RESPONSE TO

PLANNING APPLICATION MW.0039/16

BY HILLS QUARRY PRODUCTS LTD

FOR

THE EXTRACTION OF SAND, GRAVEL AND CLAY INCLUDING THE CREATION OF A NEW ACCESS, PROCESSING PLANT, OFFICES WITH WELFARE ACCOMMODATION, WEIGH BRIDGE, CONCRETE PLANT AND SILT WATER LAGOON SYSTEM WITH SITE RESTORATION TO AGRICULTURE AND NATURE CONSERVATION INCLUDING LAKES WITH RECREATIONAL AFTERUSES AND THE PERMANENT DIVERSION OF FOOTPATH 171/15 AND CREATION OF NEW FOOTPATHS

ON BEHALF OF BACHPORT
(BURCOT AND CLIFTON HAMPDEN FOR THE PROTECTION OF THE RIVER THAMES)

MAY 2016

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1. INTRODUCTION

1.1. This consultation response to planning application MW.0039/16 by Hills Quarry Products ('the applicant') for a new sand and gravel quarry at Clifton Hampden is made on behalf of Bachport (Burcot And Clifton Hampden Protection Of The River Thames). It has been prepared by Suzi Coyne of Suzi Coyne Planning with advice from other professional experts relevant to the issues raised.

1.2. Bachport is an organisation that was formed in 2010 to represent Clifton Hampden and Burcot Parish Council further to the identification of land southwest of Clifton Hampden as a potential new area for sand and gravel extraction within the Oxfordshire Minerals sites issues and options consultation paper. This is the land to which the current application relates. Bachport now also represents the views of Long Wittenham, Appleford and Culham Parish Councils.

1.3. Prior to this application Bachport, together with representatives from each of the four parish councils, attended pre-application meetings at the request of the applicant in July 2014 and November 2015. The minutes of these meetings and correspondence are provided in Appendix 1. The applicant made a commitment following the first of these meetings to present their plans to each of the four parish councils, but subsequently withdrew this commitment at the meeting in November 2015.

2. THE NATURE OF THE PROPOSED DEVELOPMENT

2.1. The current proposal is to open a new sand and gravel quarry on 104 hectares (ha) of land in the Oxford Green Belt between the River Thames to the south of Culham Science Centre and southwest of Clifton Hampden. The applicant gives the address of the site as "Land at Fullamoor Plantation" and calls the proposal "Fullamoor Quarry". The planning application is supported by an Environmental Statement (ES).

2.2. The site area of the current application is smaller than the area of 160ha for which a screening opinion was requested in 2014. It is understood that the applicant intends to acquire the wider 160ha as its landholding. This is indicated by the extent of the blue line on the application area plan, drawing no.: C6_LAN_001. A number of the reports submitted in support of the application also relate to an assessment of the wider 160ha area.

2.3. The proposed extent of mineral extraction is 76ha with the remaining 28ha to be used for the site access, plant site, silt ponds, soils and overburden storage. The mineral reserve is estimated at 2.5 million tonnes (mt), and it is proposed to be extracted at a rate of about 250,000 tonnes per annum (tpa). The duration of the operational life of the site is therefore given as 10 years. No timescales are provided for the duration of

initial development works (construction of site access, installation of processing plant, formation of bunding etc) or for the works required to finally restore the site.

2.4. The sand and gravel deposit is up to 4m deep. The underlying clay would also be extracted to be used on site for lining the excavations on the western and southern boundaries and to assist in restoring the site.

2.5. The mineral comprises approximately 70% sand and 30% gravel (maximum size 10-20mm with an insignificant proportion of coarse gravel >20mm[1]). It is proposed to be worked dry (requiring pumping of the groundwater), and transported by a field conveyor system to the plant site. The extraction area would be worked in 10 phases with the direction of working (including the plant site) broadly counter clockwise from the northwestern corner through the western and central part of the site then along the River Thames and into the northeastern section before finally extracting beneath the plant site back at the northern edge of the site. Provision is proposed to be made for out of sequence working in the northeastern corner of the site (phase 7) at times when flooding prohibits working in the southern part of the site. As a consequence phase 7 would be stripped ready for working at the same time as phases 4, 5 and 6 are operational.[2]

2.6. A new access would be constructed from the Abingdon Road (A415) to the plant site. The new road would be approximately 240m in length and enclosed by 2m high bunding on either side. The plant site would cover an area 9.4ha in size[3] on the northern edge of the extraction area and is proposed to accommodate a concrete batching plant in addition to the mineral processing plant. 30,000 tpa of the mineral (12%) would be used to make concrete.[4]

2.7. A variety of different shapes and sizes of bunds ranging from 5 – 10m in height would be formed around the plant site, and a number of angular shaped settlement ponds would be constructed (following extraction of the underlying gravel) on the other side of these bunds to the east and west of the plant site for management of silt from the mineral processing and dewatering operations. Stripped soils and overburden would be stored in large rectangular mounds ranging in height from 3 – 5m along the western boundary of the application site (on land not proposed to be worked for mineral as part of this application).

2.8. The proposed traffic generation is given as about 100 heavy goods vehicle (HGV) movements per day, with additional traffic movements relating to staff and visitors. A

[1] Paragraphs 4.7 and 4.16 of ES Chapter 11 and Appendix 11C
[2] Paragraph 3.25 of the planning Statement
[3] Table 1, page 9 of the planning Statement
[4] Paragraph 4.2 of the transport statement at Appendix G of the planning statement

routeing agreement is proposed to ensure that lorries associated with the development only use local A roads, and a £20,000 contribution is offered for the widening of the footpath on the south side of the A415 at the Clifton Hampden school gate.

2.9. The area of the application site comprises agricultural land with mature hedgerow and woodland belts and copses along field boundaries. According to the Agricultural Land Classification Map the entire site is identified as having an agricultural land quality of grade 2, which is classified as best and most versatile (BMV) agricultural land. The application forms state, however, that 49ha (less than half of the 104ha site) are BMV agricultural land (both grade 2 and grade 3a).[5]

2.10. All of the woodland belts and hedgerow within the proposed extraction area are to be removed. No tree assessment has been provided to identify the nature and value of the trees at the site. Some advanced planting is proposed mainly along the western boundary of the application site and along the River Thames, and new planting would be implemented upon restoration of the site.

2.11. Public footpath 171/15 currently runs from the edge of Clifton Hampden village in a south westerly direction into the middle of the application site and then turns south east to meet up with the Thames Path National Trail, and is proposed to be permanently diverted around and fenced off from the eastern limits of the extraction area along the existing concrete track to Clifton Lock. The Thames Path runs along the northern bank of the River Thames and the proposal is to provide a standoff of 25m from gravel extraction to the river, within which the National Trail would run, with fencing at 5m from the excavation edge.[6]

2.12. Bordering the River Thames the vast majority of the site (between 80 and 95%) lies within the floodplain, with over half the site in flood zone 3.[7] The northern extent of the floodplain is roughly coincident with the northern boundary of the application site and with the base of an escarpment of adjoining land, which rises about 8-9m above the floodplain.

2.13. This higher land to the north of the application site features a number of residential properties which by virtue of the difference in land levels have direct views over the application area. One of these properties, identified as Fullamoor Farm in the application documents, though its correct name is Fullamoor Farmhouse, is a historic building, which as the applicant acknowledges was aligned to take in the aspect to the south, and derives significance from this historical intention of intervisibility and

[5] Question 3.13 of the application forms
[6] Paragraphs 3.53 and 5.92 of the planning statement
[7] Table 3A.3 of Appendix 3A: Flood Risk Assessment to the ES

setting, including long views to and from the farmland to the south (the area of the application site). In addition the significance of the heritage assets of listed buildings and the character of the Conservation Area at the western end of Clifton Hampden village derives significance from the transition into the surrounding farmland.[8]

2.14. The land at Fullamoor is known to contain significant archaeological interest including a Scheduled Monument (SM) of a Bronze Age round barrow cemetery on the western boundary of the application site. A 10m fenced buffer zone to the SM would be provided. The remainder of the archaeological interest within the proposed mineral extraction would be lost, but would be subject to full archaeological evaluation in phases 5, 6 and 8 and a programme of Strip, Map and Sample archaeological recording in all other phases.

2.15. Restoration would be for 23.5ha of agricultural land[9], 14.8ha of grassland[10] and two lakes, one of which would be 20ha[11] in size and running along the entire southern edge of the site bordering the River Thames. The silt ponds would be left (once no longer functional) to re-vegetate naturally (in succession from reed marsh to wet woodland). The restored lakes and wetland areas are proposed for biodiversity benefit with the large lake also being used for low key recreational use. A bird management plan to monitor, manage and deter birds that present a strike hazard to aviation safety would need to be implemented due to the development site being located within the safeguarding zone for RAF Benson.

2.16. Upon restoration new rights of way would be provided, including the realignment of part of footpath 171/15 close to its original route to the point where it has to divert around the large lake to re-connect with the Thames Path, new footpaths circumventing the large lake and a route along the site entrance linking to diverted footpath 171/15.

3. NATIONAL AND LOCAL PLANNING POLICY

3.1. Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Section 70(2) of the Town and Country Planning Act 1990 require that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise.

3.2. The development plan for the area comprises:

[8] Paragraphs 5.60, 5.84,5.86, 6.39 and 6.43 of ES Chapter 4

[9] Whilst the planning statement refers to a figure of 41.8 ha (paragraph 5.97) this includes land not within the extraction area. Paragraph 7.13 of ES Chapter 10 gives a figure of 23.5 ha for restored agricultural land.

[10] Paragraph 7.13 of ES Chapter 10

[11] Paragraph of ES Chapter 6

- Oxfordshire Minerals and Waste Local Plan - adopted 1996 (OMWLP);
- South Oxfordshire Local Plan 2011 - adopted 2006 (SOLP); and
- South Oxfordshire Core Strategy - adopted December 2012 (SOCS).

3.3. The National Planning Policy Framework (NPPF), which applies from the date it was published in March 2012, makes clear that it aims to strengthen local decision making and reinforce the importance of up-to-date plans, and for the purposes of decision-making the policies in the Local Plan should not be considered out-of-date simply because they were adopted prior to the publication of the Framework. Nevertheless policies in the NPPF are material considerations and due weight should be given to relevant policies in existing plans according to their degree of consistency with the Framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given) – "The NPPF paragraph 215 test". With regard to emerging plans the NPPF states that weight may be given to their policies according to the stage they have reached, the extent of unresolved objections, and the degree of consistency with the Framework policies.[12]

3.4. In terms of emerging local plan policies, the Oxfordshire Minerals and Waste Local Plan: Part 1 - Core Strategy Proposed Submission Document (OMWCS) was published for representations in August 2015. There has been strong objection to the Plan on the basis that it is seriously flawed, legally non-compliant, and generally unsound. The inspector appointed to conduct the examination has written to the Council raising fundamental concerns about the Plan, and in response the Council has indicated that further work and modifications to the Plan will be required, which are currently subject to further consultation. The weight that its policies should therefore be given would depend on the extent of unresolved objections and their degree of consistency to those in the NPPF.

3.5. It is considered that there are a number of relevant considerations for determining whether the proposed development should be granted planning permission, which are as follows:

- Development plan strategy for sand and gravel provision
- Need for the mineral
- The balance of supply objective
- Quality and quantity of the mineral
- Alternative options
- Landscape and visual impact
- Historic environment
- Green Belt
- Traffic

[12] Paragraphs 208 – 216 of the NPPF

- Health and quality of life
- Water management issues
- Best and most versatile agricultural land
- Rights of way
- Biodiversity
- Restoration objectives
- Cumulative impacts

4. DEVELOPMENT PLAN STRATEGY FOR SAND AND GRAVEL PROVISION

4.1. The first principle of the overall strategy for minerals provision in the existing development plan OMWLP (paragraph 1.10) is to comply with Government guidance and to seek an acceptable and sustainable balance between society's needs for minerals and the need to conserve and protect the environment. With regard to the NPPF paragraph 215 test (see paragraph 3.3 above) this objective very much accords with the NPPF, and therefore should be given considerable weight. (The primary emphasis of the NPPF is to promote a presumption in favour of sustainable development (paragraph 14), and to balance any harm against possible benefits).

4.2. OMWLP policy SD1 states that a landbank will be maintained for sharp sand and gravel which accords with current Government advice, and the explanatory text clarifies (paragraph 2.14) that the OMWLP Proposals Map indicates areas to meet requirements for the Plan period and that further areas can be identified from within the broad areas (that had been) indicated by the Structure Plan, if that should prove necessary to maintain a landbank. The relevant areas are set out at Chapter 7 of the OMWLP and are:

- The Sutton Courtenay area
- The Sutton Wick area
- The Stanton Harcourt area
- The Cassington-Yarnton area

OMWLP policy PE2 then confirms that planning permission will not be granted outside the identified areas unless the working would be acceptable under OMWLP policy SD2, which provides permission to be granted for small extensions to existing operating sand and gravel quarries, or the required supply (landbank) cannot be met from the areas identified.

4.3. The application proposal is not located within any of the areas identified in the development plan, it is not an extension to an existing quarry, and the county's existing sand and gravel landbank is significantly higher than the level that is required in accordance with Government guidance (a matter addressed in more detail under Section 5 below), so there is no issue with needing to make up a shortfall in supply, or

to ensure that the landbank is maintained. The application proposal is therefore not in accordance with the development plan.

4.4. In respect of the emerging plan OMWCS policy M3 on locations for working aggregate minerals identifies broadly drawn "strategic resource areas" within which mineral working should take place, with the identification of specific sites being reserved for a Part 2 of the plan (subject to meeting the criteria set out in OMWCS policy M4). The strategic resource areas for sand and gravel are:

- The Thames, Lower Windrush and Lower Evenlode Valleys area from Standlake to Yarnton;
- The Thames and Lower Thame Valleys area from Oxford to Cholsey; and
- The Thames Valley area from Caversham to Shiplake.

4.5. OMWCS policy M5 then provides for permission to be granted for the working of the allocated sites, and that planning permission will not be granted outside the allocated sites unless the requirement to maintain a steady supply of aggregate in accordance with OMWCS policy M2 cannot be met.

4.6. Whilst the application site is in one of the strategic resource areas, that alone does not meet the policy test. The specific requirement is that the site must be an allocated site otherwise it will not be granted. With regard to the proviso relating to supply, OMWCS policy M2 is an update of OMWLP policy SD1, and as has been identified at paragraph 4.3 above (to be explained in more detail in Section 5 below) there is an abundance of supply of sand and gravel in the county. The application proposal therefore also does not comply with the emerging development plan.

4.7. Notably the inspector appointed to examine the OMWCS has drawn the same conclusion in his letter of 22 January 2016 outlining initial thoughts and concerns, namely "that until the Part 2 plan reaches a stage that would attract significant weight in accordance with Framework paragraph 216, a planning application coming forward anywhere within any of the areas identified in policy M3 could only be refused, subject of course to compliance with the relevant criteria in policy M4 and the relevant core policies C1 to C11, if the proposed provision was not necessary in order to maintain the relevant landbank."[13] The Council's response to this point in their letter of 4 February 2016 was that they consider policy M5 to be a development management policy that pending adoption of the Part 2 plan requires applications for aggregate mineral working to be considered against the criteria in policy M4 and policies C1-C11. [14]

[13] Paragraph 37 of the inspector's letter
[14] Paragraph 32 of the Council's letter

4.8. It is considered, however, that the Council's response does not reflect NPPF policy, which is that "Local Plans should set out the opportunities for development and clear policies on what will or will not be permitted. Only policies that provide a clear indication of how a decision maker should react to a development proposal should be included in the plan."[15] In order to do what the Council says the policy is expected to do it must expressly say that, i.e. that pending adoption of the Part 2 Plan applications will be assessed against policy M4. It is not at all clear from a plain reading of the policy as currently drafted that that is what is intended to happen, and it provides no certainty about where mineral working will take place, contrary to the NPPF's first core planning principle that plans should provide a practical framework within which decision on planning applications can be made with a high degree of predictability and efficiency.

5. NEED FOR THE MINERAL

5.1. According to the latest available figures, which are in Table 1 of the Preliminary Assessment of Minerals Site Options published in April 2016, the total permitted reserves of sand and gravel amount to 13.558 mt.

5.2. Furthermore assuming the Oxford Flood Alleviation Scheme (paragraph 4.32 of the OMWCS) goes ahead there would be an additional 750,000 tonnes of sand and gravel to add to the landbank, giving a total in in the order of 14.308 mt.

5.3. The NPPF states at paragraph 145 (6th bullet point) that mineral planning authorities should make provision for the maintenance of landbanks for sand and gravel (permitted reserves) of at least 7 years, with the annual provision figure to be determined in the Local Aggregate Assessment (LAA) (1st bullet point). The LAA 2014 was subject to an interim update in November 2015, but this does not change the previous LAA 2014 annual provision figure of 1.015 mtpa for sand and gravel, and on this basis Oxfordshire's existing landbank of permitted sand and gravel reserves equates to more than 13 years of supply, or alternatively, to almost twice (190%) of the required minimum. (If the Oxford Flood Alleviation Scheme gravel is added in there would be more than twice the landbank). It is therefore quite apparent that there is no immediate need whatsoever for new reserves to be permitted.

5.4. Furthermore there has been strong objection to the annual provision figure of 1.015 mtpa for sand and gravel identified in the LAA, on the basis that it is significantly higher than it should be. Government guidance is that the LAA should be based on a rolling average of sales data and other relevant local information and an assessment of all supply options, including marine dredged, secondary and recycled sources. The

[15] Paragraph 154 of the NPPF

relevant local information may include, for example, levels of planned construction and house building in the area, and mineral planning authorities are required to look at sales over the last three years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply.[16]

5.5. The Oxfordshire LAA 2014 identified a rolling 10-year average of sand and gravel sales of 0.715 mtpa for 2004-2013, with the average sales for the last 3 years being just 0.483 mpta.[17] It was then concluded that in light of commercial decisions by quarry operators to mothball some of their quarries in the county after the onset of the recession (2007) that this introduced significant market distortions, and that this has significantly reduced the rolling 10-year average for these materials. As a consequence it was considered appropriate to suppose that if not for those closures Oxfordshire's earlier proportion of total sales in England would have been maintained and the 10-year average was adjusted to be 2.51% of the total 10-year rolling average sales in England. (2.51% being the average 'pre-recession' proportion of Oxfordshire's production compared in England over the period 2001 – 2007).[18]

5.6. Unfortunately what this analysis fails to take into account is that Oxfordshire's sales were already steadily falling prior to 2007. They had in fact almost halved from 2001 to 2007 (1.612 mt in 2001 to 0.893 mt in 2007) in times of economic boom and before any mothballing of quarries.[19] This trend in declining sales was doubtless exacerbated by rapid growth in the use of recycled aggregate as a proportion of total aggregate (in Oxfordshire and across the UK), as well as growth in the supply of marine dredged aggregates to other counties in the South East, both factors reducing demand for gravel previously supplied from Oxfordshire. Furthermore the 3-year average sales confirmed that the trend was for sales continuing at a very low level (0.483 mtpa 2011 – 2013). The upward adjustment of the 10-year average sales is therefore not justified by the local conditions, and this is further borne out by the LAA Interim Update of November 2015, which shows that the 10-year average sales figure (2005-2014) is now at 0.66 mt.

5.7. The LAA 2014 did take other factors into account, which concluded that there should be some/modest (though unquantifiable) uplift to the 10-year average figure, but for not one of these was there any robust evidence provided to justify an uplift of as much as 42% (or as much as 54% when compared with the more recent 10-year average in the November 2015 LAA update). A factor of 10% would be more

[16] Paragraph 145 of the NPPF and paragraphs 062 -064 of Planning for Aggregate Minerals: Local Aggregate Assessments in the National Planning Practice Guidance

[17] Table 3.5, page 29 of the LAA 2014

[18] Paragraphs 4.25 – 4.30 of the LAA 2014

[19] In addition there are other factors relating to the 'mothballed' quarries which mean that they would not have made such a significant difference to current sales of an additional 300,000tpa (i.e. the difference between 10-year rolling average of 0.715 mtpa and annual provision figure that was set of 1.015 mtpa), even if they had continued to operate.

appropriate and on the basis of the 2013 (higher) 10-year rolling average would give an annual provision figure of 0.787 mt.

5.8. This figure is not at all dissimilar to the figure of 0.81 mt identified in the previous version of the OMWCS issued for consultation in February 2014, which was then already identified as providing significant headroom to accommodate possible changes in local circumstances such as an increase in economic activity and consequent demand for aggregates. At this level of provision, which it is considered to be appropriate in all the circumstances, there is sufficient existing supply to last for 17 years, which is the duration of the plan period. This therefore reinforces the conclusion reached at paragraph 5.3 above that there is no immediate need whatsoever for new reserves to be permitted, either in terms of maintaining ongoing supply or for the proposed new plan period.

5.9. The applicant makes a number of suggestions in their planning statement[20] with a view to justifying need for the development. The first of these is that the NPPF states that a 7 year landbank is only one requirement of the NPPF, and that: "Other considerations include use of longer periods as may be appropriate to ensure a wide range of supply of materials, location of permitted reserves relative to markets, productive capacity of sites and ensuring that large landbanks are not bound up in a few sites." Notwithstanding that this is a misquote of the NPPF paragraph 145 (for example it is a case of ensuring that large landbanks bound up in a very few sites do not stifle competition), the planning statement nevertheless does not go on to give soundly justified reasons why any of these considerations apply in this case. This is because they do not, for the reasons given in more detail in the following section 6.0. The requirement for a seven year landbank of permitted reserves is the only relevant consideration to meet the NPPF requirement to plan for 'a steady and adequate supply of aggregates' in relation to this proposal.

5.10. The second argument put forward by the applicant is that they have identified a need for a local source of aggregates, as they are unable to meet the demand from their existing operations in Oxfordshire. However, this is an argument for commercial convenience not a planning issue. The applicant has never been involved in and does not have any existing operations in the sharp sand and gravel business in Oxfordshire; they only have soft sand quarries. The 'need' is therefore for the company to get a foothold in the Oxfordshire sand and gravel market, which they have been looking to do for many years.[21]

5.11. The third argument is that the proposed site is well located to supply the south Oxfordshire markets and would provide a natural follow-on to ensure continuity of

[20] Under the heading Need & Landback, pages 35 and 36 of the planning statement

[21] Paragraph 2.2 of ES Chapter 13

supply when Sutton Courtenay closes. These are matters that are addressed and challenged as without basis in the following section.

5.12. Fourthly the applicant puts forward the argument elsewhere in the planning statement (paragraph 5.13) that it is known, anecdotally, that because Oxfordshire cannot produce the aggregates which are required to maintain economic growth in the county, supplies of sea-dredged aggregates are being brought in significant quantities from elsewhere, including from their own sand and gravel quarries in Wiltshire or Gloucestershire. There is no concrete evidence to back up the statement that Oxfordshire cannot produce enough aggregate for its own needs, and the LAA shows that there is both import and export of sand and gravel into and from the County, with the quantities varying over time as would be expected.

6. THE BALANCE OF SUPPLY OBJECTIVE

6.1. An underlying factor of the minerals planning strategy in OMWCS policy M3 is the "balance of supply objective" between "north Oxfordshire" (Cherwell and West Oxfordshire Districts) and "south Oxfordshire" (South Oxfordshire and Vale of White Horse Districts). The supporting text (paragraphs 4.28 - 4.30) explains that the Council wishes to promote and enable a move over the plan period to a distribution of sharp sand and gravel production that more closely reflects the distribution of demand for aggregate within the county, and to even the balance of supply between the northern part of the county (which is said to have increasingly the most concentrated production – particularly in West Oxfordshire) and the southern part. The explanatory text clarifies that:

- this strategy would be in line with the plan objective of minimising the distance that minerals need to be transported by road from quarry to market;
- provision of additional sand and gravel working in south Oxfordshire would enable local supplies of aggregate for planned housing and economic growth in this part of the county; and
- the Council will seek to achieve this objective through the allocation of sites in the Part 2 plan.

6.2. Further in relation to this point paragraph 4.30 of the OMWCS states: "In view of the relatively high level of existing permitted reserves in the northern part of Oxfordshire (mainly in West Oxfordshire), any requirement for additional sites for sharp sand and gravel should be met primarily in the southern part of the county, at least over the first half of the plan period."

6.3. It is stated at paragraph 5.7 of the planning statement in considering the application proposal against OMWCS policy M3 that it is in line with this (balance of supply) objective and will contribute to the proposed economic growth by providing a local

supply of needed construction materials. We consider that this is a misguided notion for a number of reasons as set out in the following paragraphs.

6.4. Firstly, given the position that the balance of supply objective is intended to be achieved through site allocations, as also reinforced at (b) of policy M4 (in setting the criteria for selecting specific sites to be allocated), it cannot be a relevant consideration to this planning application, which is not an allocated site.

6.5. Secondly, irrespective of the lack of relevance of this aspiration of the proposed new minerals strategy to this application, it is the case that the balance of supply objective is in any event currently met. There are four permitted quarries with existing reserves in north Oxfordshire (Finmere, Gill Mill, Cassington and Stonehenge Farm) and five in south Oxfordshire (Caversham, Sutton Courtenay, Sutton Wick, Radley and Wicklesham). There are therefore more quarries in south Oxfordshire than in north Oxfordshire.

6.6. Furthermore the current volume of supply is greater in south than in north Oxfordshire. Finmere and Gill Mill are the only operational quarries in north Oxfordshire and have an annual production capacity of 431,000 tpa. (106,000 tpa for Finmere and 325,000 tpa for Gill Mill, as identified by 2nd note to Table 2 of the OMWCS). In south Oxfordshire four of the five quarries are operational and have a combined production capacity of 530,000 tpa. (Sutton Courtenay 240,000 tpa, Caversham 155,000 tpa, Sutton Wick 75,000 tpa and Wicklesham 60,000 tpa). Alternatively put, south Oxfordshire already supplies the greater proportion, at 55%, of the available sand and gravel production in the county, with north Oxfordshire at only 45%.

6.7. Thirdly, there is no urgent need within the early part of the plan period to find new sites. The position on the duration of the available supply in the various parts of the county is, that the shift in the balance of supply to north Oxfordshire rather than shared with south Oxfordshire would not occur until 2021 at the earliest, and even then the balance of supply at 36% to 64% from 2022 until 2027 would not be overly disproportionate[22]. In any event, by the time that the shift in balance starts to occur, the OMWCS site allocation process would have determined the most appropriate location for the new sites to provide sand and gravel in the southern part of the county.

6.8. Fourthly, and irrespective of the fact that there is no immediate need to meet the balance of supply objective, it is the case that the application site would in any event not be well located to provide an effective locally sourced construction material to the

[22] Based on Stonehenge Farm followed by Cassington reserves coming on stream as Sutton Courtenay reserves expire and Radley comes after stream after Sutton Wick

county's main growth areas, in line with the plan objective to minimise the distance that minerals need to be transported by road. With regard to the south Oxfordshire area the key locations for development are identified as Didcot and Wantage & Grove.[23] The application proposal might be relatively close to these locations as the crow flies, but it would not be close in terms of road miles travelled and/or environmentally suitable routes.

6.9. If lorries drive through Abingdon the distance would be about 17km to Didcot and 24km to Wantage & Grove. It is noted that the centre of Abingdon has been declared an Air Quality Management Area (AQMA) since 2006 due to air pollution exceeding national air quality objectives as a result of the high levels of nitrogen dioxide from vehicle emissions. At the rate of on average 100 lorry movements per day, which would be the scenario if the proposed quarry is for the purposes as claimed of providing a local supply of needed construction materials to the south Oxfordshire growth areas, this would have an entirely unacceptable adverse impact on the AMQA as well adding to congestion and causing harm to the historic town centre environment in Abingdon.

6.10. It was originally stipulated by County Highways officers in response to the request for a scoping opinion in 2014 that there should be a commitment to exclude quarry related HGVS from passing through Abingdon town centre. There are no apparent reasons or justification in the application supporting documents for departing from this original advice, which was no doubt for the purposes of safeguarding against further harm to air quality as well as a hazardous and inhospitable conditions for those living, working and using Abingdon town centre. In support of these very important interests, lorries should not travel through Abingdon and the route that they would have to take to both locations would be via the Wallingford bypass, and would be a distance of about 25km to Didcot and about 43km to Wantage. (The alternative route via the Oxford ring road to Wantage would be the same distance of 43km).

6.11. The statement at paragraph 5.12 of the planning statement that the proposed quarry would reduce travel to only very short distances in respect of Didcot is therefore not substantiated. It needs to be noted that this paragraph of the planning statement does not make reference to the other growth area of Wantage & Grove, but to Wallingford. Yet Wallingford has not been identified in any of the development plans as an area of strategic growth

6.12. A number of other potential sites in south Oxfordshire have been identified through the OMWCS process, and with the exception of the Lower Radley sites, all of the others are closer to Wallingford[24] – and therefore to Didcot/Wantage/Grove[25] - than

[23] Paragraph 2.5 of the OMWCS
[24] The distance from the Drayton St Leonard/Stadhampton site to Wallingford is about 12km, Warborough site 6km, Cholsey site 0.5km, compared with about 14km from the application site.

the application site. Therefore this site is not justified over alternative site locations in the southern area on its proximity to the identified area of strategic growth.

6.13. The planning statement states (paragraph 5.33): "Caversham is located just outside of Reading and historically the majority of its production is supplied directly into Berkshire and it is anticipated this will continue. Also being some distance from the markets that Fullamoor would serve Caversham would not achieve the goal of reducing transportation miles for aggregate minerals." There is no evidence supplied to support this contention. If it is the case that there is a need for minerals to supply markets in south Oxfordshire, then there is no doubt that Caversham will be meeting that demand as a local quarry source. It would not make any business sense for the quarry to be sending the majority of its production into Berkshire when there is a demand for it in south Oxfordshire. (The applicant itself stated at a meeting with representatives of the four parish councils and Bachport in June 2014, and recorded in the minutes of that meeting, that the market for their quarry materials would typically be a 30-40 mile radius from the quarry)

6.14. The fact that the application proposal is not aimed principally to supply the south Oxfordshire market is confirmed within the ES. The proposed vehicle movements onto the major road network are shown diagrammatically in Figure 1 of Appendix A to ES Chapter 8 and this identifies that 50% of the vehicles will travel north and 10% west beyond the A34, with only 20% travelling southwards towards the strategic growth area of Didcot/Grove/Wantage/Science Vale in South Oxfordshire (via the A34), with an equal amount (20%) travelling southwards towards Wallingford via the A4074.

6.15. Given that only 20% of the mineral is proposed to be destined for the identified areas of strategic growth in South Oxfordshire, and at most 40% for South Oxfordshire overall, it is very clear that the site does not meet the proposed minerals strategy requirement for a new local source of sand and gravel to support the planned housing and economic areas of growth in South Oxfordshire.

6.16. Indeed Hills representatives stated at meeting with the four parish councils in November 2015 they envisaged this quarry serving the local market, particularly small builders and builders' merchants (see Appendix 1). This market ambition does not accord with the stated need that a new quarry will supply the strategic growth areas for South Oxfordshire.

6.17. It is very likely that there are other sites better located within the southern Oxfordshire strategic resource area for sand and gravel provision to provide for the local need when and if it arises. Furthermore the most correct means of determining which of the

[25] Wallingford is 11km from Didcot

potential sites is the most appropriate to meet the proposed new minerals strategy is by robust assessment and comparison of all their relevant merits leading to allocation through the local plan process, as the OMWCS intends should happen in order to implement the minerals planning strategy.

6.18. This application has come forward on an entirely speculative and premature basis, without any legitimate exceptional circumstances relating to current or pending need at all for the proposed development. At this point in time there can be no justification for opening up a new quarry in the countryside with all the associated harm it would bring.

7. QUALITY AND QUANTITY OF THE MINERAL

7.1. A detailed review of the geological information contained in ES Chapter 11 is provided at Appendix 2. This shows that the mineral reserve comprises 70% sand and 30% fine to medium grained gravel only (most of which is 5-10mm). There is no coarse grained gravel (or at 0.5% of the total reserve it is insignificant and not a product that can be offered as sourced from the quarry). The deposit is therefore not gravel rich, and would not be able to meet the wide range of building applications that local markets would be demanding. As is evident from section 3.2 of the review of the geological information at Appendix 2, other sand and gravel quarries in the county typically have a higher gravel content than sand, not the other way round as is the case here.

7.2. In addition the yield per hectare of mineral is considerably lower than other existing sites, which produce between 46% and 100% more by volume per hectare. The reserve is therefore also not mineral rich in terms of its depth, and so requires more land to be opened up to get at the same quantity of mineral that would be worked from a smaller area at other quarries in Oxfordshire. There is furthermore an alternative proposal for new sand and gravel workings elsewhere in the same strategic resource area of OMWCS policy M3 (at Cholsey), which would have a yield per hectare almost three times that of the application proposal, thereby requiring significantly less land to be disturbed through mineral extraction than is proposed with the application scheme.

7.3. Therefore and notwithstanding the view that OMWCS policy M4 is not relevant to the proposal, (because it is a policy expressly drafted for determining which specific sites should be allocated in the Part 2 plan and not as a development management policy for windfall sites) the application proposal is not one that would score well against criterion a) of policy M4 – consideration of the quantity and quality of the mineral.

7.4. Other larger sized aggregate would still have to be imported to South Oxfordshire from elsewhere to supplement the range of supply required, and therefore the quarry would not meet the balance of supply objective of enabling production of locally sourced construction material.

7.5. In addition, whilst the sand may be suitable for concrete production, the proportion of the aggregate component in concrete sales is typically comprised of about a third sand to two-thirds gravel (or crushed stone). Given that the ratio of the mineral reserve composition at the application site is the other way round, i.e. roughly two-thirds sand to a third gravel, and that there is no coarse grained gravel for making higher grades of concrete, additional import of aggregates from elsewhere would be necessary in order to provide the full range of concrete mixes at the site.

7.6. There is a concern that the applicant therefore may seek to bring other aggregate on to the site to increase the range of concretes. Indeed it is noted that the proposed vehicle fleet[26] shows an increased capacity for concrete sales than is justified by the production forecasts, in that 4 (or 40%) of the proposed fleet of 10 HGV vehicles will be for concrete lorries, yet only 12% of the aggregate will be processed to concrete, and only 18% of the anticipated off-site vehicle movements (104 out of a total of 562 movements[27]) are concrete vehicle movements.

7.7. Furthermore it is noted that in applying for prior approval under permitted development rights for their concrete batching plant at Upwood Park, the applicant stated "It is anticipated that the majority of the materials used in ready mixed concrete will be sourced from Upwood Park Quarry although there may be occasions when a specialist mix is required which requires some externally sourced materials." Notwithstanding that this position does not fulfil the requirements of the permitted development provisions, which are that the principal purpose is for the treatment, preparation for sale, consumption or utilization of minerals won at the mine (and so the erection of the plant should not have been allowed), the applicant's approach must indicate that they consider it would be permissible to do the same at the application site. In that case the erection of a concrete plant as part of the proposal would add to the traffic generation consequences of the proposed development, and would run counter to the OMWCS plan objective of minimising the distance minerals need to be transported and to policies C2 (climate change) and C10 (transport).

7.8. It would also mean that the concrete plant should not be considered to be permitted development (not requiring a case to be made for very special circumstances to justify its location in the Green Belt – a matter which is considered under section 11 below) unless strict controls apply to prevent the importation of aggregate from

[26] Paragraph 6.7 of the TA
[27] Paragraphs 6.3 and 6.4 of the TA

elsewhere. Such circumstances then reinforce the point that the quality of the minerals at the application site means that this location does not meet the balance of supply objective.

8. ALTERNATIVE OPTIONS

8.1. A detailed review of the information provided on alternatives in ES Chapter 13 is provided at Appendix 3. Chapter 13 of the Environmental Statement purports to comply with the EIA Regulations in considering the alternative options to the application proposal. However, this has not been done in any robust manner.

8.2. The Alternative Sites section focuses on the applicant's own desire to establish a sand and gravel quarry in Oxfordshire, which as already identified at paragraph 5.10 above they have been trying to do for many years. However, the question of alternative sites in planning terms is not concerned with a particular applicant's commercial interests, but with whether the proposed site is the most environmentally acceptable option.

8.3. A number of other potential sites[28] have been identified through the OMWCS process and there has been no consideration of these other options or a comparing of their environmental effects with those of the application site. The availability or otherwise of these other site options to the applicant is not a reason for ruling them out, given that it is a question of whether the land is the better option, not who will operate it, but also not least because site options do change hands, as is evident in relation to Site SG-33 at Cholsey. This was originally nominated by a different operator to the one who has recently requested a screening opinion, and who is intending shortly to make a planning application for working the land.

8.4. While the applicant has attempted a comparison of this site to other sites under the sequential test requirements for Flood Risk in Appendix 3A-D, this comparison has been done in a wholly unsatisfactory manner and is meaningless, as set out in Section 14 of this report.

8.5. With regard to the Alternative Supply Options, the narrative simply rehearses misguided notions about the ability of recycled aggregate to replace virgin aggregate, in order to discredit this valuable source of alternative material. It is not the case as stated at paragraphs 4.2 and 4.3 of Chapter 13 of the Environmental Statement that the quality of recycled aggregate cannot meet the specifications demanded of the construction industry, that there is little opportunity to increase the level of recycled

[28] The applicant notes 42 alternative sites being considered under the OMWCS in Appendix 3A-D

aggregate use, or that the associated processing and transportation costs make the products prohibitively expensive.

8.6. Aggregate is undergoing significant advances in capability and new recycled aggregate wash plants systems are in operation that enable the production of higher quality substitute aggregate from construction, demolition and excavation (CDE) waste that can supply the full range of sized and graded aggregates, as well as coarse and fine sand, and ballast, equivalent to the products that would be offered by a local quarry. The quality of the products that they manufacture is to such a high level that they can also be used to manufacture concrete and concrete products. The concrete product has a 93% sustainable content by volume (the cement content making up the remainder). In addition the wash plants are able to process more of the proportion of the CDE waste, which was previously considered to be intractable and not capable of being recycled. All of this means that there is considerable scope to increase levels and use of recycled aggregate as a direct substitute for primary land won materials.

8.7. Furthermore the wash plant used is very similar to that of a sand and gravel processing plant, but is not dependent on the location of mineral reserves, or the costs involved in extracting them, and does not affect or require large areas of land, so therefore has more opportunity to be located close to the product markets, reducing transportation costs rather than increasing them as claimed. Far from the production of recycled aggregate being prohibitively expensive, it is in fact a much more cost effective as well as a more environmentally sustainable and resource efficient alternative to the application proposal.

8.8. The detailed review of the information provided on Alternative Sites at Appendix 3, in addition to identifying the serious shortcomings in complying with the need to carry out a review of other potential sites in relation to flood risk and Best and Most Versatile (BMV) agricultural Land (matters to be returned to at the appropriate sections below), makes clear that a proper assessment of alternatives - assuming other sites were considered – would include a number of wide ranging factors in order to evaluate the sites' comparative suitability.

9. LANDSCAPE AND VISUAL IMPACT

9.1. A Landscape and Visual Report, carried out by Anthony Stiff Associates ('the ASA report'), to review the applicant's Landscape and Visual Impact Assessment (LVIA) is at Appendix 4. This report is based on a combination of desk based research and photographic field survey work carried out in 2014 and in 2016 (during both summer and winter months), and sets out where there is agreement or disagreement with the judgments and approach taken in the applicant's LVIA.

9.2. The ASA report finds that the landscape character in this area has a strong degree of coherence with the River Thames, which provides a strong unifying influence. The proposed quarry would destroy this rural and tranquil landscape (with 'arcadian' qualities) and create a fragmented and disrupted industrialised quarry landscape, with current low intervisibility of the site being transformed into high intervisibility including from Wittenham Clumps in the North Wessex Downs AONB due to loss of mature trees. Attention is drawn to the South Oxfordshire Landscape Assessment and its guidelines that large-scale development of any kind will be inappropriate within this area; that development would generally be inappropriate within the unspoilt floodplain pastures; and that further recreational development associated with the former gravel pits is generally incompatible with nature conservation interests and therefore undesirable. The applicant's LVIA document does not place any reliance at all (erroneously it is considered) on the South Oxfordshire Landscape Assessment, despite it having status and weight as a Supplementary Planning Document, or on the North Wessex Downs AONB landscape assessment. The ASA report also considers that upon restoration there would be a continuing landscape harm, as the new water bodies (including silt pond areas) would look incongruous and out of character in the River Meadows landscape, and causing large scale change to the historic landscape which is part of the setting of the Scheduled Monument(s) and the AONB.

9.3. With regard to visual impact the ASA report finds that there are a number of important viewpoints that have not been considered in the applicant's LVIA and that viewpoints from some receptors have not properly taken into account the extent of the impact and incongruous and intrusive aspects of it, such that the visual effects have been significantly underplayed. This includes viewpoints from Fullamoor Farmhouse and the converted barns next door, as well from the railway line, which is elevated and would afford train passengers extensive views of the proposed quarry workings for quite some considerable distance, from the A415 once vegetation has been cleared to comply with the road safety audit requirements for the access, and from the existing rights of way. The author of the applicant's LVIA has been invited to visit Fullamoor Farmhouse and 1-4 Fullamoor Barns to consider the actual viewpoints from these properties, because currently the only assessment of visual effects from these locations has been undertaken by sightline sections, which it is considered do not represent the true position. However the author has declined this invitation[29].

9.4. The overall conclusions are that the landscape and visual impacts on this sensitive river corridor landscape would be unacceptable over the long period of the quarry operation and restoration and that even after the restoration is complete the legacy landscape would remain out of character within its context. This is ably shown by the applicant's own photomontage on drawing no.: C6_LAN_029, which shows the view

[29] Email correspondence with Suzi Coyne 17th May 2016.

of the existing landscape from the Thames Path and how the important landscape features of the pastoral farmland and Sandy Bury will be lost and replaced by an extensive water body.

9.5. In addition to the omissions identified above in relation to the lack of reliance on published local landscape studies and lack of certain viewpoints, there are other serious shortcomings with regard to the information that has been provided in the applicant's LVIA in assessing the landscape and visual impacts of the proposal, which are identified below.

9.6. The area of the application site is a particularly unspoilt and attractive area of river meadow landscape with a strong structure of hedgerows and trees, a high scenic quality and strong sense of place, particularly given the presence of the Thames Path National Trail, which runs along this side of the river. Yet the applicant's LVIA provides no description or sense of this. It only reiterates the descriptions pertaining to the Landscape Character Areas (LCAs) defined by Natural England and the OWLS Study and identifies features of value within them (such as the Green Belt designation, listed buildings, Scheduled Monuments, Conservation Areas, Historic Parks, SSSIs and overlap with the AONB). Under "Landscape Conclusions" (beginning at paragraph 2.43) the applicant's LVIA simply describes the existing site as comprising 98ha of mostly arable land and 6.3ha of woodland and hedgerows, and itemises the nature of the restoration proposals. Following brief reference to the LCAs considered to be relevant (though the Vale Farmland, within which part of the site falls, is excluded) with listing of the elements of change that would be brought about by the proposed development and mitigation measures, the conclusion is drawn (paragraph 2.47) that the majority of landscape effects are judged to mitigate to residual levels by the stage of final restoration. There is, however, no understanding of how the restoration proposals have been designed in light of and to reflect local landscape character.

9.7. Contrary to the claim at paragraph 3.15 (page 36) of the applicant's LVIA that the length of the Thames Path that would be affected by the proposed quarry is relatively short in length at approximately 800m, and unlikely to represent a significantly adverse visual intrusion for long distance walkers, it is the case actually that the length affected would be considerably longer at about 2.7km. The 800m length is the distance of the national path that immediately adjoins the proposed extraction area, whereas of course the workings and wider site (including the plant complex) would also be visible from the trail either side of the application area. It is considered that there will be considerable harm to the enjoyment and amenity value of this national footpath both during the workings and once the site is restored, by the loss of the River Meadow land character of the River Thames and that the proposal is therefore contrary to OMWLP policy PE5, which specifically safeguards against mineral workings harming the immediate setting of the River Thames. (See viewpoints 5, 6, 13, 20 and 21 at Appendix 4).

9.8. The applicant's LVIA accepts at paragraph 3.6 that perimeter soil and overburden storage mounds can cause visual disturbance, but there appears to be no assessment of their impact in landscape terms, which is particularly important in this instance given the very large scale nature of them. There is also no landscape (or visual impact) assessment of the unnaturally shaped silt ponds, which would not be in keeping with the local landscape character, both due to their artificial form and the fact that they will always be hazardous areas and will need to be protected with high and intrusive fencing. The reason that the silt ponds will be hazardous areas are that they are in the floodplain and will never dry out, forming potential quicksand areas.

9.9. Furthermore no tree survey or assessment of the nature and value of the trees and hedges on the site has been provided. Without this information it is not possible to make a proper evaluation of the significance that they have in the landscape or from a visual amenity point of view.

9.10. Bachport have commissioned an independent review of the trees that are accessible from the rights of way by Ringrose Tree Services, and a copy of this is at Appendix 5. The Ringrose tree survey looked at ten trees: three ash and seven oaks in two groups adjacent to the existing right of way across the site. It found that seven were over mature (OM), one was veteran (V), one was dead (D) and one was mature (M). Bats were heard in the veteran tree and it was concluded that others were ideal habitat for bats.

9.11. In addition the South Oxfordshire tree officer has visited the site and considers that several of the trees on the site are valuable and some of the oaks are of a considerable age approaching the veteran stage of life. This is an important matter that should not be overlooked, as paragraph 118 of the NPPF states that planning permission should be refused for development resulting in the loss of aged or veteran trees found outside ancient woodland (unless the need for, and benefits of, the development clearly outweigh the loss). OMWCS policy C7 also safeguards against the loss of aged or veteran trees.

9.12. Notwithstanding the presence of these highly valuable trees on the site, OMWLP policy also requires that mineral working should not damage or destroy woodland, and where proposals affect woodland they will be assessed by taking into account the importance of the affected woodland, economically, scenically and ecologically amongst other factors. It is not possible to make this assessment without detailed information describing the type, location and condition of the trees. In addition Sandy Bury is clearly a prominent woodland, visible from many viewpoints around the site, and is a key landscape feature. It demarcates and defines the boundaries of the two landscape types of the River Meadowlands and the Terrace Farmlands, which the applicant's LVIA identifies as the landscape receptors for the site, yet there is no

assessment in the LVIA of the landscape (or visual) effect of its loss, as proposed by the application scheme. The proposal is to provide replacement planting, but this would be in a different location and form. Also the new planting would take some very considerable amount of time to represent anything like the landscape value it currently has.

9.13. Further assessment is also required of the hedgerows within the site, which are also considered to be of high value. The full extent of the existing hedgerows is not shown on working drawing C6_LAN_002, omitting the hedgerow shown in the photograph C6_LAN_013 running parallel to the Thames Path, the north-south hedgerow west of Sandy Bury and much of the hedgerow connecting Sandy Bury to Grasshill Covert, as well as some of the west-east hedgerow south of Fullamoor Plantation. The Hedgerows Regulations 1997 protects most countryside hedgerows from being removed, and according to Schedule 1 (see also Government Environmental management guidance at GOV.UK web page: Countryside hedgerows: regulation and management) an important hedgerow is one that is more than 30 years old, is situated on land associated with or adjacent to a Scheduled Monument, or was an integral part of a field system pre-dating the Inclosure Acts (1896) The current hedgerows are considerably older than 30 years, being visible on aerial photographs taken by Major Allen in the 1930's[30]. They clearly form part of the farm landscape associated with the historic setting of Fullamoor Farmhouse, the current building dating from at least 1769 and thus the time of the Inclosure Acts; and the current hedgerow of Sandy Bury and the associated east-west hedgerow immediately south of it also relate to the field boundaries identified and shown south of Fullamoor Farm on the ancient 1797 map "A new Map of the County of Oxford", a copy of which is at Appendix 6.

9.14. A tree survey and arboricultural impact assessment of all the trees and hedges on the site and adjoining land (which may be affected by the proposed development) must therefore be submitted in order to determine the implications of the proposed development in relation to the landscape and amenity value of the trees and hedges to be affected. This was a matter that was requested by South Oxfordshire District Council in their consultation response dated 29 July 2014 on the applicant's request for an Environmental Impact Assessment (EIA) scoping opinion. The provision of this information is also necessary further to the duty placed on Local Planning Authorities by Section 197 of the Town and Country Planning Act: "to ensure, whenever it is appropriate, that in granting planning permission for any development, adequate provision is made by the imposition of conditions for the preservation or planting of trees".

9.15. For all the reasons given above, it is not accepted that the application proposal is supportable in landscape and visual terms, and in addition to it being contrary to

[30] 14 aerial photographs of Fullamoor Farm are stored in the Major Allen Archive at the Ashmolean Museum, Oxford

OMWLP policy PE5 and OMWCS policy C7 as identified above, it also does not comply with SOLP policies G2, G4, C3, C4, C9 and D1, SOCS policy CSEN1, and emerging OMWCS policies C5 and C8, which require that the district's countryside, settlements, environmental resources, and landscape features, including the distinctive character and heritage of the River Thames and its valley and settlements are protected from loss and adverse developments, and that proposals for minerals development do not have an unacceptable adverse impact in terms of visual intrusion and that they respect and where possible enhance local landscape character.

10. HISTORIC ENVIRONMENT

10.1. There is a wealth of archaeological interest at the site including the round barrow cemetery SM 1421606, which overlaps the western boundary of the application site. We have a number of concerns that the proposed development does not properly take account of and will have serious detrimental effects on SM 1421606.

10.2. Firstly there is no consideration in the application documents of the consequences of draw down and re-charge of the groundwater for the integrity of SM (see also paragraph 14.7 below).

10.3. Secondly it is considered that the evaluation of the impact on the setting to the Monument has been underplayed. It currently lies within a relatively flat riverside meadowland. There are other Monument sites close by and it is likely that the presence of these and other non-designated archaeological interest at the site is linked through the use of the River Thames for transportation and communication. The current unspoilt nature of the riverside setting to the Monument is we consider therefore a leading element of the key aspects of its intrinsic heritage significance, rather than "not a predominant factor" as described at paragraph 6.36 of ES Chapter 4 Archaeology and Cultural Heritage.

10.4. This setting to the Monument will be dramatically altered through the proposed excavation of the land and large rectangular shaped mounding up to 5m high placed close to the monument, which would not be at all typical features in the landscape. In addition upon restoration a large, long, narrow and curvy edged shaped lake would be introduced parallel to the River Thames, together with other unnatural (square shaped) wetland areas (former silt ponds) which would be features entirely at odds with the existing typical meadow lands landscape to the River Thames. The County Archaeologist has also stated that he considers the impact upon the setting of the Monument would be neither temporary nor minor. As a result we consider that the effect of the changes will be major adverse, not low to minor resolving to negligible/neutral as assumed at paragraphs 6.36 and 6.37 of ES Chapter 4, and that the proposed development does not comply with OMWLP policy PE9, which requires that Scheduled Monuments and their setting should be preserved in situ. In addition

the application documents do not provide any assessment of the harm caused to the designated heritage asset weighed against the public benefits of the proposal, in order to justify the grant of planning permission, as required by paragraph 134 of the NPPF.

10.5. The evaluation of another aspect of the historic environment which we consider has been underplayed in the application documents concerns the heritage assets of listed buildings and the character of the Conservation Area at the western end of Clifton Hampden, which derive some significance from the transition into the surrounding farmland, and Fullamoor Farmhouse, whose setting is directly linked to the intervisibility between it and the site of the application proposal.

10.6. Paragraph 6.39 of ES Chapter 4 states that there would be a 7m high bund along the eastern boundary of phase 7, which would reduce noise levels and provide a visual screen when viewed from the western edge of the Clifton Hampden Conservation Area. It is noted, however, that the bund will not be in place when phase 9 is being worked, which is also on the boundary of the application site to Clifton Hampden. In addition it would be a significantly high and unnatural feature in this otherwise flat landscape and would therefore have a harmful impact on the setting to the heritage assets of the listed buildings and conservation area at Clifton Hampden. As a consequence it is considered that the effect of the proposed development would be moderate to major adverse, not low or minor adverse resolving to negligible/neutral as identified at paragraphs 6.41 and 6.42 of ES Chapter 4.

10.7. As is clear from paragraphs 5.84 and 5.85 of ES Chapter 4, Fullamoor Farmhouse was aligned to take in the aspect due to its elevated position above the land on the escarpment, and the house is afforded open views to the south, which is precisely the land that is proposed to be subject to mineral working. Paragraph 6.44 of Chapter 4 then concludes that whilst the view will be changed, the topsoil bund to be created in the northwestern corner and vegetation screening will soften and minimise visibility of the works. We consider, however, that the topsoil bund and other bunds will introduce alien features in the landscape, and that they will in any event not screen the workings from view and so the setting of Fullamoor Farmhouse would be radically changed. This alteration would continue once the site is restored, with views of the site from the house of unnatural water features rather than farmland, which is a key aspect of the setting to this heritage asset. Consequently we consider that the effect of the proposed development on the heritage asset of Fullamoor Farmhouse would be major adverse, not low or minor adverse resolving to negligible/neutral as identified at paragraphs 6.45 and 6.46 of ES Chapter 4.

10.8. OMWLP policy PE9, SOLP policies CON5, CON7, and CON11, and SOCS policy CSEN3 are concerned with preventing proposals that adversely affect the setting of listed buildings and national important archaeological remains, and harm to the character and appearance of conservation areas, whilst OMWCS policy C9 states

that proposals for minerals development will not be permitted unless it is demonstrated that they will not have an unacceptable adverse impact on the historic environment. For the reasons above it is considered that the proposed development does not comply with any of these policies.

11. GREEN BELT

11.1. All of the proposed site falls within the Oxford Green Belt. The NPPF (National Planning Policy Framework) confirms at paragraph 79 that the Government attaches great importance to Green Belts, and clarifies that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The NPPF further identifies at paragraph 90 that mineral extraction may be a form of development that is not inappropriate in the Green Belt provided it preserves the openness of the Green Belt and does not conflict with the purposes of including land in it.

11.2. In the first instance the openness of the Green Belt would not be maintained by the proposed development for a number of reasons. The first of these is that the site is visually very exposed from a number of surrounding vantage points, which would afford direct views of the workings. The proposals to remove and work all of the existing hedgerows and woodland areas within the proposed extraction area would exacerbate this harm to openness. The position of the site lying on lower land also makes it very difficult to screen the workings from many of these viewpoints on surrounding higher land.

11.3. Such difficulty is evident from the extremely high and unnatural bunding that is proposed around the plant site to screen it from views. The processing plant, concrete batching plant and associated development, including engineered settlement lagoons, would be at a visually prominent part of the site and would introduce a distinctly urbanising element in the countryside. The proposed development would therefore also harm the visual amenity of the Green Belt contrary to SOLP policy GB4.

11.4. If there were a definite and immediate need for the mineral to be extracted, that would warrant the opening up of a new quarry in this special area of countryside, and very special circumstances could be demonstrated that outweighed the harm to the openness of the Green Belt, then the aggregate processing plant, which is directly required for the purposes of the development could also potentially be justified. However, the additional factor of the proposed concrete batching plant adds to the intensity of the proposed urbanisation and is not a requirement of the development, but a desired additional element to add value to the sale of the mineral.

11.5. Also given that the concrete plant would only utilise 12% of the mineral (30,000 of 250,000 tpa) it thereby making only a small contribution to productivity of the site, and would only be able to provide a limited range of concrete product, it is questionable for the reasons described at Section 7 above that its purpose would principally be for the utilisation of minerals won at the site, and that it would in fact need to be supplied to a significant degree by minerals brought in from elsewhere, all of which would add to the urbanising nature of the proposed development. In this case the concrete plant would be inappropriate development in the Green Belt for which very special circumstances would need to exist for it to be allowed. No such case for very special circumstances has been made in the application documents.

11.6. It is considered that the proposed development would also not meet the second proviso at paragraph 90 of the NPPF, in that it would have a serious conflict with the purposes of the Green Belt. Not only would it harm the purpose of safeguarding the countryside from encroachment by introducing various elements of substantial new built development as described above, but it would also be detrimental to the setting and special character of the historic town of Abingdon, which lies just to the north west.[31] The riverside setting, within which the application site sits, is important to and defines the character of the historic heart of Abingdon. This setting, which is one of tranquil riverside meadows, would be radically altered in character both by the working of the mineral and by the proposed restoration to water based areas.

11.7. The proposed development therefore does not comply with Green Belt policy, and so it would be inappropriate development in the Green Belt, which is by definition harmful to the Green Belt and should not be approved except in very special circumstances (paragraphs 87 and 88 of the NPPF). Furthermore it is difficult to anticipate how very special circumstances can be demonstrated to outweigh the harm that would be caused, when there is no clear need for the development, either in terms of overall or local supply, and when there are a large number of alternative sites to be considered which have not yet been discounted and are not in the Green Belt.

12. TRAFFIC

12.1. A review of the transport information has been carried out by EAS Transport Planning Ltd, and a letter containing their findings is at Appendix 7. This concludes that the Transport Assessment (TA) and ES Chapter 8 Transport & Access have not followed standard national guidance and have therefore not been produced to an adequate standard or scope, which has generated a number of inadequacies in and concerns

[31] 3rd and 4th purpose of the Green Belt - paragraph 80 of the NPPF

about the information that has been presented. These concerns are summarised below, with the full detail set out in the EAS Transport Planning letter at Appendix 7.

12.2. There is no information or analysis in the TA on local junction capacity, which has resulted in the TA failing to recognise the significant queuing problems at the Clifton Hampden A415/B4015 staggered junction, which extend past the proposed quarry entrance for up to four hours per weekday at peak times. It is estimated that the addition of 3 HGVs per hour to be a loss of capacity of 24 vehicles or 28 passenger car units (pcus) per hour in the morning and 42 vehicles or 46 pcus per hour in the evening, with an additional queue of about 170 to 280m in the morning and evening peaks respectively, which would take queues back beyond the Culham Science Centre access. The analysis has been done on the basis of 3 HGVs – if 4 HGVs arrive in one hour the impact would be increased by 33%. In addition to adding significantly to local congestion to the detriment of local road users, there are major consequences for quarry traffic through HGV arrivals from the west (Abingdon) being delayed before being able to turn into the quarry entrance, and safety concerns both for HGVs turning right out to join a queue of traffic, or turning right in to leave a queue of traffic.

12.3. The TA does not mention air quality or environmentally sensitive areas, yet it should do, as this is a fundamental issue for consideration in a Transport Assessment. The original objections from Highways Officers to HGV traffic through Abingdon town centre would have been due at least in part to environmental concerns, and Abingdon is furthermore in an AQMA. Since the TA does not mention air quality and fails to identify traffic data correctly, the accuracy of the air quality assessment at ES Chapter 12 has to be called into question, because it uses average daily traffic data that is significantly lower than would typically be the case. In so doing it is unclear whether the air quality assessment has been carried out on the correct basis.

12.4. Separately from the issue of air quality effects in Abingdon, it is apparent that the environmental effects and harm to local amenity of HGV traffic (in both directions along the A415) from a potential new quarry at this location was a significant enough concern for the Council to decide not to take the site forward in the preferred minerals strategy in 2011 (see email correspondence at Appendix 8).

12.5. Finally, the accident data used in the TA is not consistent and parts of it are not up to date and are incorrect. Paragraph 3.27 of the TA states that the accident record from 2009 to April 2015 has been considered and refers to a map showing the accident locations in Appendix 3. Table 3.1 (page 19) of the TA shows 30-35 accidents per year with 20 in the first four months of 2015. However, the data supplied in Appendix 3 only shows the locations of accidents up to March 2014, so 30-35 accidents are not shown on the map. Furthermore the location of the serious accident on Tuesday 03/05/11 was not recorded in the correct location. It was 150m east of the proposed

quarry access at the point where the farmyard and the access road to the lock meet the A415 (not by Zouch Farm as shown). In addition there was a further serious accident in the February 2014 slightly further east again by the garage, which is also not shown. Both of these accidents and two slight accidents, noted by the TA, relate to queuing and/or turning traffic. It is therefore not correct as stated in the TA (paragraph 3.33) that the road has a good safety record, and there clearly is an existing issue with accidents caused by queuing and turning traffic[32], which is likely to be made worse by the proposed development which would increase queues and would involve the addition of potentially unsafe HGV turning movements.

12.6. The lack of a proper assessment of existing local traffic conditions in the TA has meant that there has not been a proper identification of the issue with local queues, which in turn has led to a failure to carry out a robust analysis of accident data and the potential of the development to impact on accident risk.

12.7. In summary all of the new traffic that would be generated by the proposed development would be added to the already congested A415. In addition there is a dedicated cycle route along the southern side of the A415, which the new proposed quarry access would cross. An increase in turning movements in general onto the A415 across this cycle route and between the other busy junctions of the Culham Science Centre and at Clifton Hampden increases the risk of accidents occurring, but HGV turning movements in particular are slow and they need a wider turning circle, further exacerbating the dangers.

12.8. Furthermore much of the HGV traffic would travel eastwards through the village of Clifton Hampden and this would be highly detrimental to the amenity and safety of the village. The location of the village school and the nursery school in the village hall directly on the A415 are a particular concern. When roads become overloaded they are not only dangerous, but become inhospitable environments, discouraging their use by other modes of transport such as walking and cycling. It can also become extremely unpleasant for people living on and using such roads for a variety of reasons, from the difficulties associated with having to access the road to the problems caused by elevated levels of noise, dirt and pollution.

12.9. The most recent data (2014) from the Department of Transport (DoT) for HGV movements along the A415 is shown below. There are three count points, which provide data that captures the number of daily HGV movements eastbound and westbound from the site, as well as through Abingdon town centre.[33] The impact of the additional quarry vehicles on the total number of HGVs is shown as a percentage

[32] There was a further serious accident by Forge Garage on Monday 9 May 2016 and the road was closed for an hour.

[33] The discrepancy between numbers of HGVs westbound and eastbound represents the loss of HGV vehicles along the westbound section of the A415 (to Culham Bridge which is not weight restricted, to the Culham No 1 Site and to the Culham Science Centre

increase. The proposed routing plan advocated by Hills would increase the number of HGV vehicles by more than 27% in Clifton Hampden and Burcot, and by 8-10% in Abingdon town centre. These are material changes and would represent a significant increase to that element of local road traffic noise that is generally the most annoying to residents and pedestrians, namely noise from HGVs, especially when this involves vehicle actions such as accelerating, braking, changing gear, and movements at junctions or on inclines, within built up areas or near dwellings. A significant increase in HGV numbers under these circumstances can influence people's perceptions of traffic noise to a greater extent than would otherwise be suggested by the overall change to the $L_{A10\ (18\ hour)}$ noise index used to assess traffic noise change.

12.10. Sensitive receptors to vehicle noise are usually considered to lie within 300m of a road, and therefore the increase in HGVs can reasonably be expected to create a noise impact to the residents along the A415 in Burcot, Clifton Hampden, and Abingdon, as well as other sensitive receptors including Clifton Hampden primary school, the nursery school at the village hall, the Europa school at Culham, Clifton Hampden surgery, the retirement home in Burcot, the Plough and Chequers public houses, and the many varied businesses in Abingdon town centre.

Department of Transport Annual Average Daily Flow of HGV movements			
*** based on 100 HGV movements per day**			
Count Point Ref	**47112**	**17038**	**57364**
Section of road	**A415**	**A415**	**A415**
Start Junction	**B4015**	**Stert St**	**Stert St**
End Junction	**A4074**	**B4015**	**Stratton Way**
Count Direction	**Two way**	**Two way**	**One way**
Route Proxy	**Eastbound A415**	**Westbound A415**	**Abingdon High St**
Sensitive Receptors along A415 route	**Clifton Hampden Burcot**	**Culham Abingdon Bridge Street**	**Abingdon High St**
Total HGVs 2014	**240**	**347**	**214**
Hills routing plan for HGVs	**65%**	**35%**	**18%**
Additional HGVs*	**65**	**35**	**18**
% increase HGVs (2014)	**27%**	**10%**	**8%**

12.11. It is considered in light of all the above that the proposed development would not comply with the requirements of SOLP policies T1 and T7, SOCS policy CSM1, and OMWCS Policy C10, because the minerals and waste development would:

- be harmful to the safety of all road users including pedestrians and cyclists;
- materially decrease the efficiency and quality of the local road network; and
- have significant negative impacts on local residential and environmental amenity.

The application proposal is also contrary to SOCS policy CSM2, because it does not provide an adequate TA as required by this policy

12.12. An additional requirement of OMWCS policy C10 is that where minerals will be transported by road, mineral workings should as far as practicable be in locations that minimise the road distance to locations of demand for the mineral. As has already been described at paragraphs 6.9, 6.10, 6.13 and 6.14 above, the location of the application site is not close to the main growth areas in terms of road miles that would need to be travelled, and the application proposal is also not aimed principally to supply the south Oxfordshire market, as confirmed by the fact that the majority of the mineral is identified as travelling north or westwards. The proposed quarry would therefore not meet the objective of minimising distances that minerals need to be transported by road.

13. HEALTH AND QUALITY OF LIFE

13.1. It is a recognised fact that minerals and waste developments can have adverse local impacts, and safeguarding people's quality of life from these effects whether individually or cumulatively should be an important consideration in determining whether a proposed form of development is acceptable.

13.2. It has already been established in the sections above that there are a number of harmful effects on the local environment and local community that would arise from the application site, and there is furthermore concern about additional potential harm that would be caused through such matters as noise and dust emissions, vibration, visual intrusion and light pollution.

13.3. The distance between the limit of the proposed working and the nearest residential properties is only about 140m to Warren Farm Cottage (though only about 30m to the application site) and 180m to the next nearest properties (160m to the overburden storage mounds). In addition the lie of the land is such that these properties sit on raised ground some 8-9m above the proposed area of the quarry and so are afforded direct views into the workings. This topography of the land would also create a natural amphitheatre effect, boosting the effects of sounds and accelerating the rising of dust emissions from the site activities towards the properties.

13.4. In addition to being in close proximity to individual residential properties, the proposed working comes within a distance of about 400m from the village of Clifton Hampden, the Culham Science Centre site and the villages of Appleford and Long Wittenham.

13.5. Given this close proximity of the site to sensitive receptors extensive measures are required to screen both the industrial and visually intrusive nature of the operations

and plant site from view as well as to attenuate the noise emissions that would emanate from the proposed activities - the location of the processing plant and operational area would also be at the closest part of the site to the properties of Fullamoor Farmhouse, Fullamoor Barns and South Cottage. It is accepted that these substantial areas of mounding could be effective in reducing overall noise level to comply with Government guidance, but they would in themselves comprise alien features, which would be visually very intrusive. With regard to the 7m high proposed bunds on the eastern boundary of the site (required to attenuate noise impacts on Clifton Hampden) they would also create an enclosed high sided corridor for the route of the diverted footpath, to the detriment of its enjoyment as a local feature of local amenity. Furthermore the lack of bunds on the southern edge of the operating area will increase the noise and dust exposure to users of the Thames Path and residents of Appleford and Long Wittenham on the opposite banks of the river. Bunding is not permitted in this area in order to continue to allow the river to flood.

13.6. The noise assessment at ES Chapter 9 nevertheless does not take account of the third octave band frequency composition of the noise generated by the plant to ensure that no unacceptable tonal or impulsive factors are caused at the closest receptors after mitigation. If tonal factors would be present then the noise limits would need to be modified for these receptors.

13.7. Furthermore even with mounding in place some activities may be audible to some receptors subject to the position of the working area relative to each receptor and the wind speed and direction at any given moment. Wind direction may make noise more audible at various times as it will change the respective contributions of either distant traffic or quarry noise. Therefore, if permission is to be granted there should be a condition requiring the applicant to monitor noise levels regularly where receptors are close to a working phase, or close to the processing area, to ensure compliance with the limits, and such information should be made available to the planning authority. A dedicated phone line should also be made available for local residents to contact the quarry in the event of unacceptable noise events, which should be investigated immediately and any exceedances of the noise limits curtailed.

13.8. It is noted from paragraph 4.9 and Table 8.7 at paragraph 4.15 of the ES Chapter 8 Transport & Access that staff are expected to arrive at between 5.30 and 6.30 am and for HGVs to start leaving the site from 7am. This very early morning traffic could quite well create additional intrusive and disturbing noise conditions at one of the quietest times of the day for the properties either side of the proposed new road access.

13.9. Reversing beacons on mobile plant and haulage vehicles can be particularly noticeable to local residents, and the applicant should develop a routing plan within the site that demonstrates how the need for vehicles to reverse will be minimised. In addition, if planning permission is to be granted, a condition should be imposed to restrict the types of reversing beacons to those that reduce long distance tonal

effects, such as by modifying their frequency content or their volume according to the background noise level.

13.10. In addition to the visual intrusion caused by the extensive areas of high mounding required to screen noise and other effects of the plant site, floodlighting of the site, that would be necessary for health and safety reasons in the winter months, would add significantly to this visual intrusion and cause considerable harm to local amenity. The effects of floodlighting is a matter that does not appear to have been assessed anywhere in the application documents.

13.11. Finally, there are concerns that the local land topography could cause the rising of dust and other airborne emissions from site activities to accelerate towards the properties lying to the north of the site. Therefore if permission is to be granted, appropriate conditions should be applied to ensure the adequate control of dust and other airborne emissions both from site operational activities and from vehicles leaving the site.

14. WATER MANAGEMENT ISSUES

14.1. Bachport has sought expert advice from GWP Consultants in reviewing the information that has been provided in the application documents relating to hydrogeology and flood risk and this has revealed a number of concerns. The advice received is given at Appendix 9, and which is set out here in full. GWP separates matters into two types: Fundamental Issues and Areas of Inadequacy.

14.2. Fundamental Issues refer to those of such significance that these could in themselves potentially be grounds for refusal of the planning permission. Areas of Inadequacy refer to weaknesses or omissions in the submitted environmental statement which are currently inadequate.

Fundamental Issues

14.3. The sequential test reported in the submission excludes all mineral sites larger than 3mt, despite the current site under consideration being estimated at 4mt in the preliminary site assessment report. It is nonsensical to exclude larger sites, as these can be worked only in part, or provide the opportunity for subsequent quarry expansion. The sequential test is therefore not fit-for-purpose, with other sites > 3 mt being available with smaller total percentage areas in the floodplain. See also the review of the information provided on alternatives in ES Chapter 13 at Appendix 2, which provides more detail on this matter.

14.4. The floodplain numerical model is not capable of accurately predicting floodplain levels to within the predicted changes (up to 30mm) reported by the applicant. The

Environment Agency (EA) reported its model to have an accuracy of +/- 250mm, the LiDAR data used for topographic data has an accuracy of +/- 150mm, the use of differing Manning's Roughness Coefficients (to reflect vegetation status *et al*) introduces a natural seasonal variance of +/-200mm according to the applicant's own hydraulic modelling sensitivity analysis, changing the boundary conditions of the model also alters flood levels by up to 290mm, blockage analysis on the bridges raises flood water levels by more than 1.00m. Given the hydraulic model predicts areas of increased flood level within the floodplain, the uncertainty over the model predictions provides no certainty of reduced flood risk to properties currently susceptible to flooding.

14.5. It is important to note that properties at Clifton Hampden already suffer from flooding and therefore any variation in the current floodplain geometry is likely to have an effect on these residents. The concern of uncertainty in the flood prediction modelling is therefore not only one of increased potential flood risk but of actual flood risk – that is to say, there is no freeboard for error.

14.6. The applicant's hydraulic modelling shows increases in flow velocity around the upstream and downstream edges of both the operational phase pit voids as well as the restored lakes and across the river bank during times of flood. These will result in increased risks of erosion and mobilisation of sediment in these areas. There is a consequential likelihood of annual erosion, and eventual loss of the bank and consequential severance of the Thames Path, given the intended long term duration of the restored surface.

14.7. There is also a substantial increase in the 'Danger for All' hazard areas (hazard being defined as depth of water multiplied by velocity) identified along and north of the Thames Path for the operational and restoration phase.

14.8. Given the predicted increases in water flow velocity arriving at the site, passing around the site and leaving the site towards Clifton Hampden, it is difficult to see how this increase in velocity (which appears to double in some instances) does not manifest itself as an increased flood risk to this area, despite the marginal predicted reduction in flood levels.

14.9. The flood risk assessment does not include an evaluation of the cumulative effect of the proposed development in conjunction with the future Didcot-to-Culham Relief Road and River Thames Crossing. It is understood the preferred road alignment currently passes through the Applicant's proposed site area. There are likely to be complex floodplain flood interactions between these two developments, which the applicant has explicitly decided not to consider within the planning application. This is unreasonable.

Areas of Inadequacy

14.10. There are three main areas of water impact which require consideration as part of any environmental statement, these are: surface water (pluvial/rainfall) run-off management; groundwater; and fluvial (river) flooding. These are considered each in turn below.

Surface Water Run-Off Management

14.11. There is negligible consideration of the increased storm run-off that will be generated from the low permeability restored agricultural lands nor any description (outline design) of the necessary storm water attenuation to maintain the pre-development green field run-off rate from site.

14.12. If groundwater infiltration approaches are proposed for these storm waters, this increase in groundwater recharge needs to be assessed as part of the groundwater flood risk assessment.

Groundwater

14.13. The Lower Greensand aquifer will have to be de-watered in the excavated pit floor to prevent upward heave and mobilisation of sands into the pit base.

14.14. No site investigation data has been collected from site for the Lower Greensand aquifer – no groundwater levels, nor permeability or storage data, nor water quality data.

14.15. No local well inventory has been undertaken of local properties. Bachport has identified 15 wells currently in use in the surrounding settlements of Clifton Hampden, Burcot and Appleford, some of which will be abstracting groundwater from the gravel plain and some from the Lower Greensand. None appears to have been assessed for impact. The impact assessment undertaken by the applicant appears to have been restricted to just those wells and boreholes identified from the local Environmental Health officer and EA records and a chance meeting with the residents of Fullamorr Farmhouse.

14.16. The pumping tests of the sand and gravel aquifer are unreasonably short (2 hours duration only), are inadequate for the purpose of investigating long term de-watering, and did not attempt to measure the response in the Lower Greensand aquifer.

14.17. Details provided of the numerical groundwater modelling are inadequate. There are, however, some obvious concerns with the modelling work presented. These are highlighted below.

14.18. The numerical groundwater model does not extend beyond the area of the floodplain gravels. The Lower Greensand aquifer actually extends more than 3km north of the site, 3km west of the site and 3km east of the site. The operational phase pit de-watering and restoration phase groundwater flow truncation and flooding risk have not been assessed for the Lower Greensand aquifer beyond the area of the floodplain gravels. This needs to be undertaken.

14.19. There is no consideration of the consequences of lowering of groundwater levels during dewatering or raising of groundwater levels after restoration on the Scheduled Ancient Monument west of the site.

14.20. There is no detailed description of groundwater flooding risk mitigation where groundwater levels will rise close to existing ground level and impair surrounding agricultural land productivity.

14.21. There is no detailed consideration of the adequacy of the land restored using site derived low permeability materials specifically with respect to waterlogging, for its intended future use as agricultural fields.

Fluvial Flooding

14.22. The original EA 1-Dimensional (1D) model was found to be unstable and not fit-for-purpose by the applicant's consultants.

14.23. A revised 1D linked to a 2-Dimensional model of the northern floodplain of the River Thames predicts changes in flood water level up to 30mm but over wider areas of inundation than previously estimated by the EA.

14.24. The 2-Dimensional Model does not consider the floodplain south of the River Thames including the villages of Appleford and Long Wittenham, nor does the 2-Dimensional model extend to all of Clifton Hampden or Burcot or beyond. It is unclear why the applicant considers properties in these areas not be afforded the same level of assessment as those within the northern floodplain. It is entirely possible properties further downstream of Clifton Hampden could be affected by the proposed changes to the floodplain morphology.

14.25. An allowance of 20% increase in peak flows has been used for climate change. Guidance for the Thames Region currently suggests this should be 25% on average.

14.26. There is no consideration of whether flood event duration has increased for flood water levels considered to be within the baseline – duration of flooding is a critical factor in the extent of damage caused to property, as well as closure of transport routes.

14.27. There is no consideration of the impact of site boundary fences, signage, gates and other security related infrastructure on the impediment of flood flows, including the effect of flow impediment due to debris collection and capture on the fence lines.

14.28. There is no consideration of silt re-mobilisation risks during flooding events which enter the silt lagoon locations during the operational and/or restoration periods.

14.29. There is no consideration of scour erosion from the pits during operation or scour erosion from the restored lakes during river flooding inundation, with regard to the impacts on water quality.

14.30. There is no consideration of the stability and erosion risk to quarry and lake restoration faces/slopes during flood water inundation.

14.31. There is no outline design or stability assessment of the flood bund proposed to separate the excavated site from river flooding, when the 'high ridge' has been removed through excavation, nor how such a ridge will be reinstated given the on-site derived materials available for restoration.

14.32. It is difficult to understand the details and differences in each of the proposed excavation phases, the exact locations and lateral extents of bunds and stockpiles, and how these relate to the hydraulic modelling reported upon for selected phases only. A table is requested detailing which and where bunds, stockpiles, ponds, lagoons, mobile and static plant are located and within which flood zones, cross-referenced to the relevant hydraulic model output drawings. In particular it is unclear how noise/acoustic/visual bunds have been integrated into the hydraulic model, as well as soil and sub-soil tips and the ever changing volumes of stock piles.

14.33. Consequently it currently is unclear whether there is loss of floodplain storage in each phase, at what elevations this has occurred, and whether any compensation storage has been provided. This should be clearly described for each and every phase, along with drawings to demonstrate the storage loss and gains, in incremental 0.1m elevation bands.

14.34. It is clear from the above advice that Bachport has received that there are serious concerns regarding the effects of the application proposal in terms of water management and flood risk, and that more information is required to demonstrate that these issues can be overcome.

14.35. In addition there is a further issue that has been identified. Paragraph 3.13 of the planning statement says that additional pre-development works will include the creation of a shallow scallop feature as part of the flood mitigation measures in the field east of the extraction area in front of Warren Cottage. There is nevertheless no further documentation or evidence that can be found in the application documents

which gives any details of this proposed feature, for example in relation to its precise form, size and how it would function. There is furthermore no explanation as to what would happen to the feature upon restoration of the site, or any reference to the proposed new River Thames crossing road routes, one of which would cross this field and how the feature might impact on the proposed route or vice versa how the road might impact on the efficacy of the flood mitigation measure. Further details to clarify these issues are necessary.

14.36. The submitted proposal does not comply with OMWLP policies PE4 and PE7, SOLP policies EP6 and EP7, and OMWCS policy C3, because it is does not demonstrate that the water management systems would not have any adverse effects on the water environment, and because the development is proposed to take place in an area of identified flood risk in circumstances where alternative locations with potential for lower flood risk have not been properly explored and the flood risk assessment is not able to demonstrate adequately that the risk of flooding is not increased from any source.

15. BEST AND MOST VERSATILE AGRICULTURAL LAND

15.1. The Regional Agricultural Land Classification maps identify the entire site as having an agricultural land quality of grade 2, which is classified as the best and most versatile (BMV) agricultural land. The application forms state, however, that only 49ha (less than half of the 104ha site) are BMV agricultural land (both grade 2 and grade 3a). This new information is derived from paragraph 2.8 and Table 5.6 of ES Chapter 5 Agriculture, and the source of this can be found in the Agricultural Land Classification and Soil Resources report, carried out by Reading Agricultural Consultants Ltd ('the RAC report') at Appendix 5A to ES Chapter 5, which provides the results of a survey of the soil resources of the site and assessment of quality of the land.

15.2. A detailed review of the information provided in ES Chapter 5 Agriculture and the RAC report is provided at Appendix 10. This review finds that not all the appropriate considerations have been taken into account or appropriately applied in the assessment of the agricultural land quality, thereby casting doubts about the conclusions the RAC report reaches in determining almost half of the land should no longer be classified as BMV agricultural land. Only a fraction of the data underpinning the land grade map presented in RAC report Appendix 5A has been provided, making it impossible to understand the land grade mapping that has been presented.

15.3. There is furthermore a discrepancy in the figures provided with regard to how much of the land proposed to be worked versus the undisturbed land is BMV land (as defined in the RAC report). Paragraph 3.9 of ES Chapter 5 states that the (application) site

contains 49ha of BMV land and that 33ha of this is land to be worked. As a consequence the difference of 16ha must be undisturbed land. However, this is not consistent with other evidence given in the planning documents.

15.4. The planning application forms make clear that the application site is 104.6ha and the total surface area of the proposed extraction site is 76ha. Therefore the unworked area is 28.6ha. With the exception of a very small element that is non-agricultural (e.g. woodland and hedgerows) almost all of this unworked land is defined in the RAC report as BMV agricultural quality, as can be seen from the map of the agricultural land grades defined in the RAC report (drawing no.: RAC8133:2). Therefore even accounting for the small element of non-agricultural land, the unworked land must amount to about 26ha and there is therefore a difference of up to 10ha of undisturbed BMV land not accounted for.

15.5. There are further discrepancies regarding the amount of land that is to be reinstated to agriculture. Paragraph 5.97 of the planning statement states that upon restoration there will be 41.8ha of agricultural land, with a net loss of 10ha of BMV land, but this figure is misleading as it includes the undisturbed land.

15.6. Paragraph 3.8 of ES Chapter Agriculture appears to assist in arriving at the amount of worked land that is reinstated to agriculture, as it breaks the figure reported at paragraph 5.97 of the planning statement down into:

- 2 large fields restored to agriculture in the centre and west of the site: 23.5ha
- existing agricultural land in the eastern part of the site (unworked land): 18.3ha

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41.8ha

15.6. There is however, no reference to, or account for, the existing agricultural land in the western part of the site, which is not to be worked and must therefore form part of the west field “proposed to be restored to agriculture”. If the unworked land to the east is 18.3ha then the land to the west must be about 10ha which would account for the missing land highlighted above, though it is not clear that this is the case, as there is no transparent accounting for the different parcels of land.

15.7. Assuming, however, that is the case then the quantity of BMV land to be reinstated to agriculture following mineral extraction would not be as much as 23.5ha, as this figure includes undisturbed land, but would actually amount to about 13.5ha which means that, even on the applicant’s own figures only about 40% of BMV land to be worked (33ha) is to be reinstated to agriculture (with a net loss of about 20ha of BMV land).

15.8. There is clearly something amiss with the figures and a rough check, carried out by overlaying the delineation of the agricultural land grades shown on drawing no.: RAC8133:2 in the RAC report and comparing them with the restoration scheme would

indicate that broadly half of the BMV land in the extraction area is not to be reinstated to agricultural land.

15.9. A further factor that has not been taken into account in the agricultural information supporting the planning application is the proposed flood mitigation feature proposed in the field east of the extraction area in front of Warren Cottage. This feature is proposed in an area identified as BMV land, but as set out at paragraph 14.33 above, no details are available as to the size and precise nature of this feature, and so it is unclear how much loss of high quality agricultural land this also entails.

15.10. It is considered that the loss of BMV land even on the basis of the applicant's own figures gives rise to at least a moderate adverse effect not minor adverse as assessed by the applicant (paragraph 3.32 of ES Chapter 5 Agriculture).

15.11. Furthermore for the reasons given in the review at Appendix 7 of the information provided on agricultural land quality, there are serious doubts about the veracity of the re-assessment of the land leading to a reduction in the grading of all the area to be worked for mineral from having a high BMV value according to the Regional Agricultural Land Classification maps and from other evidence from previous landowners of the land's high grade quality, to only 43% (33ha of 76ha) of that area having a BMV rating.

15.12. On the basis of the regional classification and other evidence from previous landowners of the land's high agricultural quality, there would be an actual loss of somewhere in the region of 52 – 60ha of BMV land from the extraction area alone (notwithstanding any further loss to account for the flood mitigation measure by Warren Cottage), which would represent a major adverse effect.

15.13. OMWCS policy C6 states that the permanent loss of BMV land will only be permitted where it can be shown that there is a need for the development which cannot reasonably be met using lower grade land, taking into account other relevant considerations. Furthermore the NPPF says at paragraph 112 that where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality.

15.14. As set out at in the review of the information provided on alternatives in ES Chapter 13, which is provided at Appendix 2, there should also have been a consideration of alternative sites to determine whether they might enable use of poorer quality agricultural land, on the assumption as put forward by the applicant that the proposed development is demonstrated to be necessary. However, no such analysis has been carried out to enable the planning authority to determine whether areas of poorer quality agricultural land can be used.

15.15. Nevertheless for the reasons set out at Sections 5-7 above it has not been demonstrated that this proposed significant development is at all necessary, and therefore there can be no justification for the proposed loss of BMV land contrary to OMWCS policy C6 and the NPPF.

16. RIGHTS OF WAY

16.1. It is commonly accepted that public footpaths form an important part of recreational resources and that they often follow routes that have been used for many hundreds of years and have historical significance. As such it has been a longstanding principle of planning policy that the existing rights of way network should be maintained in situ and that any loss of routes should be resisted unless the circumstances of a necessary development proposal mean that it cannot be avoided. The current route of the footpath is highly scenic (see viewpoints 4, 5, 8, 9 and 11 at Appendix 4) with open views over the farmland to Sandy Bury as wells as to Castle Hill at Wittenham Clumps in the North Wessex downs AONB.

16.2. There is very little information in the planning application documents regarding the proposed permanent diversion of public footpath 171/15. It is raised in the TA at Appendix G by way of brief comment in paragraphs 4.16, 4.19 and 8.8. It is also discussed briefly in the planning statement and shown on the drawings of Development Phases A-D. However, apart from discussion of the width and fencing of the new footpath and some associate bunds shown on the Development Phase B drawing at the northern end of the diverted route, there is little information on it or the impact on users of the footpath. There are no photographs from the current or the diverted route and it would appear that much of the diverted route would not be screened from the workings, particularly in the southern area according to the Development Phase drawing B, C and D. Also the last 375m of the diverted path parallels the Thames Path within 10-15m of it, which reflects the landownership boundary rather than a good route.

16.3. As far as can be ascertained from the planning application documents there appears to be no justification whatsoever for the proposed permanent diversion of public footpath 171/15, other than the interests of the convenience of the applicant. Also it is evident from the Working Phases drawings at ES Chapter 2 Hydrology and Hydrogeology that the large lake to the south of the application site is to be created in stages with an intervening barrier, so there appears to be no obvious reason why the workings and restoration could not be designed in order to allow the footpath to be reinstated onto its original route. It is noted that the original restoration proposals for the site in 2014 included a 1km long purpose built rowing lake. The water body now proposed is also 1km long and would therefore continue to allow for a rowing lake to

be established. This intention could explain the proposed permanent diversion of footpath 171/15, rather than providing for the original route and link to the Thames Path to be reinstated.

16.4. Whilst it is accepted that there would be additional new routes created upon restoration of the site, these would not provide the direct access to the Thames Path that is currently enjoyed by many users of the existing route. Instead walkers would need to take long detours circumventing the large lake (which is about 1km in length) either to the east or the west to get to the river. In addition the route to the east around the lake is likely to be impassable at times of flood for some considerable length where it runs parallel to before linking in with the Thames Path. As a consequence at these times of the year a very much longer and more inconvenient route would need to be taken if coming from the north to get to the Thames Path than is currently the case.

16.5. The situation with flooding of a significant part of the southern section of the route of 171/15 would also be the case for its proposed diversion during the proposed life of quarrying. Indeed the diversion would mean that access to the Thames Path from the north would not be possible at flood times during the life of the quarry.

16.6. However, there are also other issues that would make the proposed diversion route unsatisfactory. As already mentioned at paragraph 13.5 above there would be 7m high bunds either side of the diverted footpath creating a tunnel effect within which users would have to walk to the detriment of enjoyment of its use. Another matter is that the clear views of Wittenham Clumps from the existing footpath, which add to the enjoyment of its use, would be lost.

16.7. It is considered that harm would also be caused by the proposed development to the use and enjoyment of the Thames Path National Trail, because of a number of factors. The only means of separating the proposed workings from the Thames Path is to provide a buffer strip of land and fencing. No other measures to screen the visual impact or the dust and noise emissions from activities at the site are proposed. This would not provide a suitably conducive environment for users of the long distance path. In addition there are serious concerns that given the fast flowing nature of the flood waters at the site, that the strip of land left between the River Thames and the proposed lake could become so severely eroded that there would be loss of the bank and consequential severance of the path (see comments at paragraph 14.5 above). Finally, it is considered that the proposed creation of a large lake adjacent and parallel to the river would be an unnatural feature in this river meadowland landscape to the detriment of the current high scenic quality and strong sense of place that users of the path come to enjoy.

16.8. In all the circumstances and given the importance of the National Trail and need to retain the integrity of the river itself, it is considered that the proposed 25 metre offset from the workings is not logical when there is an existing hedgerow within 50 metres of the path that would act as a natural barrier as shown in Specific Viewpoint 1 C_LAN_013. The full extent of this existing hedgerow is not shown on the Working Phases plan, drawing no.: C6_LAN_002 as previously mentioned in Section 9.

16.9. Consideration also needs to be given to the impact of the users of public footpath 106/2/10 on the south bank of the river between the villages of Long Wittenham and Appleford, who will also be impacted by the noise and visual appearance of the quarry workings. Representative views from this footpath are shown in viewpoints 18 and 19 at Appendix 4.

16.10. The development proposal is thus contrary to SOLP policy R8, OMWLP policy PE11, paragraph 75 of the NPPF, and emerging OMWCS policy C11, because it does not meet the policy requirements for public rights of way to be protected, and would lead to serious deterioration in their value.

17. BIODIVERSITY

17.1. A review of the information provided in ES Chapter 10 Biodiversity is provided at Appendix 11. The proposed development has the potential to result in significant biodiversity impacts due to the very large area of land in the countryside adjacent to the River Thames that would be affected by the development. This review finds that there is insufficient survey data to adequately assess the implications of the proposed development on biodiversity. Indeed the biodiversity assessment appears to rely on the prevailing view that the proposed development will have a positive impact on biodiversity due primarily to the implementation and management of a restoration scheme that, by virtue of the fact it includes the creation of reed marsh, wet woodland, a large area of open water and some restored areas of grassland, will be beneficial upon restoration, and as such the surveys presented are sufficient in so far as they have identified current birds, mammals, flora and fauna on the site.

17.2. The review concludes the survey information is inadequate to properly assess the predicted impacts on protected species, or notable sites and habitats. Further survey information is required in order to identify the biodiversity impacts, to include:

- Identification of the area of woodland proposed to be removed;
- Additional surveys of use of the site by wintering birds;
- Additional surveys of breeding birds;
- An assessment of the impact of the proposed bird management plan on existing birds using the site;
- Otter surveys;

- Water vole surveys
- Bat surveys;
- Badger surveys

17.2. An assessment of the cumulative ecological impacts from the operating and restoration phases should be assessed, including for each stage the amount of retained versus new tree and hedgerow habitat, and the impact of specific operating phases on the habitat for different bird and mammal species, including the location of bunds, lighting, fencing etc. in relation to that habitat.

17.3. Until this information is forthcoming it is not possible to assess the impacts of the proposed development and in particular the implications for habitat loss. For example it is not possible to assess the impacts of the loss of the southern ditch on otter or vole, or the impacts of features such as the soil storage bunds or new fencing around the new lakes on the foraging patterns of badgers that already frequent the area. Similarly, attention needs to be give to the occurrence of nests occupied by those bird species listed in Schedule 1 of the Wildlife and Countryside Act, including Kite which was noted as nesting in scrub in Field 7. The loss of a significant volume of mature hedgerows and a woodland has the potential to significantly affect the breeding bird value of the site, currently noted as having a District site value[34] as these habitats take a long time to reach maturity from new planting.

17.4. As currently presented the development proposal is therefore contrary to the requirements of OMWLP policy PE14, SOLP policies C6 and C8, SOCS policy CSB1, and emerging policy OMWCS C7, that the biodiversity resource is maintained and enhanced and that protected species are not adversely affected.

18. RESTORATION OBJECTIVES

18.1. The proposed restoration scheme described in ES Chapter 10 Biodiversity includes (paragraph 6.27) the creation of the following wetland habitats:

- 24.5 ha of open water;
- 6.7 ha of reed marsh;
- 6.6 ha of reed marsh/wet woodland.

The creation of these new habitats, together with other initiatives, is highlighted as providing key biodiversity benefits associated with the proposed development that would offset any residual effects associated with the loss of hedgerows and other habitats as a result of the proposed quarrying operations (paragraph 7.13). This report considers the biodiversity and recreational uses of the restoration scheme

[34] ES Chapter 10 paragraph 3.39

Biodiversity

18.2. Possibly the key potential nature conservation benefit associated with the creation of open water is the provision of new habitat for waterfowl (wildfowl and waders). Indeed the OWLS character assessment for the Lowland Village Farmland notes "p*arts of the landscape type are associated with mineral extraction, and this has resulted in a number of flooded gravel pits which are particularly important for the wintering wildfowl and other bird species they attract"*. The restoration strategy would appear, therefore, to have the potential to encourage the use of these habitats by large numbers of birds. Given the location of the proposed development site adjacent to the River Thames, a key corridor for bird migration, the open water would be well placed to be used by passage, over-wintering and migrant populations of geese and swans and resident populations of gulls. The creation of large areas of reedbeds also has the potential to attract large numbers of roosting starlings.

18.3. However, the restoration scheme presented and assessed in ES Chapter 10 Biodiversity makes no reference to and takes no account of the legal requirement to discourage large or flocking birds that could create a hazard to air traffic from RAF Benson. The locality of the application area is well used by military helicopters, particularly pairs of low-flying Chinooks, with the aircraft frequently appearing to follow the route of the River Thames. Aircraft are frequently noted flying low over the development site on a regular basis, including conducting training exercises in groups of two or three aircraft.

18.4. The following commitment is presented at paragraph 6.39 of ES Chapter 1:
'Areas of wetlands have the potential to attract various species of birds dependent on the nature of the wetland. The proposal is to create habitats which will encourage wildlife but will not encourage larger or flocking birds that could create a hazard to air traffic from RAF Benson. Upon restoration, a bird management plan to minimise any bird strike hazard will be implemented. This will be agreed with the Defence Infrastructure Organisation and will be secured by means of legal agreement.'

18.5. The proposed restoration objectives and the bird management requirements are directly contradictory in nature. One would encourage birds to the restored site and the other requires the deterrence of birds away from the same site. The proposed restoration scheme is therefore not sustainable, or indeed compatible with its location alongside the River Thames and within the safeguarding zone of RAF Benson. A full review of Chapter 6 Bird Strike Hazard Assessment in provided at Appendix 12.

18.6. In addition the requirement to deter birds from the newly created habitats could result in a significant adverse impact to other existing birds that currently use the site, including breeding birds. The need to implement techniques to deter birds from the

open water, in particular, could therefore have a detrimental impact on the existing nature conservation value of the site rather than the positive one currently described.

18.7. The initiatives to be undertaken to minimise the potential for birds to use the restored site are presented in the bird management plan and described in ES Chapter 6 Bird Strike Hazard Assessment (paragraphs 7.18 and 8.4) and include the following:

- Preventing the successful breeding of geese, gulls and cormorants on site, for example by destroying eggs.
- Preventing the successful breeding of grey heron by managing the nest site through habitat manipulation.
- Preventing formation of a starling roost, such as cutting back reeds in winter or tree removal.
- The use of bird scarers.
- The use of goose-proof wire fencing around the edge of all water bodies.

18.8. The bird control initiatives listed above may well prevent breeding by geese, gulls and cormorants, prevent the formation of starling and gull roosts, disperse geese, starlings and other birds, and prevent breeding by grey heron. However, it is considered unlikely that they would prevent the use of the site by migrant and passage birds unless bird monitoring and/or the use of bird scarers, was undertaken on a daily basis at key times of year. Bird monitoring is currently proposed to be undertaken on a monthly basis from September to March, dropping to two visits during April and August.

18.9. There is also a concern that devices such as crop scarers may create issues for other non-flocking birds and prevent successful nesting and breeding of other species on, or adjacent to, the proposed development site. It is noted that the adverse impact of the bird management plan on the existing nature conservation interest of the site is not considered in ES Chapter 10 Biodiversity.

Recreational

18.10. A further issue to consider in relation to the restoration objectives for the site is that the proposal is to use the large lake for low key recreational use (paragraph 5.102 of the planning statement). The restoration scheme on drawing no.: C6_LAN_007 identifies the lake for angling and small vessel sailing and already includes a car park. It is noted that being 1km long the lake would also very suitable to be used for rowing. If the lake is permitted to be used for such activities there will then inevitably be pressure for further enabling development, such as a clubhouse, boat park and further car parking areas as the use becomes more established (as was proposed as part of the applicant's original restoration proposals in 2014). Such development of the site would introduce an urbanisation of the site, which would have a serious conflict with the purposes of the Green Belt, both in terms of safeguarding the countryside from encroachment and protecting this landscape of historic importance.

18.11. This restoration objective would be directly contrary to the guidelines of the South Oxfordshire Landscape Assessment, which state that further recreational development associated with the former gravel pits is generally incompatible with nature conservation interests and therefore undesirable (see paragraph 9.2 above), and to SOLP policy R9, which seeks to resist proposals for recreational development associated with the River Thames and its valley, the overriding aim being to preserve the river environment and landscape. In particular the policy requires that water-sports activities should develop through existing sites and premises rather than the creation of new ones. It is noted that this policy although very relevant to the development proposal is not cited in the list of policies at paragraph 4.10 of the planning statement. Alternatively the applicant relies on OMWLP policies PE1 and PE16 in support of their restoration proposals for recreational use. However, these are not saved polices and have no relevance to the application proposal.

18.12. A further consideration in relation to the restoration objectives is that they are directly counter to the objectives of the 2015 Burcot and Clifton Hampden Village Plan (i.e. the Community Led Plan). Community Led Plans are National and Local Government backed initiatives and carry the weight of the local community behind them. The applicant acknowledges (paragraph 2.6 of ES Chapter 15) the significance of the Village Plan/Community Led Plan in representing the views of the local community, but then ignores the development objectives contained therein, namely the promotion of the village as a visitor destination, restoration of the wharf, and a new community centre. These objectives support the future sustainability of the village and its amenities. The proposed restoration scheme will draw visitors away from the village, which is directly counter to the objectives set out in the Village Plan.

18.13. The purpose of the Community Led Plan is to inform the Burcot and Clifton Hampden Neighbourhood Plan (NP). The authority to develop the NP was made to SODC on 26 September 2014, and Hills were made aware of the emerging NP at the meeting with the four parish councils in July 2014. Indeed Hills objected to the inclusion of the proposed quarry site within the NP boundary, thereby acknowledging the NP as a statutory instrument for use in determining local planning applications. A key purpose of the NP is to implement the development priorities identified in the Village Plan. The restoration scheme is thus counter to the objectives of the emerging NP.

18.14. Furthermore the area already benefits from sailing facilities at Dorchester and Abingdon, as well as angling at the Dorchester lakes, along the wharf area at Clifton Hampden and other stretches of the River Thames as far as Abingdon. No need has been identified for additional recreation facilities of this kind in the area, and so in turn justify the creation of a large new lake.

18.15. It is considered for all the reasons above, and notwithstanding other concerns highlighted at Section 9 about the inappropriateness of the proposed lakes and other wetland areas in the landscape context, that the proposed restoration scheme for the application site is not credible or sustainable. It is therefore contrary to the requirements of SOLP policies R4, and R9, which safeguard against recreational proposals that would adversely affect the area and Green Belt, and also to OMWLP policy PE13 and OMWCS policy C7, which require proposals for restoration to nature conservation and aftercare to be made in a satisfactory manner appropriate to the location.

19. CUMULATIVE IMPACTS

19.1. A review of the considerations in the ES of in–combination effects and cumulative impacts as a result of the proposed development is provided at Appendix 13. This review finds that there is no consideration of the potential for direct in-combination effects to occur to sensitive receptors; rather the significance of effects is only assessed on an issue-specific basis. The question of the need for additional mitigation measures to offset the potential for in-combination impacts to reduce their significance has therefore not been addressed.

19.2. The ES also does not consistently or systematically assess the potential for environmental impacts to occur as a result of other planned and proposed projects within the vicinity of the application site. There are a number of such developments that need to be taken account of including for example:

- Expansion of Culham Science Centre
- Local housing proposals, including Berinsfield expansion; and
- New Thames crossing and road link between Didcot and the Culham Science Centre
- A new solar farm on land northeast of the agricultural buildings at Fullamoor Farm.

19.3. The ES does not therefore comply with the EIA Regulations, which require that an ES should include consideration of the inter-relationship of the environmental factors that are likely to be significantly affected by the proposed development, and of its cumulative effects (with other proposed or planned developments). A properly conducted cumulative impact assessment should therefore be required to fulfil the EIA obligations for this application.

20. SUMMARY AND CONCLUSION

20.1. The proposed development does not comply with the minerals strategy of the existing or of the emerging development plan. The proposal is entirely speculative and premature pending a proper assessment through the local plan process of all site options available to meet the proposed new minerals strategy.

20.2. There is no current or pending need for the proposed development, either in terms of overall supply or for providing a balance of supply in different parts of the county, which it is questionable that the site's location would in any event achieve, because of the significant distances that would need to be travelled to bring the mineral to the relevant growth areas, and because the details of the proposal demonstrate that it is in any event not primarily intended for this purpose. There is furthermore no certainty that a need may even arise before the end of the Council's proposed local plan period, and even if that need should arise the OMWCS site allocation process would have determined the most appropriate location for the new sites to provide sand and gravel in the southern part of the county, which is the correct means of facilitating implementation of the minerals planning strategy. At this point in time therefore there can be no justification for opening up a new quarry in the countryside with all the associated harm it would bring.

20.3. Furthermore the quality of the gravel reserve is limited and would in any event not be able to meet the requirement of providing an effective supply of locally sourced construction material. Additional aggregates would still have to be sourced from elsewhere to satisfy local needs. In terms of quantity the site would also not be effective. Other sites yield much higher volumes of mineral per hectare, meaning that more land needs to be opened up to get at the same quantity of mineral that would be worked from a smaller area at other quarries in Oxfordshire.

20.4. There has been no robust analysis of alternative options, which could well be more environmentally suitable than the application proposal.

20.5. The area of the application site is a particularly unspoilt and attractive area of river meadow landscape with high scenic value quality and a strong sense of place, particularly given the presence of the Thames Path National Trail, which runs along this side of the river. The proposed development would have severe landscape and visual impacts both during the life of the operations and through the reinstatement proposals, which would completely alter the nature and character of the landscape and introduce alien and intrusive features.

20.6. The historic environment of the application site is significant. There is a wealth of archaeological interest including the round barrow cemetery SM 1421606, which overlaps the western boundary of the application site, and there are a number of

listed buildings and the conservation area at Clifton Hampden as well as other non-designated heritage assets, which derive significance from their setting which includes the farmland proposed to be radically altered through the application proposals. It has not been shown that the proposed working would not harm the integrity of the Monument (through changes in groundwater levels), and the proposed development would further cause significant harm to the setting of the various local heritage assets. There are no demonstrable public benefits that would outweigh the harm that would be caused.

20.7. The site is within the Oxford Green Belt, and the proposed development would materially harm both its openness and the purposes of the Green Belt, by reason of the fact that the site is visually exposed from surrounding higher ground, by the proposed urbanisation of the land through substantial new built development as part of the scheme, and by radically altering the riverside meadow character of the area which is important to preserving the setting and special character of the historic town of Abingdon. It would therefore be inappropriate development in the Green Belt, which is by definition harmful to the Green Belt and should not be approved except in very special circumstances.

20.8. The level of traffic generation associated with the proposed development would be significant and the new access would have to cross a dedicated cycle route. The increase in turning movements onto the already congested A415 would be harmful to the safety of all road users, particularly given the cumbersome movements of heavy vehicles and would materially decrease the efficiency of the road. The additional traffic would also make for an inhospitable and unpleasant environment for people living on and using the road with elevated levels of noise, dirt and pollution. The development would also not be acceptable in transport terms, because it would not enable the minimisation of distances travelled to and from the markets for and sources of materials.

20.9. Given the close proximity of the proposed workings to sensitive receptors and the site topography there is likely to be an increased level of disturbance from activities, and the proposed mitigation measures together with floodlighting of the plant site would be visually intrusive and harmful to local amenity.

20.10. The vast majority of the site lies within flood zones 2 and 3, including the functional floodplain. It is accepted that sand and gravel can in principle be dug from areas at risk of flooding, but given the importance of the floodplain, that must be in circumstances where there is a definite need for the mineral and the quality of the reserve justifies it, which is not the case here.

20.11. The entire site has an agricultural land quality of best and most versatile (BMV), and the loss of this land must only be permitted where it can be shown that there is a need that cannot be met using lower grade land, which is not the case.

20.12. There appears to be no justification for the proposed permanent diversion of public footpath 171/15, which would result in a highly circuitous alternative route to get to the Thames, and would result in adverse effects that would be detrimental to the current enjoyment of it as a resource by many local users. In addition the amenity value of the Thames Path National Trail, would be adversely affected by the close proximity of the workings, by the likely potential that the strip of land left between the River Thames and the proposed lake could become so severely eroded that there would be loss of the bank and consequential severance of the path, and by the loss of the natural landscape and heritage of the River Thames setting through the creation of the restoration proposals.

20.13. It has not been possible to properly assess the impacts of the proposed development in relation to biodiversity, as further information is required.

20.14. The proposed restoration strategy and the bird management requirements are directly contradictory in nature. One would encourage birds to the restored site and the other requires the deterrence of birds away from the same site. The proposed restoration scheme is therefore not credible or sustainable.

20.15. It is considered that the application documents do not fulfil the requirements of the EIA Regulations in relation to the need to consider in-combination and cumulative impacts, and that this information needs to be provided in order for the implications of the application to be properly assessed.

20.16. It is apparent that there is a significant level of information that is still required in order properly to assess the application proposal, which for ease of reference is summarised below.

- A proper assessment of alternative options to the application site for meeting the minerals strategy;
- A case for very special circumstances to justify the development in the Green Belt;
- A full and hedgerow tree survey and arboricultural impact assessment;
- The data missing from the TA as outlined in Appendix 7
- An update to the noise assessment to take account of third octave band frequency composition of the noise generated by the plant
- Details of proposed floodlighting and an assessment of its environmental and amenity effects;
- A robust FRA sequential test;

- An update to the ES on water management issues to cover the items listed at paragraphs 14.9 - 14.33 above;
- Details of the proposed flood mitigation feature in the field in front of Warren Cottage;
- An analysis of alternatives options to determine whether there is land of poorer agricultural value that could be used in preference to this site;
- Identification of the area of woodland proposed to be removed;
- Additional surveys of use of the site by wintering birds;
- Additional surveys of breeding birds;
- Otter surveys;
- Water vole surveys
- Bat surveys;
- Badger surveys
- An assessment of the impact of the proposed bird management plan on existing birds using the site; and
- A properly conducted cumulative impact assessment.

20.17. Bachport would request that the Council require this further information to be provided by the applicant before the application proceeds to be determined, and that it is subject to further consultation once available.

20.18. Nevertheless in order to respond to this round of consultation, on the basis of the information that has been submitted with the application and for all the reasons outlined above, which it is submitted are significant, and clearly demonstrate that the proposed development is not acceptable, Bachport strongly OBJECTS to the development proposed in planning application no.: MW.0039/16 and urges the County Council to refuse planning permission.

20.19. The reasons for objection are summarised below:

- There is no need for the development and it is therefore contrary to OMWLP policies SD1 and PE2 and emerging OMWCS policies M3 and M5.
- The proposed development would cause significant harm by reason of landscape and visual impact contrary to the provisions of OMWLP policy PE5, SOLP policies G2, G4, C3, C4, C9 and D1, SOCS policy CSEN1, and emerging OMWCS policies C5, C7, C8 and C9.
- The proposed development would be harmful to the local historic environment contrary to the provisions of OMWLP policy PE9, SOLP policies CON5, CON7, and CON11, SOCS policy CSEN3, and emerging OMWCS policy C9.
- The proposal would not be appropriate in the Green Belt and very special circumstances have not been demonstrated to outweigh the harm, contrary to paragraph 87 and 88 of the NPPF.

- The application scheme does not provide for safe, effective or environmentally acceptable transport arrangements, contrary to SOLP policies T1 and T7, SOCS policy CSM1, and emerging OMWCS Policy C10.
- The submitted proposal does not demonstrate that the water management systems would not have any adverse effects on the water environment and flood risk, contrary to OMWLP policies PE4 and PE7, SOLP policies EP6 and EP7, and emerging OMWCS policy C3.
- It has not been demonstrated that the proposed development is necessary and therefore the loss of BMV land would be contrary to paragraph 112 of the NPPF and emerging OMWCS policy C6.
- The development proposal would not protect the rights of way network, contrary to SOLP policy R8, OMWLP policy PE11, paragraph 75 of the NPPF, and emerging OMWCS policy C11
- There is insufficient information to properly assess the implications of the proposed development on biodiversity, contrary to OMWLP policy PE14, SOLP policies C6 and C8, SOCS policy CSB1, and emerging policy OMWCS C7.
- The proposed restoration objectives are contradictory and inappropriate in the landscape context, contrary to the aims of SOLP policies R4, and R9, which safeguard against recreational proposals that would adversely affect the area and Green Belt, and also to OMWLP policy PE13 and OMWCS policy C7.
- The proposed restoration strategy is directly contradictory to the development priorities set out in the Burcot and Clifton Hampden Village Plan 2015, and the emerging Neighbourhood Plan. The priorities are to develop Clifton Hampden as a visitor destination through the restoration of existing amenities and development of new ones, yet the proposed restoration scheme will draw visitors away from the village.

20.20. In addition if planning permission is unfortunately to be granted, BACHPORT considers that there should be an additional requirement within a planning obligation for an additional pedestrian refuge island to be provided on the A415 to the Clifton Hampden village side of Culham Science Centre to deter overtaking vehicles, and that the following conditions should be imposed, without prejudice to identifying further conditions as more information becomes available:

- To require the applicant to monitor noise levels regularly and have a dedicated phone line for complaints;
- To require a routing plan to be developed for minimising vehicle reversing;
- To restrict the types of reversing beacons to those that reduce long distance tonal effects;
- To ensure the adequate control of dust and other airborne emissions both from site operational activities and from vehicles leaving the site.
- Site operating hours to be restricted to 7.00 am to 6.00pm Monday to Friday and 8.30am to 13.00pm on Saturdays, with no working on Sundays or Bank Holidays.

- Employee arrival and departure times to be restricted to these same operating hours
- Periods of maintenance also to be restricted to these operating hours and to exclude Sundays and Bank holidays
- Withdrawal of permitted development rights for any changes to the operations set out and agreed in the consent.
- A limit on the number of vehicles leaving and arriving at the site during the morning and evening peak periods between 7-9am and 4-6pm.