

Appendix I

East Herts Environmental Health recommended conditions:

1. Best practicable means shall be employed to minimise the noise generated by the operations hereby permitted. The means shall include but may not be limited to those listed below:
 - a) All vehicles, plant and machinery used on the Site shall be operated with closed engine covers;
 - b) All engines shall be fitted with effective silencers which shall be regularly maintained in accordance with manufacturer's instructions; and
 - c) All vehicles required to be fitted with reversing alarms shall be fitted with broadband 'white' noise reversing alarms or other suitable non-audible reversing aids and these shall be maintained in accordance with the manufacturer's recommendations and specification.
2. Site attributable noise shall not exceed the noise limit at the noise monitoring locations shown in the table below, other than temporary operations associated with the stripping and replacement of soils, and the construction and removal of screen mounds. Any such temporary operations shall not exceed 70 dB $L_{Aeq, 1 \text{ Hour}}$ (free field) at the locations listed below and the total duration of any such temporary operations shall not exceed a total of 8 weeks in any calendar year.

Noise Monitoring Location	Freefield Site Noise Limit $L_{Aeq, 1 \text{ hour}}$ [dB]
Sacombe Road	52
Waterworks Cottage	55
The Orchard	50
Glenholm	53

3. No later than 3 months after the date of this permission, a Noise Monitoring Scheme ('the Scheme') shall be submitted for the written approval of the Mineral Planning Authority. The Scheme shall include details of:
 - a) The noise monitoring equipment;
 - b) The precise noise monitoring locations;
 - c) The frequency of measurements;
 - d) The presentation of results; and,
 - e) The procedures to be adopted in the event that noise levels exceed the limits approved or in the event that complaints are received.

4. Except in emergencies to maintain safe quarry working (which shall be notified to the Mineral Planning Authority as soon as practicable) or unless the Mineral Planning Authority has agreed otherwise in writing no operations, other than water pumping, environmental monitoring, shall be carried out at the site except between the 07.00 hours and 18.00hrs Monday to Friday and 07.00hrs and 13.00hrs Saturdays; and at no times on Sundays or Public Holidays
5. No HGV's shall enter or leave the site except between the hours of 07.00 hours and 18.00hrs Monday to Friday and 07.00hrs and 13.00hrs Saturdays; and at no times on Sundays or Public Holidays unless the Mineral Planning Authority has agreed otherwise in writing.
6. Before any site preparatory works commence, the site access road shall be hardened to ensure smooth running surface free of pot holes and shall be maintained at all times until completion of site restoration and aftercare.
7. No commercial vehicles shall enter the public highway unless their wheels and chassis have been cleaned to prevent material being deposited on the highway.
8. No mineral extraction shall take place until wheel cleaning facilities have been installed, in accordance with details of design, specification and position which shall have first been agreed in writing with the Mineral Planning Authority. The agreed facilities shall be available in full working order for use at all times.
9. The surface of the internal access road between the wheel washing facility and the public highway shall be metalled, drained and kept clear of debris throughout the life of the site.
10. No development shall take place until a scheme and programme of measures for the suppression of dust, have been submitted to and approved by the Mineral Planning Authority. The scheme shall include inter alia:
 - (a) The suppression of dust caused by the moving and storage of soil and overburden, stone and other materials within the site;
 - (b) Dust suppression on haul roads including speed limits
 - (c) Provision for monitoring and review of the scheme
 - (d) Details of complaint management and response.

Such a scheme shall be implemented and complied with at all times.

The Environment Agency response including recommended conditions:

Condition 1

The development hereby permitted shall not be commenced until such time as a scheme for the following has been submitted to, and approved in writing

by, the local planning authority. The scheme shall be implemented as approved.

1. A long-term groundwater monitoring programme (including maintenance plan for the groundwater boreholes) in respect of contamination and turbidity, including a timetable of monitoring and submission of reports to the Local Planning Authority shall be submitted to and approved in writing by the Local Planning Authority.
2. Groundwater monitoring reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to and approved in writing by the Local Planning Authority. Any necessary contingency measures shall be carried out in accordance with the details in the approved reports.

Reasons: To protect groundwater from pollution. The site lies in our most sensitive groundwater protection area in a Source Protection Zone 1(SPZ1). Protection of the water environment is a material planning consideration and development proposals, including mineral extraction, should ensure that new development does not harm the water environment. National Planning Policy Framework (NPPF) paragraph 109 states that the planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels water pollution. Government policy also states that planning policies and decisions should ensure that adequate site investigation information, prepared by a competent person, is presented (NPPF, paragraph 121).

Condition 2

No Controlled Waste defined by “The Controlled Waste Regulations 2012” or Extractive Waste defined by “The Environmental Permitting Regulations 2010” (as amended) can be imported to the site for reuse, processing, recovery or disposal.

Reasons: to protect groundwater. The site lies in a highly vulnerable groundwater area within a SPZ1. Imported waste can contain contaminants which could pose a risk to controlled waters.

Condition 3

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.

Reasons: to protect groundwater. No site investigation fully characterises a site. Not all of the site area was accessible during the investigations to date.

Condition 4

No drainage systems for the infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it

has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approved details.

Reasons: to protect groundwater. Infiltration through contaminated land has the potential to impact on groundwater quality.

Condition 5

The development hereby permitted shall not be commenced until such time as a scheme to dispose of foul water has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.

Reasons: to protect groundwater from pollution. The site lies in our most sensitive groundwater protection area in a Source Protection Zone 1 (SPZ1). Protection of the water environment is a material planning consideration and development proposals, including mineral extraction, should ensure that new development does not harm the water environment.

Air quality advice for County Planning Authority

Dust and Particulates

Although we now have a strategic duty relating to air quality, we do not have a duty to comment on this matter within the planning process. However we feel that it is relevant and necessary to raise our concerns when commenting on this particular planning application. Therefore in principle we would recommend that the Planning Authority look to impose conditions that make this development, wherever possible, air quality neutral.

The site is located in an area that has been the subject of significant concern to us with regards to air quality. In particular, there already are high levels of airborne particulate pollution (PM10) and Nitrogen Dioxide (NO2) in the area and we feel this proposed development has the potential to contribute to the poor air quality in the area if robust abatement measures and management systems are not put in place.

We advise that robust conditions are placed on any permission granted to aim to address the air quality issues. The issues that we recommend that you address by planning conditions (if permission is granted) are: **Mineral**

Screening

This activity can give rise to dust and noise beyond the site boundary if it is not carefully located and managed. It is critical that modern plant is used and maintained at a high level to minimise impact to the environment and human health.

Road Sweeping

In 2008 and working in partnership with TfL we used contractors to carry out a study into the monitoring data at the Horn Lane area of Ealing. This study was to determine the most effective abatement measure to reduce dust emissions. The study showed that an increased frequency of road sweeping removed dust particulates and therefore reduced the risk of re-suspension of the particulates. As a result we consider that it is advisable that the planning

permission should include a requirement that the public highway and the private haul road are swept by a high efficacy road sweeper on a daily basis.

Road Surfaces

We strongly recommend that site roads which are used on a daily basis are constructed of impermeable concrete or bituminous material or other easily cleaned surfaces to reduce PM10 emissions. A spine drain down the middle of road or impermeable surfaced area with short hard standing roads branching off it, will minimise the potential for PM10 to be generated. We support a maximum site speed limit of 10mph which will also help reduce the risk further.

Wheel Washing

The same 2008 report showed that wheel washing helps reduce mud and debris from escaping the site and reduce the re-suspension of dust from vehicles passing over it. A lack of space on sites can mean traditional wheel-wash systems are not always possible but smaller systems, designed to clean a single axle at a time are readily available. Please note a trough (bath) and/or spinner is not an acceptable alternative. It would be consistent with other businesses in the waste management sector to install and operate a wheel-wash and ensure use by all vehicles using the site. The GLA's draft guidance in "The Control of Dust and Emissions During Construction and Demolition" also recommends the use of wheel washers. **Vehicle and Plant**

Emissions

We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on non-road going machinery are imposed as a planning permission condition for the life of the site. As the site is sensitive for NO2 emissions we recommend that the Tier 3b standard is required for all NRMMS on site and only vehicles rated to Euro5 and Euro6 emission standard are permitted to use the site.

Reducing Vehicle Idling

We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on vehicle idling is imposed as a planning permission condition for the life of the site. **Construction**

Logistic Plans

We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on construction logistic plans are imposed as a planning permission condition for the life of the site. **Diesel or Petrol Generators**

We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on diesel or petrol generators are imposed as a planning permission condition for the life of the site. **Chutes, conveyors and skips**

As the site involved chutes and conveyors we recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and

Demolition” on chutes, conveyors and skips are imposed as a planning permission condition for the life of the site. **Covering Vehicles**

We recommend that the GLA’s guidance in “The Control of Dust and Emissions During Construction and Demolition” on covering vehicles serving the quarry and landfilling operations are imposed as a planning permission condition for the life of the site.

Advice on use of dust suppressants

Using chemical dust suppressants can offer significant reductions in the level of dust and particulates produced in an area. They should not be used in isolation but form part of a comprehensive strategy to control dust at source. A targeted strategy using chemical dust suppressant can achieve up to 36% reduction in the level of dust and particulates escaping from dusty activities. As a result we advise that the GLA’s guidance “The Control of Dust and Emissions During Construction and Demolition” on dust suppressants are adhered to and that the applicant should be required to comply with this guidance by a suitable planning condition for the life of the site.

Hertfordshire Ecology

Over a period of up to 15 years, this proposal anticipates the extraction of 2.6 million tonnes of sand and gravel from a 36.1ha site north of Bengeo in a series of phased workings from south to north. Although currently dominated by arable farmland, the application site lies immediately adjacent to the Waterford Heath Local Nature Reserve (LNR), and the ‘St John’s Wood, Rickneys Quarry’ and Waterford Heath (North & South) Local Wildlife Sites (LWS). These represent components of national and county-wide networks of protected areas, respectively; St John’s Wood LWS also supports ancient woodland, a feature listed on s41 of the NERC Act as a habitat of principal importance and identified by the NPPF as an irreplaceable resource. The application is accompanied by an Environmental Statement (ES) and an Ecological Appraisal (DK Symes/Liz Lake Associates November 2015) which incorporate the (complete or summarised findings of) bat, badger, botanical and reptile surveys dating back to 2013. In brief, these conclude that the implementation of mitigation measures (including, *inter alia*, woodland and hedgerow creation, the installation of bat boxes and bespoke measures to safeguard badgers and bats) would remove ecological constraints from the application. It anticipates that the mitigation plan will ‘...enhance the network of habitats present in and around the site in the long term’ (s1.1.1). However, these documents contain shortcomings in terms of the site description, impact assessment and mitigation and this conclusion cannot yet be substantiated. Initial thoughts on these issues are provided in turn below but further information will be required before definitive views can be provided. Note that paragraph numbers refer primarily to the ecological appraisal; references to paragraph numbers in the ES are preceded by ‘ES’. Site description: I have no reason to doubt the suitability or outcomes of the bat, habitat and reptile surveys. However, the absence of a farmland bird survey is surprising. Both summer and winter populations of these characteristic species, including many of conservation concern, have

experienced enormous declines in recent decades. *Ad hoc* observations (s2.3.21) confirm the presence of 'red list' species on the site but cannot be relied upon to inform a valid assessment of the importance of the site or otherwise. The claim (s2.3.1) that arable farmland 'is generally unsuitable for most statutorily protected or other notable species' cannot be justified at this stage. Similar comments can apply to the presence of brown hares (also listed on s41 of the NERC Act), confirmed on site via casual observations with no further attempt to substantiate this.

In addition, whilst there is no reason to doubt the description of the adjacent badger sett, there is no evidence to suggest that efforts were made to explore their use of the arable fields for foraging or whether this social group also utilised outlier and subsidiary setts, or indeed, if other social groups occupy territories nearby (s2.3.3). Whilst additional, future surveys proposed will aid understanding of this sett throughout the life of the project, the existing uncertainty requires action now. Policy and best practice clearly advocate that decision-makers must be aware of the biodiversity value of a development site prior to determination yet at present, it is clear that either considerable gaps in the knowledge base of the site remain or that insufficient evidence has been put forward to explain why further survey is not required. This requires remedy before this application can be determined.

Impact assessment

Best practice encourage that specific guidelines are followed to enable consistent analysis and evaluation, yet no reference to established industry standards is made here. Furthermore, other than in bespoke species surveys there is no reference to published literature to support the outcomes made. This casts doubt on the outcomes.

This is compounded by the shortcomings of the site description which means there is reduced confidence in the modest impacts predicted for badgers, farmland birds and hares (s4.1). This is then further compromised by the lack of a clear description of the physical parameters of the proposed development to inform the impact assessment exercise. More specifically, whilst groundwater impacts have been reviewed, uncertainty surrounding the impact the depression would create on surface and sub-surface flows within the adjacent woodland (and possibly other habitats as well) requires further scrutiny; indeed, the need for hydrological review was highlighted in the ecological appraisal (s4.1.13) but does not appear to have been pursued. Whilst direct losses of woodland and hedgerow are likely to be modest, without further hydrological studies, adverse, indirect effects on adjacent protected areas cannot be ruled out (s2.2.8). As they currently stand, these issues not only undermine attempts to evaluate the impacts in terms of local and national policy, especially the ancient woodland, but also compromise the design of the mitigation strategy. This is illustrated by the suggestion that artificial recharge is adopted (s4.1.13) to ameliorate unquantified hydrological impacts; this is not a sustainable solution and is not appropriate for an irreplaceable habitat.

Furthermore, the arguments to suggest that dust will not threaten adjacent, ancient woodland are not compelling. For example, whilst it is reasonable to presume that prevailing winds may well reduce the threat to habitats to the west of the site, this same factor will only increase the threat to the ancient woodland to the north. Elsewhere, other explanations lack consistency or explanation with, for instance, dust dismissed as a threat as a consequence of the high moisture content of the deposit whereas impacts on groundwater are also dismissed as the deposit is dry (ES s6.2.7).

Conversely, the suggested need to obtain a licence from Natural England to allow the felling of a possible bat roost with only one record of an emerging bat in 2013 (s2.3.8) seems very precautionary when additional survey may more accurately determine the best course of action.

On the basis of existing information, the modest impacts suggested (s4.1) cannot be relied upon and both direct and indirect, adverse effects on protected sites, species and habitats cannot be ruled out.

Mitigation

Shortcomings described above make it difficult to accept the mitigation measures suggested and claims that additional measures are not needed (s4.2.9) cannot, at present be accepted.

For example, the ability of the 20m buffer to prevent harm arising to the protected sites, especially the ancient woodland, from dust or from changes in surface drainage cannot be determined with the necessary certainty especially given that the exact width is confusingly described (s4.1.13). Similarly, it is insufficient to simply rely on the basis that it exceeds the 15m minimum suggested by Natural England; each case must be determined on its own merits and is very dependent on the type and intensity of the adjacent land use.

Both policy and best practice clearly advocate the delivery of biodiversity gain from development yet here, the restoration proposals promote a predominantly agricultural afteruse (s4.2.10 and Plan Nos.1217/CO/1, 1217/PO/1 and 1217/R/1). Little evidence is provided to support this approach and although biodiversity gain is claimed, prospective benefits are few and challengeable, and casual claims to provide 'wildlife links' remain unjustified (21.1.1 & 4.1.16).

For example, proposals for the establishment of calcareous grassland creation in and around the balancing pond are not compelling (s4.12.5), and the composition of wildflower grass mixes is not specified. Elsewhere, hedgerow creation and the creation of woodland glades might be more appropriate, yet tree planting, immediately adjacent to the existing ancient woodland (s6.2.8), could place the existing woodland edge in shade and destroy its light-demanding communities rather than enhancing them (s4.1.8). This unnecessary replacement of an existing, ancient woodland edge (identified to be of high regional value (s3.3.4) with a newly created

and far less diverse one is unnecessary and unacceptable; a more effective option would be to simply create a wide ride between the old and the new that would retain the existing communities and provide new opportunities for others. However, even the proposed species composition remains undefined (s4.2.10) and only a three-year aftercare period (five years in the ES) is proposed (s4.2.2); this is inadequate when establishing 'semi-natural' habitats.

Furthermore, the area of woodland created appears to be more a reflection of the finished landform and the difficulties of farming slopes on land 'too steep to cultivate' (s4.12) than a considered approach to delivering biodiversity gain. Similarly, there is insufficient evidence provided to justify the erection of eight bat boxes (s4.2.5) in an area with only modest bat populations. A more appropriate solution might simply be to establish better foraging habitat for bats across the landholding.

In addition, the inclusion of 43 pages of data derived from the HERC within the appendix is confusing and unhelpful as it does not appear to inform any aspect of the appraisal. It should either be removed or evaluated.

Even within these constraints, however, the proposed development still provides enormous potential for delivering biodiversity gain which would better meet the aspirations of national (the NPPF) and local policy but which could, importantly, also continue to form part of a commercial farming enterprise. This could take the form of an alternative, more appropriate mitigation strategy that would embrace elements of the existing proposals such as new woodland and hedgerow creation, expand these to protect, enhance and manage adjacent woodland and draw on best practise elsewhere to adopt more extensive, but still commercially viable, arable farming practices to provide real and sustainable gains in biodiversity. Taking these in turn, the following measures, described in the briefest of details, should be considered:

Woodland:

Woodland and hedgerow creation should comprise appropriate species of local provenance, possibly drawn from seed from the neighbouring woodlands. The extent of these new features should be designed to complement the current woodlands, maintaining existing edges, rides and glades. All should benefit from a prolonged, bespoke management regime that is not dependent on agricultural practice. This could usefully be extended beyond the red line boundary to incorporate the management of existing woodland in the LNR and LWS, in other ownerships, with the aim of improving their conservation status and improving their resilience to the indirect effects of extraction.

The County Landscape Officer comments

The proposed extraction phases 1, 2 and 3 are located within 'Preferred Area 2.'

This policy states that there should be specific consideration for the following:

- The site as an extension to the existing Rickneys Quarry
- Buffer zones to properties
- Advanced planting
- Phased working
- Protection of ancient woodland
- Archaeological interest
- Provision of safe public rights of way network
- Ground water protection zone
- Sufficient balance of materials for restoration

Minerals Policy 4 – Outside Preferred Areas

The proposed extraction phase 4 and the site access/facilities/stockpile area are located outside the preferred area. This policy states all proposals will need to satisfy the relevant policies of the Minerals Local Plan.

Minerals Policy 12 – Landscape

All mineral extraction and related Planning applications may be refused where there is significant local landscape intrusion and loss of important landscapes or distinctive landscape features.

Development proposals will be expected to:

- i. respect landscape character both during operations and in proposals for reclamation;
- ii. ensure that any distinctive landscape features are protected from the impact of development;
- iii. be accompanied by landscape conservation, design and management measures that both strengthen the character and enhance the condition of the landscape.

The County Council will have regard to the visual impact of proposals (including any proposed mitigation measures to minimise visual or other intrusion) on sensitive land uses, including areas of public access.

Particular regard will be had for the Hertfordshire Landscape Strategy in assessing proposals.

Hertfordshire Landscape Strategy - East Herts District Landscape Character Assessment - The site lies within the Stoney Hills landscape character area, the area is characterised by *'gently undulating open arable farmland with woodland, usually treed rather than hedged, or with fragmented hedges and occasional mature hedgerow oak. Active, disused and restored mineral extraction sites, with mix of field sizes and variety of after uses.'*

The strategy for managing change in this area is to **improve and restore** the landscape condition and strength of character. In order to achieve this, the following guidelines should help shape the proposed development:

- *...safeguard existing hedges, increase hedged field boundaries, create permanent grass strips around field margins...*
- *Encourage the replanting and/or improvement of hedges along historic field boundaries, within arable areas rather than along roadsides...*
- *Support the establishment of new woodlands, especially around existing woodlands where this would create additional habitat and protection. Ensure that new woodland would not damage historic features such as banks and ditches, but use ancient field and woodland boundaries as appropriate*
- *New woodland planting should be of locally indigenous species only, using seed/plants of local provenance if possible*
- *Encourage the reversal of habitat fragmentation and the creation and improvement of habitat links to create eco-corridors*
- *Ensure that the restoration of exhausted minerals sites is carried out in accordance with agreed restoration plans, amended where necessary to reflect current best practice in maximising nature conservation potential and to ensure that they reflect and enhance local landscape character and distinctiveness*

Background

Landscape Comments on the original proposals were provided on dated 21st June 2016, which raised the following issues:

- Extension of the plateau and flattening of contours across the valley slopes, in the area broadly consistent with working phases 2 and 4
- The creation of a steep bank (1:4) to accommodate a change in level up to 13m, along the site boundaries with Sacombe Road, Rickneys Quarry and St Johns Wood, and the approach to planting along here
- The creation of a small hillock west of Waterworks Cottages, which appears contrived and interrupts the east facing valley slopes
- The erosion of a distinct undulation or dry valley, running on a southeast to northwest axis between the site boundaries with Rickneys and Wadesmill Road (across the phase 2 development area)
- The removal of individual trees that are historic landscape features
- Negative landscape and visual impact of the new access
- The lack of sufficient enhancements, to improve the landscape resource and visual amenity of the site and its wider setting above its baseline condition

Further landscape information was submitted on 19th January 2017, in summary the main changes are:

- Reduction of material for extraction from 2.6 million tonnes to 1.75 million tonnes
- Reduction in duration of development from 12/15 years to 7.5/10 years

- Retention of 3 existing oak trees (along boundary between phases 1 and 2)
- Restoration of historic hedgerow boundary with trees (along boundary between phases 1 and 2)
- Introduction of additional oak trees along existing hedgerows
- Amendment of the final restoration landform
- A series of woodland blocks with buffer strips(5m to 10m) to northern and western site boundaries

Baseline

The baseline sets out the existing context against which the landscape and visual effects of the proposed development is measured and considers landscape character, key features, and landscape value.

Local Designations

The proposed working phases 1-3 are located within the 'Preferred Area No. 2' (PA) for mineral working, as identified within the current Minerals Local Plan (MLP). The PA is defined by St Johns wood to the north, Rickneys Quarry and Sacombe Road to the west, and Hertford 001 (restricted byway and footpath) to the east, (hereafter referred to as the byway).

At the minerals local plan preparation stage, the initial draft PA was larger and included the area between the byway and Wadesmill Road. However, as a result of more detailed assessment, this area was removed in order to contain the mineral working within the less sensitive flatter plateau, away from the plateau edge, where it is more visually contained, and to protect the amenity and safety of the byway.¹ With this in mind, there is strong concern for the proposal to locate aspects of the proposed development (working phase 4 and the site access/facilities/stockpile area) outside of the PA within the area between the byway and Wadesmill Road.

Whilst the PA is not a landscape designation in itself, the boundary of the PA was identified in respect of landscape and visual issues. Since the adoption of the MLP the baseline condition of the site has not changed and these issues remain relevant considerations.

The landscape and visual effects as a result of development within these areas is discussed in more detail within this report.

Landscape Character

The site lies within the Stoney Hills landscape character area² and strongly reflects the local landscape character that is described as '*gently undulating open arable farmland with woodland, usually treed rather than hedged, or with fragmented hedges and occasional mature hedgerow oak...*'

With regards landscape features, the individual trees that are relics of the historic field pattern are of some historic value.

¹ As highlighted in Herefordshire Minerals Local Plan Review – Inspectors Report

There are several sites of high biodiversity value adjacent to the site boundary, including St Johns Wood and the Local Nature Reserve.

Due to the sites location on the urban fringe it is of recreational value. The public footpaths and byways that skirt/cross the site are well used and provide links with the neighbouring local nature reserve and the wider landscape to the north.

Landscape and Visual Effects

In line with industry good practice guidance, the landscape and visual effects of the proposed development are discussed separately in relation to the operational stage and restoration stage of the of the project lifecycle.

Operational Stage

The operational stage comprises the following aspects which will result in landscape and visual effects:

- Enabling works e.g. construction of site access and haulage routes and site facilities and stockpile area, and stripping of soils and exposure of bare ground
- Mitigation measures e.g. construction of mitigation bunds, and implementation of advanced planting
- Extraction activity e.g. extraction and exportation of mineral
- Environmental aspects e.g. lighting, vehicular noise and movement

Landscape Effects

Duration & Reversibility

It is proposed to carry out the development over 7.5-10 years that is considered temporary; however medium – long term, it is therefore important that the effects of the proposed development are mitigated as far as possible.

Landform

The site is located upon the elevated ridgeline between the River Beane and River Rib valleys, and extends across the east facing slopes of the River Rib valley.

The principle of minerals extraction is established within working phases 1-3 due to their location within the ‘preferred area,’ however subject to specific considerations.³ These phases are located within the more elevated and/or flatter part of the plateau landform that is less sensitive to this type of development than the more steeply sloping valley sides.

Working phase 4 lies to the east of the byway and extends across the toe of the ridgeline and the east facing valley side. Excavation in this area will erode the distinct transition between the plateau edge and the more sensitive sloping valley sides.

³ As listed within the Minerals Local Plan, Adopted March 2007

The site access/facilities/stockpile area lies between the byway and Wadesmill Road. The location of this area will interrupt the more sensitive sloping valley side, and is more open to views from the wider valley landscape to the east (refer to comments under visual effects).

In addition it is proposed to locate this area below existing ground levels, on a temporary platform cut into the sloping hillside. Careful consideration needs to be given regarding the changes in level and how they will be achieved, without compromising slope stability and drainage etc. For example, in the northwest corner of the area the top of a bund is at 59m, and the base of a bund is at 55m, however the stockpile platform is at 50m representing a 5m change in level between the base of the bund and the platform, which requires appropriate engineering.

Field Pattern

The site is located within a distinct parcel of land defined by Wadesmill Road, Sacombe Road, Rickneys Quarry and St Johns Wood. Within the site, the loss of several field boundaries has eroded the historic landscape pattern, resulting in a more open landscape. The most notable surviving boundary feature is the byway that runs between St Johns Wood and Wadesmill Road, plus some relic hedgerow trees.

Working phases 1-3 are well contained by the existing highways and vegetation to the north and west, and by the existing byway to the east. The byway represents a logical landscape boundary, containing the development within the less sensitive elevated and/or flatter part of the site.

With regards to working phase 4 and the access/stockpile/facilities area, the extension of these areas and associated temporary bunds, east of the byway, will interrupt the more sensitive open valley side.

Landcover and Vegetation

The proposal to conserve and enhance the existing site boundary vegetation, and relic trees within the site, is fully supported. However it has not been demonstrated how any vegetation will be protected in line with industry good practice guidance 'BS5837:2012 Trees in relation to design, demolition and construction – recommendations.' For example, the location of bunds appear to overlap the root protection area.

In addition the proposed new access requires the removal of a substantial length of existing vegetation to accommodate the associated bell mouth and turning circles, visibility splays, and a new right turn lane. The removal of vegetation erodes the rural character of the highway setting, and opens up views into the site from users of Wadesmill Road (see comments under visual effects).

Visual Effects

Views from the north, west and south

Views of the site from the north, west and south are generally screened by the existing landform, woodland and urban area.

The majority of views are from properties, public rights of way and highways in close proximity to the site and include the dwellings at the junction of Sacombe Road and Vicarage Lane, public footpath (FP4), Sacombe Road, Revels Croft Farm, Watermill Lane north and the properties fronting Sacombe Road. From here there are short glimpsed views through gaps in the boundary vegetation towards the perimeter bunds that screen views of working phases 1-3 beyond.

Views from the east

Despite the elevated and open nature of the site there are limited publicly accessible views from across the River Rib valley to the east.

There are moderate to highly sensitive views from residences such as Ware Park Manor and other properties.⁴ From here working phase 4 and the access/facilities/stockpile area result in negative visual effects as they extend across the more sensitive and open sloping valley side. In the preparation of the MLP the PA was removed from this area to protect the amenity of these views.

The majority of views are from properties, public rights of way and highways in close proximity to the site and include Waterworks Cottage, Wadesmill Road, and footpath 13. From here there are glimpsed views through gaps in the boundary vegetation towards the perimeter bunds that screen views of the works beyond.

There are highly sensitively views from users of the public rights of way. With regards the footpaths that skirt the site there are views towards the perimeter bunds that screen views of working phases beyond.

With regards the central byway, the proposed development results in unacceptable negative visual effects, the perimeter bunds associated with Phase 4 and the access/facilities/stockpile area foreshorten typically open and long distance views across the valley to the east. Towards the midpoint of the byway the haul road crossing, and associated traffic passing along the haul road between the site access/facilities/stockpile area and Phase 2, detract from the amenity and safety of the footpath and views. In the preparation of the MLP the PA was removed from this area to protect the amenity of the byway.

There are views of moderate – low sensitivity from users of Wadesmill Road. From here there are negative views through the new access, (that requires the removal of a substantial length of existing vegetation to accommodate the associated bell mouth, turning circles, and visibility splays), towards a series of bunds at 3m, 4m and 7m high, there is also a channelled view along the existing access track that links with the byway.

⁴ As highlighted in Hertfordshire Minerals Local Plan Review – Inspectors Report

Approaching along Wadesmill Road from the north, there are negative views through gaps in the boundary vegetation towards the bunds that screen working phase 4. There is some concern regarding the potential visibility of plant and machinery across the elevated slopes that rise above the 2m bunds.

Restoration Stage

The restoration stage comprises the following aspects that are likely to result in landscape and visual effects:

- Final restoration landform and placement of restoration soils, below original ground levels
- Final landscape scheme, hedgerows, trees and woodlands
- Implementation of public rights of way

Landscape Effects

Duration & Reversibility

With regards the worked phases, due to site constraints it is not proposed to import any material for restoration, resulting in a final landform below original ground levels. The effects of operations in these areas are therefore considered permanent and irreversible, (see comments under restoration stage).

Landform

With regards the submitted further information, cross sections showing the proposed *and existing* levels were requested; however they only show the proposed levels.

In general the restoration of minerals development to original ground levels, of a character and quality that is equal to or an enhancement of the baseline situation, is the preferred option. However in this case, due to site constraints, it is not proposed to import any landfill resulting in low level restoration.

In order to improve the final restoration landform it is proposed to reduce the quantity of material for excavation from 2.6 million tonnes to 1.75 million tonnes, this approach is welcomed, and helps mitigate the negative effects of low level restoration in working phases 1-3.

In working phases 3 and 4 it is proposed to create a low lying relatively flat plateau. Whilst the creation of a plateau is not considered unacceptable in working phase 3, where the existing landform is relatively flat, and has a better ability to accommodate this type of change. The extension of the plateau and flattening of contours across working phase 4, where the existing landform is characterised by the more sensitive transition between the ridgeline and the valley slopes, is not supported. In addition the proposed linear and curving raised area along the eastern boundary of working phase

4 that appears contrived and interrupts the consistency of the more sensitive valley slopes, is not supported.

With regards working phase 2, it is proposed to restore the landform profile similar to existing and recreate the distinct dry undulation that crosses the site on a northwest and southeast axis. This approach is supported.

In working phase 1 it is also proposed to restore the landform profile similar to existing, however there is concern for the proposed contours where they meet the byway, at this point they appear to indicate a sharp change in level that is likely to result in negative landscape and visual effects.

Along the north and west site boundaries with Sacombe Road, Rickneys Quarry and St Johns Wood, it is proposed to create a bank at 1: 7 or 1:8 to accommodate a change in level up to 7m. Whilst not characteristic of the local landscape, the bank is mitigated to an extent by the proposed planting.

It is proposed to restore the site access/facilities/stockpile area, to a landform that is similar to existing. This approach is supported.

Landcover and Vegetation

The submitted information states that the following amendments have been made:

- Additional provision of a historic hedgerow feature, taken from the 1880 map
- Additional oak tree planting along hedgerow features
- Improved connectivity to wider landscape
- Retention of 3 key oak trees along an historic hedge line (previously removed)
- Provision of woodland blocks copses that fit the landscape characteristics of the site

The proposed after use for agriculture is deemed appropriate. The retention of the relic oak trees and the introduction of additional woodland, hedgerows and oak trees are supported, and should provide a landscape enhancement. In particular the restoration of the historic hedgerow boundary helps reinforce the landscape pattern.

With regards the new hedgerow and tree planting along the southern section of the byway that crosses the site, it is not understood why the planting switches from one side of the footpath to the other, the contours at this point also appear to suggest a sharp change in levels.

It is proposed to retain the site access for agriculture. Whilst this may be supported in principle, there is concern for the permanent negative landscape and visual impact of the access due to its substantial engineering and design for minerals development. It is strongly advised that the access should be restored to a character and quality that reflects a typical rural field gateway.

Visual Effects

With regards to views from the wider area, a landcover of arable farmland, with woodland, hedgerows and trees helps assimilate the site with the wider agricultural landscape, however the appearance of the proposed landform, in particular in working phase 4, is not supported for the reasons as explained under landscape effects.

Byway

The most significant views are from users of the public footpaths that cross the site, in particular the byway that runs between St Johns Wood and Wadesmill Road.

Along here, views to the west are filtered by the new hedgerow and tree planting. There is likely to be views towards the banks that accommodate a change in level along the northern and western site boundaries with Sacombe Road, Rickneys Quarry and St Johns Wood, whilst the banks are not deemed characteristic of the local landscape, their appearance is softened by the new woodland planting.

With regards views to the east, they are generally open, with the exception of the northern section of the footpath from which views are interrupted by the linear and curving raised area along the eastern site boundary of working phase 4.

Summary & Conclusion

Overall the ability of the site to accommodate the proposed development without causing unacceptable harm to landscape character and visual amenity varies between different areas of the site, for each stage of the development life cycle.

Phase 1 – 3

The principle of minerals extraction is established within working phases 1-3 due to their location within the 'preferred area.' Within these areas, negative landscape and visual effects as a result of the operational stage are mitigated due to the containment of works within the less sensitive elevated and/or flatter part of the plateau landform, and the screening effect of the local topography and established vegetation in combination with the temporary bunds.

At the restoration stage, the restoration of the landform profile similar to existing, and the recreation of the distinct dry undulation, is supported. There is some concern for the negative landscape and visual effects as a result of low level restoration, and the creation of a bank along the site boundary, however the significance of this is reduced due to the mitigating effect of the proposed planting.

The proposed after use for agriculture, the retention of the relic oak trees, and the introduction of additional woodland, hedgerows and oak trees is supported, and provide a landscape enhancement.

Phase 4

The proposed working phase 4 is not supported. The operational stage results in significant negative landscape and visual effects due to the erosion of the distinct transition between the plateau edge and the valley slopes, and its impact upon views from the byway, Wadesmill Road, and from across the valley to the east.

At the restoration stage, the proposed landform results in significant negative landscape and visual effects due to the erosion of the distinct transition between the plateau and valley side, and the creation of linear and curved raised area that interrupts the consistent valley slopes and views from the byway.

Site access/facilities/stockpile area

The proposed site access/facilities/stockpile area is not supported. The operational stage results in significant negative landscape and visual effects due to the interruption of the sloping valley side and the removal of a substantial length of established roadside vegetation, and its impact upon views from the byway, Wadesmill Road, and from across the valley to the east.

Conclusion

In conclusion, whilst the principle of minerals development is established within working phases 1- 3 due to their location within the PA, the proposed development is not supported in landscape and visual terms due to the significant negative landscape and visual effects as a result of the location of the site access/facilitates/stockpile area, and the proposed operations and restoration of working phase 4.

HCC Archaeology

An archaeological evaluation of this proposed development site took place in 2014-2015, prior to the submission of this application. This evaluation comprised a geophysical survey of the site, and a programme of trial trenching, and the reports on this work are included in the Environmental Statement submitted with the application.

The archaeological investigations produced significant archaeology, particularly with the identification of an early-mid 1st century A.D. enclosure at the north-western end of the site and the new evidence of Late Mesolithic/Early Neolithic activity. The finds from the former suggest high status occupation, and the forms and fabric types of some of the imported pottery found may compare with contemporary assemblages associated with

funerary activity, found at Skeleton Green, Puckeridge and at King Harry Lane, St Albans.

The geophysical survey and trial trenching have therefore demonstrated that significant archaeological remains (heritage assets of archaeological interest) are present on the site. These are in the main present on the level higher ground at the northern/north-western end of the prospective development site, but not entirely so. The identification of the early-mid 1st century enclosure is particularly significant, given the finds assemblages from it, and this and adjacent areas are likely to require a programme of open area excavation. The stripping of topsoil and subsoil in other areas has lesser implications, but should also be carried out as part of a programme of archaeological work prior to any mineral extraction.

The current proposal will involve the stripping of topsoil over the site, prior to extraction, and I note that it is recognised in the Environmental Statement and the Non Technical Summary that 'all the archaeological features will be destroyed in the course of excavating the mineral.' I also note that it is intended to phase the extraction of minerals from the site.

The proposed development is such that it should be regarded as having an impact on below-ground heritage assets of archaeological interest which will require mitigation via a detailed programme of archaeological work, and I recommend therefore that the following provisions be made, should you be minded to grant consent:

The excavation of the area of the 1st century enclosure noted above, before any development commences.

The archaeological evaluation of all areas of the site subject to phased extraction and to associated works, such as the construction of compounds, stockpile areas, site offices, and new access, before any development commences. This is likely to be via a programme of 'strip, map and record'. The monitoring will include all soil stripping and ground reduction, as appropriate.

Such appropriate mitigation measures indicated as necessary by the above programme of archaeological evaluation.

These may include:

The appropriate archaeological excavation of archaeological remains identified during the programme of archaeological evaluation, before any development commences on the site;

- The analysis of the results of the archaeological work, with provision for the subsequent production of a report and an archive, and the publication of the results, as appropriate;

Such other provisions as may be necessary to protect the archaeological

interests of the site.

I believe that these recommendations are both reasonable and necessary to provide properly for the likely archaeological implications of this development proposal. I further believe that these recommendations closely follow the policies included in Policy 12 (para. 141, etc.) of the National Planning Policy Framework. In this case *three* appropriately worded conditions on any planning consent would be sufficient to provide for the level of investigation that this proposal warrants. I suggest the following wording:

- A** *No demolition/development shall take place/commence until an Archaeological Written Scheme of Investigation has been submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of archaeological significance and research questions; and:*
- 1. The programme and methodology of site investigation and recording*
 - 2. The programme and methodology of site investigation and recording as suggested by the archaeological evaluation*
 - 3. The programme for post investigation assessment*
 - 4. Provision to be made for analysis of the site investigation and recording*
 - 5. Provision to be made for publication and dissemination of the analysis and records of the site investigation*
 - 6. Provision to be made for archive deposition of the analysis and records of the site investigation*
 - 7. Nomination of a competent person or persons/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.*
- B** *The demolition/development shall take place/commence in accordance with the programme of archaeological works set out in the Written Scheme of Investigation approved under condition (A)*
- C** *The development shall not be occupied/used until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition (A) and the provision made for analysis and publication where appropriate.*

If planning consent is granted, I will be able to provide detailed advice on the requirements for the investigations and provide information on professionally accredited archaeological contractors who may be able to carry out the investigations.

The Woodland Trust

The Woodland Trust **objects** to the planning application on the basis of damage to St John's Wood (grid ref: TL324153), an Ancient Semi Natural

Woodland designated as such on Natural England's Ancient Woodland Inventory (AWI).

Ancient woodland is defined as an irreplaceable natural resource that has remained constantly wooded since at least AD1600. The length at which ancient woodland takes to develop and evolve (centuries, even millennia), coupled with the vital links it creates between plants, animals and soils accentuate its irreplaceable status. The varied and unique habitats ancient woodland sites provide for many of the UK's most important and threatened fauna and flora species cannot be re-created and cannot afford to be lost.

Guidance from central Government states 'planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.' (Paragraph 118 point 5 National Planning Policy Framework).

The Natural England standing advice for Ancient Woodland and Veteran Trees (published April 2014) at paragraph 4.8.1 states: 'Ancient woodland is of prime ecological and landscape importance, providing a vital part of a rich and diverse countryside. In particular, ancient woodland:

- is exceptionally rich in wildlife, and supports many rare and threatened species;
- may contain surviving descendants and features from the original natural forests;
- acts as reservoirs from which wildlife can spread into new woodlands;
- has valuable soils due to their undisturbed nature;
- is an integral part of England's historic landscapes and the biological and visual functioning of a landscape;
- contains a wealth of features of historical and archaeological importance little altered by modern cultivation or disturbance;
- contributes to people's sense of place and imagination.

Our Concerns

The Woodland Trust is concerned about the following:

- *Fragmentation as a result of the separation of adjacent semi-natural habitats, such as small wooded areas, hedgerows, individual trees and wetland habitats;*
- *Development provides a source of non-native plants and aids their colonisation;*
- Noise and light pollution occurring from adjacent development;
- There can be changes to the hydrology altering ground water and surface water quantities;
- *Any effect of development can impact cumulatively on ancient woodland - this is much more damaging than individual effects.*

When land use is changed to a more intensive use such as in this situation plant and animal populations are exposed to environmental impacts from the outside of a woodland.

In particular, the habitats will become more vulnerable to the outside influences, or edge effects, that result from the adjacent land's change of use. These detrimental edge effects can result in changes to the environmental conditions within the woodland, changing the stable conditions that are within the woodland.

Creation of new areas of woodland or buffer zones around semi-natural habitats, and more particularly ancient woodland, will help to reduce and ameliorate the impact of damaging 'edge effects', serving to improve their sustainability. The size of the buffer is dependent on the intensity of land use adjacent to ancient woodland.

Buffering

Natural England's Standing Advice on Ancient Woodland (April 2014), Section 6.4:

"Development must be kept as far as possible from ancient woodland, with a buffer area maintained between the ancient woodland and any development boundary. For buffers to be effective they need to be designed on a case by case basis. The 15m buffer referred to in the Standing Advice was in relation to a housing development, not an industrial activity that will, at times, be in operation 24 hours a day. There is no one size fits all approach to buffer design and each buffer will be unique to its location and the functions it is to fulfil. A good understanding of what needs to be protected is needed before any buffer construction takes place. Furthermore, once a buffer is constructed its effectiveness needs to be monitored and assessed and the results made available so that subsequent buffer designs can be amended and improved.

The 10m undisturbed buffer and additional 10m margin referred to in your mitigation measures (Volume 1 – Environmental Impact Assessment – p24) are appreciated but the Woodland Trust feel the undisturbed buffer needs to be at least 100m. This would also allow for the total distance to the ancient woodland edge to total 30m. This is particularly important in the protection of the badger colony within St Johns Wood (as identified – Volume 1 – Environmental Impact Assessment – p41)

Dust

The production of dust is an integral part of all quarry activities. While we acknowledge that this quarry is working with wet deposits and produces less dust than dry quarrying the flora within ancient woodland is particularly sensitive to dust. Dust has a major deleterious impact on epiphytic lichens with all but the most resistant species dying at high dust concentrations. Lichens are used as a monitoring tool for air pollution owing to their sensitivity. Lichens form part of the complex ecosystem that make up ancient woodland and their health can be used as a good indicator of the quality of the rest of the habitat. Loppi and Pirintsos (2000)¹ investigated the distribution of epiphytic lichen to assess the impacts of both acid and alkaline dust from quarries. They showed the main factor that influenced the distribution of lichen was dust itself rather than the chemical composition of the dust. The impacts of dust therefore varied with distance from the quarries with all but a few resistant lichens dying at high concentrations of dust.

The chemical composition of the dust can also have a direct impact on the soil chemistry, dust and chemical drift produced by quarrying and mineral extraction can affect woodland several miles downwind. Research into impacts of alkaline dust is more extensive than the impacts of acidic deposits, but effectively demonstrates the level of impact that might be expected from acid deposition. For example, research at a wood 0.5km distant from an Austrian lime quarry and adjacent cement works indicated calcium levels were fivetimes greater than at a control site 30km distant (Berger & Glatzel 1998)².

Much work has been undertaken to show that trees can be effective as filters of dust particulates with commensurate improvements in air pollution (e.g. Beckett et al 1998)³) however the trees suffer consequences as a result of this process. Mandre and Ots(1999)⁴ showed that over a four year period regularly surveyed conifer trees, when compared with unpolluted controls, suffered 61% reduction in height growth and similar reductions in shoot, root and needle growth. Farmer (1993)⁵ presents a review of the evidence of the impacts of dust on a variety of vegetation discussing both the mechanism and results and showed that the composition of woods could be fundamentally changed as a result of dust deposition.

We appreciate that a number of mitigation measures have already been considered for dust production (Volume 1 – Environmental Impact Assessment – p61-63). However, the high level impact of dust on ancient woodland is undeniable and is further backs our recommendation for a 100m buffer.

Noise

The site will also be disturbed due to the increase in the level of noise on the site.

Quarrying and mineral extraction is a noisy process (e.g. increase the number of vehicles on site, blasting, processing and warning sirens). The increase in noise will potentially have an adverse effect on woodland species present within the site.

In summary the Woodland Trust **objects** to this application because it is felt the buffer to protect St Johns Ancient Woodland and the protected species within it are currently insufficient. We suggest that the undisturbed buffer is increased to 100m.

The Council for the Protection of Rural England (CPRE) has a number of concerns with regard to the application -

It is premature in respect of the principal justification for creation of a new aggregates quarry in the near future, and would have serious adverse impacts, that in our opinion necessitate the refusal of planning permission.

One of the principal considerations set out by the applicant in respect of the planning policy context is that the Consultation Draft East Herts District Plan (EHDP) identifies the land south of the site as a potential Housing allocation, and therefore the aggregate near that site should be removed before that

housing is built and occupied. This is not a material consideration at this stage for the following reasons:

1. The Consultation Draft EHDP has very limited weight according to Planning Inspectors who have determined recent planning appeals in the District;
2. The allocation of the adjacent land for Housing is contrary to both the current adopted East Herts Local Plan Review, and national Green Belt policy as set out in the NPPF, and is expected to be strongly opposed by a range of interested parties;
3. Even in the event that the adjacent land is allocated for housing development in the Adopted EHDP in due course, there would be well in excess of a decade within which the aggregate could be removed within the southern part of the site before any of the new occupants moved into houses within an area that could be adversely affected by noise, dust, etc; and
4. That occupation of new housing would be expected to commence from the south, at the greatest distance from the quarry.

We note that the application documents also contain a significant misinterpretation of the status of the adopted Minerals Local Plan Review allocation of the majority of the site south of Rickneys, exclusively west of Byway 1, the important right of way from Bengo to Chapmore End. Contrary to the applicant's claim, the allocation of 'Preferred Area 2 – Land adjoining Rickneys Quarry, near Hertford' in the adopted Minerals Plan Review 2002 – 2016, is subject to 'Specific Considerations' the first of which is that *'Working of this site would be considered as an extension to the existing Rickneys Quarry'*, not as a new freestanding quarry.

This is a very important issue because the land south of Rickneys cannot be independently worked for minerals without major disruption to the use of Byway 1, and also because the use of land east of that Byway would be in a much more exposed landscape. Both of these considerations were identified as important disbenefits to avoid when the principle of the site's allocation, and site boundaries, were determined by the Minerals Local Plan Review.

CPRE Hertfordshire is similarly concerned that the proposed stockpiling, plant storage and other operational areas of the site that would be heavily used by mobile plant and haulage vehicles, is within the area considered to be vulnerable to potential pollution of the major water supply aquifer that underlies this part of Hertfordshire and from which groundwater is abstracted for local water supplies. In addition, the boundary of the newly proposed extraction area 'Phase 4' would be within 100 metres of the Wadesmill Road water supply borehole, rather than 300 metres as proposed in the Minerals Local Plan. This concern about potential water pollution would be totally avoided if the site were worked as proposed in the Minerals Plan.

Further comments from CPRE received 2017 - Although the East Herts District Plan has progressed to its next draft stage since that time, there has been little change to the status of the proposal to build housing to the south

of the site, which has yet to be tested by an Inspector at a public Examination, and which is strongly contested by many objectors.

The main issue that arises out of the applicants' new proposals, however, is that they now intend that only two thirds of the mineral resource at the site would be extracted. This action would indeed sterilise a limited resource of around 0.8 million tonnes of sand and gravel at the site, despite the claim in the submitted 'additional information' statement that this would not prevent future exploitation. This is because that mineral could not be accessed in future either sustainably or economically, because the infrastructure to do so would not exist, and the necessary operations to re-open the site would cause unacceptable harm, particularly if the land to the south were to be allocated for housing development in the East Herts District Plan, as hoped by the District Council and assumed by the applicants.

Furthermore, the failure to exploit the resource identified in the Minerals Plan would put pressure on the County Council to release other, inevitably new sites for mineral working. Either all the resource identified in the Adopted Minerals Plan is extracted in accordance with the provisions of that statutory Plan, including those referred to in our letter of 29 April, or the application should be refused. These are not matters that can be addressed by planning conditions.

For the above reasons, and those set out in our letter of 29 April 2016 we continue to ask the County Council to refuse the application.