (Drawing No. 2239/PA/A) dated June 2015, and of the quarry access road.**

x. **No crushing of reject stone shall take place until the details of the location in which it will take place and the plant and machinery to be used are submitted to and approved by the Mineral Planning Authority.**

xi. **No winning or working of any mineral other than brown ironstone in block form or clay shall take place on the site.**

xii. **The dust management scheme for the quarry submitted to the Mineral Planning Authority dated 15th May 2012 and approved by the Mineral Planning Authority on 3rd August 2012 pursuant to planning permission no. 11/0237/P/CM shall be applied to the site the subject of this planning permission and implemented during the operation of the development.**

xiii. **Noise from the crushing operations referred to in conditions 9 and 10 shall not exceed 55dB (A) Leq 1 hour when measured freefield at residential properties within 350 metres of the site. Such measures as may be necessary, including insulation and silencing of vehicles, plant and machinery and acoustic screening, shall be taken to ensure that this level is not exceeded.**

xiv. **Noise levels arising from the development shall not exceed 45 dB(LAeq) (1 hour), freefield at the Council House and 35 dB(LAeq) (1 hour) freefield at Home Farm identified in the Environmental Noise Assessment Report (WBM) dated 18 December 2009 approved pursuant to planning permission no. 11/0237/P/CM.**

xv. **No mud or dust shall be deposited on the public highway.**

xvi. **No reversing bleepers or other means of audible warning of reversing vehicles shall be fixed to, or used on, any vehicle operating on the site, other than those which use white noise.**

xvii. **No hydraulic rock splitters shall be used at the site for the breaking up of stone.**

xviii. **No materials shall be used for restoration other than wholly inert materials.**

xix. **All topsoil and subsoil shall be retained on site and used in restoration.**

xx. **No blasting shall be carried out on the site, as detailed in Section 4.2 of the 'Additional Ecological Assessment' (Report Ref: P2014 – 48 R2 Final).**

xxi. **No noisy operations shall be undertaken between 1st March and 31st May in any year within 30 metres of any woodlands with nesting potential for Lesser Spotter Woodpecker, including the central woodlands W5 and W6 (as set out in Section 3.1 of the Ecology Response (March 2016)). Noisy operations include soil stripping, bund creation and stone cutting/extraction. In the event a suitably qualified ecologist confirms absence of Lesser Spotted Woodpecker by the end of April in a given year, based on robust survey effort, noisy works can recommence within May. Where this is the case, evidence must be submitted to the Mineral Planning Authority.**

xxii. **No external lighting shall be used on the site unless or until the details of the location, height, design, sensors, and luminance of external lighting (which shall be designed to minimise the**

potential nuisance of light spillage on adjoining properties, highways, wildlife corridors and pollution of the sky), has been submitted to and approved in writing by the Mineral Planning Authority. Any scheme that is approved shall be implemented for the duration of the development and no development shall take place other than in accordance with the approved scheme.

xxiii. **No works of site clearance or development shall commence unless or until a Water Monitoring, Maintenance and Action Plan has been submitted and approved in writing by the Minerals Planning Authority. The Plan shall include programmes for:**

- **monitoring water quality and quantity in the Deddington Brook**
- **monitoring habitats within the Local Wildlife Site**
- **proposals for annual monitoring of groundwater levels during both working and restoration including additional data regarding the level of the water table level in the northern part of the Marlstone Rock Formation (Phase 4 and 5 of the Lower Quarry as identified on drawing number 2239/PA/5).**
- **monitoring silt loading within ditches of the site**
- **maintaining the silt buster**

The Water Monitoring, Maintenance and Action Plan that is approved shall be implemented for the duration of the development and no development shall take place other than in accordance with the approved scheme.

xxiv. **In accordance with the details approved under the Water Monitoring, Maintenance and Action Plan, the operator shall send groundwater monitoring data on an annual basis within the form of a report to the Mineral Planning Authority which shall inform the final working methodology. If monitoring demonstrates that the development may result in harm to groundwater quality or quantity then the final working methodology shall be amended to avoid these potential impacts. If monitoring demonstrates the development has harmed groundwater quality or quantity then remedial action shall be proposed by the operator. The revised working proposals and any remediation action, shall be submitted to and approved an writing by the Minerals Planning Authority and the approved details shall be fully implemented.**

xxv. **No works of site clearance or development shall commence unless or until an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP) have been submitted and approved in writing by the Mineral Planning Authority. The AMS and TPP shall be in accordance with BS 5837/2012 best practice guidance (as set out in Section 5 of the Arboricultural Report in Appendix 6 of the Environmental Statement (May 2015)). No development shall take place except in accordance with details for the protection of trees from damage as detailed within the approved AMS and TPP.**

xxvi. **No works of site clearance or development shall commence unless or until a reptile and amphibian translocation and mitigation strategy has been submitted to and approved by the Mineral Planning Authority. The strategy shall include the**

identification of suitable receptor site/s and provide evidence of the condition of the site/s to demonstrate suitability as reptile receptor site/s and a management scheme for the receptor site/s. No works shall take place other than in accordance with the approved strategy..

xxvii. No works of site clearance or development shall take place unless or until a Habitat Management Plan has been submitted to and approved in writing by the Mineral Planning Authority. This shall include details on how the existing and proposed features (trees, hedgerows, woodland, surface water attenuation pond, ditches and adjacent watercourse) will be removed / protected, monitored and managed during the development for the benefit of bats, reptiles, amphibians, breeding birds and wild pansy. It shall be in line with the approved documents including the 'Additional Ecological Assessment' (Report Ref: P2014 – 48 R2 Final); the Hydrological & Hydrogeological Response (5 April 2016); David Jarvis Associates Response (05 April 2016); the Ecology Addendum (5 April 2016); and David Jarvis Associates Response (13 April 2016). Any plan that is approved shall be fully implemented and no work shall take place other than in accordance with the approved plan.

xxviii. Initial soil stripping and bund formation shall only be undertaken outside the bird nesting season (1st March to 31st August inclusive) in accordance with Section 4.7 of the 'Additional Ecological Assessment' (Report Ref: P2014 – 48 R2 Final). No removal of hedgerows, trees or shrubs shall take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation for active birds' nests immediately before the vegetation is cleared and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation shall be submitted to and approved by the Mineral Planning Authority.

xxix. All deep excavations shall be suitably ramped to minimise the risk of badgers and other mammals, such as hedgehog being inadvertently killed and injured within the active quarry after dark.

xxx. All trees, shrubs and hedgerows as shown on the Proposed Restoration plan (Drawing No. 2239/PA/7A) shall be planted in the first planting season after restoration is completed.

xxxi. All trees, shrubs and hedgerows as shown on the Proposed Restoration plan (Drawing No. 2239/PA/7A) shall be maintained and any plants which die at any time during the development and aftercare period, are removed or become seriously damaged or diseased shall be replaced in the next planting season with other of a similar size and species.

xxxii. No development shall take place in Phase 5 as shown on plan 2239/PA/5A unless or until a 5 year aftercare scheme (to include monitoring and management details of open water, woodlands, hedgerows, scrub, pasture/parkland, arable farmland and

grassland habitats and bats, reptiles, amphibians, breeding birds and wild pansy) has been submitted to and approved in writing by the Mineral Planning Authority. In respect of wild pansy, an update survey will be required to be submitted to the Mineral Planning Authority to inform the aftercare proposals. Any scheme that is approved must be fully implemented and no work shall take place other than in accordance with the approved plan.

xxxiii. **Before 1st June of every year during the 5 year aftercare period, a site meeting shall be arranged by the occupier of the land, to which the Mineral Planning Authority and the landowners shall be invited to monitor the management over the previous year and to discuss and agree future aftercare proposals. The meeting shall also be attended by the person(s) responsible for undertaking the aftercare steps. Any proposals that are agreed shall be set out in writing and shall be implemented in the timescales agreed.**

xxxiv. **Before 1st August every year during the aftercare period, a detailed annual aftercare review and programme shall be submitted in writing to the Mineral Planning Authority for approval: This shall include:**

xxxv. **Proposals (for the forthcoming 12 months) for managing the land in accordance with the biodiversity management objectives for the site;**

xxxvi. **A record of aftercare operations carried out on the land during the previous 12 months.**

xxxvii. **Any scheme that is agreed in writing by the Mineral Planning Authority shall be implemented for the duration of the time period to which it relates.**

xxxviii. **No felling of trees with potential for roosting bats shall take place unless or until (i) 66 bat boxes have been installed on trees to be retained at appropriate locations within the site, and (ii) aerial inspections are completed for each tree by a licensed bat worker. Where bats are absent, felling operations shall be carried out within 48 hours of the survey, implementing appropriate avoidance mechanisms to include soft felling. (Should a bat roost be found it will be necessary to apply for a European Protected Species Mitigation Licence from Natural England to permit the lawful felling of the tree). A letter report must be prepared and submitted by an ecological consultancy to the Mineral Planning Authority confirming the locations of the 66 bat boxes and that trees have been felled as per the above.**

xxxix. **No initial soil stripping or bund formation shall be undertaken unless or until reptile translocation has been completed, to avoid the risk of killing or injuring hibernating individuals in accordance with David Jarvis Associates Response (13 April 2016).**

xl. **All windows of the Site Office will comprise bird friendly glass such as Ornilux in addition to vertical blinds in accordance with David Jarvis Associates Response (13 April 2016).**

xli. **No HGV movements associated with clay exportation shall take place during the harvest season (1st August to 31st October).**

Annex 4

Summary of Consultations

1. West Oxfordshire District Council – Objection, with following observations (summary):

   i) Cumulative visual impact with severe impact to views from the north.
   ii) Loss of woodland and ecologically rich hedgerows.
   iii) Consider importance of retaining existing vegetation for screening and ecology.
   iv) Need to protect boundary vegetation.
   v) Loss of Woodland 'G7' (Arboricultural Report).
   vi) Forward planting should be considered ahead of extraction.
   vii) Ecological reports seek to increase overall biodiversity value on completion of works.
   viii) Securing a supply of suitable local stone, should help maintain the local distinctiveness of local towns and villages. However extraction schemes should respect local landscape character and protect features of ecological value.
   ix) The site includes some protected hedgerows on site.

Response to Further Information – No additional comments

2. Thames Water – No Comment

3. Environment Agency – No Objection

4. Arboricultural Officer –Further Information Required:
   i) Conflicts between the Arboriculture Report and plans (Drawing No. 2239/PA/4, 5, 6 and 7). Relates to 'G7' group of trees. Wishes to applicant can confirm the extent of copse 'G7' removal required and how this relates to T19, T20 and T21?
   ii) Confirmation from application no other trees contained within the Arboriculture Report will be removed as part of this development?
   iii) Can the applicant clarify what woodland management practices will be adopted to mitigate the loss of these trees, with an appropriate outline relating to their implementation?
   iv) Can the applicant provide further information in the form of an appropriate method statement for the protection of all remaining individual and groups of trees and woodlands to mitigate development activities?
   v) Can the applicant include these trees within the BS 5837:2012 Trees in relation to design, demolition and construction report?
   vi) Can the applicant provide further information in the form of an appropriate method statement for the protection of the remaining trees to mitigate development activities?

Response to Further Information:

> *The additional information is sufficient in answering my queries and I'm of the opinion that a condition can be placed on the application to ensure retained trees are protected. This has been done in other similar situations so, unless you know of a specific reason, I'm happy to do this.*
>
> *If this is appropriate then the condition should look something like this:*
>
> *'No works of site clearance or extraction operations shall take place until a scheme for the protection of trees has been submitted to and approved in writing by the Mineral Planning Authority This shall include an Arboricultural Method Statement and Tree Protection Plan in combination with any other details actions concerning the method of protection around the perimeter of the trees remaining on site. The protection measures shall be erected, retained and maintained throughout all stages of the development, from site clearance until all plant, equipment and surplus materials have been removed from the site, in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. Nothing shall be stored or placed in the area protected and the ground levels within these areas shall not be altered. There shall be no use of plant or heavy earth moving equipment within the protected areas. Upon completion of the restoration the protection measures shall be removed off site. No work shall take place other than in accordance with the approved scheme.'*
>
> *Also, I can't find any details for the restoration scheme apart from the plan though this is usually also conditioned. I'd suggest something like this but I'm sure there will be other consultees whose advice will need to be taken into account.*
>
> *'No extraction shall commence until a Detailed Restoration Scheme has been submitted to, and approved in writing by, the Minerals Planning Authority. The Detailed Restoration Scheme must be based on up to date arboricultural information and no more than two years old. No restoration work shall take place other than in accordance with the approved detailed restoration schemes.'*

5. Natural England – No Objection

6. Environmental Health Officer – "*No objections to proposal, providing the existing controls on noise and dust continue to be implemented."*

7. Archaeology - No archaeological constraints to this application.

8. Lead Flood Authority – Requests further information:

i) *"They state that the water from the quarry will be pumped to a stilling pond, this is not good enough we need to see the design and maintenance schedule for this system. This needs to be a full proof system or the Deddington Brook will become polluted by silt from the quarry works. I am not convinced that a stilling pond will protect the quality of water in Deddington Brook or the ecology."*

ii) *"Pumping water from the quarry will lower the water table for a certain distance round the quarry this will have an effect on the ecology round the quarry, therefore they will need to produce a map showing the limits of the water table lowering for Tamsin so she can determine the areas of land affected and what affect this will have on the ecology."*

9. Transport Development Control – Requesting further information:
"…A transport assessment should be provided. On this basis I would recommend objection."

Response to Further Information:
Recommendation**:** No Objection subject to conditions

This application was previously queried in regard to the quantification of the number of movements that the site is likely to generate. A Transport Statement submitted has made clear of the HGV movements likely to be generated by the introduction of clay exportation on an ad-hoc basis.

This clearly demonstrates that the HGV movements with the additional trips can be accommodated well within the capacity of the existing conditions if measures are put in place that ensure that clay exportation is strictly carried out outside of the Harvest period. The proposal would thus have similar/lesser traffic implications as/than the existing site activities on the local highway network provided the clay extraction is not done in the harvest season.

On that basis, I would recommend the condition below;

Condition
Prior to commencement of the development hereby approved, HGV movements associated with clay exportation shall be restricted to outside of the harvest season (August to October) which should put in writing by the applicant and agreed by the Planning Authority. Reason – In the interests of highway safety and public amenity and to comply with Government guidance contained within the National Planning Policy Framework.

10. Rights of Way (Countryside Services) – No Comment

11. BBOWT Comments

I wish to submit an objection to this application for the following reasons:

- Potential for significant impacts on the adjacent Local Wildlife Site
- Lack of sufficient ecological assessment of the development site
- Lack of detail on restoration measures for biodiversity

Valley West of Great Tew Local Wildlife Site (LWS)

Valley West of Great Tew Local Wildlife Site lies immediately adjacent to the application site and supports a range of priority habitats including wet woodland, lowland mixed deciduous woodland, lowland meadows and fen. I am concerned that the proposals could alter the hydrology of the area, both during operation and following restoration, to the detriment of habitats supported by the Local Wildlife Site.
Such changes could include:

- Alterations to surface water flowing on to habitats within the Local Wildlife Site.
- Reduced quality of surface water entering the Local Wildlife Site.
- Alterations to (or loss of) ground water flows that feed habitats supported by the Local Wildlife site.
- Changes in water chemistry of ground water that feeds the Local Wildlife Site.
- Impacts on the quality and quantity of water entering the water course on the eastern boundary of the application site, which flows into the Local Wildlife Site.
-

Further detail regarding the above issues would help to determine any likely hydrological impact on the LWS.

I have reviewed the Hydrogeological Assessment and the Flood Risk Assessment and Surface Water Management Plan, and understand that a significant level of work has been undertaken to assess impacts of the proposals on ground water and surface water. However, whilst interpretation is provided with regard to the significance of this in terms of flood risk, ground water abstractions and WFD status of the Deddington Brook, there is no reference to the potential impact on habitats within the Local Wildlife Site, despite it being identified as a ground water dependant ecosystem of concern in section 6.2 of Hydrogeological Assessment (albeit incorrectly referred to as a SSSI).

Specifically, further information is needed on the following:

- It is understood that on-site surface run-off won't exceed the pre-development rate, but clarification is sought as to whether surface run off will reduce and whether this could affect habitats within the LWS
- Clarification as to where the perimeter drainage channels around the quarry and screening mound, and the attenuation pond, will discharge, and whether this will affect the location, quality or quantity of surface water entering the LWS

- Assessment of the likelihood of soil erosion from the topsoil store proposed adjacent to the north-east overburden landform effecting habitats within the LWS
- On site investigation of the presence of springs or a seepage line within the LWS north of the application site, to confirm whether all groundwater flowing across the application site would reach the River Tomwell via seepage from the eastern ditch, or whether it discharges elsewhere in the LWS.
- How and where water pumped from the aquifer during de-watering will be discharged; whether it will enter the Local Wildilfe Site in the same location and at the same rate and volume as currently occurs
- Clarification as to the likelihood that springs and other wetland habitats within the LWS will be affected, given the range of the radius of the de-watering effect that has been predicted (181m-915m).
- Clarification as to any expected alteration to the chemical status of the water that will be discharged following de-watering (e.g. in terms of dissolved minerals and nutrient status).
- Whether there will be less groundwater input into the habitats within the Local Wildlife Site, which habitats will be affected and to what degree.

It is unclear how close the topsoil bund and screening mound to the north of the western extension will be to the Local Wildlife Site boundary. This could have implications for tree root protection for woodland areas within the LWS, and a buffer should be used to ensure these woodland areas are protected.

Ecology on site

The Ecological Assessment only covers the area of the proposed extension to the quarry and does not provide an ecological baseline within the footprint of, or assessment of impacts of, the existing quarry restoration, the proposed buildings or the new overburden landform NE of the existing quarry. Without this information a full consideration of the impacts of the proposals on biodiversity is not possible.

In table 9 of the Ecological Assessment, with regard to the population of Viola tricolor, it is stated that a more intensive survey would be required to ascertain the size and extent of the population and whether the species persists in other areas of the overall site. This information is required to inform assessment of ecological impact of the proposals, and should also be available to inform proposed mitigation measures. Even so, the Ecological Assessment identifies a Major negative impact of major significance due to the tree planting proposed in this area. No justification is given for the proposal to plant trees in this area; priority should be given to in-situ conservation of the Viola population over the proposals to attempt to translocate, which have a risk of failure and loss of the population.

Restoration

The Ecological Appraisal identifies there to be considerable opportunities for habitat enhancement as part of site restoration. I agree with this, but the

restoration proposed does not fulfil the potential of the site to deliver biodiversity gain.

It is difficult to determine the level of biodiversity value that will be achieved through restoration due to a lack of detail on the land uses to be created. The areas to be restored to arable are likely to be of low biodiversity value (although various wildlife friendly measures could be incorporated). The areas to be restored to pasture and parkland could be of high biodiversity value, but would be of greatest value if the pasture is species rich and not intensively grazed. The Restoration Plan does not restore the original hedgerow network, as suggested in the Ecological Appraisal, in order to re-establish the existing bat commuting routes.

It is usual for the Council to request a 20 year management plan for restored minerals sites, in addition to the usual 5 years aftercare. This should be requested in order to help ensure that areas of habitat for biodiversity are managed appropriately in the long term and establish and maintain value.

Given the location of the application site, adjacent to a Local Wildlife Site, and the low agricultural value of the soils present, a more biodiversity-led restoration would be preferable. This would provide the opportunity to buffer and extend habitats found within the Local Wildlife Site, such as lowland meadow and deciduous woodland. Such an approach would be in line with policy in the emerging Minerals and Waste Local Plan.

Final Comment

I welcome the further information submitted by the applicant to address the points raised in my email of 23rd March, and those of OCC's Ecologist Planner and Environmental Strategy Officer. In light of this information, I am able to withdraw my objection subject to the inclusion of conditions to cover the following:

1. Further monitoring of groundwater levels during early phases of quarrying to add to data regarding the level of the water table level in the northern part of the Marlstone Rock Formation (Phase 4 and 5 of the Lower Quarry as identified on drawing number 2239/PA/5).
2. A restriction on the depth of excavations so that they remain above the water table (informed by the monitoring during early phases). This will avoid the need for dewatering and should greatly reduce the likelihood of impacting the groundwater feeding the Local Wildlife Site.
3. A monitoring and maintenance regime for the Silt Buster and drainage ditches
4. Monitoring of the water quantity and quality in the Deddington Brook as well as monitoring of the habitats within the Local Wildlife Site, with a mechanism for remedial action to be taken should monitoring identify a decline in condition caused by the extraction.

As I have previously indicated, given the location of the planning application in such close proximity to a Local Wildlife Site it would be beneficial to see a more biodiversity-led restoration plan, in line with policy in the emerging Minerals and Waste Local Plan. The provision of areas of species rich grassland and scrub is welcomed, as is the commitment to a 20 year management plan.

It has been indicated within the Additional Ecological Assessment (Philip Parker Associates Report Ref 2014-48 R2 F) that there is possible drying out of the sedge beds within the Local Wildlife Site. I have some concern that this could be related to activities on the adjacent land, for example the installation of drainage in the north eastern area of the application site which has recently been upgraded by the new French drain. As mentioned above, it will be important to ensure ongoing monitoring of the Local Wildlife Site.

Additionally, a commitment from the applicants to provide improvements within the Local Wildlife Site would be welcome and would help contribute to the overall biodiversity enhancements provided by the proposals (for example through improved conservation management measures on the Local Wildlife Site, or any possible remediation of hydrological changes that may have occurred) .

12. Ecologist Planner (OCC) Comments:

OBJECTION

Thank you for consulting me on this application. I object to the application, as the information provided to accompany the application does not demonstrate that the full impacts of the proposal have been assessed.

Without adequate assessment of the impacts of the proposals and details of the proposed mitigation and restoration, it is not possible to understand whether the proposals could be adequately mitigated to avoid a net loss in biodiversity on the site or avoid indirect impacts on the adjacent Local Wildlife Site (contrary to Oxfordshire Minerals & Waste Local Plan (1996) policies PE4, PE10, PE13 and PE14, NPPF paragraphs 9, 109 and 118 and emerging Minerals & Waste Local Plan Core Strategy (Proposed Submission Document, August 2015) policies, including M10 and C7).

As I commented on the EIA Scoping Opinion request, the site is in a highly sensitive location in terms of ecology. It is close to designated sites and with protected and notable species present in the immediate area.

Please ask the applicant to provide the

following: Surveys & Assessment

- Revised Ecological Assessment that assesses the potential impacts of all of the proposed development on the site. The current

Ecological Assessment focuses on the extension to the quarry and does not assess the impacts of the other development proposals e.g. the construction of temporary and permanent landforms, relocation of consented stone saw shed, replacement office building, erection of a new shoot store and multi-purpose building, etc.

In my response on the EIA Scoping Opinion request I said "*The EIA should also assess the grassland that would be lost in the area of the proposed north East landform and any impacts of demolition and construction of the buildings"*

- As some examples:
    - o the north-eastern area of the application site where it is proposed to deposit the clay overburden– what ecological surveys have been carried out of this area?

    - o The proposed buildings – would there be lighting and is there potential for this to affect bats? Large glass paned windows are proposed on the site office – I do not consider that this is appropriate due to the risk of birds being killed or injured colliding with these windows.

- The Ecological Assessment should be amended to provide clarity on which areas surveyed are within the working area and which habitats would be retained. Also, what buffer zones would there be to each of the retained habitats?

- The Assessment should also clarify whether there are any UK Priority Habitats on the site and where any Priority Habitats are.

- Unfortunately, it seems that the applicant has not followed the advice provided in my response on the EIA Scoping Opinion request. I have attached my response in Annex 2, for reference.

<u>Water Environment</u>

- Full assessment is needed of potential impacts on the water environment, especially water quality and how this relates to the habitats and species found in the nearby watercourses, fen and meadows. Would the water quality be altered by the development? E.g. pollutants and nutrients? What species are present within the River Tomwell/Deddington Brook and are they sensitive to changes in water quality and quantity?

- Surveys for White Clawed Crayfish have not been provided and I do not consider that the assessment of potential impacts of the application proposals on the River Tomwell is adequate. White Clawed Crayfish surveys should be carried out unless there is

sufficient evidence and assessment that demonstrates that there would be no impact from the proposed development on water quality and quantity of this watercourse.

- In addition, there should be a full assessment of potential impacts on the watercourse that runs to the east of the proposed extraction area and the species it, and its corridor, supports. From the Ecological Assessment that accompanied application 11/0237/P/CM (Proposed Extension to Great Tew Quarry 2010, Ecological Assessment, Philip Parker Associated, 23 December
  2010) I understand that the woodland block through which the stream runs
  had species suggestive of more long-standing woodland cover and the stream valley had populations of various fern species, dependent on wetter conditions.

- The Environmental Statement includes:
  "6.26 Surface Water Flooding: The slope of the site combined with the relatively impermeable Whitby Mudstone formation clay geology suggests the site has the potential to create large quantities of surface runoff. However all runoff flowing down the slope flows directly into the Deddington Brook, reducing the risk of surface water flooding."

- Please ask the applicant to provide further information on whether there is a risk of nutrient enrichment or pollutants entering the Local Wildlife Site (LWS) from surface runoff.

- Also, the applicant should confirm whether the greenfield runoff rate over the various habitats in the LWS is going to change at any point during the development, aftercare or restoration, which is what appears to be concluded in the Environmental Statement (see below). If so, what impact there would be on the Local Wildlife Site (which includes fen and other water-dependent habitats)? Would springs and groundwater in the area be affected? If water bypasses the fen and wet habitats on the LWS and is pumped straight into the
  River Tomwell this could have a harmful impact on the LWS.

  6.34 of the ES states:
  "During the Phase 4 Extraction and Restoration of Phases 1 - 3 and Phase 5 extraction and Phase 4 Restoration, it is proposed to construct a temporary screening mound to the north of the western excavation, using approximately 140,258m3 of overburden. In order to manage runoff rates and water quality of runoff draining the temporary storage mound, runoff is designed to be captured by a perimeter drainage ditch, routing runoff to the quarry sump. ***Runoff will subsequently be filtered and pumped to the Deddington Brook at below the Greenfield Runoff Rate"*** *[*my emphasis]

- The applicant should provide further explanation of what assessments have been used to classify the impact on the downstream watercourse

as negligible (ES paragraph 6.37). They should also explain whether this assessment took account of the ecological sensitivities of the Local Wildlife Site status of the land downslope of the proposed development and assessed potential impacts on the ecology of the area. Paragraph 6.37 of the ES stated:

"6.37 Consequently, due to the short duration of the topsoil storage, the buffer strip of arable land/vegetation and the current annual soil disturbance, it is deemed apparent that the temporary storage mound will impose a ***negligible impact*** *[my emphasis] on the downstream watercourse.*
We can therefore confirm there will no requirement for runoff attenuation or treatment, associated with the temporary topsoil storage."

- Please confirm what assessment has been carried out of the potential impacts of the new landform to the north-east of the site and other development on hydrology? Please provide details of the potential impacts on water quality and quantity and the ecology of the watercourses.

- Also, confirmation of whether there would be any impacts on the water from the tufa-forming springs
  If the quarry extension were granted consent, would water continue to be pumped from the lower former quarry basin in the long-term, post-restoration? If not, how would the flow of water off the site be affected?

<u>Breeding Birds</u>

- The Ecological Assessment states that:

> *"The population of birds within the survey area is however considered to be of county value due to the range of breeding species but in particular the presence of breeding lesser spotted woodpecker (one of the only known breeding sites in the county)."*

Whilst the Ecological Assessment (section 6.13 Noise) explains that *"Studies have shown that birds and other wildlife are disturbed by a sudden loud noise, but have the ability to habituate (become accustomed) to regular noises, including those associated with low key quarry workings."*

My understanding is that different species have different sensitivities to noise. The applicant should provide further evidence for the assertion that birds (and other species groups) would habituate to regular noises and whether the proposed development would result in any sudden loud noises. In particular, the Ecological Assessment recognises the rarity of breeding Lesser

Spotted Woodpeckers - what level of sensitivity to noise does this species have? Would the individual birds' ability to communicate be inhibited by the noise of the quarry? Would they still breed nearby?

- Lesser Spotted Woodpeckers are British Trust for Ornithology Red Listed species because of their recent breeding population decline. The 2010 Birds of Oxfordshire, Oxfordshire Ornithological Society Annual Report also reported the breeding range decline and a Red List status and in 2010 there were only ten records of single birds in Oxfordshire.

- Please also ask the applicant to provide clarity on what the proposed mitigation for the various species of breeding birds is and how this would be managed in the long-term.

Existing Ecological Mitigation/Compensation

- Has all the ecological mitigation from the existing quarry been completed, managed and under nature conservation management? Please confirm that no areas of ecological mitigation/compensation are now being proposed for development or for mitigation for the proposed quarry expansion. The Supporting Statement, paragraph 3.8 states:

> *"3.8 The proposed works exclude extraction of part of the consented Phase 3 MRB. The consented area includes part of 'Clay Bank,' an area of woodland and individual trees which would instead be retained. This forms part of a range of proposed ecological mitigation measures in relation to consented and proposed working."*

Clarification should be provided as to whether this area that is being retained was due to be retained as a mitigation measure for the consented workings,

therefore should not be double-counted as mitigation for the proposed works or an area of mineral extraction to be given up.

Paragraph 5.5 of the Supporting Statement says:

"5.5 Notwithstanding this, extant policy (SD4) requires that planning permission for additional ironstone extraction will only be granted in exchange for an agreed revocation of an existing planning permission containing workable reserves. The proposed development therefore makes provision for the retention of the consented 'Clay Bank', an area of woodland and individual trees. The retained area forms part of a range of proposed ecological mitigation measures in relation to consented and proposed working and is considered to satisfy the provisions under Policy SD4 of the Minerals Local Plan."

Please ask the applicant to clarify whether the planning permission they intend to revoke is for an area that was agreed as ecological mitigation for works that have already been carried out?

- Under Planning Permission MW.0022/11 it appears that the approved Landscaping Plan (Drawing Number 1985/LP/1B) shows woodland planting (and seeding beneath) to the north of the existing building. Please ask the applicant to confirm whether this requirement has been met.

Hedgerow Assessments

- Hedgerows should be surveyed (including the TB2 tree line) and assessed in line with the Hedgerow Regulations, 1997, to confirm whether they meet the criteria for Important Hedgerows.

- The Ecological Assessment refers to hedgerows being reinstated. However, Drawing Number 223/PA/7 (Proposed Restoration) does not show all the hedgerows as being reinstated.

Wild Pansy (*Viola tricolor*)

- The UK Red List Near Threatened *Viola tricolor* (Wild Pansy) is present on the application site. The Ecological Assessment states:

  "Grassland/arable: IEEM assessment criteria for a habitat of 'National' value include the presence of a sustainable population of a nationally important species. The small population of the GB Red List Near Threatened species, Wild Pansy Viola tricolor found in a field margin to the south of a bund comprising arisings from existing works probably represents the remnants of a population associated with the former arable usage of the field. A more intensive survey would be required to ascertain the size and extent of the population and whether the species persists in other areas of the overall site. At this stage it is not known if the population is sustainable and has therefore been given a County grading."

- Further survey for this species is necessary to determine the extent of the species on the site and to propose a detailed mitigation and management plan for this species.
- Tree-planting is proposed for the area known to contain the Wild Pansy, which would shade out the Wild Pansy – please ask the applicant why tree planting
  is proposed here?

Lighting

- The proposed working hours are between 07:00 and 18:00 hours Monday to Friday and 07:00 hours and 13:00 hours on Saturday. Therefore, in winter some working will be after dark. Details of the proposed lighting for the quarry, new buildings and other proposed

development and assessment of the impacts on ecology should be provided.

Restoration & Management Proposals

- I do not consider that the replacement woodland that would be planted post- completion of quarrying would adequately replace the woodland to be lost. A recognised biodiversity metric could be used by the applicant's ecological consultant to use to calculate what woodland habitat creation would adequately compensate for the woodland to be lost, factoring in the loss of woodland habitat available to species during the operation of the quarry and the risks associated with habitat creation.

- The Arboricultural Report notes that "In most cases the impact can be mitigated with appropriate management of the remaining woodland…". Clarification is needed on what management is proposed for the remaining woodland.

- In my response on the EIA Scoping Opinion, I commented that:
  "I would expect the site to be restored to nature conservation to habitats complementary to those in the LWS and be subject to 20 year long-term management (in addition to the 5 years of aftercare). The EIA should provide details of the proposed restoration and management. This should include ecological monitoring proposals and that any remedial action is taken to ensure a successful biodiversity restoration."
  The current application does not appear to follow this advice.

- The agricultural grade of the soils is mostly 3b with some 3a. Grades 1 – 3a being Best & Most Versatile. Therefore, please ask the applicant for further information on why a restoration to arable is proposed for part of the site and whether this could be revised to be restoration to nature conservation?

- Annex 2 contains exerts from the Oxfordshire Minerals & Waste Core Strategy (Proposed Submission Document, August 2015) on restoration to biodiversity-led conservation. The full Proposed Submission Document is available via this link: https://www.oxfordshire.gov.uk/cms/content/minerals-and-waste-core-strategy

- Full restoration proposals should be submitted in order to enable assessment of whether the development would result in a net loss or gain in biodiversity. This should include planting and seeding mixes and confirmation of the provenance of these. It should also detail the restoration and management proposals to show how UK Priority Habitats would be created and managed for biodiversity and be accompanied by monitoring proposals. For example, woodland would

need to be managed and thinned out and grassland would need appropriate level of grazing or cutting.

- In my response on the EIA Scoping, I commented that "*I would expect the site to be restored to nature conservation to habitats complementary to those in the LWS*". Whilst the proposed restoration shows a new woodland block at the north-east corner of the western field, which links to the LWS woodland, there is missed opportunity to enhance connectivity in the landscape with the proposed south-eastern woodland block with a very straight edge, not linking to the LWS or neighbouring woodland. Additional woodland planting along the western side of the site would help to provide a buffer and enhance the Local Wildlife Site.

- A more biodiversity-positive restoration scheme is also considered important because of the proximity of the Conservation Target Areas (CTAs) to the north and south of the site and the opportunity for this site to help bridge the gap between them.

- The restoration plan shows pasture beneath the scattered tree planting. In 6.3 of the Ecological Assessment it states that *"Overburden from the proposed extension will also be used to restore the existing quarry. This will then be restored with a mixture of parkland tree planting and species rich grassland/pasture…"* However, the application contains no information on how species-rich grassland would be achieved – what seeding mix? How it would be managed? E.g. cut or grazed, what level?

  The proposal that proposed tree planting in the pasture area would be *"managed as veterans"* is not relevant within the timescale that is considered for a planning application or restoration (this takes 200+ years). Nor does the application explain what is proposed for the grassland on the new proposed quarry.

- Without these details and other information accompanying the application it is not possible to assess whether there would be a net loss/gain in biodiversity as a result of the proposed development.

- Please ask the applicant to confirm that the site would be subject to 20 years of long-term management for nature conservation, in addition to the 5 year aftercare. In Oxfordshire the standard long-term management period is 20 years, in addition to the 5 years of statutory aftercare.

<u>Landscape</u>

- I recommend that the County Council seeks landscape advice on this application.

Response to further information:

Further to the 'Additional Ecological Assessment' (Report Ref: P2014 – 48 R2 Final), the applicant has provided:

- Hydrological & Hydrogeological Response (5 April 2016) to address comments made by the County Ecologist, BBOWT & the Drainage Engineer
- David Jarvis Associates Response (05 April 2016) to address comments made by the Environmental Strategy Officer & County Ecologist
- An Ecology Addendum (5 April 2016) to address comments made by the County Ecologist and BBOWT
- David Jarvis Associates Response (13 April 2016) to address comments made by the Environmental Strategy Officer & County Ecologists

We are satisfied that these documents address the queries raised; we have **no objection** to the proposals. If minded to permit the proposals, there will be a requirement to deliver the mitigation outlined in the above documents. The development would therefore be subject to the following **conditions and informatives**.

In addition, a Section 106 Agreement should be produced **for twenty-years of long-term management** for nature conservation **in addition to the five-years' of aftercare**.

We note that monitoring of the condition of the Local Wildlife Site suggests that the sedge beds have been drying out and are therefore degrading. It may be that existing operations, such as water management, on the wider site have contributed to this. We would therefore welcome any remediation and enhancement of the Local Wildlife Site by the applicant, such as improved water management and conservation work.

Conditions

1. No blasting shall be carried out on the site, as detailed in Section 4.2 of the 'Additional Ecological Assessment' (Report Ref: P2014 – 48 R2 Final).

Reason: In the interests of the amenities of the locality (Minerals & Waste Local Plan (1996) PE18)

5. Section 3.1 of the Ecology Response (March 2016) states "A standoff of 30m from the woodlands where Lesser Spotted Woodpecker could potentially be nesting is proposed for noisy operations between the beginning of March and the end of May. This would include the central woodlands W5 and W6. Noisy operations that should not be undertaken within this period include soil stripping, bund creation and stone cutting/extraction". In the event a suitably qualified ecologist confirms absence of lesser spotted woodpecker by the end of April in a given year, based on robust survey effort, noisy works can recommence within May. Where this is the case, evidence must be submitted to the Mineral Planning Authority.

Reason: In the interests of lesser spotted woodpecker and to avoid net loss in biodiversity in line with MWLP policy PE14 and NPPF paragraphs 9, 109 and 118.

3. No external lighting shall be used on the site unless or until the details of the location, height, design, sensors, and luminance of external lighting (which shall be designed to minimise the potential nuisance of light spillage on adjoining properties, highways, wildlife corridors and pollution of the sky), has been submitted to and approved in writing by the Mineral Planning Authority. Any scheme that is approved shall be implemented for the duration of the development and no development shall take place other than in accordance with the approved scheme.

Reason: To minimise the nuisance and disturbances to neighbours, impact on wildlife (policy PE18 of the MWLP and NPPF paragraphs 9, 109 and 118) and in the interests of highway safety.

4. No works of site clearance or development shall commence unless or until a Water Monitoring, Maintenance and Action Plan has been submitted and approved in writing by the Minerals Planning Authority. The Plan shall include programmes for:

- monitoring water quality and quantity in the Deddington Brook
- monitoring habitats within the Local Wildlife Site
- proposals for further monitoring of groundwater levels
- monitoring silt loading within ditches of the site
- maintaining the silt buster

The Water Monitoring, Maintenance and Action Plan that is approved shall be implemented for the duration of the development and no development shall take place other than in accordance with the approved scheme.
If the monitoring demonstrates that negative impacts are occurring as a result of the development then the operator shall propose remedial action which shall be submitted to and approved in writing by the Minerals Planning Authority and all remedial action shall be implemented in full for the duration of the development.

Reason: To ensure water quality is carefully monitored and managed in the interest of the Local Wildlife Site in accordance with Minerals & Waste Local Plan PE1, PE4 and PE14.

5. Further monitoring of groundwater levels during early phases of quarrying detailed within the proposed Water Monitoring, Maintenance and Action Plan shall provide additional data regarding the level of the water table level in the northern part of the Marlstone Rock Formation (Phase 4 and 5 of the Lower Quarry as identified on drawing number 2239/PA/5). During the operation and restoration of the site, the operator shall send groundwater monitoring data on an annual basis within the form of a report to the Mineral Planning Authority which shall inform the final working methodology. If monitoring demonstrates that proposed development may result in harm to groundwater quality or

quantity then the final working methodology shall be amended to avoid these potential impacts. If monitoring demonstrates the development has harmed groundwater quality or quantity then remedial action shall be proposed by the operator. Working proposals, and any remediation proposals, shall be submitted to and approved an writing by the Minerals Planning Authority and approved proposals shall be fully implemented

Reason: To protect the interest features of the Local Wildlife Site and watercourses (OMWLP PE4) and NPPF paragraphs 9, 109 and 118.

6. No works of site clearance or development shall commence unless or until an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP) have been submitted and approved in writing by the Mineral Planning Authority. The AMS and TTP shall be in accordance with
BS 5837/2012 best practice guidance (as set out in Section 5 of the Arboricultural Report in Appendix 6 of the Environmental Statement (May 2015)). No development shall take place except in accordance with details for the protection of trees from damage as detailed within the approved AMS and TPP.

Reason: In the interests of the amenity of the local area in accordance with the Minerals & Waste Local Plan (1996) PE18.

7. No works of site clearance or development shall commence unless or until a reptile and amphibian mitigation strategy has been submitted to and approved by the Mineral Planning Authority. The strategy shall include the identification of a suitable receptor site and provide evidence of its condition l. No works shall take place other than in accordance with the approved document.

Reason: to ensure the protection of reptiles and amphibians to ensure that the development results in no net loss of biodiversity in accordance with, NPPF Para 9, 109 and 118 and Minerals & Waste Local Plan (1996) PE18.

8. No works of site clearance or development shall take place unless or until a Habitat Management Plan has been submitted to and approved in writing by the Mineral Planning Authority. This shall include details on how the existing and proposed features (trees, hedgerows, woodland, surface water attenuation pond, ditches and adjacent watercourse) will be removed / protected, monitored and managed during the development for the benefit of bats, reptiles, amphibians, breeding birds and wild pansy. It shall be in line with the approved documents including the ‘Additional Ecological Assessment’ (Report Ref: P2014 – 48 R2 Final); the Hydrological & Hydrogeological Response (5 April 2016); David Jarvis Associates Response (05 April 2016); the Ecology Addendum (5 April 2016); and David Jarvis Associates Response (13 April 2016). Any plan that is approved must be fully implemented and no work shall take place other than in accordance with the approved plan.

Reason: to ensure that the site is restored and managed appropriately in accordance with NPPF Paragraphs 9, 109 and 118 and MWLP PE13 and PE18.

9. Initial soil stripping and bund formation will be undertaken outside the bird nesting season (1st March to 31st August inclusive) in accordance with Section 4.7 of the 'Additional Ecological Assessment' (Report Ref: P2014 – 48 R2 Final). furthermore, no removal of hedgerows, trees or shrubs shall take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation for active birds' nests immediately before the vegetation is cleared and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the local planning authority.

Reason: to ensure the development results in no net loss in biodiversity in accordance with MWLP policy PE18 and NPPF paragraphs 9, 109 and 118 and to ensure compliance with the legislation which protects nesting birds (Wildlife and Countryside Act 1981, as amended).

10. All deep excavations should be suitably ramped to minimise the risk of badgers and other mammals, such as hedgehog being inadvertently killed and injured within the active quarry after dark.

Reason: to ensure the protection of badgers and other mammals and to ensure no net loss in biodiversity in accordance with Minerals & Waste Local Plan (1996) PE14 and NPPF paragraphs 9, 109 and 118 and Badger Act 1992.

11. All trees, shrubs and hedgerows as shown on the Proposed Restoration plan (Drawing No. 2239/PA/7A) shall be planted in the first planting season after restoration is completed.

Reason: to improve the appearance of the site in the interests of visual amenity, to screen the workings, and the assist in absorbing the site back into the local landscape to ensure that the site is restored and managed appropriately in accordance with Oxfordshire Minerals & Waste Local Plan policy PE13 and that the development results in biodiversity enhancement in accordance with the Minerals & Waste Local Plan (1996) PE14 and NPPF paragraphs 9, 109 and 118.

12. All trees, shrubs and hedgerows as shown on the Proposed Restoration plan (Drawing No. 2239/PA/7A) shall be maintained and any plants which die at any time during the development and aftercare period, are removed or become seriously damaged or diseased shall be replaced in the next planting season with other of a similar size and species.

Reason: to improve the appearance of the site in the interests of visual amenity, to screen the workings, and the assist in absorbing the site back into the local landscape to ensure that the site is restored and managed

appropriately in accordance with Oxfordshire Minerals & Waste Local Plan policy PE13 and that the development results in biodiversity enhancement in accordance with the Minerals & Waste Local Plan (1996) PE14 and NPPF paragraphs 9, 109 and 118.

13. No development shall take place in Phase 5 as shown on plan 2239/PA/5A unless or until a 5 year aftercare scheme (to include monitoring and management details of open water, woodlands, hedgerows, scrub, pasture/parkland, arable farmland and grassland habitats and bats, reptiles, amphibians, breeding birds and wild pansy) has been submitted to and approved in writing by the Mineral Planning Authority. In respect of wild pansy, an update survey will be required to inform the aftercare proposals. Any scheme that is approved must be fully implemented and no work shall take place other than in accordance with the approved plan.

Reason: to ensure that the site is managed appropriately in accordance with Oxfordshire Minerals & Waste Local Plan policy PE13 and PE18 and that the development results in biodiversity enhancement in accordance with NPPF paragraphs 9, 109 and 118.

14. Before 1st June of every year during the 5 year aftercare period, a site meeting shall be arranged by the occupier of the land, to which the Waste Planning Authority and the landowners shall be invited to monitor the management over the previous year and to discuss and agree future aftercare proposals. The meeting shall also be attended by the person(s) responsible for undertaking the aftercare steps. Any proposals that are agreed shall be set out in writing and shall be implemented in the timescales agreed.

Reason: To ensure the effective restoration of the site to nature conservation (biodiversity) afteruse. (Oxfordshire Minerals & Waste Local Plan policy PE18, PE13 & NPPF paragraphs 9, 109 and 118).

15. Before 1st August every year during the aftercare period, a detailed annual aftercare review and programme shall be submitted in writing to the Waste Planning Authority for approval: This shall include:
(a) Proposals (for the forthcoming 12 months) for managing the land in accordance with the biodiversity management objectives for the site;
(b) A record of aftercare operations carried out on the land during the previous 12 months.

Any scheme that is agreed in writing by the Waste Planning Authority shall be implemented for the duration of the time period to which it relates.

Reason: To ensure the effective restoration of the site to nature conservation (biodiversity) afteruse. (Oxfordshire Minerals & Waste Local Plan policy PE18, PE13 & NPPF paragraphs 9, 109 and 118).

16. No felling of trees with potential for roosting bats shall take place unless or until (i) 66 bat boxes have been installed on trees to be retained at appropriate locations within the site, and (ii) aerial inspections are completed

for each tree by a licenced bat worker. Where bats are absent, felling operations are to be carried out within 48 hours of the survey, implementing appropriate avoidance mechanisms to include soft felling. Should a bat roost be found it will be necessary to apply for a European Protected Species Mitigation Licence from Natural England to permit the lawful felling of the tree. A letter report must be prepared and submitted by an ecological consultancy to the Mineral Planning Authority confirming the locations of the 66 bat boxes and that trees have been felled as per the above.

Reason: to comply with the requirements of the Conservation of Species & Habitats Regulations 2010 and that the development results in biodiversity enhancement in accordance with the Minerals & Waste Local Plan (1996) PE14 and NPPF paragraphs 9, 109 and 118.

17. No initial soil stripping or bund formation shall be undertaken during the bird nesting season (1st March to 31st August inclusive) and unless or until reptile translocation has been completed, to avoid the risk of killing or injuring hibernating individuals in accordance with David Jarvis Associates Response (13 April 2016),.

Reason: To prevent the killing or injury of reptiles and destruction of an active bird nest in accordance with the Wildlife & Countryside Act 1981 (as amended) and to ensure no net loss in biodiversity in accordance with MWLP PE14 and NPPF paragraphs 9, 109 and 118..

18. All windows of the Site Office will comprise bird friendly glass such as Ornilux in addition to vertical blind in accordance with David Jarvis Associates Response (13 April 2016),

Reason: To reduce the risk of birds striking the windows to ensure no net loss in biodiversity in accordance with MWLP PE14 and NPPF paragraphs 9, 109 and 118.

European Protected Species
The Local Planning Authority in exercising any of their functions, have a legal duty to have regard to the requirements of the Conservation of Species & Habitats Regulations 2010 which identifies 4 main offences for development affecting European Protected Species (EPS).
1. Deliberate capture or killing or injuring of an EPS
2. Deliberate taking or destroying of EPS eggs
3. Deliberate disturbance of a EPS including in particular any disturbance which is likely
a) to impair their ability –

i) to survive, to breed or reproduce, or to rear or nurture their young, or
ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
b) to affect significantly the local distribution or abundance of the species to which they belong.

4. Damage or destruction of an EPS breeding site or resting place.
The site survey results have identified 33 trees with potential for roosting bats which need to be felled. In the absence of mitigation it would be possible for the works to result in destruction of a roost and/or the killing / injury of bats.
It is proposed (in paragraph 6.88 of the Environmental Statement) that all trees with bat roosting potential are subject to high level inspection prior to felling. This is taken to mean an aerial inspection by a licenced bat worker. Where bats are absent, 'felling operations will be carried out in a bat friendly way'. This is taken to mean reasonable avoidance measures will be implemented, such as soft-felling.
Where a bat roost is identified it will be necessary to secure a European Protected Species Mitigation licence to enable felling of the tree to lawfully proceed.
Bat boxes will be erected in the surrounding woodland prior to tree felling operations; three boxes for each potential bat roost tree to be lost (therefore 66 bat boxes in total).
We consider the mitigation measures outlined above to be appropriate "offence avoidance" measures. We would therefore recommend the condition (number 16) above to secure implementation of the offence avoidance measures to ensure that no offence is committed.

Informatives

Protected species
If any protected species e.g. bats, badgers, reptiles or nesting birds are found at any point, all work should cease immediately. Killing, injuring or disturbing any of these species could constitute a criminal offence. Before any further work takes place a suitably qualified ecological consultant should be consulted for advice on how to proceed. Work should not recommence until a full survey has been carried out, a mitigation strategy prepared and licence obtained (if necessary) in discussion and agreement with Natural England.
Breeding birds
All bird nests, eggs and young are protected under the Wildlife & Countryside Act 1981 (as amended) which makes it illegal to intentionally take, damage or destroy the nest of any wild bird while it is use or being built. Therefore, no removal of trees, scrub, hedgerows, grassland should take place between 1st March and 31st August inclusive to prevent committing an offence under the Wildlife & Countryside Act 1981 (as amended).
Wild mammals
All wild mammals are protected from unnecessary suffering, including suffocation in burrows. Where common mammals such as hedgehogs, rabbits, foxes, voles and mice are encountered during maintenance works, they should be allowed to safely escape the working area to avoid unnecessary cruelty. Should any burrows be located in the vicinity of intrusive earthworks, ecological advice should be sought to determine which species is present and what measures can be taken to avoid any unnecessary suffering to mammals. Note the information above regarding badgers.
Sharing information
You are advised that you should send the biodiversity information/ecological assessment provided as part of this application to Thames Valley Environmental Records Centre. This will assist in a key principle of the National Planning Policy Framework that planning policies and decisions

should be based on up-to date information about the natural environment and other characteristics of the area by building up the data base of up-to-date ecological information and this will help in future decision making. Ideally data should be provided in ESRI shape file format.

Environmental Strategy Officer Comments

These comments are made following a visit to the general area of the site on Monday 10 August.

Landscape Planning Context

In addition to the OWLS landscape character assessments it would be appropriate to also review the 1998 West Oxfordshire Landscape Character Assessment.

Views from the North

There are clear views of the western working area from the north. These views are most prominent from the track leading towards Butlers Barn where there are various opportunities to view the site from gateways, and when looking south from the bridleway that links to the A361. Glimpsed views can also be seen from the A361 at the bridleway intersection though these would be transitory and brief for road users.

The proposals include the creation of large overburden mounds that will also provide a screen to the lower parts of the workings. The upper parts of the quarry and the discontinuity this introduces with the rest of the ridgeline running west will remain visible during extraction. The overburden mounds themselves will be noticeable in the valley landscape as a result of their relatively steep landforms. The mounds remain in situ until Phase 5 extraction is being restored.

The parkland created during restoration of the southern slopes will be visible in views from the north. The appropriateness of parkland in this location is questioned. There is parkland landscape closer to Great Tew village and house. However the proposed quarry site is more remote from the village and the context for parkland is weaker. The landscape in this section of the valley is more strongly defined by woodland and hedgerows with a relatively small number of in-field trees. It will be many years before the parkland trees can be “managed as future veterans”.

There may be opportunities to further reduce the impact to views from the north could by additional off-site planting closer to the points of view, such as in hedgerows which run up the northern valley sides.

Note: The Landscape Elements plan omits a section of marked as K on the aboricultural constraints plan.

General Impacts on Trees and Woodlands

It is noted that the arboricultural impact assessment (AIA)only relates to trees in the western extension area. There are other trees within the application site that may be affected by development works, e.g. to the south of the site buildings. These should be included within the AIA.

It is noted in the AIA that further information is required before the impact on groups of trees to be retained can be assessed fully, therefore at present retention cannot be guaranteed particularly given the extent of landform change proposed.

The AIA notes the relative lack of management of existing woodland. This may affect the ability of retained tree groups to fulfil a long-term landscape function. In this context the potential future impact of ash dieback disease should be assessed. What proportion of the woodlands are ash and what would the impact of possible loss of ash from the woodland canopy? How might this be mitigated? There would seem opportunity for additional woodland planting to offset the loss of mature woodland and to improve habitat connectivity.

The excavation of the western quarry may affect local hydrological conditions reducing the water available to the woodland on the western edge. Further detail on the expected change in soil moisture status if any on this belt of trees would be welcomed.

Mound Adjoining Home Farm Road and Slopes to South of Buildings

A spoil mound from existing works has been created in fields adjacent to the road past Home Farm. The mound whilst screened by hedgerows remains out of keeping with the local topography. There is some re-grading of the northern edges of this mound proposed in this application. The southern edge is proposed for planting as woodland. It would be helpful to understand if this mound could be re-profiled to more closely match surrounding topography and the material used in quarry restoration before being planted with woodland.

As the vegetation on these steeper southern slopes are difficult to manage they may become dominated in the short to medium term by plant species typical of disturbed ground. Whilst these have value from a wildlife perspective these species give an industrial quality to the landscape that is not in keeping with the wider surroundings.

It would be helpful to understand whether additional woodland / shrub planting was considered on this mound and southern slopes. This could help to compensate further for the loss of mature woodland if permission is given.

North-Eastern Spoil Mound

A large volume of spoil is proposed for placement to the north-east of the existing buildings. This is a shallow valley that is visible along a relatively short section of road which follows the lie of the land. The current gentle curves of the valley will become more pronounced.

Noting the comments in the hydrological assessment about the silt trapping qualities of hedgerows I still have concerns that under intense rainfall the new narrow valley and steep slopes will channel water onto the sharp bend of the B4022 and over the adjoining field towards the Deddington Brook.

The landscape impact of this mound could be further reduced by hedgerow improvement works along the roadside (off-site), which could take place in advance if permission were to be granted.

Response to further information:

Landscape Planning Context

The Oxfordshire Wildlife and Landscape Study notes that the OWLS assessment "should be used in conjunction with landscape character assessments available at a district level", i.e. the 1998 West Oxfordshire Landscape Character Assessment.

As the amended proposals address points of concern that would be given context by the district council's assessment no further clarification on this aspect is sought.

Views from the North

The applicant's further comments and revised restoration proposals are noted and are acceptable.

Mound Adjoining Home Farm Road and Slopes to South of Buildings

The applicant's further comments and proposals are noted and are acceptable.

North-Eastern Spoil Mound

I note the applicant's comments about a reduction in watershed and I note that the field margin adjacent to the B4024 is grassed which will help reduce run-off. Against this I refer again to the applicant's Flood Risk and Water Management Strategy which includes hedgerows as a factor in the attenuation of flood water (GWP June 2015, para 2.1). Arable cropped land is bare or lightly vegetated for part of the year and therefore remains susceptible to run-off and erosion by heavy rainfall at these times. It is understood that

the proposed rye-grass ley will be returned to arable once operational earthworks are concluded. The applicant's ecological report (Philip Parker Associates 2014-48'R2'F', Feb 2016) notes a gap of several metres by the bend in the road in a "discontinuous and outgrown" hedge. Reinstatement of this section of hedge, preferably as part of advance works, would strengthen the characteristic hedgerow framework in this part of the site and would contribute to controlling the rate of water run-off into surrounding areas over the longer term. I still consider these benefits outweigh the loss of some glimpsed views of the reinstated farmland, which could largely be retained with appropriate long-term hedgerow management.

New Woodland / Woodpasture

I note the applicants' proposal to replace the parkland on the western section with species rich grassland and tree/scrub habitat. This is considered more appropriate than the parkland in the original proposal and is acceptable. Successful maintenance of the species rich grassland will be influenced by the nutrient status of the soil. I would ask that confirmation is given that a soil of appropriate nutrient status can be created from the soil resources generated on site and used for restoration of this area.

I note that the applicant proposes to create ash / oak woodland Type W8 Woodland (Ecological Report REF 2014-48 R 2F). Due to the presence of Chalara ash dieback in the UK a Plant Health Order (*Plant Health (Forestry) (Amendment) Order 2012*)
is currently in force that prohibits all imports of ash seeds, plants and trees, and all internal movement of ash seeds, plants and trees. I would like clarification on what alternative species are proposed if the planting of ash remains prohibited.

I note the comments in the Supplementary Information to Arboricultural Report regarding the management of existing retained woodland and confirm that a management plan developed along these lines would be acceptable.

13. Oxfordshire Geology Trust – No Comment Received

14. National Planning Casework Unit – No Comment Received

15. Swerford Parish Council – No Comment Received

16. Little Tew Parish Council – No Comment Received

17. Great Tew Parish Council – No Comment Received

18. Ramblers Association – No Comment Received

19. Open Spaces Society – No Comment Received

20. CPRE Oxfordshire – No Comment Received