



**Stop Bengo Quarry
Response to Planning Application for Extracting
Sand and Gravel from Land at Ware Park
(known as Bengo Field), Hertford
Ref PL\0870\17**



**Submitted by Stop Bengo Quarry
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INTRODUCTION

The Stop Bengo Quarry campaign strongly opposes the proposed quarry north of Hertford.

Campaigners believe that all the objections raised in the previous consultation remain. The threat to the landscape and wildlife remains. The health concerns related to gravel extraction remain. The impact of the quarry on the water supply and highways remains a concern. If the quarry were permitted, the character of this part of Hertford will be permanently damaged.

This document addresses some of the main issues and concerns in response to the quarry application, covering: traffic and road safety, landscape and amenity, ecology, dust and health, water contamination, archaeology, noise and the strategic need.

The strength of local feeling, expressed in response to the original application, has continued to increase since the original application in April 2016. The following provide evidence of the strength of the opposition to the quarry just outside Hertford:

- **1,093 members of the Stop Bengo Quarry Facebook group** campaign actively and exchange views, findings and updates. **2,462 followers of Save the Countryside – Stop Bengo Quarry Facebook page** follow up and share the campaign updates.
- We have a **Facebook presence of well over 3,000 followers**. Some of our campaign Facebook updates have been viewed 15,000 times.
- In October 2017 we had **2,323 campaign website page views** with average session duration of 2.38mins. **61.9%** of visitors to the website were new.
- The campaign is supported by **MP Mark Prisk**, as well as the local **Green Party** and **Labour Party**, and a number of local Residents Associations including **Molewood Residents Association, Lower Bengo Residents Association, Chapmore End Association, and Watermill Estate Residents' Association**.
- The Stop Bengo Quarry's HCC e-petition against the quarry proposal has just been approved and the figures of the supportive entries will be shared with HCC within the next few weeks.

Stop Bengo Quarry would also like comment on the overall way the new application is presented to the public. We consider the new application unsatisfactory because it is incomplete, which makes the reading of the documents confusing, if not incomprehensible. Some examples of this are:

1. The Transport statement – relies on the Transport statement prepared in the original application of February 2016.
2. The Landscape section - it is unclear whether to refer to the original LVIA of Liz Lake or the LVIA of the revised application and because the new post-quarry relief map shows a significantly different final landform neither documents are actually applicable.
3. The ecology section - relies on the original assessment from February 2016.

With a matter of such great interest to the community and of such great public concern this is neither satisfactory nor acceptable. At very least the developer should have resubmitted all the documents with the appropriate addendums attached so that it was clear which documents were being referred to in each section.

It is of very great concern to us that the documents are presented in this way and we believe that unless corrected invalidates the application – since the application is clearly incomplete.

Finally, the new draft Minerals Local Plan does not recommend the Bengo Field as a preferred area. We welcome this development and hope that this will be taken account of when judging this new application.

1. Landscape and amenity concerns

The land proposed for the quarry is a much loved and visited piece of Green Belt (known locally as Bengo Field), containing two extensively used public rights of way with beautiful views across the Rib Valley towards Ware Manor.

The land is of the Stony Hills landscape character and contains two wave form ridges with distinct central dry valley. The site lies on sloping land with relief sloping to the east towards the river Rib.

The Landscape Visual Impact Assessment from Liz Lake (1571 LVA Technical Addendum) takes the form of an addendum to application 3/0770-16. However, there are some significant landscape changes in the new proposal, including:

- a new attenuation area, close to the footpath, is planned
- the slopes are steeper than originally anticipated
- the deepest point of the quarry is below the level of the current path (this point is planned to form the attenuation area).

However, within the addendum to the LVIA, views from different locations are not re-considered – as they should be.

The central public footpath, recently declared an asset of community value, is heavily used throughout the year.

It is declared that the central footpath would be undisturbed apart from movements of lorries, yet quarrying working appears to go up to the very edge of the path. It is far from clear how the lorry movements would be safely handled given the current high usage of the path. There is no real explanation as to how bunding would be managed or users of the path protected from the daily workings in the quarry.

The addendum totally fails to explain the rationale behind the new proposed (post restoration) landscape.

Several of the points made in the rejection of the previous application have not been addressed. For example, the quarry is not an extension of Rickneys quarry, and considerable truck movements across currently open land would be required.

The developer has stated (both in the East Herts District Plan - Statement of Common Ground – Gowling WLG Trust Corporation Ltd, and indirectly in the Environmental Statement for the original application) that extraction of minerals is necessary so that the land is not sterilised prior to the development of housing as a part of HERT4 to the south of the field. It is, therefore, clear that the eventual landscape will not be that envisioned in the technical addendum or as shown in the drawings because the southern part of the site will contain new houses.

To our knowledge there has never been a landscape assessment which included house building on this precious and valued part of the green belt. This makes the entire landscape assessment flawed as clearly some of the views mentioned would be affected by the new housing. The future of the landscape and the rural amenity value of our countryside is very much the business of HCC, and therefore it is important to consider the complete plan for the land – not just the part covered by the immediate application to extract minerals.

D.K. Symes Associates, Environmental Statement says:

- 1.3 *These competing land uses are recognised at both Government and County level (Hertfordshire County Council (HCC) is the mineral planning authority) and policies are in place to avoid the needless sterilisation of known mineral reserves as the deposits are finite. Therefore, **there is a real risk that the need for further houses could result in the sterilisation of the identified mineral deposit, both directly by building over the minerals and indirectly by locating new residential development adjacent to an identified mineral area** resulting in increased environmental constraints.*
- 1.4 *In order to address this conflict discussions have taken place with EHDC who are the authority responsible for delivering the additional homes that are needed.*

Statement of Common Ground states:

- 4.1 *Plan 1389 A4 01 A is an indicative concept master plan prepared by Liz Lake Associates which demonstrates how the Pre-Submission HERT4 site can be comprehensively developed to provide up to 150 dwellings. **Prior to residential development on the Trust land, minerals would be extracted from the land immediately to the north, which is within the Minerals Preferred Area.***
- 6.5 *The specific requirement in terms of the development of the Trust part of HERT4 is the need to remove minerals under, and close to, the site. [...] This was proposed to*

*be followed by phased restoration which would ensure that the southern part of the minerals area is restored to its final landform by 2020. This would allow the new planting to be created to form the new Green Belt boundary, **so that dwellings can be occupied on the Trust land from this date.***

CPRE states:

*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.*

Impact on the landscape and amenity

The proposed quarry would have a devastating impact on the landscape. The proposed central attenuation area (pond) would be both unsightly and potentially dangerous for users of the path and children.

The revised landscape plan still anticipates significant changes to landscape and would be visually devastating – both during the period of operation and after. The attractive rolling landscape is irreplaceable – the proposed new landform would look unnatural and unsightly. According to the technical addendum steep slopes of 1:7 and 1:8 would be introduced to the north, south and east of the site.

The quarry as before still skirts St John's Wood with potential damage to amenity, to the hydrology of the woodland as well as the flora and wildlife.

The proposal fails to take into account views during the autumn and winter when trees are not in leaf and neglects many views from many of the local public rights of way that surround the site.

The land is of significant local amenity value and hundreds of people use the field weekly for walks and enjoyment of the countryside. Our landscape survey had 417 respondents 95% of whom thought the view was either special or very special. At a public meeting of 280 residents in June evidence was gathered that almost all of these present considered protection of local green spaces as of highest priority.

Our landscape survey clearly shows that hundreds of people use the field as an amenity, for health walks, and for enjoyment of the landscape and at least 30% travel up to 15 minutes to reach the field.

We believe that the new proposal does not address the concerns of the landscape officer with regards to amenity at all.

The developer has never assessed the public use of the land or attempted to work with the local community to preserve the amenity value.

Bengo Field is the only open agricultural land available on the edge of Bengo urban area, the landscape is enjoyed by hundreds of people weekly as a part of their health regime. This in part explains why the field is so loved and valued locally. The plan would also

deprive people of a much-loved amenity for at least 10 years while the quarry is in operation and probably for considerably longer.

For all these reasons the new proposal remains entirely unacceptable to the local community.

2. Ecology concerns

There is a note at the beginning of the applicant's document Updated Ecology Survey saying "The original Ecological Survey is provided electronically only." That survey appears not to be among the application documents. For the purposes of this response we have assumed that this is actually ES vol. 2 - Ecological Assessment Extended Phase 1 Nov 2015 - originally submitted with planning application 3/0770-16. If that assumption is incorrect we would respectfully ask for an electronic copy of the correct document together with a deadline extension so that we may study and respond to it.

The document Updated Ecology Survey seems to contain 2 documents:

- A copy of the document Further Ecology Information submitted as Further Information for PA 3/0770-16 and dated November 2016. We note that this document refers to other documents that were submitted as part of PA 3/0770-16, but which do not appear to have been "carried over" to the current application.
- A Wintering Bird Survey report dated March 2017.

In our response to the revised form of PA 3/0770-16 we discussed weaknesses in both the original Ecological Survey and the Nov 2016 Ecological Advice Response (referred to below as the EAR) which was intended to address the concerns raised by Hertfordshire Ecology in their comments (dated 17 June 2016) on the relevant sections of PA 3/0770-16. We reiterate those comments here, together with some updates to reflect the applicant's latest statements.

We strongly disagree with the positions taken in the EAR. There is still no attempt to actually survey or manage important wildlife such as badgers or brown hare, nor to identify how the site itself fits into the local pattern of land usage. The Planning Statement and Updated Environmental Statement now asserts, apparently without evidence, that the removal of Phase 4 from the proposed scheme means there would be no impact on the one identified sett in St John's Wood.

The dangers to St John's Wood itself, highlighted by the Woodland Trust and others in responses to the initial application, are simply brushed aside with little supporting evidence.

The suggested hedgerow planting may be desirable, but cannot be supported without concrete information on how the hedgerows will be managed in the longer term.

We note that throughout the original application and the EAR there is barely any detailed description of how the ecology will be managed during and after restoration. Such management is all deferred to an as-yet-unwritten Landscape and Nature Conservation Management Plan (LNCMP) which, if we understand correctly, the applicant will produce

after permission has been granted. It seems to us that such plans provide important information that is required when attempting to judge whether (for instance) hedgerow planting is desirable and that the application is therefore incomplete.

We would also observe that the history of gravel extraction in this area shows that operators often allow the lifetime of quarries to extend well beyond the time span initially envisaged. Many of the applicant's assertions regarding the ecological consequences of this proposal and their mitigation are meaningful only if the envisaged timescale is adhered to. It seems crucial, therefore, that the LNCMP should be agreed before permission can be granted and that realistic measures are put in place to enforce its implementation.

We do not believe that the EAR actually improves the wildlife situation at all and that the Ecology Officer's original objections to PA 3/0770-16 still stand. We, therefore, object to the proposed extraction on the grounds of unsatisfactory provision for wildlife management.

The site and the locality

Generally, in the UK the local landscape is made up of a mosaic of different land uses - woodland, arable, heath etc. This is what gives the countryside in the UK and our county of Hertfordshire its unique rural appearance. This mosaic is also of use to wildlife because species that live in woodland often forage on more open ground, and autumn ploughing and cultivation turns up insects and earthworms, consumed by local creatures etc.

In the North Bengo area there is extensive local woodland but relatively little open agricultural land in the area close to housing. So Bengo Field is not just useful as a resource in its own right but is also a corridor between areas of woodland and surrounding countryside. Any ecological comments must use this context to be fair and balanced.

In among many other open fields Bengo Field would not be a particularly unique ecological resource, but nested as it is alongside woodland to the north (St John's Wood) and housing to the south, it plays a key role in maintaining the balance between woodland, housing and open field. It provides a natural buffer zone.

The overwhelming impression from reading the EAR is that the "*phased, short-term nature of the proposals*" (e.g. page 2, first paragraph) means that disturbance to wildlife such as brown hare or skylarks can essentially be ignored. We strongly disagree:

- Extraction is planned to take place in phases, but there would be significant disturbance from noise and other activity on the site throughout the entire period of operation.
- Restoration of any part of the site to farmland would not realistically happen until the entire operation is complete. Indeed, it is probable that re-establishment of actual farming could take decades from that point. As HCC officers are no doubt aware, long-term storage of soil in bunds dramatically reduces its quality and fertility.
- We already have evidence that skylarks may not return. Long-term local residents are well aware that skylarks used to be present on the fields that became the Rickneys quarry site. They disappeared during active extraction and, even though much of that site was restored about 10 years ago, the skylarks have not returned.
- Depending on the "*phased, short-term nature of the proposals*" is simply not a plan for wildlife at all - saying that the species are migratory is a failure to take responsibility for them. As mentioned above the buffer function of the field between road, houses and woodland actually means that there would be no easy places for

species to go to. Generally, hare and badgers are shy and would not remain in areas used for quarrying without special care being taken and the active involvement of naturalists etc to monitor populations and take remedial action.

St John's Wood

The EAR states that there is no danger to St John's Wood, either from changes to the hydrology or from dust. They assert firstly that since the trees are well above the groundwater level the wood depends only on moisture retained from rainfall and, since quarrying would (presumably) not affect rainfall, the woodland is safe.

We would counter that:

- Digging an 8-metre-deep hole next to a raised area, is likely to change the retention of water in the soil under the raised area. Please note that St John's Wood already slopes (naturally) down on the northern and western sides, so this proposal almost isolates the wood on top of a low hill.
- Again, anecdotal evidence of what has happened at Rickneys quarry shows that trees in exactly this kind of situation do suffer from increased stress. That quarry skirts (and slopes away from) the southern and eastern boundaries of Bardon Clumps (a small wood) and a significant number of trees along those boundaries have died or died back in the last 10-20 years.

The EAR also uses the presence of soil moisture as a justification for saying that there would simply be no dust. We question whether this is really an ecologist's area of competency, but will respond simply by saying that, again, experience shows that quarrying in this area generates very significant dust. Any long-term resident of Sacombe Road, Chapmore End or Crouchfields will remember that when Rickneys was active, very significant amounts of dust were generated. It is impossible to say what damage has already been done to areas such as St John's Wood (or indeed to public health in general), but it is clear that further quarrying would generate more dust and would do more damage.

Hedgerows

From an amenity and landscape perspective, the beauty of this particular field is largely due to its open nature and rolling landscape. The proposed hedgerows, therefore, could be seen as an undesirable change. It can be argued that from an ecological perspective a hedgerow could enhance the field's ecological diversity by providing nesting cover for birds and homes for reptiles etc.

However, when discussing hedgerows we should recognise that we do not need a quarry in order to plant them - there are generous agricultural grants available for this. The case for planting hedgerows (or not) should come from the land itself and a judgement as to whether such a planting has agricultural and ecological benefits. If it does have such benefits then this planting can happen without a quarry.

A hedge takes up to 30 years to establish and during the first 10-15 years will require active management. As with all the other ecological topics, however, there is no detailed plan for such management presented - it is deferred to the LNCMP. We are, therefore, left in the position of trying to assess the merits of a proposal without knowing exactly what it is.

The absence of the LNCMP, or any similar information, forces us to conclude that the applicants may not be seriously committed to the long-term ecological management of the site and that there is not a sustainable plan for hedgerows or for hedgerow management. Since a failed hedgerow would add no ecological value and may simply become an eyesore, we contend that there is not a credible rationale for planting hedgerows.

3. Water supply concerns

In Bengo Field, sand and gravel lie on top of chalk. The chalk is the aquifer that supplies the local grid operated by Affinity Water. Hertford takes its water from this grid.

Six million litres of water are drawn each day from boreholes at the Wadesmill Road pumping station. Those boreholes lie within the field that is proposed to quarry. Fractures in the chalk mean that any pollution can reach those boreholes rapidly: a point recognised by all parties involved with this resubmitted proposal to quarry Bengo Field.

The threat to the water supply is enough in itself to rule out a quarry in this field. The applicant's own consultants, Hafren Water, have identified clearly the nature of the risks that would arise by quarrying in a field that contains key water-supply boreholes. Any pollution entering the aquifer would spread rapidly through fractures in the chalk. Pollution entering the main body of the chalk via these fractures would be slow to clear. Earlier **reports by hydrogeologist KJ Edworthy for McMullen & Sons (1992)**, and by **Lee Valley Water Company (1990)**, demonstrate the serious possibility of causing damage to the chalk aquifer by quarrying north of Hertford.

Permission to quarry cannot reasonably even be considered at this stage. We do not yet have a sufficiently accurate survey of the geology of the field to be able to assess adequately the risks to the water supply posed by the proposed quarrying. Granting permission for operations without obtaining and considering such a survey would be a failure of due process, and would leave the various parties who are responsible open to legal challenge in the event of any subsequent interference by quarrying operations with the water supply.

Assessment of the chance of successful prevention of pollution requires a detailed map of the buried chalk surface, and a survey of the size and orientation of fractures within the chalk aquifer itself. Such information has not been presented by the applicant. Yet the measures proposed by the applicant to protect the aquifer only work if the top-chalk surface is smooth. We do not know whether the surface of top-chalk is smooth in Bengo Field: the limited evidence we do have suggests that the surface is not smooth.

Hafren Water (for the applicant) interpolate sub-parallel contours between borehole determinations of depth from surface to top-chalk, thereby giving the appearance of a smooth surface at top-chalk. Evidence collected nearby during **geological research by Dr Bryan Lovell of the University of Cambridge** suggests that a detailed survey in Bengo Field will prove that the top-chalk surface is not as smooth as sketched by Hafren Water.

The Environment Agency (EA) stated on 20 September 2017 (e-mail from Simon Hawkins to Lovell) that uncertainty about the nature of the top-chalk surface is a "*valid concern*". The

EA says that coping with this valid concern is the role of Hertfordshire County Council rather than a matter for the EA. In any event, a survey of top-chalk is a prerequisite for adequate appraisal of risk of quarrying.

Dr George Tuckwell of RSK Hemel Hempstead, advises (email to Lovell of 6 July, 2017) that mapping the top of the chalk aquifer is feasible, but fractures within the chalk are harder to image in detail. The difficulty of mapping the fractures within the chalk is confirmed by **Dr Adrian Butler of Imperial College London, Chairman of the Hydrogeological Group of the Geological Society of London** (email to Lovell of 26 September 2017). Dr Butler suggests that this difficulty in mapping fractures means that it is best to take a “precautionary principle approach” in assessing the risks to water-supply wells.

The data required to make a rational decision about the safety or otherwise of quarrying in Bengo Field have not been presented by the applicant and are not otherwise available. In these circumstances no party involved can make a rational and hence defensible decision. On these grounds alone, the re-application to quarry should be refused.

It is probable that the geology of Bengo Field precludes safe extraction of sand and gravel from above the chalk aquifer. Fortunately, the relatively small quantities of sand and gravel it is proposed to quarry are not essential for the local or national community. What is essential is that we protect the chalk aquifer.

4. Air quality and health concerns

The National Planning Policy Framework states that planners must “*ensure in granting planning permission for mineral development there are **no unacceptable adverse impacts on... human health***” (our emphasis).

In its response to the developer’s original proposal to build this quarry within a few hundred metres of a primary school, Natural Health England said the developers must show there will be no “*additional emissions including dust or particulate matter which could adversely affect the local community*”.

Neither of these conditions is met by the new proposal from the developers, as shown by the air quality assessment they submit.

At first glance, the air quality report appears to give the development a clean bill of health and states the risks posed by fugitive dust emissions are negligible. This is misleading. The report and its conclusions are based on what the report authors claim are “*robust assumptions*”. It is for the Planning Officer and Committee to decide whether those assumptions are sufficient to make a decision of this scale and impact. We argue they are not, for the following reasons.

The air quality assessment concludes the risk to the health of children at the school (and local residents) is negligible based on guidance issued by the Institute of Air Quality Management (IAQM). This guidance, it should be noted, comes with an important caveat. It reads: “*The IAQM does not expect practitioners to follow the suggested approach in all*

circumstances. Other approaches may also be valid, provided they are based on sound scientific principles.”

As detailed in our original submission that expressed concern about the possible impact of the quarry on health, there are significant scientific studies that warn about the risks carried by exposure to particulate matter.

The approach taken in the submitted air quality assessment report to address this risk relies on estimates of mean annual exposure, and states that the (estimated) process contribution to the (estimated) background particulate matter level is unlikely to push the (estimated) total annual mean exposure over the statutory limit.

This, as the IAQM makes clear, is one approach. But, in our view, it is inadequate. We note that an earlier response from HCC also points out its severe limitations – not least that no baseline conditions are available. We agree with the HCC suggestion that, as a minimum, no permission can be granted for the development to proceed without this information.

A better approach, and one based on the sound scientific principles the IAQM recommends, is to consider the possible daily exposure to particulate matter for children at Bengeo Primary School. As the IAQM guidance points out, “*dust impacts will occur mainly **within 400m** of the operation*”. The **school is 350m** from the proposed site boundary. It is important to note that school pupils and staff will not be exposed to an annual average amount of harmful dust. The timing of the school day (8am-6pm, Monday to Friday) maps almost exactly onto the proposed quarry’s hours of operation. And when the weather is fine and dry, children are more likely to be outside during the precise conditions when more dust will be created.

For PM10 concentrations, the legal limit is 50 micrograms/cubic metre, which must not be exceeded over a 24 hour period more than 35 times a year. The IAQM guidance notes that this threshold could be exceeded for “*several days per year*” without having a significant impact on annual mean concentrations. The (estimated) annual mean figure used to dismiss the risk to health of the quarry, in other words, provides no guarantee that children at the school will not be exposed to greater than this daily limit on repeated occasions.

In fact, the developer’s own air quality assessment suggests that the wind will blow directly from the quarry site to the school 12.5% of the time. That is 46 days a year. Therefore there is a possibility that PM10 exposure levels at the school will be illegally high. And, of course, there is robust, peer-reviewed, research published in recent years that the risk to health could be significant at much lower levels.

What is the risk to the children? Could the development be in breach of the law? Could children at Bengeo School be exposed to illegal levels of pollution and therefore place the school (and HCC) in breach? We do not know. You do not know. Most importantly, the developers do not know – they have not provided a single real measurement of dust released from their proposed site. Given the uncertainty, and the risk to the health of vulnerable children, the proposal cannot be permitted to proceed without this information.

At the very least, the committee must make clear to the developers – as the HCC’s own health officials suggest – that no operations will be allowed until stringent and reliable PM10 monitoring equipment is installed at the school, and run for long enough to get reliable

baseline data. And there must also be strict conditions imposed on the response when the pollution levels are too high.

5. Traffic and road safety

We have serious concerns about the unacceptable impacts that the proposed quarry would have in highway and movement terms. The applicant's analysis in the documents submitted in support of the planning application has not allayed residents' well-founded fears and is demonstrably inadequate to allow County Councillors on the County Council's Development Control Committee to fully assess its impact.

Our primary areas of concern are:

- Information submitted with this application does not adequately describe the highway and movement impacts of the proposed scheme. It makes no reference to the concerns set out in our formal responses sent to HCC on 2nd May 2016 and in February 2017. Nor does it respond to concerns expressed by many other local residents and their representatives. It simply answers questions raised by HCC Highways' in their first formal response submitted on 10th May 2016. Worryingly the report ignores the highway authority's second response made in December 2016.
- The Response to HCC's Highways Comments seems largely aimed at making the case that the scheme would not have a significant impact on congestion and safety on the wider surrounding road network in the long term. It takes no account of peaks in traffic associated with the site nor the operation of the site entrance at those busiest times. In policy terms all the attention has been focused on the final bullet point of paragraph 32 in the NPPF (in which permission should not be withheld unless residual impacts are severe) but paid insufficient attention to the point before that which requires that "*safe and suitable access to the site can be achieved for all people*".
- Our primary concern is in the area of road safety. We continue to question the ability of the B158 to cope with the predicted daily average of 80 additional extra heavy lorries. Under the amended scheme the overall quantity of gravel to be dug from the pit would be reduced by about a third. While this might result in reduced landscape damage it would do nothing for traffic congestion or road safety since the rate of extraction would be unchanged.

We continue to have major concerns about the unacceptable safety hazard that would be created by the construction of the new site access junction. This is an area where none of our earlier points have been addressed. Just because it "*accords to relevant design guidance*" does not mean that it could operate safely or without an unacceptable effect on congestion, especially at peak hours.

Information supplied

Highways impacts are described in detail in the 170-page document called Response to HCC's Highways Comments and in a more general way in the 21-page Updated Non-Technical Summary and the 78-page Planning Statement & Updated Environment Statement. All three documents refer to the Transport Statement (wrongly called Transport Assessment in the Summary) submitted with the earlier (March 2016) application. A copy of this key document has not been submitted with the new application. Analysis of the application by third parties, particularly these new to the scheme, is hampered by this

omission.

The detailed highway and transport document Response to HCC's Highways Comments is dated 14/11/2016. That was 4 months before the earlier application was determined. The document was in fact submitted as part of a late amendment to the earlier application in which the size of the proposed gravel pit was reduced. It seems odd, therefore, that this document is labelled Updated Response to HCC Highways Comments on the HCC website when nothing about it is new. At the very least the report should have been updated to make reference to the last formal consultation response by HCC Highways (dated 30/12/2016) in which their Mr Sehmi recommended that permission be refused because of the unsafe location and layout of the proposed site access. This remains a significant concern for the community as well as for the highway authority.

Highway aspects of the proposed development

The highway and movement aspects of the proposed quarry were described in the original (February 2016) Transport Statement (TS). Additional information was provided in section 4.5 Traffic of the original (March 2016) Environmental Statement (ES). Further information is provided in the subsequent Response to HCC's Highways Comments (14th November 2016).

According to para 3.2 in the TS the gravel pit would operate between 7am and 6pm on weekdays and 7am and 1pm on Saturdays. This is then qualified (in para 3.3) to state that the quarry would only operate in daylight and therefore that during "*the winter period*" it would close at 4:30 pm. HGV traffic generated by the site is described as "*80 per day on average*" in the Updated Non-Technical Summary.

The site would be accessed by vehicle from a new access junction in a dip in the B158 Wadesmill Road opposite the footpath from Watermill Lane, Bengo. This would be designed in accordance with the appropriate highway standards.

Traffic volume

The coverage of highway and movement aspects of the proposed quarry in the original Transport Statement is woefully short of information and analysis relating specifically to the quarrying industry. Residents know only too well how busy the B158 is, particularly in the morning rush hour. In both morning and evening peaks the A602 between the B158 junction and the A10 is congested in both directions. The presence of additional gravel lorries, made worse if Rickneys were to reopen before its December 2017 deadline, would only compound this problem as well as worsening air quality in the area.

The TS appears to have been based on a template for a more standard development, not for one involving the extraction and transport of minerals by road. A more intense examination would hopefully have given more information about lorry movements than the rather vague (and suspiciously round) figure of 50 vehicles a day with more detail on likely movements during the busiest morning peak hour.

We note that the A602 features in figure 2.45.2 of the County Council's Traffic and Transport Data Report for 2017 as one of Hertfordshire's most heavily trafficked roads. The degree of seriousness with which HCC regards the problem of congestion on the A602 is highlighted by the fact that it has begun to build an online improvement scheme to improve the route's capacity. That is an indication of how busy it is and how poorly it would cope with any more

HGVs. And yet the impact of the gravel lorries heading south to the site and then away to the north once loaded has not been assessed with any degree of rigour in the TS. Nor has traffic growth and development pressure on roads in the area over the 8-year duration of the proposed scheme been considered at all

The suspicion that HGV traffic generated by the quarry is likely to be greater in the morning than the evening peak hour is strengthened by the figures from the more detailed Transport Assessment for Rickneys quoted in table 5.2 of the TS. This predicts 29 trips in the morning compared with 10 in the evening. In other words, the neighbouring pit would generate nearly three times as much traffic in the morning rush as it would in the evening. We contend that a similar ratio should be applied to the Ware Park pit proposal and that if it were followed through TS paragraph 5.12 might be predicting that development traffic in the morning peak would be near if not over the critical 5% threshold usually applied when assessing the severity of the impact of additional traffic.

We also question that implicit assumption that development traffic patterns would be the same all year round. Given that there is acknowledgement that winter operations would be over a shorter day than in the summer, we would have expected this to be reflected into the trip generation and traffic modelling. No such subtlety of thinking has troubled this crude assessment.

Paragraphs 18-44 in new report are headed Traffic Impact. They state (in para 19) that *"there would be approximately six vehicles an hour or 12 two-way trips generated by the development proposal"* with no more substantiation and still no recognition of the likely higher numbers in the morning rush hour. It is recognised (in paragraph 21) that the total additional HGV traffic likely to be generated by this pit and the reopening of Rickneys would represent 4.2% of all traffic. Bearing in mind that these would be 8-wheeled tipper lorries and that we believe the numbers associated with the Ware Park proposal to be significantly underestimated, it is our contention that this would be a significant proportion of morning rush hour traffic and one on which the highway authority should have identified as leading to a severe negative impact on the free and safe flow of traffic on the B158.

The highway authority only chose to draw this conclusion about the roundabout at the junction of the B158 with Anchor Lane and the A602. In order to assess this the applicant's transport consultant had traffic counts taken on 19th October 2016. We would point out that private schools in the area were on half term holiday so the data so derived are not entirely representative. The description of the modelling done to predict future flows is not easy to follow since there is confusion as to whether the future or base year is 2015, 2017 or 2021.

The predicted flows were then 'plugged' into a computer model using TRL Arcady software. It is not clear but presumably the geometry used to set up the model was of the existing layout. We note that predicted RFC (Ratio of Flow to Capacity) values are unacceptably high on the Anchor Lane approach in the morning peak and on the Wadesmill Road approach in the evening. We would ask that the highway authority presses this point with the applicant and discusses it in its report to the DC committee.

Given that HCC now has planning permission to improve the A602, including making physical changes to this roundabout, we would regard this as committed development and would request that the future geometry as well as the resultant predicted increased traffic

flows on the A602 are also tested to fully understand the impact of the proposed development.

The furthest into the future that predictions about traffic patterns in the area have been made appears to be 2017. Given the 8-year lifespan of the proposed gravel pit and the planned levels of housing and other growth in the area we would ask that the highway authority and/or Development Control committee members demand that the situation later on in the life of the development is assessed.

We are disappointed that these points have not been picked up by the County Council's highway development management engineers and ask that this matter is put directly to them and their view made known in writing to the Development Control committee.

Traffic safety

In our view the B158 is not safe enough to cope with an average of an extra 80 HGV movements a day. TS para 3.11 records that 85th percentile speeds on the B158 were 59.6mph in the northbound direction and 60.8 heading south. These are so near the speed limit that they imply that a significant number of vehicles being driven along this stretch of road at well in excess of the safe speed. The collision record for the road is discussed in TS paragraphs 2.6 to 2.13. This backs up the feeling of Crouchfields residents that this is an unsafe stretch of road. The map of collision locations given in TA Appendix A shows that the 13 collisions that have led to injury have all taken place in the 1.3km stretch between the Rickneys junction and the A602 roundabout – the stretch that would be used by the gravel lorries from this pit and from the Rickneys extension which has a pending permission awaiting completion of its S106 agreement.

The figure of 80 lorry movements day is a crudely estimated average derived from the calculation given in paragraph 4.5.2 in the Planning Statement and Updated Environmental Statement. Were the DC committee minded to grant this should be assessed with HCC experts and a maximum set by planning condition so that it could be monitored and enforced.

Additional collision data is provided in the 'new' transport report in response to a request from the highway authority. It relates to the A602 between the B158/ Anchor Lane and A10 roundabouts. No map is given (as it was in the original TS) to show where the individual at events took place. We are disappointed that this has not been picked up by the County Council's highway development management engineers and ask that this matter is put directly to them and their view made known in writing to the Development Control Committee.

In our view the B158 is not safe enough to cope with the proposed new junction. Further study of the collision map shows that the collisions which have led to casualties and one death in the last 5 years are all clustered around the junctions. It would seem negligent, therefore, to introduce a new junction, let alone one in a dip in the road with curving horizontal alignment to the north.

Furthermore, there is a 7.5 T lorry ban in place to the right (south) on exit from the existing Rickneys site access road. This valuable safety and environmental protection would be compromised by the opening of a new heavy lorry access further south. No mention is

made as to the need to alter this to allow the proposed Ware Park pit to operate and then how the applicant would monitor and enforce this vital movement restriction.

This choice of location of the road access point is especially hard to understand given that the HCC specification for Preferred Area 2 in its Minerals Local Plan requires that the whole area is accessed via the existing Rickneys pit access road. Given that this road could itself be used again by gravel lorries at some point in the future it would appear reckless of the DC committee to permit a new collision cluster to be created. As well as being in a dip in the road the right turn lane for the new site access junction would be nearly opposite the access to Revels Croft Farm. We understand that the HCC Highways development management engineer has recently recommended refusal of permission because of this inter-relationship and ask that the Development Management officer team and Development Control committee take heed of this advice.

We note that the traffic information submitted by the applicant in December included a Stage 1 Safety Audit of the site access carried out for the applicant by GM traffic Consultants. It is included in Appendix I of the latest submission on traffic. Disappointingly the only issue it highlighted was the risk of overtaking collision associated with the introduction of a new access at this point. Whilst we recognise this point and welcome it being identified we are concerned that this was all that was spotted and, in particular, that no comment was made about the potential for conflict with traffic entering/leaving Revels Croft Farm. For that reason, we call into question the quality of the audit and would like to know whether HCC Highways will be signing it off by completing Appendix C - Local Highway Authority Response of the audit report.

Given these safety concerns we were surprised to see no mention in any of the material on traffic aspects of the development to a possible speed limit reduction on the B158.

Site management

Our concern is that drivers keen to win loads for their clients/ employers would arrive at or before 7am (or whatever the opening time is at that time of year) and have nowhere safe to wait. This aspect is a serious deficiency of the application. Rather than provide useful information about how the developer would manage the arrival of trucks prior to and immediately after site opening, the TS describes cycle routes and bus services in the vicinity. No reference is made to how they will be managed on a day-to-day basis other than the presence of a banksman at the main gate in paragraph 49.

We are pleased to note that "*all vehicle movements will be routed north along Wadesmill Road*" (para 35) as this would remove the negative impact of development traffic on Bengo Street. However, we are highly sceptical as to how this could be enforced, particularly in the case of staff and deliveries, and would ask that committee members seek to understand this on the behalf of residents.

Internal site operational issues are covered unconvincingly in paragraph 56 of the new report with the throwaway comment "*The applicant will ensure that the internal layout will be designed to ensure that there is no impact on the adopted public highway and it will be designed to ensure that there are no operational issues*". The applicant's transport consultant then sought to suggest that it was no business of HCC Highways how the site is managed yet has done nothing to address the questions and concerns of the Stop Bengo Quarry campaign and others on this critical aspect. We trust that officers and

elected members representing HCC as Planning Authority will take a keen interest in this area and seek answers to all our concerns.

Mud on road surface

An inevitable feature of all minerals extraction operations is mud on roads leading to/from the site entrance. The quality of the submission made in support of this application and the size of the site set-up proposed do not convince us that this significant environmental and safety hazard would be managed effectively. Committee members need not travel too far from Hertford to see examples of sites where this is an ongoing problem. Sites that spring to mind are those along the Lower Hatfield Road towards Essendon and Cole Green Lane on the way into Welwyn Garden City.

Damage to road surface and resultant safety hazard

It is our contention that in the longer term, with all these heavy lorries turning in and out of the site access, the road surface of the B158 would become dangerously rutted for cyclists and motorcyclists travelling along it. Highway degradation is addressed in paragraphs 67 and 68 of latest report.

However, there is no mention of cyclists other than (in paragraph 66) the derisory "*The proposed use will not generate a significant number of transport movements, including cyclists*". This demonstrates their lack of attention to concerns of local residents and of knowledge of the number of cyclists who use the B158 Wadesmill Road at weekends.

Rights of way

The other safety hazard that would be created were this scheme to be implemented involves conflicts between heavy plant and users of the Rights of Way around the site. These are addressed in the original application documents with glib words about appropriate fencing and signage. Given that this is an application for full, not outline permission, this is unacceptable.

Footpath HERTFORD 013 links the northern end of Watermill Lane with the eastern verge of the B158 opposite where the new site entrance would be built. Anyone emerging from the path and wanting to continue west would have to cross into the new site entrance and its steady flow of incoming and exiting heavy lorries. The road at that point would have been widened to create a right turn lane so pedestrians would be crossing 3 lanes with no safe designated crossing point. If the scheme were to proceed the design of the junction should be subject to a full safety audit and serious consideration would need to be given to providing a signal-controlled crossing point. This is not addressed in the new report.

One of the defining features of the site is the Right of Way that runs north-south through it. This starts at the B158 by Glenholm as Restricted Byway HERTFORD 001 and then turns into Footpath HERTFORD 001 as it rises uphill for the last 200m to St John's Wood. It has recently been given the status of Asset of Community Value. Comparison with the work phase areas shown on application drawing 12176/CO/1 shows that Byway 001 would cross the site haul road along which all heavy plant would pass throughout the 15-20 life span of the pit. This interaction would be created, of course, an unauthorised alteration to the description of Preferred Area 2 as envisaged by HCC. No evidence is given as to how this can be made to operate safely for that length of time or how site security and therefore public safety would be maintained during operating hours. This point is addressed weakly in new report paragraph 63.

Following the rather token public consultation exercise carried out by the applicant's planning consultant in November 2015 the scheme was amended to include a new 'permissive' path from Byway 001 at Glenholm, along the eastern edge of the site as far as the Rickneys Farm access for the duration of the project. While this may be of benefit to pedestrians we question the safety of crossing the site entrance which would be approximately 10m wide at that point and used by a steady stream of lorries entering and leaving the site. We note the complete absence of information in the application as to how this would be achieved and maintained.

In the additional information supplied the applicant's transport consultant suggests that it is no business of HCC Highways how the site is managed yet has done nothing to address the questions and concerns of the Stop Bengeo Quarry campaign and others on this critical aspect. We trust that officers in the HCC Rights of Way team and elected members representing HCC as Planning Authority will take a keen interest in this area and seek answers to all our concerns.

Other observation

In paragraph 1.1.1 of the Road Safety Audit report provided in appendix H of the Response to HCC's Highways Comments the auditor describes the proposed development as "*an extension of the existing quarry off Wadesmill Road*". This, of course, is what the HCC Minerals Plan envisaged and is a significant policy objection to the scheme which will be covered in more detail elsewhere.

6. Noise concerns

The decision notice for the previous planning application for this site (3/0770-16) noted 6 grounds for refusing permission. The sixth of these concerned noise:

"The proposal has not demonstrated that noise would not have a detrimental impact upon nearby residential property. This is contrary to Policy 18 of the Minerals Local Plan, NPPF (para. 144) and National Planning Practice Guidance."

We are therefore very surprised that:

- There does not appear to be an updated Noise Assessment in the submitted documents (the new document entitled Noise Report appears to be identical to ES vol 2 - Noise Assessment from 3/0770-16 and has the same date - Dec 2013). We note also that the document predates the current version of Minerals Planning Guidance which was published in Oct 2014.
- There is no substantive change to section 6.8 "Noise" of the document Planning Statement and Updated Environmental Assessment vis-a-vis section 6.8 of the original Volume 1 Environmental Statement from 3/0770-16, other than a note that the removal of Phase 4 will reduce noise impacts at Waterworks Cottage.

We submit that this alone should be a sufficient reason to refuse the current application, but we would also make the following specific observations.

The Orchard

In section 6.8 “Noise” of the Planning Statement and Updated Environmental Assessment, the applicants state that excess noise levels will be experienced at The Orchard. The applicants then speculate that the noise level “*breach*” should only last for “*around 3 months*” and they dismiss this issue on the basis that predicted noise levels are within accepted criteria for the rest of the time.

We note a new feature on the Operations Plan - Phase 1 consisting of a 100m standoff between BUND 1 and residences on The Orchard. This seems to have been added in response to dust mitigation recommendations in section 5.1.3 of Updated Air Quality. We are concerned that the applicants may speculate that this standoff will also improve noise mitigation. However, the applicants cannot demonstrate that any such incidental noise mitigation is sufficient without an updated noise assessment.

Sacombe Road

One of the major changes between (3/0770-16) and the current application is the removal of the stockpile area and the transfer of all the operations in that area (other than the stockpile itself) to a Load Out Area located within Phase 2. The centre of the original stockpile area would have been approximately 550m from the properties on Sacombe Road, whereas the centre of the load out area would be less than 300m. Without expert guidance it is impossible to know whether this change in proximity will lead to significantly higher noise levels being experienced by the Sacombe Road properties. However, the applicants’ noise assessment already predicts that those properties are expected to experience average noise levels very close to the maxima given in the NPPF guidance - we therefore submit that *any* extra noise could easily lead to a “*breach*”, as at The Orchard, and that an updated noise assessment is therefore an absolute requirement.

Restricted Public Byway Hert 1

Local residents have made it abundantly clear that this byway has very high amenity value to much of the Bengo community and EHDC recently recognised the byway as a Community Asset. This author frequently uses it and other footpaths around the application site and can state that, apart from some background noise from the B158 and the occasional aeroplane, it is normally very tranquil with birdsong (often skylarks) being the only other obvious sound.

The noise assessment presented with the application makes no attempt to estimate the noise levels that would be experienced by users of the byway and in the absence of an expert assessment we can only speculate how severely the amenity value of the byway would be impacted. We note, however, that whereas nearby dwellings will be most severely affected when extraction is occurring at its closest point, the byway runs along the length of the site and, therefore, for much of the life of the quarry anyone walking the byway would experience:

- significant noise along its entire length
- relatively high noise levels wherever the path is close to the active extraction zone.

The failure to address the impact of noise on the amenity value of this Community Asset again underscores the fact that the applicants have still not satisfactorily addressed a key environmental concern that was a reason for rejecting 3/0770-16.

7. Archaeological considerations

The archaeology of the site

The archaeological desk-based assessment undertaken in July 2014 on behalf of Ware Park Estate Trustees ('Ware Park') and RJD Limited ('RJD') by Archaeological Solution Limited ('AS') describes the site at Ware Park ('the site') as "*an area of considerable archaeological potential*". Several considerable multi-phase features dating from the late Bronze Age to the Roman period are identified on the site, including:

- cropmarks indicative of a late Bronze Age rectilinear enclosure, situated to the south-west of St John's Wood ('the wood') and towards the site's north-western boundary (Historic Environment Record ('HER') 7609)
- cropmark indicative of a sub-circular enclosure of the same period, situated to the south of the wood, in the central northern section of the site and to the west of the public footpath (HER 7610)
- cropmark of a double square enclosure in the site's central eastern section, opposite the drive to Ware Park Farm, which is thought to be a Roman temple (HER 7996).

The concentration and high potential of these particular features led to the northern section of the site being accorded 'alert area' status on the HER. Records of multiple medieval finds at the site – two shield shaped mounts dating to the late 13th or early 14th centuries (HER 21527 and 21921) and a purse bar dating to the mid - 15th to mid - 16th centuries – as well as the presence of further undated cropmarks of rectilinear enclosures (HER 18424) are cited as further evidence of the archaeological richness of the site in the assessment.

In July and August 2015, AS conducted a trial trench evaluation of the archaeological features identified in the aforementioned assessment. This confirmed the presence and dating of the features, turning up significant quantities of Bronze Age and Roman 1st century pottery.

The evaluation also uncovered a level of late Iron Age activity which was completely unexpected from previous knowledge and records of the site. The evaluation report states that this activity is "*of higher than average status*" due to the presence of imported continental pottery which was unearthed in the course of the trial trenching. It further states that "*this particularly interesting pottery assemblage might contribute to regional artefact studies; a research subject identified as being of particular importance for the eastern region (of the UK).*"¹ The report goes on to suggest that the nature of the pottery assemblage might be indicative of funerary activity and that further investigation of the site could be of significant importance in coming to understand the transitional period from the Iron Age to the Roman period, an area in which there has been increasing academic interest in recent decades.²

In summary the considerable archaeological potential of the site, in terms of both physical features and material culture uncovered so far, is clearly established in both the desk-based and trial trench assessments commissioned by the applicants, the latter of which goes even further in suggesting that further investigation of the site might be of significant benefit to the academic community.

¹ 'Land North of Hertford, Hertfordshire: An Archaeological Trial Trench Evaluation' (2015), Archaeological Solutions Ltd, pg 49

² Archaeological Solutions (2015), pg 50 and pg 63

The proposed development

In its current state, the archaeology of the site is well preserved, despite past and present agricultural cultivation, and would merit further investigation, as set out in the reports discussed above.³ If the proposed development were to go ahead the physical archaeological features would inevitably be destroyed and the material culture, including the “*interesting pottery assemblage*” identified during the trial trenching, would be displaced from its context. In the former case, the nature of the mineral extraction process means that it would be impossible to preserve the archaeological features currently identified on the site, in particular the Bronze Age features in HER “*alert area*”, which located in phases 3 and 4 of RJD’s development plan.⁴

In the latter case, while the artefacts themselves - or at least as many as could be excavated before the commencement of the development - would be saved, the destruction of the context in which they were found would significantly reduce their value for academic study which, in the modern age, is increasingly focused on complex stratigraphical assessment and rigorous scientific testing of the surrounding physical context.⁵

In accordance with current planning policy and precedent, Ware Park and RJD would be obligated to conduct an excavation of the site before commencing extraction, as a condition of planning permission being granted. RJD’s proposal for any pre-extraction excavation of the site has not yet been made known. However, evidence from previous development linked excavations has shown that such archaeological projects - conducted under extreme time and financial pressures - invariably yield poor results which do not in any way compensate for the permanent loss of the archaeological features themselves.

Furthermore, the size of the roughly 40-hectare site would inevitably lead to a selective excavation process which would be incapable of properly uncovering, assessing and recording its full archaeological record. Given the considerable potential of the site, in particular the unusual Iron Age pottery assemblages, the loss of a chance to conduct a proper excavation in line with acknowledged best archaeological practice would be a significant for both the local and the academic community.

The best option

The archaeology of the site represents a finite, non-renewable resource for the community, both local and academic, and should be preserved as important evidence of the history of human settlement and cultural development in the area. This position is clearly reflected in the government’s stated objective that “...*the historic environment and its heritage assets should be conserved and enjoyed for the quality of life they bring to this and future generations*”.⁶

The current presumption among archaeologists is that sites such as this should be left undisturbed in order to conserve them for excavation by future generations, whose techniques and technology will enable them to learn more from the historic environment than we could in the modern age. This approach means that even sites of considerable potential

³ ‘Land North of Hertford, Hertfordshire: An Archaeological Trial Trench Evaluation’ (2014), Archaeological Solutions Ltd, pg 16

⁴ Archaeological Solutions (2014), pg 5 and pg 17

⁵ For an example of the use of such methods, see pg 62, Archaeological Solutions (2015)

⁶ ‘Planning Policy Statement 5: Planning for the Historic Environment’ (2010), pg 5

in terms of advancing our understanding of the past may well be left 'dormant' in the coming years.

However, the fact that passive conservation rather than active excavation is the current order of the day should not be used as a basis for disregarding the importance of this site. Both its archaeological potential and the presumption that conservation of such sites is the best option to allow for their full future exploitation should be taken into consideration by the Council as significant operative factors in the making the decision whether or not to allow the applicants to proceed with the proposed development. The best option for the local community of Hertford and the national academic community, both now and in the future, is to refuse permission, thereby preserving the archaeology of the site for the benefit of both and ensuring its long-term future in the years to come.⁷

8. Planning need

Minerals Policy 2 of the MLP requires the County Council when determining planning applications to take into account a number of factors including the existing quantity of permitted reserves of the relevant material.

The National Policy Planning Framework requires minerals planning authorities to maintain a minimum 7-year landbank of permitted reserves.

The 2016 Local Aggregates Assessment states that based on the county's East of England Aggregates Working Party apportionment of 1.39 million tons, the county had a 9.5-year landbank of permitted reserves. In addition, Brett Aggregates' proposed new quarry on the Hatfield Aerodrome site (application 5/0394) has been granted permission, adding approximately 8 million tons to the landbank.

While it is acknowledged that the fact that the landbank is above the minimum level would not in itself justify the County Council in refusing planning permission, it is necessary for the applicant to demonstrate that there is a need for minerals to be extracted from this site that outweighs the negative impacts of development.

The applicant's arguments and SBQ's grounds for objection

The applicant's case in relation to need can be summarised as follows:

- **Local supply** - Having acknowledged that the current permitted reserves are well in excess of the minimum, the applicant goes on to suggest that there is a need for a spatial division of supply. The inference is that other sites are too distant to supply 'Ware/Hertford East', but no evidence is offered in support of this contention. It is noted that the existing quarries at Panshanger and Tyttenhanger and the permitted site at Hatfield are within a radius of 11 miles of Ware.
- **Possible development of HERT4** - The applicant argues that the granting of permission is necessary to prevent sterilisation of minerals in the event that housing is built on the area to the south of the site identified as HERT4 in the EHDC draft Minerals Local Plan.

⁷ 'Planning Policy Statement 5' (2010), pg 13

Obviously, this argument is based on a presumption that the Local Plan when adopted will approve the development of HERT4 and that development will proceed. Assuming that is the case, however, it still does not follow that a significant quantity of materials will be sterilised.

Firstly, it is noted that HERT4 is *adjacent* to the area of the application. There is no overlap so reserves will not be built upon. The applicant may be referring to minerals actually beneath HERT4 which could, theoretically, be extracted prior to housing development. We would argue that nothing in the current proposals in any way enables the recovery of such mineral deposits and, moreover, since no details are supplied regarding the scale or feasibility of such extraction the question of whether or not significant quantities of mineral might be involved is entirely hypothetical.

Secondly, any extraction carried out post development could be conducted in a manner that keeps the impact on HERT4 residents within acceptable limits. If the applicant's position is that this would be impossible, the applicant is in effect admitting that its application cannot be carried out without unacceptable impact on current residents.

Finally, it is noted that the applicant states at paragraph 3.1.8 that currently active reserves are operated by two companies. The alleged significance of this observation is not explained and it is denied that this is a material consideration, but it will clearly no longer be the case once Brett Aggregates' Hatfield Aerodrome quarry becomes operational.

9. Emerging Minerals Local Plan

Under the current MLP, 'Preferred Area 2' is made up of land around Rickneys including Bengo Field. The current MLP site selection process involves a 'sieve' of potential sites for quarries.

Hanson (who operated Rickneys and who controlled a lot of the land to the north of the plant) did not put any of their land in the current Preferred Area 2 forward. This may be because they have decided that it would not be economically viable for them to reopen their plant. As a result, the officers preparing the draft plan recommended that the land to the north of Rickneys should no longer be a Preferred Area because there could be no confidence that it would be dug.

Bengo Field is owned by a trust on behalf of Ware Park; Hanson does not have any connection with it. The field's owners did put it forward as a potential site, but it was removed from the draft plan – partly because the County Council rejected the recent planning application and partly because Rickneys is inactive and the MLP has always considered that Preferred Area 2 should be worked via Rickneys.

The emerging Minerals Local Plan's recommendations were agreed at Hertfordshire County Council's Employment, Planning and Transport Panel on the 7th September and by the HCC Cabinet on 1st November 2017.

Although the draft plan is still at an early stage, the facts which informed the choice of options are very relevant to the current application. It is clear from the HCC Cabinet Report dated 25 September 2017 that the application was excluded because the land at Ware Park was regarded as having potential for high impacts against six Sieve 3 assessment criteria: ancient woodland, groundwater vulnerability, recreation, sensitive land uses, sustainable transport and transport related pollution. To be more detail, the land at Ware Park:

- falls within a water Source Protection Zone 1 and scored high for Groundwater Vulnerability (para 7.6 of the report)
- performed badly on the criterion for sustainable transport and pollution to the environment - dust, air, water (para 9.7).

The concerns on groundwater, on sustainable transport and pollution, should therefore be considered valid current concerns of the Council. Also it can no longer be assumed that the reserves north of Bengo are bound to be worked at some time.



Appendix 1 - Results of landscape survey

Please find below responses to question 10 ("Please make any other comments with regards to the view and landscape of Bengo Field") grouped into analytical themes.

Further analysis of responses to the Bengo Field Landscape Survey has been shared with HCC Spatial Planning .

1. Views and landscape

- It is a beautiful view & a feeling of countryside so near to Hertford Town.
- Our heritage. AONB for Hertford. Iconic view painted, photographed, recognised, loved.
- It is a fantastic view whatever season. A lovely unspoilt open space.
- The landscape is very beautiful and peaceful place to go to on the weekends
- It's beautiful, unique and essential to the health of local people.
- It's always different. Sometimes very green, sometimes dusty but always beautiful
- It's a beautiful space enjoyed by many throughout the year. It would be a terrible shame to lose it to a destructive process such as a quarry.
- The view is perfect as it is - a quarry would ruin not only the landscape but it would alter our community forever.

- We do not need a gravel pit in Bengo spoiling what is a beautiful unspoilt landscape
- It's a lovely area open to all, wouldn't really want anything built there
- The view of the field is very distinctive. The lone oak is as much an indicator that you are entering Hertford as is the road sign on the B158, and it has been there much longer. I also value the view from the field. As I walk or run across it the view constantly evolves.
- The population (and housing) in Hertford and Bengo has grown significantly over the years and we desperately need to keep the beautiful Bengo Fields as a green space for public use.
- beautiful land that me and my family love to go to our happy place
- My children attended a school in Bengo for many years, for all those years I drove past these fields every day, sometimes up to 4 times a day! The view and the sense of openness to the countryside is unexplainable, it draws you in, makes you happy. So close to the town yet so much freedom to enjoy the country too. I have hundreds (almost!) of friends who live in very close proximity to this field in and around Bengo, I feel very strongly about helping them to protect it. It would be a terrible disaster to each and every one of them if they were to lose this beautiful field to a dirty, noisy, polluting gravel pit. I want to fight for them to protect their health, their homes and their future lives in Bengo- the place they chose to live, put down roots all those years ago and to bring up their families.
- In my opinion a view and landscape such as this should be preserved for all those in the surrounding area. Quarrying of the site would be detrimental to the environment, have adverse health implications and severely reduce leisure opportunities. A view such as this is calming, and forms part of a traditional landscape, supporting a diversity of wildlife and plant life which should be preserved.
- It never ceases to take my breath away. It is stunning whatever the season. It would be utter madness to destroy this little gem, especially as so much other surrounding countryside is under threat from new house building on a massive scale.
- Bengo Field is a local example of the type of superb view and irreplaceable ancient landscape that make Britain great.
- I grew up with this as my landscape. Whenever I return with my family to visit my parents we always walk across the field from Bengo to Chapmore End. I cannot imagine this not being something that happens for generations to come.
- It is a beautiful, quiet place right on my doorstep. I can go for a walk there and completely destress. The views are outstanding and it is so peaceful in comparison to other public space. I would miss it greatly if it was to disappear.
- Please don't allow anyone be destroy this beautiful countryside.
- Bengo Field is a beautiful landscape and it would be completely upsetting if we lost the open space for any type of building etc.
We sincerely hope we win this battle and keep our beautiful scenery & fields!!!!
- Beautiful in all seasons.
- It would be a travesty to dig up such a beautiful landscape.
- The proposed gravel quarry would result in a tragic and irreversible loss to the distinctive natural environment of the area.
- It is a very beautiful and special area full of nature and birds. Very well used by the members of the public of all ages and not just by the local Bengo population but by all of Hertford. To dig this special place up would cause chaos in the nature of the area and cause great environmental damage not only for us but for future generations, which if this goes through future generations will not forgive us for.
- I often walk my dog across and around Bengo Field. I always admire the vista at different times of the year as it offers so many different views depending on the climate. It is a beautiful field with varied wildlife and has much to offer to all ages.
- This is a great place to go with my family. I think the views are unparalleled in Hertfordshire, you can just drink in the views across to Three Lakes.
- Bengo field is very beautiful and lovely to explore with our children on a sunny day. We would definitely miss this if it was destroyed.
- It is beautiful landscape that is used by many people for recreational purposes and must not be lost.
- We chose to move to Bengo because we could have the best of both worlds; a short walk into town but far enough out to get away from the hustle and bustle and secondly to be

near the vast stretch of countryside offered along the B158. The views from the top of the field are breath taking and each season offering a different view. I've spent many hours running around and up this field and would hate to be forced to take a less scenic route i.e Sacombe Road which with its sharp bends is pretty unsafe as a pedestrian.

- This view is amazing i hope these views are never compromised. The Fields and views are iconic to Bengo. i honestly think that Bengo would be a completely different place without these.
- It really is a beautiful site and a nice space that is usable. I would like to see spaces like this on the edge of communities be preserved where possible otherwise it changes the landscape and quality of life for those that choose to live near them.
- Don't turn this land into a quarry. It is beautiful, has been left in its natural state for generations, and is too close to houses and especially Bengo Primary School. The area is heavily used by local residents and people from the other side of town for family recreation, exercise and dog walking. Also, the infrastructure is not set up to cope with the amount of traffic which a quarry will generate. Further traffic causes further problems of pollution, wear and tear on the roads, and danger to pedestrians.
- It is a breathtaking view which must be retained for future generations. It is rare to have an interesting landscape of open expanse being so close to a County town. It is an area that should be treasured.
- In a part of the country which tends to be fairly flat the undulating landscape of the field rising up above the Rib Valley and giving commanding views into the distance is worth protecting. It also provides the type of entrance an Historic County Town such as Hertford deserves.
- It's a wonderful piece of landscape that helps define the attraction of living in and around Hertford as a whole. The more industrial and commercial the surrounding areas become the less value Hertford holds to those, like myself, seeking an attractive area to live.
- It has a peacefulness about it that I particularly value even though so many people use it
- The views of the surrounding fields from our home in Crouchfields are simply stunning and we would be utterly heartbroken to have these views ruined by the proposed quarry or future housing developments.
- Bengo Field has the most distinctive views for miles around. A beauty to behold and keep forever!
- I've always longed to live in Bengo because of the beauty of the countryside. 4 years ago I got my wish and I've never been happier! When I leave my home I have the beautiful view over Ware Park; as I drive to and from work in WGC (via Sacombe Road) to visit family (via Wadesmill Road) it always lifts my spirits. It would be criminal madness to destroy all this.
- It's such a beautiful place, very peaceful and serene and such a gorgeous landscape
- This landscape is unique and much loved and visited by people. It should not be taken away!

2. Loss of amenity

- It would be a great loss to local amenities to lose this field for 20-30 years with no guarantee of the restoration to a nice landscape. Many skylarks use this field.
- It would be devastating to the local community if we lost this beautiful place
- Please stop the quarry and keep this natural resource for Bengo and Hertford. Quality of life for all residents will be reduced for everyone if this is not stopped
- Please save our field.
- Please save our field and the country side
- The beauty and history of Hertford is being destroyed by development. Taking away Hertford's green space will impact local people in terms of their lifestyles and leisure activities and amenities that is so important to family life. Surely a county town should have green space to be proud of and enjoy?! Instead they want to turn it into an ugly looking quarry, totally absurd to destroy this beautiful landscape that brings and has brought pleasure to Hertford residents and visitors.
- It would be disastrous to lose this lovely amenity.
- We as a family use the field to walk our dogs, to cycle across & as a nice walk. Taking this field away will not only be detrimental to the local community but to the health of

the locals, the school children who would be exposed to the ill effects more than most. The quarry will also have a negative effect on house prices & have a massive impact on the road network.

If there are going to be any protests against the quarry at Hertfordshire County council's County Hall then I will be there to show my support & voice my opinion in opposition to the quarry.

- It would be a very sad thing to rip away such beauty and fill it with noise pollution and all that comes with a quarry
- It would be a shame for us to lose this bit of countryside
- There are fewer and fewer spaces like this left for families to walk safely and children to enjoy what countryside should look like.
- An irreplaceable tract of countryside - they don't make land any more.

3. Love the field

- I just love the field and couldn't do without it. Love to walk there in the peace and quiet of such lovely views.
- My family have enjoyed this area with the dog for many years. The field is beautiful, listening and watching the skylarks on both sides of the path on a warm summers day is magical
- It is the BEST thing about Bengo, I walk there every day if I can and love it! If this was taken away I'd consider moving.
- The Bengo Field view is just amazing. There are always people and animals walking there. Please let us enjoy this place - there are no comparable alternatives to it!
- I love the way it changes with seasons, yet hasn't changed for centuries.
- Love walking with grandchildren and their dog across Bengo Field. My grandsons also attend Bengo school
- Grew up in Bengo, always loved walking across the field dog walking when I was younger and now my 2 children enjoying the fields and woods there when walking their grandparents dog. It's a lovely field in a lovely area and that should not change. It is enjoyed by so many for so many different reasons, young and old.
- Don't ruin it it's a lovely place to go.
- I was born and bred in Bengo and would like it to remain as it is. It's a lovely walk to the river and all the wildlife there is beautiful.
- Bengo Field provides me with invaluable opportunities to admire its aesthetics and biodiversity as well as numerous recreational activities to enjoy with my children.
- We love using Bengo field. The kids love walking out. It's a regular thing for us as a family!
- We love walking here with the children and there are always interesting birds to be seen.
- It's such a lovely walk to Chapmore End from Bengo.

4. Edge of countryside

- I have live in Bengo of over 22 years and what has always made it special is its 'on the edge of the beautiful countryside position. This quarry proposal would destroy that and turn it into an industrial landscape with all the noise and pollution that goes with it.
- I live in Bengo Mews and one of the things I love about living there is the beautiful countryside on my door step which I do not want to see ruined.
- there is a surprising lack of country walks near Bengo - particularly those that can be accessed without first getting in a car. To be able to get straight out to open fields and walk over to Chapmore end is a special part of the local ambience. We have an 18 month old daughter and see this as an important part of introducing her to a healthy life and the great outdoors.
- It can be hard to find a route out of Hertford that isn't scarred by quarries/landfill. And the field links lots of other footpaths together.
- I have lived in Bengo for many years in my life so far until recently. I still drive into Bengo every day to take my children to Bengo School and use the B158. It's nice to see all the fields around, especially in the Summer. It looks lovely.

- I feel very lucky to live where I do as I am on the edge of a lovely town but also on the edge of beautiful countryside. I hope that my son will be able to enjoy the countryside as I do in his childhood and beyond.
- It defines the boundary from town to country. Crucial to the whole setting on the area north of Hertford.
- It is one of the greatest things about living in Bengo that you have this oasis of countryside on your doorstep in my case literally a 3 minute stroll away. To not only lose this but for it to be replaced with what is essentially a strip mine is beyond belief and I am always amazed that it is even being debated let alone considered
- The view from our house would be completely spoilt. I love looking across the fields
- We can appreciate the view from the top floor of our house, we would be very disappointed to look out onto a gravel pit!

5. Land must be preserved

- The land must be preserved for my children and grandchildren, the noise and air pollution would affect all the children at Bengo school
- I think this beautiful place should be preserved and should never be turned into anything e.g. Housing estates, quarry etc
- My kids love it!! Even my 6 year old said it would be a shame to destroy it. I want them to be able to enjoy it for years to come!
- In an area already blighted by previous gravel extraction and land fill sites it is one of the few open green spaces left to be used and experienced in this locale. It is used and needs to be preserved.
- This unique landscape must be preserved at all costs: it is one of the most significant features of Hertfordshire and to destroy it would be vandalism. It is an ancient site that enables people to reconnect with the natural environment and to appreciate a stunning and irreplaceable landscape.

6. Footpath from Crouchfields

- The path through the field is the safest route to Bengo from where we live (Crouchfields). It is a lovely field but if they create a quarry there it would be important for us that a path was created along the busy B road so that we can get to Hertford.
- The field is my only access to chapmore end. Please save our field
- We have lived here for 50 years & have always enjoyed walking our dogs there all the way to Chapmore End. lovely as you have not got to use your car to enjoy the countryside & pollute the environment.

7. Quarry close to residential

- I find it unbelievable that this is even being considered by a council that we pay for. I have never seen a quarry so near to a residential area (nor have they from speaking to planning) and for an area of Hertford that attracts people to Hertford due to its natural beauty. The fact this has progressed so far considering all of the factors is dubious.
- Still can't believe they are seriously planning to do this. Hate the thought of my girls growing up and being educated next to a massive quarry.
- I live at waterworks cottage so would be surrounded by the quarry both effecting y quality of life and my house price.
- I am shocked and appalled at the never-ending attempts to industrialise our countryside, as a prior resident of Crouchfields, the prospect of losing the beautiful view that I still visit and drive through is heart-breaking.
- There are enough quarries around Hertford and it's vicinities so another one is NOT necessary and mainly welcome.
- To think a quarry can go ahead so close to so many homes and right next to a school is beyond believe.
- My children go to Bengo school and to think what damages they will have latter on in life is unbelievable!!

- To think my 2 & 4 year old will be exposed to this on daily basis is heartbreaking!

8. Environmental and custodians

- We are custodians of this land for future generations. Together with the fact that the quarrying would be harmful to the environment and particularly to people living in the area and a school, it seems beyond belief that it is seriously being considered as an industrial site. Profits are not just financial - this whole area and its people profit from this land.
- we have responsibility to save our nature for us and the future generation.
- Bengo Field is beautiful. We need countryside for the next generations
- This was featured in the original Doomsday book. There is an old tree near Bengo Hall that featured in the Doomsday book. There may be trees etc on Bengo fields that feature.
- It is not necessary to destroy such beauty, so close to human habitation, simply for the sake of sand and gravel, which is readily available from many other sources in far less intrusive locations.
- This ancient landscape has been walked by generations for hundreds of years along a path in a natural line that runs not just to Chapmore End but Tonwell. To destroy the cultural heritage for short term gain reduces, our quality of life, and our sense of place our health and wellbeing.
- It's a place my children love to play and hopefully my grandchildren get to enjoy it just as much
- I was born and raised in Bengo and attended Bengo Primary School. I now live on Bengo Street, with family on Westfield Road. This is my home and my environment and the field has been part of that for around 30 years. I hope it will be for the next 30.
- Please let's preserve this beautiful space for our enjoyment now & for the future.
- When I was younger I walked to collect chestnuts from the woods (St Johns) it's a beautiful walk in the summer and I want my kids then their kids to be able to do the same
- The loss of this landscape would represent a terrible loss for people who live in the area and for future generations who live in this area.
- My husband has enjoyed this countryside for 45 years, I have enjoyed it for 20. Our wish is for our children to be able to enjoy it safely too as they grow up.
- These fields are fresh air natural for all the family and friends to enjoy to keep fit for my grandchildren to understand how nature live so close to us educational is very important to us I'm a nanny who loves teaching my children and grandchildren about different landscape and what a beautiful world we live in

9. Not in category

- Absolutely disgraceful if they ruin this part of land
- The proposal to ruin this beautiful field by churning it up for a quarry when there is a housing estate and school close by beggar's belief.
- Please keep up the hard work and let people know how they can best support the campaign
- It's my homeplace where I live and have grown up and my idea of the perfect place to live that I want to keep this way and feel strongly against changes to the fields tall oak and other beautiful things in my area just leave it alone i really don't want the dust and pollution and ruin it will cause so near to my home and feel strongly against destroying it!!
- I am truly stunned that this planning application is actually being considered. Bengo is a beautiful leafy area & a great place to bring children up. Why on earth would anyone want to allow dirty great big lorries to ferry up & down a beautiful country lane all day past a school. It's a disgrace!
- Its already been spoilt once, please let's not have this happen again and so close to the school...
- Leave it how it is
- Life is not all about money, just leave the place alone
- Please stop the quarry

- No!! Bengo so lovely walks in the country for children!! Please don't spoil it for the children!!
Such a lovely countryside

10. Health

- It is absolutely beautiful area and would really be a shame if it were to be destroyed. It frustrates me how the government say we are the fattest nation in the world and invite us to take part in physical activity, yet they want to take away more of our beautiful country side and make there less chances to start increase physical fitness/ overall health.
- I live pretty much next to it in Temple Fields, big part of my childhood and to this day still a big part for going on walks and runs.
- So peaceful when walking.
- A sense of well-being when walking.
- It gives me and my children space to breathe and just be.
- We would like to save this beautiful field and our health.