LEICESTERSHIRE MINERALS AND WASTE LOCAL PLAN

ASSESSMENT OF POTENTIAL SAND AND GRAVEL SITES

MAY 2016

INTRODUCTION

This document provides information regarding the sites that have been put forward as potential allocations for sand and gravel working in the Minerals and Waste Local Plan, together with comments received from technical consultees thereon and an indication of the reasons for their allocation or non-allocation.

As the first stage in the production of the Leicestershire Minerals and Waste Local Plan, the County Council published an Issues Document in November 2013. Question 7 asked what potential exists to extend existing sand and gravel sites; and if wholly new sites are required, where should they be located? Representations were received promoting particular sites.

In order to enable the County Council to carry out an initial assessment of these proposals, the site promoters were asked in December 2014 to provide additional information in relation to the identified areas. A wide range of information was requested and covered areas including the amount of the mineral, the length of time that the site would be operational, possible impacts on agricultural land quality, environmental and cultural designations, residential amenity and water resources and proposed restoration and after-use.

In July 2015, coincident with consultation on the draft Plan, a letter was sent to the minerals industry drawing their attention to the opportunity to put forward further sites for sand and gravel extraction within Leicestershire. A number of potential additional sites for sand and gravel extraction were subsequently put forward in response to the consultation on the Plan.

Consultation on the additional sites was undertaken in September 2015. Comments were sought from key internal consultees such as highways, ecology and archaeology and external consultees such as the Environment Agency and Natural England.

The potential sites have been appraised through the Sustainability Appraisal (SA) process which assesses the sites against a range of social, economic and environmental factors. The SA has been updated at each stage of the preparation of the Minerals Local Plan taking into account comments received from the previous consultation stage and amendments made to the Plan. The SA includes plans showing the location of all the sites.

The Table below provides a summary of the reasons for allocating, or not, the sites put forward to the Council for sand and gravel extraction.

Site	Operator/ Proposer	Is the site an extension to an existing site?	Acceptable Impact on Local Environment and/or Community Protection	Acceptable Impact on the Highway	Acceptable Impact on the Landscape and/or the Historic Environment*	Acceptable Impact on Biodiversity	Site Allocated?
Brooksby	Tarmac	✓	✓	✓	✓	✓	✓
Cadeby – western extension	Tarmac	✓	✓	✓	✓	✓	✓
Cadeby – Newbold Road extension	Tarmac	✓	✓	✓	✓	✓	✓
Freeby	Freeby Estate	X	X	X	X	X	X
Husbands Bosworth	Tarmac	✓	✓	✓	✓	✓	✓
Lockington	Tarmac	✓	✓	✓	X	X	X
North Kilworth	Mick George	X	X	X	X	✓	X
Shawell – southern extension	Tarmac	✓	✓	✓	✓	✓	✓
Shawell – eastern extension	Tarmac	✓	✓	✓	✓	✓	✓
Shawell – western extension (Lutterworth Road)	Tarmac	✓	✓	✓	✓	✓	✓
Shawell – Cotesbach extension	Tarmac	✓	✓	✓	✓	✓	✓

* All the proposed sand and gravel sites pose archaeological and wider cultural heritage concerns warranting careful consideration. Most of the individual quarry sites, as opposed to the currently mooted extensions, have been the subject of previous and/or on-going programmes of archaeological investigation, notably Cadeby, Lockington and Shawell. The proposed sites will all merit a similar level of assessment.

The following pages set out for each site information provided by the promoter of the site (Section A), comments received from technical consultees (Section B) and the County Council's conclusions as to whether the site should be allocated (Section C).

BROOKSBY – SOUTHERN EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Proposed Extension Reserves (tonnes): 1.1 million tonnes

Estimated Annual Output (tpa): Average of 200,000 tpa

Geological Evidence to indicate that a suitable quality and quantity of material is available: Geological information is fully proven and evidenced by borehole data.

Timescale for proposed extraction (start date; estimated life of workings): Estimated start date for extraction is 2021.

Phasing of proposed workings: Extraction within the extension area would follow existing/consented reserves as the site infrastructure and processing plant facilities will remain on site.

Environmental Information

Does any site affect Agricultural Grades 1, 2 or 3a 'best and most versatile'?
Yes, agricultural land classification Grade 2 and 3. (Source: Natural England)

Has any impact on Ecology been assessed?
Yes. Previous planning applications (2000/0443/06) assessed part of the proposed extension area and minimal ecological potential was identified. A current planning application 2014/VOCM/0049/LCC is currently under consideration and ecological assessment work has been updated. This survey indicates that ecological interest remains low apart from the Rearsby Brook Corridor. As part of this assessment a desk-based investigation has been carried out that identified designations. There are no direct impacts on these designations.

Has any impact on Groundwater / Hydrology been assessed?
Yes. Original planning application for sand and gravel extraction 2000/0443/06 included hydrological assessment and flood risk assessment. Current planning application 2014/VOCM/0049/LCC reviewed this information and concluded that development would not adversely affect groundwater. The response from the Environment Agency is included within the current Planning Application. It is not anticipated that a southern extension would vary this view. However, an application would be subject to a more detailed investigation. Restoration already provides for an increase in flood water storage capacity.

Will the site affect any international, national, regional or local designated sites?
There will be no direct impact upon international, national, regional and/or local designated sites. The extension area is located in the SSSI Impact Risk Zone for

Frisby Marsh SSSI which is 2km north-east of the proposed working area. The proposed extension would not pose a threat to the ecological value of the SSSI. The extension area is situated adjacent to pockets of National Inventory of Woodland and Trees, Priority Habitat Inventory – Deciduous Woodland, as well as a small area of Woodland Grant Scheme 2. There would be sufficient off set of workings from these designations that none would be adversely affected by proposed operations.

Will the site affect any known archaeological features and / or historical buildings?
Wider archaeological investigation has been carried out under previous planning applications – 2000/0443/06. There are known features of archaeological interest at Brooksby. Working is subject to a watching brief and a scheme of investigation which satisfactorily controls the potential for impact upon features of archaeological interest. A desk-based assessment does not identify any additional assets of historical or archaeological potential.

Have you undertaken any surveys or environmental impact assessments of the site?
Previous planning application (2000/0443/06) was subject to extensive EIA. The current planning application 2014/VOCM/0049/LCC updated assessment work on part of the proposed extension area in regards to ecology, archaeology, water environment, soil resources, landscape and visual, traffic, noise and dust and traffic. All of these assessments would be updated as part of a future Planning Application.

Transportation

Means and route of transportation of material to existing processing plant:
Access to public highway is via the A607 Melton Road, this would remain as existing. The existing office / weighbridge and processing plant would remain as existing. Internal haulage routes would be factored into quarry layout and design.

Restoration

Proposed Afteruse: Agriculture at lower level and water bodies

Proposed cessation of workings: Circa 2027.

Will the restoration require importation of waste?
The site will be restored to low level agriculture. There may be a residual requirement for the importation of inert fill to assist with restoration purposes for more successful agricultural use to achieve better gradients.

Buffer Zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
There is a cluster of farm structures at Spinney Farm located within the proposed extension area and adjacent to the current working area. The farm site

would be excluded from operations. There are also farm storage units (Brooksby Grange Farm) located on the northern site boundary of the proposed extension area. The nearest residential properties are at Spinney Farm Cottages, Rotherby Lodge and Brooksby Grange Farm.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
Although the working is proposed to be in proximity to residential property and farm structures, with working practices and operational standards in place we do not consider that a designated 'buffer zone' for working/operations will be necessary. Given the importance of the mineral reserve and lack of sensitive development in proximity to operations, we would wish to ensure that sensitive developments are not permitted in proximity to the proposals.

Other Information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)? None.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: Existing constraints include Water vole, along the brook, and badgers in the Brooksby Spinney. Land is arable, of minimal existing value. The principle of linking existing woodlands through restoration and also the creation of wetlands along the brook is supported. The Brook needs to be left with a corridor of natural open space along it, to protect water vole and to improve habitat connectivity along the brook. A buffer zone between agricultural use and the watercourse of at least 10 metres is recommended, and also around all created/retained wetlands, which should be within the brook corridor.

County Archaeologist: Potential for and impact upon significant archaeological and palaeoenvironmental remains, both surface deposits and embedded in the Brooksby and Bytham gravels.

Historic England: There is the potential for impacts upon ridge and furrow.

C. CONCLUSIONS

The site is a proposed extension to Brooksby Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was included in the Consultation Draft Plan (July 2015). It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Potential for and impact upon significant archaeological and palaeoenvironmental remains, both surface deposits and embedded in the Brooksby and Bytham gravels.
- Provision for the retention of public bridleway H58.
- Impact on the Rearsby Brook and its floodplain.

- Protection of a corridor of natural open space alongside the Rearsby Brook and around any retained wetlands.
- Restoration proposals which reflect the objectives of the High Leicestershire local and national landscape character area, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.
- Restoration to include woodland in the south eastern corner to link Brooksby Spinney with other existing woodland areas; and wetland habitat alongside the Rearsby Brook.

CADEBY –WESTERN EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Proposed Extension Reserves (tonnes): 164,000t west of plant site; 143,000t north of Brascote Lane

Estimated Annual Output (tpa): 170,000tpa

Geological Evidence to indicate that a suitable quality and quantity of material is available: Resources proved by borehole drilling in 2014 and 1999.

Timescale for proposed extraction (start date; estimated life of workings): Extraction and progressive restoration would follow the proposed northern extension (subject to a current planning application and identified as Area 1 above). Start date is estimated to be 2020.

Phasing of proposed workings: To be determined.

Environmental Information

Does any site affect Agricultural Grades 1, 2 or 3a 'best and most versatile'?
Yes, agricultural land classification Grade 2 and 3. (Source: Natural England)

Has any impact on Ecology been assessed?
There has been no formal ecological assessment of the proposed extension area. The land is in agricultural use.

Has any impact on Groundwater / Hydrology been assessed?
An initial desk-based assessment of groundwater and hydrology has been carried out using information courtesy of the Environment Agency; no hydrological designations, features or sensitivities have been identified.

Will the site affect any international, national, regional or local designated sites? No.

Will the site affect any known archaeological features and / or historical buildings?
Grade II* listed Church of All Saints is located within 150m south-west of the proposed extension area in Cadeby village. The Church is separated from the site by a vegetative screen.

Have you undertaken any surveys or environmental impact assessments of the site? No.

Transportation

Means and route of transportation of material to existing processing plant:
Material would be transported to the processing plant by dump truck/lorry via Brascote Lane. Suitable access points onto the Lane will be constructed and maintained during operational period.

Restoration

Proposed Afteruse: Agriculture at lower level with water bodies.

Proposed cessation of workings: 2022/2023

Will the restoration require importation of waste? No.

Buffer Zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
There are two residential properties on the southern side of Brascote Lane.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
Current measures to protect amenity include the placement of topsoil and subsoil storage bunds as an acoustic and visual screen. Appropriate stand offs and/or working hour restrictions will be designed and adopted to protect residential properties.

Other Information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
None. The land is crossed by an overhead electricity line and a sewer main, which may require protection and working stand offs if the operators of those services elect to retain the apparatus.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: Land to the west is largely arable land of minimal biodiversity value, but there are great crested newts in ponds immediately north, and they may be present in ponds on site. Once the quarry starts, it will create habitats attractive to GCNS and they may move onto the operational area. This will be a constraint to operation of the quarry, likely to need EPS licence. Badger sett known to be present within the area. Restoration likely to be focussed around GCN mitigation – provision of ponds and terrestrial foraging habitat – but as at the main Cadeby quarry, there is scope to create dry grassland of considerable species-richness and invertebrate value, on gravelly substrate - there is already some in existence on the main quarry.

County Archaeologist: Potential for and impact upon significant archaeological remains

National Grid: The site is crossed by a 400/275k overhead transmission line – ZL route.

C. CONCLUSIONS

The site is a proposed extension to Cadeby Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was included in the Consultation Draft Plan (July 2015). It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Potential for and impact upon significant archaeological remains
- Details of the routes for transporting mineral from the allocated areas to the existing processing plant.
- Restoration proposals which reflect the objectives of the Upper Soar local landscape and Leicestershire and South Derbyshire Coalfield national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.

CADEBY QUARRY – NEWBOLD ROAD EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Total Reserve (tonnes): 1.5 million tonnes

Estimated Annual Output: 150,000 – 180,000 tonnes pa

Geological evidence to indicate that a suitable quality and quantity of material is available.
The sand and gravel resource has been proved from borehole drilling. Sand and gravel range from 3.6m – 11.25m (average 4.75m) thickness. Soils and clay overburden range from 0.3 – 3.0m (average 1.4m) thickness. The resource is similar to that currently worked at existing quarry and worked historically on land immediately to the west of Newbold Road.

Timescale for proposed extraction (approximate start date; estimated life of workings).
Likely to be required to provide continuity for Cadeby Quarry within next 5 years. The resource would provide circa 8 -10 years of production continuity for Cadeby Quarry.

Phasing of proposed workings.
Subject to further design, although general progression from south to north is likely to be most appropriate programme linked with progressive restoration. Early screening on northern boundary towards Kirkby Old Parks, with combination of earthworks and tree planting will be key feature of working and restoration design.

Environmental Information

Does the site affect Agricultural Grades 1, 2 or 3a 'best and most versatile' land?
Soil resource survey not yet conducted, but likely to similar to soils at existing Cadeby Quarry, which are combination of grade 3b, 3a and 2. Land can be restored to agriculture at lower level using on site materials.

Has any impact on Ecology been assessed?
No detailed site survey undertaken yet. Land is predominantly arable. Hedgerow and protected species surveys to be carried out.

Has any impact on Groundwater/Hydrology been assessed?
Hydrogeology assessment to be conducted, but issues likely to be similar to the existing quarry with scope for appropriate monitoring and mitigation strategy.

Will the site affect any international, national, regional or local designated sites? Not as far as aware.

Will the site affect any known archaeological features and/or historical buildings, structures or gardens?
Initial desk top assessment identifies two records (MLE 3043 – Medieval / post medieval earthworks at Kirkby Moats and MLE 3047 – Iron Age pit alignment).

Transportation

Means and route of transportation of material to any processing plant and out of the site.
Mineral transported by conveyor via culvert under Newbold Road to access the former Cadeby Quarry working area west of Newbold Road. The conveyor will then link to processing plant via the existing conveyor corridor. Mineral to be processed through existing processing plant and existing road access onto Brascote Lane leading to the A447 will continue to be used.

Restoration

Proposed use at the cessation of workings.
Restoration likely to be predominantly to agriculture at lower level, using on site overburden and soils. Opportunity for new hedgerows and some woodland planting, with water bodies/ ponds in base of re-profiled landform.

Will the restoration require importation of waste?
No requirement for imported materials.
Restoration to be achieved using on site overburden and soils only.

Buffer zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
Land is generally remote from residential property to the east. Appropriate operational stand–off can be designed for properties on the western and southern fringes. Beech Spinney provides good established mature tree screen to properties west of Newbold Road.

What other measures will be implemented to act as a buffer zone to reduce impacts.
Landscape screening through earthworks and tree planting can be designed to provide additional visual and acoustic screening.
Existing agricultural track from Beech Spinney to Bullacre Spinney forms natural boundary for extraction operations, although earthworks screening proposed on land immediately north of the track.

Other information

Have you undertaken any surveys or environmental impact assessments of the site?
Assessments being undertaken to assist with preparation of formal Scoping Report.

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
Proposal will be subject to formal Scoping and Environmental Impact Assessment.
Scheme of working and restoration to be agreed with the land owner and other parties with legal interest in relation to the working of sand and gravel.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: **OK with mitigation; GCN/Badger surveys**
Currently an arable field, of low biodiversity value, apart from surrounding hedges. OK in principle, as long as hedges retained and buffer zones to woodland immediately off site.
Great Crested Newt and badger surveys will be needed UP-FRONT with an application – if badger are present in one of the hedges, an increased buffer zone will be needed around the sett. If great crested newts are present in the off-site ponds to the south/south-west, some mitigation would be required (probably exclusion fencing), but as the land is arable and of low newt-foraging value, it should not affect land-take.
If GCN are present, note that if land use changes from arable to (e.g.) rough pasture or habitat more attractive to GCN, this might change, so it is best to keep it arable until any newt exclusion fencing is up.

Environment Agency: This location has the least flood risk associated with fluvial flows. The site is located within flood zone 1 and is over 1000 meters from a main river.
The glaciofluvial sand and gravels are classed as a Secondary A aquifer under the Environment Agency's Groundwater Protection, Principles and Practice (GP3). Secondary A aquifers are capable of supporting water supplies at a local scale and can form an important source of baseflow to rivers. There are numerous private wells to the west and south of the site boundary. These will all require protection from any mineral extraction and associated de-watering operations.
As Restoration is predominantly to agriculture at this site, we would advise that habitats are created as part of the restoration scheme which intercepts agricultural runoff. This can include but is not limited to hedgerows, ponds, scrapes, reed beds, wet ditches, wet woodlands and buffer strips.

Highways Authority: The transport proposals state that the minerals will be transported by conveyor to the existing processing plant and thus there will be no change to existing access to the site. On this basis the highway authority would have no further comments.

C. CONCLUSIONS

The site is a proposed extension to Cadeby Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was promoted in response to the Consultation Draft Plan (July 2015) and was subject to consultation in September 2015. It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Provision for the retention of Footpath S26.
- Provision for the planting of additional hedgerow along the western boundary of the allocated area adjacent to Newbold Road south of Beech Spinney.
- Provision of buffer zone to Beech Spinney.
- Details of the routes for transporting mineral from the allocated areas to the existing processing plant, which shall be carefully sited where they cross any restored land.
- Restoration proposals which reflect the objectives of the Upper Soar local landscape and Leicestershire and South Derbyshire Coalfield national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.

FREEBY

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Total Reserve (tonnes): in excess of 1Mt

Estimated Annual Output: up to 150,000 tonnes per annum

Geological evidence to indicate that a suitable quality and quantity of material is available: The British Geological maps indicate the presence of river terrace sand and gravels along the Eye Valley and this is supported by the existence of an operational quarry to the west of Melton Mowbray in the same river valley and geological deposit at Brooksby. This is further supported by the landowner's experience of farming of this land.

Timescale for proposed extraction (approximate start date; estimated life of workings): The site is available at present and is not constrained by any timescale issues.

Phasing of proposed workings: no information provided.

Environmental Information

Does the site affect Agricultural Grades 1, 2 or 3a 'best and most versatile' land?
The land is classified as grade 3 with potentially some areas of grade 4 along the southern edge.

Has any impact on Ecology been assessed?
No ecological impact study has yet been carried out.

Has any impact on Groundwater/Hydrology been assessed?
No such study has yet been carried out.

Will the site affect any international, national, regional or local designated sites?
The landowner is not aware of any environmental designations affecting any of the land identified for the proposed Area of Search, although the River Eye SSSI forms the southern boundary of the site.

Will the site affect any known archaeological features and/or historical buildings?
The landowner is not aware of any such features or buildings that would be affected by the proposal.

Transportation

Means and route of transportation of material to existing processing plant

It is estimated that a production rate of 150,000 tonnes per annum would result in approximately 25 lorry movements per day. It is expected that the vast majority of these movements would be travelling west along the B676 to Melton Mowbray. The site has good access to the B676 which gives good access to Melton Mowbray and the east of the County.

Restoration

Proposed use at the cessation of workings
It is likely that the site would be restored to a mixture of lower level agricultural land and lakes with low impact leisure activities being the preferred after use. The water bodies may also be used as an agricultural reservoir for the irrigation of adjacent land.

Will the restoration require importation of waste?
The importation of inert materials to facilitate a high quality restoration scheme would be preferred.

Buffer zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
The site promoter is not aware of any sensitive uses in the vicinity of the proposed area; and states that the site has few neighbours.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
The site promoter has not identified any mitigation measures.

Other information

Have you undertaken any surveys or environmental impact assessments of the site?
The site promoter has not provided information regarding any surveys or environmental assessments.

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
The site promoter has not indicated any reasons why the site would not be available during the plan period.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: **Unlikely to be acceptable S of railway, but part may be OK with biodiversity after-use; full suite of surveys needed; Natural England input; large amount of mitigation probably required N and S.**
North of the railway line, the land is mainly arable. However it is peppered with ponds, which we feel are likely to have great crested newts in them (on the basis that there is a known colony of newts in Brentingby, immediately to the west). If there were newts, it may be possible to work around them, but the level of mitigation required would be large and onerous, and if there was a large

GCN colony, it might rule this area out. There is some grassland around Wyfordby, which would require surveys; Badger surveys also needed.
South of the railway to the River Eye SSSI is a different matter. The land is mainly grassland, with just two large arable fields to the east of the area. Some of the grassland may be species-rich floodplain wetland (no recent survey data) and if so, extraction would not be acceptable; from aerial photos, some of this looks like good habitat. Extraction would however be acceptable on the arable land, leaving significant buffer zones to the river and tributaries etc. This could include some low intensity farmland and pasture. A full suite of ecology surveys would be needed.

The land should not be returned to intensive arable use afterwards, but to biodiversity/open space of a form that complements the SSSI and existing habitats, and considers that there is scope for significant wetland creation.

Natural England: The River Eye is an excellent example of a semi-natural lowland river. The SSSI is an eight kilometre stretch above Melton Mowbray which includes the natural structural features of the river, including riffles, pools, small cliffs and meanders and provides a range of conditions essential for the maintenance of rich and diverse plant and animal communities. The site is currently in an unfavourable condition due to sedimentation, water quality impacts and modifications. All reasons for failure are being addressed; the catchment has been included within the Catchment Sensitive Farming Initiative for several years now and the majority of the catchment is included within agri environmental schemes. A full river restoration strategy is in place and the Catchment Based Partnership, the Environment Agency and Natural England are working in partnership to deliver the required restoration works.

Natural England would **object** to any proposal to quarry within this area due to the impact on the designated site. Changing the natural hydraulics and flow through of the surrounding land will have an immediate and detrimental impact on the flow regimes and the ecology which is directly connected to the SSSI; the natural flood plain floodplain is part of the river's natural processes and any mineral abstraction in this area will again have a direct impact on the integrity of the SSSI.

The proposed site is immediately upstream of the River Eye SSSI. The upper catchment of the River Eye is predominately groundwater fed, meaning that several years of detailed hydrological investigations would be required to ensure there is no impact on the quality and quantity of water delivered to the SSSI system. Furthermore a full ecological impact assessment would be required, to ensure that there is no impact to the ecological conditions or connectivity to the SSSI from the proposed quarrying operation. This part of the catchment is also a very important source of sediment to the SSSI (gravels etc.) and adequate buffers would be needed to ensure that there is no disruption of large sediment inputs resulting from the quarrying activity.

The restoration scheme would need to significantly enhance biodiversity, river and floodplain habitats and lead to improvements in diffused water pollution.

It should also be noted that much of the land within the proposed area has been entered into Higher Level Stewardship and the proposed area contains current

breeding lapwing sites and many good wet grassland areas which support overwintering waders.

Environment Agency*:* This site is partly in flood zones 2 and 3, the flood plain for this area is such that there may be potential to carry out floodplain compensation works and redirect flood flows. The Lead Local Flood Authority will require a comprehensive flood risk assessment to ensure that the total runoff from the site is the same or less than current runoff rates and does not increase flood risk elsewhere. The flood risk assessment will also need to address loss of floodplain storage and flood flow routes.

The Environment Agency fully support the comments made by Natural England on this site in relation to the SSSI.

The Environment Agency also expects restoration to be biodiversity led with significant habitat creation proposed. This habitat can include, but is not limited to, lowland fen and marsh, reedbeds, wet woodlands and shallow open water, such as scrapes and ponds. Where land is returned to agriculture, they will expect habitat to be created which intercepts surface water runoff and reduces the potential of diffuse pollution from reaching the main watercourse and SSSI's.

County Archaeologist: The proposal lacks any level of heritage assessment, but appears to raise significant archaeological concerns both in term of the potential for archaeological remains encountered at the existing surface (e.g. buried remains to the later prehistoric to post-medieval periods), and secondly at depth, where the proposals are likely to impact upon the glacially buried channel of the former Bytham river. The Bytham flowed from west to east across what was to become Britain, prior to the Anglian glaciation some 450,000 years ago, and has been shown to have supported extensive early hominin activity, spacing the earliest phases of the British Palaeolithic period.

Highways Authority: It is likely that the site would access directly onto the B676 which is subject to a 60mph speed limit. The Authority has concerns with turning manoeuvres particularly with HGVs on a high speed road, which is known to lead to accidents. Policy IN5 in the 6CsDG states that accesses onto high speed A and B roads will normally be resisted due to safety concerns with slow moving turning traffic. This is exacerbated by the fact that up to 25 HGV movements are proposed per day to use the new access.

Whilst it is understood that mineral sites are somewhat different in nature to normal development sites in that minerals are in a fixed location, the Highways Authority would prefer at this time that alternative sites be considered, due to the concerns with the safety of the access. In addition HGV traffic from this site would have to travel through Melton town centre which is not a desirable route for amenity reasons. The Highway Authority consider that strong evidence would be needed that this site was required to provide for demand in the future to weigh against their safety concerns.

C. CONCLUSIONS

The proposal would involve the establishment of a new sand and gravel operation and would not therefore accord with the priority given to extensions to

existing site operations specified in Policy M1. The proposal was not included in the Consultation Draft Plan (July 2015) but was subject to consultation in September 2015.

It is not considered that the site is suitable for inclusion as a site allocation in the Minerals and Waste Local Plan for the following principal reasons:

- Lack of certainty regarding the potential reserves of sand and gravel within the proposed area
- Establishment of new minerals infrastructure within the open countryside
- Potential impact on the River Eye SSSI
- Potential impact on the River Eye floodplain
- Potential for impact on significant archaeological remains
- Highway concerns regarding the provision of safe access for HGVs onto the B676 together with the potential impact of HGVs travelling through Melton Town Centre

HUSBANDS BOSWORTH – NORTHERN EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Proposed Extension Reserves (tonnes): 300,000

Estimated Annual Output (tpa): 150 – 180,000

Geological Evidence to indicate that a suitable quality and quantity of material is available:
No detailed assessment has been undertaken, however geological mapping and previous assessments in the area support proof of sand and gravel reserves on the proposed extension area.

Timescale for proposed extraction (start date; estimated life of workings)
Commencing circa 2021 providing a 2 year extension at current product rate.

Phasing of proposed workings
From general south west to north east direction as direct continuation of current extraction area.

Environmental Information

Does any site affect Agricultural Grades 1, 2 or 3a 'best and most versatile'? Yes, Grade 2 and 3a. (Source: Magic.gov.uk)

Has any impact on Ecology been assessed?
No formal ecological assessment has been undertaken. A desk-based assessment has not identified any ecological designations present on-site. However, small pockets of potential ecological features in the form of hedgerow trees and hedgerows exist. The majority of the site is agricultural land. Restoration secures opportunities for further ecological enhancement as part of restoration proposals. Gravel Pit Spinney is excluded from the proposed extraction area.

Has any impact on Groundwater / Hydrology been assessed?
A desk-based study using Environment Agency data identifies the entire extension area as part of a wide-reaching Surface Water Safeguard Zone, which identifies 'where action to address water contamination will be targeted'. Any impacts from the Husbands Bosworth extension on this Safeguard Zone will be fully assessed as part of a Planning Application. Existing workings fall within the Surface Water Safeguard Zone and operate with negligible impact.

Will the site affect any international, national, regional or local designated sites?
A small proportion of the south of the extension area is designated Environmental Stewardship Agreement: Entry Level Stewardship – this is the only designation present on the extension area.

There are pockets of Priority Habitat Inventory Deciduous Woodland adjacent to the site at Gravel Pit Spinney and on the north-western boundary. There are also National Inventory of Woodland and Trees designations bordering the extension area to the west. Approximately 300m north of the extension area, a 1.4ha Woodland Grant Scheme 'Honeypot Farm' is in effect. These are excluded from the proposed areas of mineral extraction.

Will the site affect any known archaeological features and / or historical buildings?
The proposal will not have a direct impact on any know archaeological features or historic structures. Nearby, the grade II* listed Bosworth Hall (ref. 1360723) and Chapel of St Mary (ref. 1187989) are located within 300m from the extension area's north-western boundary. Existing Lodge Spinney woodland provides a natural screen and any additional dust, noise and visual screening could further minimise the potential for indirect impacts on these sensitive receptors

Have you undertaken any surveys or environmental impact assessments of the site? No.

Transportation

Means and route of transportation of material to existing processing plant
Internal haul roads will service the extension area and provide access to the existing processing plant. Access to public highways will remain unchanged; using the A5199 Welford Road.

Restoration

Proposed Afteruse: Agriculture at lower level, water body and woodland.

Proposed cessation of workings: Circa 2023

Will the restoration require importation of waste? No.

Buffer Zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
There are no sensitive uses adjoining or adjacent to the proposed extension area. However the proposal moves operations closer to residential areas on the outskirts of Husbands Bosworth (the closest dwelling is located approximately 150m north-west of the westernmost extent of the proposed extension area.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
There are no sensitive features identified in close enough proximity to be affected by mineral activity. It is therefore considered that a buffer zone is unnecessary. General amenity is protected by the placement of topsoil and

subsoil storage bunds as an acoustic and visual screen. The site benefits from substantial vegetative screening from Husbands Bosworth village.

Other Information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)? None.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: Possibility of species-rich grassland along the Welland. Spinney and hedges of potential species-richness and value.
Known GCNs in pond on site, and large colonies to north and south; once the quarry starts, it will create habitats attractive to GCNS and they may move onto the operational area. This will be a constraint to operation of the quarry, likely to need EPS licence. Badger sett known to be present within the area. A significant buffer zone of c20m of natural open space should be retained along the river, and a 10m buffer around created /retained wetlands along the river corridor; wetland should be linked to the river with appropriate habitats. Depending on survey findings, may need to provide compensatory neutral grassland at double the area of that lost to account for inevitable losses when habitat creation is attempted.

Restoration is likely to need to include GCN mitigation – provision of ponds and terrestrial foraging habitat – but also with creation of floodplain wetland habitats along the Welland, a regionally important watercourse and once currently subject to river restoration plan through the Welland Action Group. Scope also for additional woodland planting to link existing spinneys.

County Archaeologist: Potential for and impact upon significant archaeological remains.

Historic England: There is the potential for further archaeological survival at this site. They also consider that there may be designed views from Bosworth Hall (Grade II*); the proposed allocation may result in harm to significance through setting impacts. Further loss of ridge and furrow at this site would be detrimental to significance of designated heritage assets and the historic landscape of Leicestershire.

C. CONCLUSIONS

The site is a proposed extension to Husbands Bosworth Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was included in the Consultation Draft Plan (July 2015). It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Impact on the River Welland and its floodplain.

- Protection of a corridor of natural open space alongside the River Welland and around any retained wetlands.
- Effect on the setting of Bosworth Hall.
- Potential for and impact upon significant archaeological remains
- Ecological value of the unnamed woodland within the site.
- Restoration proposals which reflect the objectives of the Laughton Hills local landscape and Leicestershire Vales national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.
- Restoration to include woodland to link Gravel Pit Spinney to existing woodland adjacent to the River Welland.

LOCKINGTON

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Total Reserve (tonnes): 7 million

Estimated Annual Output: 360,000

Geological evidence to indicate that a suitable quality and quantity of material is available. The reserve is fully proven by borehole data.

Timescale for proposed extraction (approximate start date; estimated life of workings).
Circa 2023 and the estimated life of workings based on extraction rates would provide for a further nineteen years.

Phasing of proposed workings.
Given the ecological sensitivities surrounding the northern allocation of Lockington, Tarmac are seeking the allocation for the whole area to enable a concept restoration strategy to be developed in consultation with the County Council and Natural England. It is unlikely that a planning application would be submitted for this whole area it is more likely that smaller areas will be pursued throughout the life of the quarry. However, to enable Tarmac the security in developing a wider restoration strategy the security offered by the site being allocated is key. If the whole area is not allocated then future planning applications will only be able to pursue a restoration strategy pertinent to that area and the opportunity for an encompassing scheme may be lost.

Environmental Information

Does the site affect Agricultural Grades 1, 2 or 3a 'best and most versatile' land? Yes, Grade 2 and 3a. (Source: Magic.gov.uk)

Has any impact on Ecology been assessed?
The land is in agricultural use with hedgerows running through it. The proposed extension area has been subject to a Phase 1 Habitat Survey, with some smaller areas being assessed as part of the ecological assessment linked to previous workings. A water monitoring scheme was put in place for Lockington Marshes SSSI as per the requirements of the previous planning permission.

An initial meeting has been held with Natural England to discuss the Company's proposals and the steps required to satisfy Natural England that the site could be worked without adversely impacting on the Lockington Marshes Site of Special Scientific Interest (SSSI) as well as deriving benefit through restoration enhancement of the site where possible.

Any application will include a full assessment of ecological impact and appropriate standoffs and /or restrictions will be designated or adopted.

Has any impact on Groundwater/Hydrology been assessed?
A network of water monitoring boreholes exists within the proposed extension area. These demonstrate there is a natural seasonal variation of water in the sand & gravel. A planning application will include full hydrology assessment and appropriate standoffs and/or restrictions will be put in place. The site falls within the flood plain of the River Soar and is categorised as Flood Zone 3 by the Environment Agency. Sand and gravel workings can assist in providing enhanced water storage/water management.

Will the site affect any international, national, regional or local designated sites?
The extension area incorporates ecological and environmental designations, including Priority Habitat Inventory: Coastal and flood plain grazing marsh, deciduous woodland, lowland fens and reedbeds. National Inventory of Woodland and Trees designations are also present. Lockington Marshes SSSI is located on the site and covers a large area of the site north of Ratcliffe Lane; this is within Lockington Marshes Impact Risk Zone. The SSSI is in a mix of 'favourable and 'unfavourable recovering' states.

Any application will include a full assessment of ecological impact to understand these designations and appropriate standoffs and /or restrictions will be designated or adopted. Opportunities for protection and enhancement will be provided as part of the restoration proposals where practicable.

Will the site affect any known archaeological features and/or historical buildings, structures or gardens?
A Scheduled Monument (roman villa and enclosures -ref. 1003567) is adjacent to existing workings and located on the extension area, north of Ratcliffe Road. An adjoining but distinct Scheduled Monument (ref. 1003565) directly east of the roman villa and enclosures has been identified. There is a further Scheduled Monument in the north-west corner of the extension area (ref. 1003564). The eastern boundary of the extension area is within 100m of the scheduled monument 'Roman site on Red Hill'(ref. 1003667). Listed Structures includes both portals of the Red Hill rail tunnel are listed and are within 300m east of the site. Packhorse Bridge Redhill Lock is listed and is located within 130m east of the site. Any application for the proposed extension will assess and mitigate where necessary against impacts.

Transportation

Means and route of transportation of material to any processing plant and out of the site.
Similar combination of field conveyors, excavators and articulate dumptrucks to the existing plant site as is the current situation. Access to the site will remain as existing, off Warren Lane. Mineral will be transported by HGV on the existing road network and supplying on site readymix concrete and bagging operations.

Restoration

Proposed use at the cessation of workings.

Predominantly to agriculture together with complementary marginal wetland that has the potential to enhance Lockington Marshes SSSI. Through the restoration there is opportunity to separate the ground and surface water drainage delivering overall enhancement of the site.

Will the restoration require importation of waste? Yes

Buffer zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
There is a clubhouse used by a scout group and other community uses on the south bank of the River Trent, located at the far north of the site. There are boat moorings and marinas along the eastern boundary of the extension area, on the River Soar. There are isolated residential properties located along an unnamed road east of the River Soar, fronting the river and within close proximity to the eastern site boundary.

What other measures will be implemented to act as a buffer zone to reduce impacts.
Progressive extraction and restoration assists in minimising the long term effects of mineral operations. This is reflective of current practices at Lockington. The placement of topsoil and subsoil storage bunds as an acoustic and visual screen will also be utilised. An application would provide appropriate standoffs and/or working restrictions to mitigate against impacts. Due to the lack of sensitive land uses directly affected by the extension area, no specific buffer zone is required.

Other information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)? None.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist

OK in part, with significant mitigation and biodiversity after-use; full suite of wildlife surveys; Natural England input
In an extremely important area for biodiversity, at the junction of two regional/national wildlife corridors, and containing a SSSI and numerous candidate Wildlife Sites and wetland/marshy grasslands habitats along ditches and tributary streams. Several rare plant species know from here – Marsh Stitchwort, Water Dropworts, etc.
Outside the designated wildlife areas, the land is mainly arable, and it may be acceptable to work these areas, leaving buffer zones to the main wetlands/ditches etc. Whether or not this is allowable will be dependent on Natural England, but it would be possible to extract pockets within the area, but only on the understanding that the land was not returned to intensive arable use afterwards, but to biodiversity/open space of a form that complements the SSSI and existing habitats. This could include some low intensity farmland.

A full suite of bird, amphibian/reptile, otter/crayfish/water vole, botany/extended Phase 1 habitat and invertebrate surveys would be needed.

The County Ecologist considers that there is huge potential for habitat creation – wetlands, standing water, wet woodland, marsh etc. which would be of regional BAP significance along the Trent corridor.

Natural England

Lockington Marshes SSSI is one of the largest remaining areas of willow carr woodland in Leicestershire and comprises a diverse complex of wetland habitat supporting an important invertebrate fauna with many nationally scarce species. The site has many notified features including fen, wet woodland and inundation meadows and pools lying in the floodplains of the Rivers Soar and Trent. All of these habitats and species are hydrologically connected to the surrounding surface water systems and ground water. Natural England would **object** to any plans/applications to quarry the proposed area due to the impact on the designated site.

Lockington Marshes is directly connected to the surrounding surface water systems and ground water; any quarrying within the proposed area will have an impact on delivery of surface water and ground water supplies; also there would be a significant issue with dust and changes in water quality. Sand and gravel has been quarried and abstracted further downstream from the site, but this was only permissible due to the distance from the SSSI; furthermore the Southern Arm of the SSSI was added to the extent of the SSSI due to the significant threat of quarrying within the current proposed area.

Detailed hydrological monitoring outputs and an ecological impact assessment would be required to demonstrate that there would be no adverse impact on the SSSI before Natural England could comment in detail on the proposals.

The proposed restoration scheme would need to give careful consideration to the infill material used to ensure that there is no interruption to groundwater flows. The restoration of the site would need to include considerably more biodiversity benefits than those outlined within the submission.

Environment Agency

The location is at the greatest risk of flooding. The whole site is located within the functional flood plain, flood zone 3b. This means that the site is prone to flooding every 10 to 20 years. Sand and gravel working is classed as water compatible development and as such is appropriate in this location in accordance with NPPF. The flood plain is large in this area so there is little space for compensation works and available space to divert the flood flows. This may increase flood risk elsewhere. The Lead Local Flood Authority will require a comprehensive flood risk assessment to ensure that the total runoff from the site is the same or less than current runoff rates and does not increase flood risk elsewhere. The flood risk assessment will also need to address loss of floodplain storage and flood flow routes, we will comment on these aspects.

Lockington Marshes Site of Special Scientific Interest (SSSI) borders the proposed site. The River Soar and River Trent are also located to the east and north of the site. All of these water features will require significant protection.

The Environment Agency fully support the comments made by Natural England on this site in relation to the onsite SSSI's and will expect the applicants to fulfil their requirements in every respect.

The Environment Agency also expects restoration of the site to be biodiversity led with significant habitat creation proposed. This habitat can include, but is not limited to, lowland fen and marsh, reedbeds, wet woodlands and shallow open water, such as scrapes and ponds. Where land is returned to agriculture, they will expect habitat to be created which intercepts surface water runoff and reduces the potential of diffuse pollution from reaching the main watercourse and SSSI's.

Historic England

The area where the Rivers Trent, Derwent and Soar meet is of exceptional archaeological sensitivity and resource importance, these are known to be areas of particularly intense and complex activity in prehistory , there is a great deal of information in the three county HER's requiring detailed consultation and cooperation. There is high potential for harm to the significance of designated historic assets and high potential for impacts upon undesignated remains of national importance (including preserved timber artefacts and structures). Impacts may include, direct effects from working, access and dewatering, and setting impacts both in loss of historic landscape context and associated archaeological remains. The impacts of allocation need to be understood in the context of past research on the geo-archaeology of the river interfluve, from early prehistory to the modern period. Particular attention must be paid to the later prehistoric use of the landscape and its remaking into the Roman Period (see the Temple/cult site at Red Hill reference 1003667) and the extensive further remains found at the Parkway and Marina sites.

There is likely to be harm to the significance of the large scheduled monument (1003565) south east of Dunster Barn (comprising the remains of late Prehistoric/Roman occupation, through the isolating effect of the proposed potential reserve areas to the north, west and east, with the existing quarry to the south serving to separate the monument from its landscape context (and potential dewatering effects).

A further scheduled monument lies to the north western corner, a moated site south of Sawley Locks (reference 1003564. This site would also be largely enclosed divorcing it from its landscape context. Any losses of extant ridge and furrow cultivation earthworks would be harmful to the monument's significance as these represent its contemporary landscape context. The presence of and impacts upon any wet deposits at the moated site and must also be understood. Further detailed assessment is required to determine the impact of the proposed allocations upon the significance of heritage assets, geo-archaeological modelling of sub-surface deposits should be at the centre of understanding archaeological potential and its relationship to the mineral resource.

County Archaeologist

The proposed extension lies in an exceptional rich archaeological landscape, most obviously immediately to the north of the Lockington Iron Age settlement and Roman villa, a statutorily designated heritage asset (a scheduled monument: NHLE ref.: 1003565), it also contains a suspected Iron Age/Roman settlement site, interpreted from a combination of cropmark and artefactual evidence (HER ref.: MLE4721). Recent archaeological investigation to the south and west of the proposed site have demonstrated the presence of well preserved and extensive remains dating from a range of period, and it is very likely that similar extensive and as yet unrecorded remains extend into the current site.

Careful attention should be given to the historic environment issues, considering both designated and undesignated remains, and taking into account the high likelihood of similar as yet unrecorded archaeological deposits. Consideration should also be given to palaeoenvironmental remains and their survival across the site. Recent study of the Trent-Soar confluence has given detailed consideration to the depositional sequence of former channels of the Trent and Soar, utilising this analysis to postulate the dating and associated archaeological potential of both the channels themselves and the intervening terraces.

It is therefore recommended that due consideration should be given to the impact of the proposed extension upon the setting, character and significance of the statutory heritage assets (Lockington villa, etc.), together with appropriate assessment and analysis of both known and potential non-designated remains. Assessment should commence with a desk-based assessment, to include both cropmark and LiDAR data and analysis. A further stage of non-intrusive survey comprising fieldwalking and geophysical survey (appropriate to the alluvial/flood plain environment) is anticipated, followed as appropriate by targeted trial trenching and palaeoenvironmental investigation (borehole/auger survey).

Highway Authority

The transport proposals state that the minerals will be transported by conveyor, excavator and dump trucks to the existing site and thus there will be no change to existing access to the site. On this basis the highway authority would have no further comments.

Highways England

The site is adjacent to M1 J24A and the A50 and is north of the A453. There is potential for an increase in the number of vehicles on the SRN with Warren Lane providing a direct link to the M1 J24A. A Transport Assessment is recommended to understand the potential impacts of this site.

C. CONCLUSIONS

The site is a proposed extension to Lockington Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was not included in the Consultation Draft Plan (July 2015) but was subject to consultation in September 2015.

It is not considered that the site is suitable for inclusion as a site allocation in the Minerals and Waste Local Plan for the following principal reasons:

- Lack of evidence to demonstrate that extraction would not result in damage to Lockington Marshes SSSI
- Impact upon the setting, character and significance of the statutory heritage assets

Given the comments from Natural England, in particular, the County Council is not convinced at this stage that an allocation at Lockington would be deliverable.

NORTH KILWORTH

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Total Reserve (tonnes): Extensive geological investigations within the application area have identified a recoverable deposit of sand and gravel, estimated at approximately 2.5 million tonnes.

Estimated Annual Output: typical extraction rate of 200,000 tonnes per annum

Geological evidence to indicate that a suitable quality and quantity of material is available
The sand and gravel deposits at Pincet Lane vary from 0 to 21 metres in depth and consist of clayley to very clayey, medium/coarse grained sands with gravel. The proportion of gravel ranges from 5-62% but averages 35% and is predominantly composed of limestones/chalk with subordinate flints, quartzites, sandstones and ironstones. Within the main sand and gravel body numerous thin clay horizons are also present. Up to 12 metres of stiff blue/grey clay has been proven to exist below the sand and gravel resource.

Timescale for proposed extraction (approximate start date; estimated life of workings): working life of 13 years

Phasing of proposed workings
The proposed development would include for the phased extraction of this reserve and the progressive restoration of the site.

Environmental Information

Does the site affect Agricultural Grades 1, 2 or 3a 'best and most versatile' land?
A study was conducted by Land Research Associates to assess the agricultural land quality of the site comprising nine fields. The distribution of the land grades (as set out by the MAFF Agricultural Land Classification (ALC)) are as follows: Sub-grade 3a - 28.4%; Sub-grade 3b - 71.6%.

Has any impact on Ecology been assessed?
A detailed Phase 1 Habitat Survey has been undertaken on the land. The assessment identified that the habitats within and surrounding the Pincet Lane site are of low to potentially high ecological value, and there are no statutory or non-statutory sites within 2km of Pincet Lane. Arable fields are the dominant site habitat, along with areas of semi-improved grassland, broadleaved woodland and hedges with trees. The assessment concludes that with regards to habitats and flora, the proposed development will not have a negative effect as the floral diversity at the site is confined to areas that will be retained or only partially affected.

With regards to bats, the site is considered to be of low suitability for foraging bats. Other than common breeding birds and badgers, no evidence was found during the assessment for the presence of protected species such as Great Crested Newts. Only one single hole latrine was found at the southern sector of the site with regards to badgers.

Has any impact on Groundwater/Hydrology been assessed?
Enzygo Limited prepared a Water Environment Assessment. This concluded that the proposed development will have no significant impact on surface or groundwater resources.

The Environment Agency's (EA's) indicative flood risk mapping shows the Pincet Lane site is located within Flood Zone 1, outside the extent of the 1 in 1,000 year risk of fluvial flooding, and therefore the site is considered to be at 'low' risk of fluvial flooding.

Surface water management proposals will ensure there is no flood risk and receiving watercourses will be protected throughout. Surface and groundwater within the Site will be managed by appropriate operational management plans.

Will the site affect any international, national, regional or local designated sites?
No part of the site lies within or near to any statutory or any non-statutorily designated landscape. The Husbands Bosworth Conservation area is located c.1.8km to the Site. A small number of Scheduled Ancient Monuments (SAMs) lie within 2km of the Site One Listed Building, the 'Milepost c.500 yards off Kimcote Road' (Grade 2*) is located c.885m southeast of the Site at its closest point. There are a limited number of Listed Buildings within 2km of the Site

Will the site affect any known archaeological features and/or historical buildings?
Phoenix Consulting has undertaken a desk-based archaeology assessment, amalgamating findings from previous extensive archaeological investigations that have taken place. These past works included desk-based assessments, field walking, geophysical surveys and trial trenching. All the previous surveys, which included fieldwalking, aerial photographic survey, geophysics and trial trenching failed to identify any remains of archaeological significance. The assessment confirms the Pincet Lane site contains no remains of archaeological interest. Other than the isolated pieces of flint and the ridge and furrow cultivation, no other archaeological features were identified and no artefacts recovered.

Transportation

Means and route of transportation of material to existing processing plant
Access will be provided from a new junction onto Pincet Lane (B5414) via one of two alternative access points which are available. It is anticipated that the mineral will be exported at a typical rate of 4,000 tonnes per week equating to 40 loads (80 movements) per day. Imported restoration material would in theory double that figure but a high proportion of imported material will be "back-loaded" which would reduce overall traffic movements to a total figure of 120 movements.It is estimated that the proposed quarry would increase current

traffic levels on Pincet Lane by approximately 6%. The intended market for material from the Pincet Lane quarry is Leicester City and South Leicestershire.

Restoration

Proposed use at the cessation of workings

The site can be reinstated close to original ground levels using suitable imported inert material giving the opportunity to improve the natural capital balance of the site making a local contribution to the bio-diversity resource on the site.
The proposed restoration strategy for the site involving the importation of suitable inert material will ensure there is no permanent loss of "best and most versatile" soil resources (i.e. ALC Grades 2 and 3a) with the ability to re-establish all prime quality agricultural land, along with a range of alternative habitats.

The restoration of the site will provide opportunities for biodiversity enhancements to several faunal species. The peripheral hedgerows will be retained as part of the proposed development and although some hedgerows at the site will be removed as a result of the proposed development, at least the equivalent length of hedgerow to be removed will be replaced as part of the restoration scheme.

The planting of woodland areas, scattered trees and re-laying of hedgerows will replace the habitat which has been lost as a result of the proposed development. It may also be possible to provide additional foraging areas for breeding birds through wildlife habitat creation at the site.

Will the restoration require importation of waste?

The proposed development would include the progressive restoration of the site using imported inert material. The site will be restored using a combination of on-site residual quarry waste and imported suitable inert material. In total, some 1.5 million cubic meters of imported material would be required to restore the site close to existing levels and this would primarily be sourced from within Leicestershire.

Buffer zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?

The site lies 2 kilometres to the north of the village of North Kilworth, 1.5 kilometres northwest of Husbands Bosworth. Brickyard Farm is located directly adjacent to the north western corner of the proposed extraction area and approximately 200 metres to the west of the processing area. Tophouse Farm is located to the north west of the quarry, approximately 500 metres from the proposed mineral processing area. Bosworth Grange Farm is located to the east, approximately 500 metres from the main processing area, with the proposed soils storage approximately 250 metres from the property.The Bungalow is the closest dwelling, situated approximately 30 metres from the boundary of the proposed extraction area. Pincet Lodge to the east is derelict at present, with a new farmhouse having recently been constructed to the east of Pincet Lane, approximately 150 metres from the closest working areas.Sparrows Cottage is located to the south, adjacent to Pincet Lane and set back a similar distance

from the road. This property is approximately 200 metres from the southern boundary of the quarry.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
It is proposed to use a low profile mineral processing plant with a maximum height of 5.5m and this will be located in the northern sector of the site over 200m from the nearest residential dwelling with an intervening landscaped screening mound , reducing any potential adverse views of these mineral processing activities and mineral stockpile areas.

Strategically located landscaped soil screening mounds will progressively be established around the periphery of the mineral extraction area to limit adverse visual impact and control noise to acceptable levels.

Brickyard Farm will be screened from the operational areas by landscaped mounds, the outer face of which could be tree planted to further aid screening of activities.

Views from surrounding dwellings are from close range to the east of the site, namely The Bungalow, Pincet Lodge, the newly built dwelling off Pincet Lane and Bosworth Grange Farm. Views from these dwellings are likely to take in the peripheral bunding and planting from ground floor windows and potential filtered views from second storey windows.

Given the separation distance between the operational areas of the site and residential dwellings, matters such as noise and dust emissions can be readily controlled within recognised acceptable levels.

Other information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
The company's proposal at Pincet Lane has the benefit of almost immediate deliverability. Mick George Limited wish to develop the Pincet Lane quarry with immediate effect if the site is identified as an appropriate site to include in the plan.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: **OK with mitigation; Hedgerow, Badger and GCN surveys needed.**
The land is mainly arable, with two fields to the SE in grassland use. A survey done in 2003 by Wardell-Armstrong for a previous gravel extraction application showed that the fields were all improved/arable, and of low significance for wildlife. This situation is unlikely to have changed, and therefore the development is OK in principle, with retention of surrounding hedges with buffer zones.
Wardell-Armstrong noted relatively species-rich hedges and mature trees across the site, some of which may meet Local Wildlife site criteria. The survey data

isn't detailed enough to permit evaluation of the hedges. If any did meet LWS criteria, translocation or retention would be expected.
There is small pond in the NW corner, which was not surveyed in 2003 for great crested newts, although the survey said it was suitable. Surveys are needed; presence of GCN in this pond would require mitigation and would constrain the amount of land that could be extracted; a significant buffer zone around the pond would need to be retained.
Badgers are known to be common in the area, including several setts along W edge of the site. A badger survey is needed; presence of a sett in a boundary hedge would require a greater buffer zone. Presence of badgers in intervening hedges would require significant mitigation.

Environment Agency: The site is located in Flood Zone 1 and is not subject to fluvial flooding.
Figure 2 of the Supporting Statement shows a mineral processing area and silt lagoons. If the mineral will be washed on site, where will the water be sourced from for mineral processing and for other uses such as wheel washing and dust suppression? If anything other than mains water is used then an abstraction licence may be required. There is no guarantee that a licence could granted, it is dependent on water resources availability. Any licence issued could contain a condition requiring abstraction to cease at times of lower flow.
It is important that good site management and environmental controls are in place as the south eastern part of the site is situated on a Source Protection Zone 3.
Protection of the water environment is a material planning consideration and development proposals, including mineral extraction, should ensure that new development does not harm the water environment.

Historic England: There is potential harm to the significance of the scheduled Pinslade Moated Grange, Mowsley (reference 1010484) through loss to and remodelling of the historic agricultural landscape context. Its topographic situation suggests the site may have functioned at least at a point in its life in relation to a hunting chase and hence the experience of movement through the landscape and the contrast in landform there - in is of particular interest. Further assessment is required to understand the impact of remodelling the wider landscape setting of this monument and the experience of moving through its immediate environs. The significance of the historic Grand Union Canal Conservation Area and associated listed building structures may also be impacted upon again through erosion to historic landscape context.

County Archaeologist: Work upon which the archaeological assessment has been based is somewhat shy of the depth of scrutiny that would typically now be recommended.

Highway Authority: Pincet Lane (B5414) is a high speed classified road with a 60mph speed limit and we are concerned with the creation of new accesses where measured 85th percentile speeds are 54 mph. Policy IN5 in the 6CsDG states that we will seek to resist accesses onto high speed A and B roads due to safety concerns with slow moving turning traffic. Up to 160 HGV movements are proposed per day using the new access, and there is an existing high percentage of HGVs using the road (8% - 9%). We would need to see strong evidence that

this site was required to provide for demand in the future for the need to be weighed against our safety concerns.

C. CONCLUSIONS

The proposal would involve the establishment of a new sand and gravel operation and would not therefore accord with the priority given to extensions to existing site operations specified in Policy M1. The proposal was promoted in response to the Consultation Draft Plan (July 2015) and was subject to consultation in September 2015.

It is not considered that the site is suitable for inclusion as a site allocation in the Minerals and Waste Local Plan for the following principal reasons:

- Highway concerns regarding the provision of safe access for HGVs onto the Pincet Lane (B5414)
- Effect on the appearance and character of the local landscape as a result of the establishment of infrastructure associated with a new mineral operation
- Proposed use of inert waste to restore the site for which there is no immediate need and which, given the general paucity of such waste in the general area, is likely to delay final restoration of the site (and potentially other sites in the vicinity which are already reliant on inert waste for restoration purposes)

SHAWELL – SOUTHERN EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Proposed Extension Reserves (tonnes): Circa 750,000 tonnes (within Leicestershire). The area forms part of a wider proposed allocation for extraction of circa 1.2mt in Warwickshire which is predominantly west of the A5.

Estimated Annual Output (tpa): 400,000 tpa – 600,000 tpa

Geological Evidence to indicate that a suitable quality and quantity of material is available: Yes. The reserve is evidenced by borehole data.

Timescale for proposed extraction (start date; estimated life of workings): Circa 2021, providing approx. 2 year working life.

Phasing of proposed workings
Generally from east to west to enable progressive backfilling and restoration.

Environmental Information

Does any site affect Agricultural Grades 1, 2 or 3a 'best and most versatile'? No. Land is sub-grade 3b.

Has any impact on Ecology been assessed?
The site is predominantly agricultural farmland, bounded by a small pocket of woodland adjoining the existing Quarry Plant site. However, a desk-based study of the extension area east of the A5 has not identified any ecology-specific features or designations either on-site, or adjacent to the extension area.

Has any impact on Groundwater / Hydrology been assessed?
A desk-based study using data from the Environment Agency identifies the extension area within a Surface Water Safeguard Zone. This Zone is extensive and covers a very large area. The potential impact of the proposal on the Surface Water Safeguard Zone will be minimal in relation to the scale of the designation. A large proportion of the existing workings are located within the Surface Water Safeguard Zone.

Will the site affect any international, national, regional or local designated sites?
Cave's Inn Pits SSSI is located less than 700m south-east of the southernmost boundary of the extension area, with potential impact likely to be negligible. The site is entirely within the Cave's Inn Pits SSSI Impact Risk Zone.

Will the site affect any known archaeological features and / or historical buildings? None identified from initial desk based investigations.

Transportation

Means and route of transportation of material to existing processing plant
Sand and gravel will feed into the existing plant site through a likely combination of dump truck and conveyor. Site access to public highways will remain unchanged, using the existing access plant site access onto Gibbet Lane leading to the A5/A427 roundabout.

Proposed Afteruse: Agriculture at lower level

Proposed cessation of workings: Circa 2023, although combined operation of land in Warwickshire would provide additional 3-4 year working life through to circa 2026/2027.

Will the restoration require importation of waste? No.

Buffer Zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
Two dwellings are located west of the siteon the south side of Gibbet Lane.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
An appropriate stand off and perimeter soil screening will be designed as part of the working scheme for the residential properties.

Other Information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)? None.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Archaeologist: Potential for and impact upon significant archaeological remain, including evidence associated with the Tripontium (Caves Inn) Roman settlement. Desk-based Assessment concludes that the application area possesses a multi-period archaeological interest warranting further staged evaluation.

Historic England: There is the potential for further archaeological remains at this site.

C. CONCLUSIONS

The site is a proposed extension to Shawell Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was included in the Consultation Draft Plan (July 2015). It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Measures for transporting mineral to the processing plant without using the public highway.
- The provision of suitable measures to protect and where appropriate enhance the special features of interest of Cave's Inn Pits SSSI.
- Assessment of potential for and impact upon significant archaeological remains, including evidence associated with the Tripontium (Caves Inn) Roman settlement.
- Restoration proposals which reflect the objectives of the Lutterworth Lowlands local landscape and Leicestershire Vales national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.
- Restoration to include woodland to link existing woodland areas between Gibbet Lane and the A5.

SHAWELL –WESTERN EXTENSION LUTTERWORTH ROAD

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Proposed Extension Reserves (tonnes): 450,000 tonnes

Estimated Annual Output (tpa): 400-600,000 tpa

Geological Evidence to indicate that a suitable quality and quantity of material is available: Proven by borehole drilling.

Timescale for proposed extraction (start date; estimated life of workings):
Circa 2021 – 2025 (dependent on timescales for Southern/Warwickshire extension); would provide circa 1 year life at current production rates.

Phasing of proposed workings: To be determined.

Environmental Information

Does any site affect Agricultural Grades 1, 2 or 3a 'best and most versatile'? No. (Source: Magic.gov.uk)

Has any impact on Ecology been assessed?
Desk-based ecological assessment has identified Priority Habitat along the site's eastern boundary, adjoining the current Shawell Quarry site. The woodland designated Priority Habitat currently acts as screening for working on the operational site.

Has any impact on Groundwater / Hydrology been assessed?
An initial desk-based assessment of groundwater and hydrology has been carried out using information courtesy of the Environment Agency; no hydrological designations or features have been identified.

Will the site affect any international, national, regional or local designated sites?
The site is entirely within the Cave's Inn Pits SSSI Impact Risk Zone, although the extension area is located too far from the SSSI to have a direct or indirect impact upon the sensitive area. A proportion of the area's eastern boundary with the active quarry site is plantation woodland.

Will the site affect any known archaeological features and / or historical buildings? None identified from initial desk-based investigations.

Have you undertaken any surveys or environmental impact assessments of the site? None.

Transportation

Means and route of transportation of material to existing processing plant:
Internal haul roads will service the extension area from the main quarry site. Site access to public highways will remain unchanged, using the existing plant site access point onto Gibbet Lane leading to the A5/A426 roundabout.

Restoration

Proposed Afteruse: Agriculture at lower level with water bodies and woodland.

Proposed cessation of workings:
Extension would provide 1 year extension to quarry operations.

Will the restoration require importation of waste? No.

Buffer Zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)?
Residential property at Town End farm to the north, further residential properties to the west of the A426 and on southern periphery of Cotesbach village.

What distance or other measures will be implemented to act as a buffer zone to reduce impacts?
Measures include the placement of topsoil and subsoil storage bunds as an acoustic and visual screen. The A426 acts as a practical buffer for the farm dwelling west of the A426 and Cotesbach village. The limited number of sensitive receptors in proximity to the site means a specific buffer zone around the extension area is not likely to be required.

Other Information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
High pressure gas main running parallel to A426 will require protection on the western side of the site.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

National Grid: The Sand and Gravel Allocation SA4 (Shawell) is identified as being crossed by National Grid's high pressure gas transmission pipeline FM02 Duddington to Churchover.

C. CONCLUSIONS

The site is a proposed extension to Shawell Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was included in the Consultation Draft Plan (July 2015). It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Measures for transporting mineral to the processing plant without using the public highway.
- Provision for the retention of Bridleway X27 (as currently diverted)
- Appropriate management of non-designated heritage assets.
- Retention of the woodland belt between the current extraction area and Rugby Road (A426).
- Restoration proposals which reflect the objectives of the Lutterworth Lowlands local landscape and Leicestershire Vales national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources

SHAWELL QUARRY – EASTERN EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Total Reserve (tonnes): 1.6 million tonnes

Estimated Annual Output: 500,000 tonnes pa

Geological evidence to indicate that a suitable quality and quantity of material is available.
Sand and gravel resource proved by borehole drilling in Sept/ October 2014. Resource similar to that historically worked at Shawell Quarry. Sand and and gravel thickness ranging from 2.7m -10m thickness (average 6.5m) overlain by soils /clay overburden ranging from 11.8m- 5.8m (average 9.5m).

Timescale for proposed extraction (approximate start date; estimated life of workings).
Resource would provide circa 3 years working.
Likely to be required to provide continuity for Shawell Quarry within next 5-10 years.

Phasing of proposed workings.
Subject to further design, although early screening on southern boundary with combination of earthworks and tree planting will be key feature of working and restoration design.
Access roadways from Lutterworth Road to farm / residential properties east of M1 Motorway (Shawell Lodge Farm and Barn Farm) to be maintained during working and restoration programme, although likely to require diversion.

Environmental Information

Does the site affect Agricultural Grades 1, 2 or 3a 'best and most versatile' land?
Soil resource survey not yet conducted, but likely to similar to soils at existing Shawell Quarry, which are predominantly grade 3b.

Has any impact on Ecology been assessed?
No detailed site survey undertaken yet. Land is predominantly arable. Hedgerow and protected species surveys to be carried out.

Has any impact on Groundwater/Hydrology been assessed?
Hydrogeology assessment to be conducted, but issues likely to be similar to the existing quarry with scope for appropriate monitoring and mitigation strategy.

Will the site affect any international, national, regional or local designated sites? Not as far as aware.

Will the site affect any known archaeological features and/or historical buildings, structures or gardens? Not as far as aware

Transportation

Means and route of transportation of material to any processing plant and out of the site.
Mineral transported by conveyor via culvert under Lutterworth Road and then across former Great Central Railway line to access the Shawell Quarry working area (design will be provided for crossing under/ over the public footpath running parallel with former railway line). The conveyor will then link to the existing main conveyor which feeds the Shawell Quarry processing plant via conveyor tunnel under Gibbet Lane.
Mineral to be processed through existing processing plant and existing road access onto Gibbet Lane to the A5 will continue to be used.

Restoration

Proposed use at the cessation of workings.
Restoration likely to be predominantly to agriculture at lower level, using on site overburden and soils. Opportunity for new hedgerows and some woodland planting, with water bodies/ ponds in base of re-profiled landform.

Will the restoration require importation of waste?
No requirement for imported materials.
Restoration to be achieved using on site overburden and soils only.

Buffer zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)? What distance are these uses from the proposed site?
Land is generally remote from residential property. Appropriate operational stand-off can be designed for isolated properties.
Appropriate stand-off to be provided to the M1 Motorway and access roadway.
High pressure gas main crosses northern part of proposal area. No stand-off required until operator (National Grid) confirm post planning application process if pipeline is to be diverted or protected.

What other measures will be implemented to act as a buffer zone to reduce impacts?
Landscape screening can be provided on southern boundary to protect amenity of Shawell village.

Other information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
Proposal will be subject to formal Scoping and Environmental Impact Assessment. Scheme of working and restoration to be agreed with the respective land owners.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: **Probably OK with mitigation, including for GCNs immediately adjacent, but grasslands surveys needed before making decision. GCN/Badger/Habitat surveys**
The land is only partly arable; mainly grassland of potential species-richness; no recent surveys. It is marked by ridge+furrow, so biodiversity value is possible. Surveys will be needed to determine this; the presence of species-rich grassland may constrain the amount of land that can be extracted, or would require significant compensatory habitat creation.
Significant colony of great crested newts to north and south, and across M1. We have evidence that GCNs may be able to migrate under the M1 through drainage channels; they have previously been found in gullies along the road. No ponds on site, so there should not be a constraint to extraction, but there will need to be mitigation to prevent GCNs getting on site, and ensuring they are no on site before starting.
Mitigation would also require buffer zones along retained hedges, and ditches.
Extended phase 1, badger and GCN surveys needed.

Environment Agency: The site is located near an ordinary watercourse which is a tributary of the River Avon. Where no floodplain is associated with the watercourse a flood risk assessment will be required to determine the extent of flooding. The Lead Local Flood Authority will require a comprehensive flood risk assessment to ensure that the total runoff from the site is the same or less than current runoff rates and does not increase flood risk elsewhere.
We would require the sand & gravel removal to not deplete natural streams flows or water quality (sediments) that flow to Shawell and on to the River Avon during operations.

Restoration should include improvements to the streams geomorphology and associated wetland features expected at this location, including the de-culverting of the stream that flows in a southerly direction to Shawell alongside Lutterworth Road.

Historic England: There is potential harm to the significance of the setting of heritage assets to the south, including Shawell Conservation Area, due to its proximity. Further assessment is required to determine the impact on the significance of these heritage assets.

Highway Authority: A crossing of the public footpath X18 running parallel with the Great Central railway line is proposed. All details of this crossing should be approved by the PROW team.

The transport proposals state that the minerals will be transported by conveyor to the existing processing plant and thus there will be no change to existing access to the site. On this basis the highway authority would have no further comments.

C. CONCLUSIONS

The site is a proposed extension to Shawell Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1.

The proposed allocation was promoted in response to the Consultation Draft Plan (July 2015) and was subject to consultation in September 2015. It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Measures for transporting mineral to the processing plant without using the public highway.
- Provision for the retention of Footpath X18.
- Appropriate management of non-designated heritage assets.
- Restoration proposals which reflect the objectives of the Lutterworth Lowlands local landscape and Leicestershire Vales national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.

SHAWELL QUARRY – COTESBACH EXTENSION

A. INFORMATION PROVIDED BY THE PROMOTER OF THE SITE

Resource and Operational Details

Total Reserve (tonnes): 1.2 million tonnes

Estimated Annual Output: 500,000 tonnes pa

Geological evidence to indicate that a suitable quality and quantity of material is available
Extent of sand and gravel resource proved by borehole drilling in Sept/October 2015. Resource worked on adjoining land at Hill Farm in late 1970's/ early 1980's under 3 separate planning permissions.

Timescale for proposed extraction (approximate start date; estimated life of workings).
Likely to be required to provide continuity for Shawell Quarry within next 5-10 years.

Phasing of proposed workings.
Subject to further design, although general progression from south to north likely to be most appropriate programme linked with progressive restoration. Early screening on boundaries to Cotesbach village, with combination of earthworks and tree planting will be key feature of working and restoration design.

Environmental Information

Does the site affect Agricultural Grades 1, 2 or 3a 'best and most versatile' land?
Soil resource survey not yet conducted, but likely to similar to soils at existing Shawell Quarry, which are predominantly grade 3b.

Has any impact on Ecology been assessed?
No detailed site survey undertaken yet. Land is predominantly arable. Hedgerow and protected species surveys to be carried out.

Has any impact on Groundwater/Hydrology been assessed?
Hydrogeology assessment to be conducted, but issues likely to be similar to the existing quarry with scope for appropriate monitoring and mitigation strategy.

Will the site affect any international, national, regional or local designated sites? Not as far as aware.

Will the site affect any known archaeological features and/or historical buildings, structures or gardens? Not as far as aware

Transportation

Means and route of transportation of material to any processing plant and out of the site.
Mineral transported by conveyor via culvert under Rugby Road to access the Shawell Quarry working area (design will be provided for crossing under/ over the diverted public X27 bridleway). The conveyor will then link to the existing main conveyor which feeds the Shawell Quarry processing plant via conveyor tunnel under Gibbet Lane.

Mineral to be processed through existing processing plant and existing road access onto Gibbet Lane to the A5 will continue to be used.

Restoration

Proposed use at the cessation of workings.
Restoration likely to be predominantly to agriculture at lower level, using on site overburden and soils. Opportunity for new hedgerows and some woodland planting, with water bodies/ ponds in base of re-profiled landform.

Will the restoration require importation of waste?
No requirement for imported materials. Restoration to be achieved using on site overburden and soils only.

Buffer zones

Are there any sensitive uses adjoining or adjacent to the proposed site (i.e. housing, schools, health, community uses)? What distance are these uses from the proposed site?
Land is generally remote from residential property to the west. Appropriate operational stand -off can be designed for properties on the western and southern fringes of Cotesbach village.

What other measures will be implemented to act as a buffer zone to reduce impacts?
Working design will accommodate retention of natural ridge lines and field compartments to the south and west of Cotesbach village. Landscape screening through earthworks and tree planting can be designed to provide additional visual and acoustic screening.

Other information

Are there any reasons why any of the land that you have identified may not be available for sand and gravel extraction during the proposed plan period (i.e. before 2031)?
Proposal will be subject to formal Scoping and Environmental Impact Assessment. Scheme of working and restoration to be agreed with the respective land owners.

B. COMMENTS RECEIVED FROM TECHNICAL CONSULTEES

County Ecologist: OK with mitigation; GCN/Badger/Habitat surveys
Currently mainly arable fields, of low biodiversity value, apart from surrounding hedges and R Swift along NW edge. A few pockets of grassland, one of which

(to south) formerly of value, but not recently surveyed so it is not known whether value is still present. One section of hedge at right angles to river (at SP538831) also believed to be species rich, but not recently surveyed.
OK in principle, as long as hedges retained and substantial buffer zone to the river; possible hedgerow translocation and grasslands creation.
Great Crested Newt and badger surveys will be needed UP-FRONT with an application – if badger are present in one of the hedges, an increased buffer zone will be needed around the sett. If great crested newts are present in the off-site ponds near village and on golf-course, some mitigation would be required (probably trapping and exclusion fencing), but as most of the land is arable and of low newt-foraging value, it should not affect land-take.
If GCN are present, note that if land use changes from arable to (e.g.) rough pasture or habitat more attractive to GCN, this might change, so it is best to keep it arable until any newt exclusion fencing is up.

Environment Agency: This site is adjacent to the River Swift (main river) and includes areas of Flood Zone 3. A detailed flood risk assessment will be required. This will need to demonstrate that any extraction or restoration works do not increase flood risk elsewhere (taking account of climate change) and that there is no net loss of floodplain storage. Any ancillary development should be located in areas of lowest risk and excavated material should be stored outside the extent of the 1 in 100 year (with climate change) floodplain.
We would require the sand & gravel removal to not deplete natural streams flows or water quality (sediments) that flow to the River Swift during the operations.

The developer will have to take steps to ensure that throughout the flow range, flows in the tributary of the River Avon that crosses the site are not impacted by gravel extraction.

We will require to see an ecology survey of the River Swift including for native white clawed crayfish, which we have records for at this location.

The restoration plan should provide a great opportunity to do some low-cost river restoration of the River Swift that forms the NW boundary of the site, especially at GR: SP 54064 83353 where the rivers original meanders have been replaced with a straightened section.

Historic England: There is the potential for impact upon the significance of the Grade II* Church of St Mary and the Grade II* Cotesbach Hall and other listed buildings in the village through loss of historic landscape setting. The village of Cotesbach would be partly surrounded by workings as a result of the proposed allocation, in particular taking into account the existing works to the south. An understanding of the contribution of setting to the appreciation and understanding of the significance of the designated heritage asset is required to demonstrate that an allocation here would be sound. This may include the importance of designed views, and the relationship with the wider agricultural and rural landscape. We would also recommend that you are guided by the advice of your Conservation specialists and particular attention is paid to the advice of the County Archaeological Advisors in respect of prehistoric, Roman and early medieval settlement and burial remains on this side of the village as identified on the HER and through recent planning investigations.

Highway Authority: A crossing of the public bridleway X27 is proposed. All details of this crossing should be approved by the PROW team.
The transport proposals state that the minerals will be transported by conveyor to the existing processing plant and thus there will be no change to existing access to the site. On this basis the highway authority would have no further comments.

C. CONCLUSIONS

The site is a proposed extension to Shawell Quarry and therefore accords with the priority given to extensions to existing site operations specified in Policy M1. The proposed allocation was promoted in response to the Consultation Draft Plan (July 2015) and was subject to consultation in September 2015. Tarmac undertook borehole testing to define the extent of the sand and gravel resource to the south west of Cotesbach village in September/October 2015 which has subsequently resulted in the exclusion of land to the north Cotesbach village together with land adjacent to the River Swift.

It is not considered that there are any overriding factors which would preclude the site's inclusion as a site allocation in the Minerals and Waste Local Plan.

The main potential issues identified, which will require detailed assessment at the planning application stage, include the following matters:

- Measures for transporting mineral to the processing plant without using the public highway.
- Provision for the retention of Bridleway X28.
- Appropriate management of non-designated heritage assets.
- Restoration proposals which reflect the objectives of the Lutterworth Lowlands local landscape and Leicestershire Vales national landscape character areas, and provide the best balance of enhancing biodiversity and the preservation of best and most versatile soil resources.