

Proposed Sand and Gravel Quarry and Restoration  
Scheme

For Land at Lea Castle Farm  
Near Wolverley  
Worcestershire

EIA Scope

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Land north of Wolverley Road (now known as Lea Castle Farm), Preferred Area Status within Third Stage Minerals Local Plan

## **1. INTRODUCTION**

This document sets out the Scope of an Environmental Statement (ES) in line with the Town and Country Planning (Environmental Impact Assessment) (EIA) Regulations 2017 for the development of a sand and gravel quarry together with its restoration on land at Lea Castle Farm, near Wolverley, Worcestershire. (The site). Please see Appendix A Drawing No. KD.LCF.001-Location Plan. It has been prepared by Stop the Quarry Action Group (SQAG). This report has followed closely the format and wording of the KEDD Scoping Request

The site has been promoted within the emerging Worcestershire Minerals Local Plan. Worcestershire County Council being the Minerals Planning Authority responsible for making decisions on planning applications for mineral development in Worcestershire.

Planning applications must be determined in accordance with the Development Plan unless material considerations indicate otherwise.

The applicant has been in discussions regarding the site with the County for the past 3 years whilst geological and environmental monitoring and assessment works have been taking place.

The site's appropriateness for mineral extraction was considered by Worcestershire County Council with public consultations and statutory bodies input within 2016/2017 and was allocated a Preferred Area Status within the Third Stage Consultation of the Worcestershire Minerals Local Plan (Reference Land North of Wolverley Road – D026-2397). Please see Appendix B.

Preferred Area Status being defined as "areas of known resources where planning permission might reasonably be anticipated. Such areas also include essential operations associated with mineral extractions".

Win the Fourth Stage Consultation .....

The plan was amended further for approval for submission to the Secretary of State. The submission plan is set for consultation on 19 August to 30 Sept 2019, the minimum statutory period which also coincides with school holidays.

The applicant has agreed to submit an ES and a scoping opinion has been received from the local planning authority. SQAG were not consulted on the scope of the applicant's ES.

This document also provides a brief history of the site, known environmental designations, geology, a description of the proposed development involving sequential phased working and progressive restoration along with an initial analysis of potential environmental effects which could result due to the development.

Specialist have been employed in respect of each of the individual and interconnected environmental topics. ES work will be coordinated by SQAG within the EIA process and submitted in objection to any planning application.

## **PLANS**

The report is accompanied by the following plans which are contained within Appendix A of this document.

- Site Location Plan- – KD.LCF.001- This drawing illustrates the geographical context of the site within its local area
- Current Situation - KD.LCF.002- Shows the current arrangements at the site with the existing contours, internal and perimeter vegetation/features and potential extent of the overall site application boundary.
- Proposed Phasing – KD.LCF.003- This illustrates the conceptual location of the proposed development on a single plan including the site access, plant site, and progressive phased mineral and subsequent restoration areas.
- Concept Restoration - KD.LCF.004- Illustrates the concept for the overall completed site restoration integrating into its immediate surroundings.

### **3.0 THE SITE AND ITS CONTEXT**

#### Application Site

The site is located approximately 0.35 km north of Kidderminster (Broadwaters) and some 0.7 km east of Wolverley and 0.375 km south west of Cookley. It lies immediately north of the A4189 Wolverley Road and west of the A449 Wolverhampton Road.

The site lies within the centre of Wolverley and Cookley Parish directly between the two settlements and either side of an ancient right of way connecting the two settlements.

The proposed application site occupies approximately 45 Hectares of land with a maximum elevation of 80 m above Ordnance Datum (aOD) in the centre of the site, falling to 65 m aOD in the west and 55 m aOD in the east. It is predominantly contained land within an internal agricultural setting. See Drawing No. KD.LCF.002 – Current Situation. The actual proposed area of mineral extraction covering ~ 30 Hectares within the overall site.

The site forms part of the ~220 Ha grounds of Lea Castle built around 1762 and demolished in 1945.

There are areas of woodland to the western, south and north western boundaries of the site and a small number of TPO'ed individual avenue trees adjacent to a site internal Public Rights of Way (PROW) and scattered throughout the local landscape. A wall defines the southern boundary along with small blocks of woodland/shrubland and hedgerows with sporadic vegetation and a fence line to the east.

There are a significant number of residential properties, local facilities and businesses within the immediate area of the proposed site. The closest properties being those at South Lodge, Broom Cottage, Castle Barns, Lea Castle Equestrian Centre and properties off Brown Westhead Park. Schools..... Businesses (Equestrian, CCC, The Lock, Golf...). The Brown Westfield playing fields are located ....

Access to the site is to be gained via the A4189 Wolverley Road to the south eastern area of the site. This route providing direct access to the Wolverhampton Road and on to Kidderminster and Stourbridge. A lorry route plan is expected to be produced precluding lorry movements right in right out preventing traffic through Wolverley. Ideally, access should be proposed to prevent these movements.

#### Geology

In late 2015 Greenfield Associates (Geological Consultants) were asked to assess the sites potential for a mineral resource. Investigations comprising published geological maps, and borehole drilling combined with trial pitting by NRS and subsequent evaluation has identified a reserve area of approximately 3 million tonnes of Sand and Gravel. It is intended that the EIA will assess a potential output of 300,000 tonnes per annum which could provide ten years of supply.

## Environmental Designations

The site lies within the statutorily adopted Green Belt. Listed buildings – gate houses...There are other listed buildings within the sites wider area including Church of St John the Baptist, Grade II\*, with two memorials Grade II listed. along with the Grade II North Lodges of Lea Castle, Wolverley Court- Grade II, Knight House Grade II\* and Sionhill House – Grade II. The site is surrounding by an estate wall which abuts the listed gate house and joins the other gate house. The site is a significant part of the character of the listed structures. Indeed the site is the raisen d’etre for the listed structures. The site is also historical significant in the context of the Midlands iron and steel industry as well as the local context of ironworks in Cookley and Wolverley being the home of Edward Knight, who with the wealth generated from the iron works at Wolverley and Cookley, had Lea Castle built in the then fashionable neo-Gothic style in 1762.

Wolverley Conservation Area.....

The site is not located within a Flood Risk Area within the Environment Agency’s Flood Plan Map. It is within the Countryside Stewardship Water Quality Priority Area (England) – of medium priority.

Land within the site may also be categorised as Best and Most Versatile Agricultural Land.

TPO??

No other statutory environmental designations are known at this stage.

## Planning History

06/0644/EIA  
WF/0211/01  
WF/0260/99

The on line planning search clearly sets out previous applications on the site including golf course consents.

## Development Plan

Local Plan – GB ...

Minerals Plans ...

Emerging Minerals Plans

The site was promoted within the emerging Worcestershire Minerals Local Plan- Third Stage Consultation where it was assessed and considered appropriate to be allocated ‘Preferred Area Status’ under the title of Land North of Wolverley Road (submission reference DO26-2397). Representations were also made in respect of the fourth Call for Sites.

## Fourth Stage Plan and Submission Plan ....

### 4.0 THE PROPOSED DEVELOPMENT

The Phased Development Scheme will extract mineral and fill the site prior to restoration over a twenty year period. The initial works phase will involve the stripping and temporary storage of soils to both lower ground levels and screen via temporary bunding the proposed plant site. See Drawing No. KD.LCF.003

Phase 1 soils will be stripped and stored to place a temporary screen bund on the western boundary of the site. The removal of the soils and overburden from Phase 1 would facilitate a programme of progressive mineral extraction through phases 1,2,3 and final extraction of the plant site area with 'as dug' material being conveyed to the plant site via dump truck for processing with the sequential restoration of disturbed land **combining** both imported inert restoration material to create restoration formation levels on to which indigenous site soils will be placed. This would be achieved through a **combination** of direct placement of sequentially stripped soils and the progressive removal from temporary storage bunds of soil when mitigation measures are no longer required. It is envisaged that approximately 60,000 m<sup>3</sup> per annum of imported inert material will be utilised within the restoration scheme.

The restoration strategy for the site is illustrated on Drawing No. KD.LCF .004. The restored landform is intended to form an alian mix of current site and local area elements and features, with land use returning to agricultural use together with enhanced landscape planting and potential biodiversity gains.

A section of PROW ref FP 624 (B) will require temporary diversion for approximately **two weeks** will be restored back on its original alignment during the process. The PROW will pass between the extraction/fill area and plant/extraction site with access crossing the PROW. The access across the PROW serving Phases 1 and 2 will also link to the main site access.

No detailed phased working and restoration is available or detailed volumetric associated with soil and overburden stripping movement and placement for restoration purposes. It cannot be guaranteed therefore that that the phasing plan is achievable. No details of the plant, bunds or other infrastructure have been provided to consider further environmental effects. A further scoping opinion will therefore be required once details are produced.

## POTENTIAL ENVIRONMENTAL EFFECTS

The progressive soil stripping, mineral extraction, transportation to the plant site for processing and sale combined with the importation of inert material to be used in conjunction with in situ-soils and associated activity to restore the site have been considered to predict significant direct effects and any indirect, secondary, cumulative, trans boundary, short-term, medium-term, long-term, permanent and temporary, positive and negative effect on socio economic topics.

Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) sets out the information that should be included in an Environmental Statement, including the aspects of the environment likely to be significantly affected by the development. These are in Part 4;

A description of the factors specified in regulation 4(2) likely to be significantly affected by the development:

- Population,
- Human health,
- Biodiversity (for example fauna and flora),
- Land (for example land take),
- Soil (for example organic matter, erosion, compaction, sealing),
- Water (for example hydromorphological changes, quantity and quality),
- Air,
- Climate (for example greenhouse gas emissions, impacts relevant to adaptation),
- Material assets,
- Cultural heritage, including architectural and archaeological aspects, and
- Landscape.

Part 5 of Schedule 4 states that the Environmental Statement should provide a description of the likely significant effects of the development on the environment resulting from, inter alia;

a) The construction and existence of the development, including, where relevant, demolition works

b) The use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;

c) The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste

d) The risks to human health, cultural heritage or the environment (for example due to accidents or disasters);



- e) The cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources
- f) The impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change
- g) The technologies and the substances used

The issues listed below follow the format required by the EIA regulations, with the addition of sections on noise, transport, recreational uses and international, statutory and other designations.

A summary of the potential predicted effects is set out in the table below.

### **Issue Predicted Receptor/ Effect**

Population – There may be as a result of actual or perceived impact of the quarry a loss of population or a change in the socio economic diversity of the parish. The impact on the planned Lea Castle Hospital development including significant levels of social housing and other local development benefitting the community will be examined.

Human Health - Potential amenity and health effects on residential/ receptors are considered within the issues below. This will include impact on community cohesion, local identity and economic impact on businesses and subsequent impact on the community, facilities and character. Effects on local schools will also be addressed.

Biodiversity - The vast majority of land within the proposed mineral extraction area of the site is under agricultural use. There are sections of hedgerows within the site with adjacent woodland blocks and grassland. There are also a small number of individual trees on site protected by TPO. There are no statutory designated areas designated for biological interest within the site boundaries.

An Ecological Impact Assessment (EIA) will be undertaken in accordance with the ECIA guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIECM).

Soils - The potential planning application will comprise ~ 45 Hectares of agricultural land and it is possible that part of the land area will comprise Best and Most Versatile land characteristics. Accordingly, a soil resource and agricultural land classification will be undertaken.

Water - the proposed development site lies some 30-40 metres above the local ground water table. In accordance with good practice, a Hydrological, Hydrogeological and Flood Risk Assessment will be carried out.

Air - The types of materials to be stripped / excavated and handled as part of the proposals

are likely to result in significant air quality/ dust emissions. To assess the potential impact to local residential properties, facilities and businesses and to consider whether any standard industry controls/ mitigation measures are possible an Air Quality and Dust Impact Assessment will be carried out using relevant research and best practice guidance, e.g. The Environmental Effects of Dust from Surface Mineral Workings, Mineral Industry Research Organisation/ MIRO and LAQM TG (09).

Climate - the proposed operational development will last at least 20 years during a period of intense measures to reduce climate change and limit CO2 emissions. During this period there will be an issue in HGV movement associated with the proposals. The potential effects of which will be considered as part of highways, air and noise assessments. The plant will also have other energy uses which should be assessed to consider the whole lifetime carbon footprint.

Material Assessments are defined in the 'Advice Guidelines on the Information to be contained in Environmental Impact Assessment Reports DRAFT' (EPA, 2017) as 'built services and infrastructure'. This includes roads and traffic, electricity, telecommunications, gas, water supply infrastructure and sewerage (built infrastructure). – The increase in HGV and other movements will have an impact on local roads....

Cultural Heritage - the site obviously formed part of extensive grounds of Lea Castle, a house built in the 17<sup>th</sup> Century for a nationally important and prominent industrial pioneer.. The house has a significant local history dating back to the 17<sup>th</sup> Century and the development and growth of Cookley and Wolverley. While the house was demolished significant elements of the wider parkland remain. A Grade II Listed North Lodge (gate house) also remains ~ 280 m to the north of the site with the Grade II 18<sup>th</sup> Century Sionhill House, south of the site. Other Lodge House .... The estate wall remains largely intact and is a significant local historic landmark physically connected to the listed buildings.

Appropriate Heritage investigations will be undertaken.

Landscape – the site is located within the National Character Area 66 Mid Severn Sandstone Plateau, Worcestershire Landscape Character Assessment Landscape Character Type Sandstone Estate lands. The majority of the site is visible from the PROW crossing the site as well as other public rights of way and residential and business properties and roads. The site also forms a part of a wider landscape setting associated with the now demolished Lea Castle. The site forms the most important visual entrance to the villages of Wolverley and Cookley defining their identity and forming a local landmark. A Landscape and Visual Impact Assessment will therefore be undertaken as part of the Environmental Statement in accordance with Guidelines for Landscape and Visual Impact Assessment Third Edition Landscape Institute and Institute of Environmental Management and Assessment.

Recreational Uses – There are both informal recreational use through the site via the use of PROW and motocross scrambling and also formal equestrian-based activities. Brown Westhead

Park and Playing fields are also located adjacent to the west of the site. A number of schools and their playing fields are located close to the site. Potential effects, particularly sand deposits, will be identified and considered within the Environmental Statement.

Wall run ..

Noise - there are residential properties, schools and businesses close to the site and as such a noise study will review the advice relating to noise set out in National Planning Policy Framework (NPPF 2012) and the more detailed advice on noise at mineral working sites set out in the Planning Practice Guidance accompanying NPPF (PPG 2014, updated as web-based resource). The study will also consider the perceived impact of noise on these uses.

Transport - a new access will be introduced at an unknown location along the site frontage. The EIA will include a Transport Assessment to consider the implications of the scheme and the ability of the local highway network to accommodate the sites additional traffic movements with reference to anticipated markets, routes, existing traffic flows on the identified routes and the safety record of the routes. International, statutory and other designations. In accordance with EIA guidance the ES will look at the effects of severance and sustainability.

International, statutory and other designations – to be investigated.

Cumulative effect - An assessment will be made of the potential for cumulative effect which may result from incremental changes caused by other potential or present reasonably foreseeable developments/ activities together with the project. Including Leas Castle Hospital, Sion Hill School other ... local plan

Based upon the predicted potential environmental effects above it is proposed that the EIA /Environmental Statement associated with the proposed site development will include the following chapters;

- Alternatives (inc do nothing=need)
- Socio Economic Factors
- Planning Policy
- Landscape and Visual
- Flora, Fauna and Nature Conservation
- Noise & Vibration
- Drainage, Hydrology and Water Quality
- Geology and Ground Condition
- Traffic and Transport
- Air Quality
- Archaeology and Cultural Heritage
- Site Waste
- Agricultural Land Use and Soils

- Cumulative Effects

It is customary in undertaking an EIA and preparing an ES to review planning policy at the national and local level as a context to the determination of the accompanying planning application. A general review of the planning policy in the context of the development plan will be set out to review impact on the development plan as a whole.

## **6.0 ENVIRONMENTAL IMPACT ASSESSMENT**

The purpose of an EIA is to ensure that the environmental impacts of a proposed development are fully understood prior to making a planning decision. The procedure provides for the systematic assessment of environmental impacts, the consideration of potential measures to avoid and mitigate these effects and the ability to incorporate such measures into the design. This ensures that reliable information is available to the public and the planning authority during the decision-making process.

EIA involves.

- **Prediction:** Specialists are engaged to undertake detailed reports on the relevant issues, to undertake subjective assessment of the impact of the proposal and to propose mitigation measures and amendments to the design, if necessary and possible.
- **Design:** The project is reviewed and altered as appropriate if possible
- **Preparation of an Environmental Statement:** An Environmental Statement (ES), including a Non-Technical Summary (NTS), detailing the impact of the proposed development and any mitigation measures, is prepared to inform the decision-making process. The ES is submitted with a planning application. One of the principle purposes of EIA is to look at impacts and mitigation so that the proposal can be refined as part of an iterative process.
- **Consultation:** The planning application process provided for consultation with statutory consultees and provides an opportunity for other parties to submit statements of objection or support and the application refined before the planning authority makes a decision on the application.
- **Implementation:** If the proposed development is granted consent, the required mitigation measures are implemented during the construction and operational stages of the development.

## **7.0 SCOPING REPORT**

The purpose of this Scoping Report is to outline the nature of the proposed development, as far as it is known, and to identify topics and issues which appear to be appropriate for consideration as part of an EIA. The proposal is for the extraction for ~3 million tonnes of a geologically confirmed sand and gravel resource on land at Lea Castle Farm, Near Wolverley, Worcestershire. The mineral would be worked over a period of ~10 years with the site restored progressively utilising both indigenous soils and overburden and approximately 600,000 tonnes of imported inert materials. The Environmental Impact Assessment will be prepared in accordance with Schedule 4 of the 2017 EIA Regulations and will include;

- A description of the location of the development;
- A description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the landuse requirements during the construction and operational phases;
- A description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;
- An estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.

The Report has sought to provide a considered and appropriate approach to identifying those issues which are deemed to require particular investigation. The information will hopefully be of assistance to Worcestershire County Council and its consultees in providing a formal response to any application.

Based upon consideration of the socio environmental topics identified above it is proposed that the EIA will address in detail the potential effect of the proposed development on;

- Alternatives (inc do nothing=need)
- Socio Economic Factors
- Planning Policy
- Landscape and Visual
- Flora, Fauna and Nature Conservation
- Noise & Vibration
- Drainage, Hydrology and Water Quality
- Geology and Ground Condition
- Traffic and Transport
- Air Quality
- Archaeology and Cultural Heritage
- Site Waste
- Agricultural Land Use and Soils
- Cumulative Effects

## **Appendix A - Drawings**

Drawing No. KD.LCF.001 Site Location Plan

Drawing No. KD.LCF.002 Current Situation

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## **Appendix B**

Land north of Wolverley Road (now known as Lea Castle Farm), Preferred Area Status within Third Stage Minerals Local Plan