1 CHAPTER 1

1.1 INTRODUCTION

This Environmental Statement (ES) has been prepared to accompany the application by Lound Hive Limited (the Applicant), part of Hive Aggregates and the Hive Energy Group, for full planning permission for the Retford Circular Economy Project ('RCEP' or 'the Proposed Development').

The Proposed Development comprises the extraction of pulverised fuel ash (PFA) from former disposal lagoons currently comprising low quality grazing land, which would be connected via a new conveyor and haul road to a main processing site and highway access located on existing industrial land at the Bellmoor Industrial Estate (formerly the plant site for Bellmoor Quarry). This would be accessed solely via an existing access to the A638 during normal operations.

The PFA can be used as a sustainable cement replacement product and secondary aggregate, in addition to the potential to use it as an ingredient in other sustainable building products. It is therefore safeguarded in national planning policy¹. The primary intention of RCEP is to process the PFA for use as a cement replacement product.

The Proposed Development falls within Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations') under Part 19 1.13 'Quarries [and open-cast mining] where the surface of the site exceeds 25 hectares', and therefore Environmental Impact Assessment (EIA) is required.

This ES has been prepared in accordance with the EIA Regulations and is based on the Scoping Opinion received on 4th November 2022 from Nottinghamshire County Council(NCC).

As required by the EIA Regulations, this ES contains the EIA for the Proposed Development and presents information on the likely significant environmental effects which may occur as a result of the Proposed Development. The ES also informs the reader of the nature of the Proposed Development, assesses any reasonable alternatives considered, and details the measures proposed to protect the environment during site preparation, construction, operation and decommissioning.

This chapter of the ES is supported by the following figures provided in **Volume 2 ES Figures:**

- Figure 1.1: Site Location Plan;
- Figure 1.2: Site Location Plan (aerial);
- Figure 1.3: Site Area Plan; and
- Figure 1.4: Environmental Constraints Plan;

The 'Site' for the Proposed Development is located within the Bassetlaw District of Nottinghamshire. The boundary of the Site is located approximately 400 south of Lound, 380m southwest of Sutton-cum-Lound and 670m northwest of Retford. Nottinghamshire County Council (NCC) will determine the planning application as mineral planning authority.

¹ https://www.gov.uk/government/publications/national-planning-policy-framework--2

1.2 PURPOSE OF ES

1.2.1 ES Process

The EIA Regulations implement European Union (EU) Directive 2014/52/EU which amended Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. The EIA Regulations outline the process of the EIA and the criteria that would determine if an EIA is necessary or not.

Schedule 2 of the EIA Regulations lists certain types of developments for which an EIA is required where there are likely to be significant effects on the environment by virtue of factors such as the nature, size, or location of the development proposal.

The results of the EIA are presented in this ES which, as prescribed in the EIA Regulations, is required to include a "description of the likely significant effects" of the Development; the effects which are not considered to be significant do not need to be described. It is therefore necessary for the scope of the EIA to be appropriately and clearly defined to ensure that any likely significant effects are described and assessed.

1.2.2 EIA Scoping

The aim of the Scoping process is to identify key environmental issues at an early stage, to determine which elements of the Proposed Development are likely to cause significant environmental effects and identify issues that can be 'scoped out' of the assessment. The EIA Scoping Report and request for a Scoping Opinion was submitted in September 2022, and a copy is included in **Volume 3 Appendix 1.1**.

The 2022 Scoping Opinion was issued by Nottinghamshire County Council and received on the 4th November 2022, a copy of which is included in **Volume 3 Appendix 1.2**. The EIA contained within this ES is based on this Scoping Opinion.

The ES has been prepared following a systematic approach to EIA and project design. The Structure is outlined in **Section 1.7** below.

1.3 THE APPLICANT

The Applicant is Lound Hive Limited, a special purpose vehicle set up for the planning and development of the Proposed Development. The Applicant is part of Hive Aggregates, which itself forms part of the Hive Energy Group.

Founded in 2010, The Hive Energy Group has become established as one of the largest and most experienced UK solar developers, responsible for installing more than 300 MW of generating capacity across the country. The Hive Energy Group has since expanded to invest in and develop whole life circular economy projects that will support climate change mitigation and recycling.

Within the Hive Energy Group, Hive Aggregates has been established to make beneficial use of industrial by-products and waste to create sustainable building products. This includes the Proposed Development, where it is proposed to recycle PFA waste into a sustainable cement replacement and potentially other sustainable building products.

1.4 SITE CONTEXT

The Site is split into three connected areas as shown in **Figure 1.3**:

Area A: Main Operational Site;

Area B: Link Conveyor and Haul Road (outside of Main Operational Site); and

Area C: Main Processing Site.

The Site covers a total area of approximately 113 ha and is centred at National Grid Reference (NGR) SK 69404 84864.

The Site is generally remote from residential areas and has two one public rights of way (footpaths Sutton/FP1 and FP2) crossing a short section of it. A small number of dwellings are located approximately 100m from the western boundary of Area A (Bellmoor Farm complex). Other residential properties comprise the farmhouse and two other properties associated with Sutton Grange Farm, located immediately to the north of Area A, and two dwellings associated within the Wetlands Fishery on the opposite side of Lound Low Road to the north.

The existing Bellmoor Industrial Estate access (formerly used by Bellmoor Quarry), to be used to access Area C and the remainder of the Site, is shared with the Nottinghamshire Wildlife Trust Idle Valley visitor centre car park access.

The Site lies within the operational boundary of an Internal Drainage Board (IDB), the Isle of Axholme and North Nottinghamshire Water Level Management Board. The Environment Agency Catchment Data Explorer confirms the south of the Site lies within the Idle (from Maun/Poulter to Tiln) waterbody catchment. It lies within the Idle and Torne management catchment within the wider Humber Catchment. The north of the Site lies within the Idle (from Tiln to Ryton) waterbody catchment. The nearest Water Frame Directive (WFD) classified watercourse is the River Idle, located immediately east of the Site boundary flowing from south to north.

The former ash lagoons site (Area A) is raised with vegetated bunds or embankments around its perimeter and largely comprises grassland for grazing, of relatively poor quality. The area has historically been subject to a significant amount of sand and gravel extraction and is therefore not alien to extractive industries, with Area C having been used until recently for the processing and export of won resources and remaining in industrial use to this day.

The area is split between the 'Low-Rise' to the east (7.5 - 11 m AOD) and the 'High-Rise' to the centre and west (17 - 19 m AOD). The Site is also well screened owing to a combination of topography and existing vegetation, including tree planting and hedgerows along its perimeter, and woodland blocks and hedgerows in the surrounding area.

Area B comprises fields that have not previously been subject to PFA disposal.

The Sutton and Lound Gravel pits SSSI lies immediately adjacent to the east of the Site, and a narrow strip of the SSSI lies within the Site boundary, corresponding with an existing bund/embankment.

Retford Cemetery Local Nature Reserve is located within 3 km of the Site and the nonstatutory designated site, the Sutton and Lound Local Wildlife Site (LWS), lies to the southeast of the Site, with some of the LWS encroaching into the Site boundary. Other LWS within 2 km of the Site are also located within 3km of the site. Further information relating to ecological areas of interest can be found in **Chapter 8, Ecology** and are shown on **Figure 8.2 – Site Boundary and Designated Sites**.

1.5 OVERVIEW OF THE DEVELOPMENT

The Proposed Development would comprise the extraction, processing, and export of PFA contained in former disposal lagoons at the Site. Associated with this would be bulk earthworks, dewatering and soil storage, ponds and excavations, hard surfacing, buildings and structures, plant, conveyors, utility connections, roadways, parking, drainage, and restoration (including planting and extensive habitat creation).

A full description of the Proposed Development is provided in **Chapter 5 – Project Description and Design Development.**

The purpose of the Proposed Development is to extract PFA from former PFA disposal lagoons which would then be used predominantly as a replacement for traditional Portland cement, a very energy intensive component of concrete. Consequently, concrete production by third parties would use less raw materials and re-use a waste product with associated environmental benefits, which is discussed in **Chapter 15 – Climate Change and sustainability.**

1.6 PROJECT TEAM AND EXPERIENCE

The ES Report has been compiled by Arcus Consultancy Services Limited (Arcus) on behalf of the Applicant. The ES Project Team, as outlined in **Table 1.1**, is led by Arcus.

For each topic, the detailed assessment of likely significant effects has been undertaken by experts with relevant specialist skills, drawing on their qualifications, and experience of working on other development projects, good practice in ES and on relevant published information.

Table 1.1 lists the key authors for each chapter and their relevant ES experience.

Chapter Number	Title	Key Authors and Relevant EIA Experience
1	Introduction	Arcus, Alexandra Clarke BSc (Hons) MCIWEM C.WEM
2	EIA	Arcus, Alexandra Clarke BSc (Hons) MCIWEM C.WEM
3	Consultation	Arcus, Alexandra Clarke BSc (Hons) MCIWEM C.WEM
4	Site Selection and Consideration of Alternatives	Arcus, Alexandra Clarke BSc (Hons) MCIWEM C.WEM
5	Project Description and Development Design	Arcus, Alexandra Clarke BSc (Hons) MCIWEM C.WEM
6	Legislative and Planning Policy Context	Arcus/DWD, Alexandra Clarke BSc (Hons) MCIWEM C.WEM, Colin Turnbull BSc (Hons) MSc MRTPI
7	Landscape and Visual Impact Assessment	Arcus, Jane Hart BA (HONS) DipLA CMLI (17 years) assisted by Wei Ma BA (HONS) MA and Yanzhou Chen BA (HONS) MA
8	Ecology and Ornithology	Arcus, Matt Slaymaker ACIEEM
9	Hydrology, Hydrogeology and Flood Risk	Arcus, Sonia Devons BSC(Hons) MSC MCIWEM CEnv, Liam Nevins BSc (Hons) MCIWEM C.WEM
10	Ground Conditions and Contamination	SLR, Matt Logan, BSc (Hons), MSc CGeol; SiLC; RoGEP; SQP NQMS
11	Cultural Heritage and Archaeology	Ecus Ltd, Anthony Hana, MCiFA
12	Noise	Accon, Ben Mills, BSc MIOA

Table 1.1: Project Team

13	Air Quality	Accon, Christine Park, BSc (Hons) MIEnvSc MIAQM
14	Traffic and Transport	Arcus, Frank Ocran, BSc (Hons) MSc, MCIHT assisted by Callum Rodgers BEng (Hons)
15	Climate Change and Sustainability	Ecolyse/Arcus, Dr Graham Earl, Doctorate of Engineering in Environmental Technology, BEng (Hons), MIMechE, CEng and Lawrence Caird, MearthSci, Csci, MIES, MIAQM
17	Interaction and Accumulation of Effects	ERM, Sue Kaner BA (Hons) M. Phil CMLI Affiliate IEMA
18	Conclusions	Arcus, Alexandra Clarke BSc (Hons) MCIWEM C.WEM (12 Years)

1.7 STRUCTURE OF THE ES REPORT

The ES Report contains the findings of the assessment of likely significant environmental effects of the Development and comprises the following volumes:

- Volume 1 ES Text, comprising 17 chapters;
- **Volume 2** ES Figures (Note, to avoid duplication, some of the planning figures are cross referenced within this ES);
- Volume 3 ES Technical Appendices; and
- **Volume 4** ES Non-Technical Summary.

1.8 ADDITIONAL DOCUMENTS

1.8.1 Planning Statement

A Planning Statement has been prepared to accompany the application. The Planning Statement sets out an assessment of the Proposed Development in the context of the national planning and energy policy and emerging planning policies, and the development plan. It also considers the potential benefits and harm which may arise and concludes as to the overall acceptability of the proposal in relation to the planning context.

Although the Planning Statement does not form part of the ES, it draws from the findings of the EIA and is submitted as part of the material supporting the application.

1.8.2 Statement of Community Involvement

The Applicant has undertaken extensive consultation and engagement at the preapplication stage, and a Statement of Community Involvement (SCI) reportⁱ forms part of the application submission.

1.9 OBTAINING FURTHER INFORMATION

The ES will be publicised in accordance with Part 5 of the EIA Regulations.

Part 5 of the EIA Regulations requires the ES to be available for public viewing.

A copy of the ES will be available at:

Retford Library 17 Churchgate Retford DN22 6PE

The ES and supporting documentation to the application, together with a notice of the application, can be viewed on the Nottinghamshire County Council website;

www.nottinghamshire/gov.uk/planning-and-environment/planning-applications

and the Project website: www.retfordcep.co.uk

Hard copies of the application submission may be obtained at a reasonable charge reflecting the cost of making the relevant information available.

To request a copy of the application submission please contact:

Lound Hive Limited

Woodington House, Woodington Road, East Wellow, Romsey. SO51 6DQ

Or

Arcus Consultancy Services at info@arcusconsulting.co.uk

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ⁱ Retford Circular Economy Project, SCI, Counter Context Ltd, February 2023