

4 SITE LOCATION AND DESCRIPTION

4.1 INTRODUCTION

This Chapter of the ES contains a description of the land required for the Proposed Development. **Figures 1.1-1.3** within **Volume 2** show the location plans for the Proposed Development.

This Chapter of the ES is supported by the following Technical Appendices provided in **Volume 3: Technical Appendices**:

- Appendix 4.1 PFA Lagoons Figure
- Appendix 4.2 Geological Cross Section Figure
- Appendix 4.3 Site Photos

The majority of the Site comprises former pulverised fuel ash (PFA) disposal lagoons, split between artificially raised and lower areas, restored to grazing land. There is also a small corridor of agricultural land and land forming part of an existing industrial estate to the south, south west of the former PFA disposal lagoons.

Further detail on the location of the Site and a description of the main parts of it are set out in the remainder of this Chapter.

4.2 SITE LOCATION

The Site is located within the administrative boundary of Bassetlaw District Council and Nottinghamshire County Council (NCC), approximately 670 m north of Retford. It covers an area of 113.55 hectares (ha), comprising predominantly agricultural land, field boundary vegetation, and part of an existing industrial estate and an access road to the A638. The Site is centred approximately on National Grid Reference SK 69404 84864. The Site boundary, and the surrounding area, is shown on **Figure 1.1: Site Location Plan**.

Topographically, the Site is low-lying, sitting between 0 and 20 m Above Ordnance Datum (AOD). It covers a relatively flat area within the floodplain of the River Idle which flows in a northerly direction between 100 m and 500 m to the south-east. The Site is surrounded by a series of water bodies which have formed within the pits of disused sand and gravel quarries along the floodplain of the River Idle, some of which have been included in designated Nature Reserves.

The Site is situated within an area of flat rural agricultural land. The area has historically been subject to a significant amount of sand and gravel extraction, the legacy of which is clear, including a concrete batching plant and major pre-cast concrete works adjacent/close to the Site. The majority of the Site boundary is formed of raised, vegetated embankments, which provide screening through topography and existing vegetation. The existing vegetation includes tree planting and hedgerows along the Site's perimeter and blocks of broadleaved woodland and hedgerows in the surrounding area, which can be seen on **Figure 1.2: Site Location Plan (Aerial)**. A thin layer of topsoil overlies much of the Site, averaging 0.3m in thickness.

The Site is bordered by Lound Low Road to the north and reaches the A638 (North Road) to the south. Access to the Site would be taken from the A638. The eastern and western boundaries of the Site are bordered by existing vegetation, waterbodies, and agricultural fields.

The area is relatively isolated, with the village of Lound located approximately 400 m to the north and the village of Sutton-cum-Lound located approximately 380 m to the north west. The town of Retford is located approximately 670 m to the south. Distances are taken from the closest point to the settlement from the boundary of the Site.

The closest residential properties are those associated with Low Farm and Sutton Grange Farm located immediately to the north of the Site. Two dwellings associated with the Wetlands Fishery are located on the opposite side of Lound Low Road, also to the north. There is also a group of residential properties associated with a small development at Bellmoor Farm located approximately 130 m to the west. A residential property named Brooklyn is located adjacent to the hand car wash on North Road some 250 m to the south west; and 300 m to the south west is Cross Roads Farm, a second adjacent residential property and two semi-detached properties on the opposite side of the North Road and Sutton Lane crossroads. There are further dwellings located within 500 m to the south, identified as Merrydene, Botany Bay Farm, Cooks Cottages and Trinity Farm; and further to the east at Tiln Farm on the opposite bank of the River Idle.

There are a number of industrial uses in the area, including an anaerobic digestion plant, the Bellmoor Industrial Estate, and the aforementioned pre-cast concrete works and concrete batching plant, amongst others.

There are a range of recreational users in the immediate area that include walkers, cyclists, equestrians, anglers and visitors to the Idle Valley nature reserve (located adjacent to the south east and east of the Site). The A.P.E. and Prime8 educational and outdoor facilities are also located to the north of Lound Low Road, close to the Wetlands Lakes, which is located within 50 m of the Site's northern boundary. There are also two public rights of way (footpath NT|Sutton|FP1 and FP2) that cross through the Site, although not in a location where PFA has been deposited.

4.3 SITE DESCRIPTION

4.3.1 Proposed Development Areas

The Site can be characterised as three connected areas:

- Area A: Main Operational Site;
- Area B: Link Conveyor and Haul Road (outside of Main Operational Site); and
- Area C: Main Processing Site.

The above areas are shown in the **Site Area Plan, Figure 1.3**, included in **Volume 2** of this ES. **Appendices 4.1** and **4.2** within **Volume 3** show the location of the lagoons and geological cross sections of the site, respectively. **Appendix 4.3** includes a selection of photos for the Site.

Area A – Main Operational Site

This area is approximately 105.84 ha and comprises the former ash lagoons site raised with vegetated embankments around its perimeter, and currently largely contains grassland for grazing, though this is 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. The vegetated embankments are man-made; constructed to contain PFA as part of the former disposal lagoon land use. The embankments are constructed primarily from site-won sandstone and soils, and for the most part are around 6 m high from ground level.

Photos 6 to 11 in **Appendix 4.3** demonstrate the existing pastoral use of the Main Operational Site, and the boundary vegetation found around the Site.

The area is split between 'Low-Rise' to the east (7.5 – 11 m AOD) and 'High-Rise' to the centre and west (17 – 19 m AOD). The High-Rise is where the larger embankments (around 6 m high) are found, bounding the entire area.

Area B – Link Conveyor and Haul Road

This area is approximately 5.20 ha and includes a section of the conveyor and link road passing south from the Main Operational Site to the Main Processing site, utilising farmland. This area is shown in Photo 5 in **Appendix 4.3**.

Area C –Main Processing Site

Area C comprises approximately 2.51 ha of land at the Bellmoor Industrial Estate, accessed from the A638 via a dedicated priority turn junction. It currently accommodates a number of industrial uses, including a stonemason and concrete batching plant, and is therefore in daily operational use. It was historically used as the plant site for the former Bellmoor Quarry. This area is shown in Photos 2 to 4 in **Appendix 4.3**, demonstrating the existing industrial use and hardstanding. The A638 access is shared with the Nottinghamshire Wildlife Trust Idle Valley Nature Reserve visitor centre, and is shown on Photo 1 of **Appendix 4.3**. Bellmoor Lake lies nearby to the east and beyond this is a sewage treatment works. The industrial areas along Randall Way in the northern part of Retford are located approximately 620 m to the south east. The east coast mainline railway passes by to the south at around 300 m at its nearest point.

The Main Processing Site would be constructed on an area previously operated by Tarmac during the former quarrying operations. The majority of the site is hardstanding, being the old car parking area for the quarry offices. Currently the Site is utilised for storage of vehicles, concrete road barriers and aggregates for the existing operations at the Industrial Estate.

4.3.2 Site Constraints

The location of the Site was pre-determined due to the demand for the material (PFA) that is available at the Site, and the limited availability of PFA elsewhere. Environmental constraints have been taken into consideration and have influenced the design of the Proposed Development. An environmental constraints plan is shown on **Figure 1.4** within **Volume 2**.

Two sites of ecological importance are located adjacent to the Site. The Statutory Designated Site Sutton and Lound Gravel pits Site of Special Scientific Interest (SSSI) adjoins the eastern boundary of the Site, and extends to the northeast, approximately 350 m northeast from the Site's northern boundary. A small area (approximately 1.47 ha) of the SSSI is included within the Site boundary. This is designated for the wetland habitat and species found in the area as it includes extensive areas of open water lagoons, supporting a variety of breeding, wintering, and passage birds. It (the wider SSSI) is highlighted as one of the most importance localities for passage and overwintering wildfowl in the East Midlands.

The non-designated Sutton and Lound Local Wildlife site (LWS), which also overlaps with the Nottinghamshire Wildlife Trust's Idle Valley Nature Reserve, is located adjacent to the Site's southeastern and eastern boundary, and extends to the north east. Part of this LWS is located within the Site, at the southwest extent of the Main Processing Site, and extensive consultation with the Nottinghamshire Wildlife Trust has been completed to discuss this. The LWS comprises sand and gravel pits, including part of the Sutton and Lound Gravel Pits SSSI, with a variety of different habitats, and supports a range of breeding and wintering wetland birds.

Impacts of the Proposed Development on these ecologically sensitive areas have been considered throughout this ES in the relevant technical chapters, including LVIA, Noise, and Air Quality.

There are other Statutory (including Retford Cemetery Local Nature Reserve) and Non-statutory (including Idle Valley Centre Pond, Tiln Wood Track, and Tiln North and the Conservation Lake, for example) designated sites within 2 km of the Proposed Development, and these are further detailed in **Chapter 8: Ecology and Ornithology**.

In terms of cultural heritage assets, one Conservation Area is located within 1 km of the Site. Lound Conservation Area is located approximately 530 m to the north of the Site, and contains five Grade II Listed Buildings. Sutton-Cum-Lound contains a Grade II Listed Building, and the Grade I Listed 'Church of St Bartholomew', approximately 1 km east of the Site.

There are no landscape designations within 1 km of the Site, and the Site is predominantly located within Flood Zone 1 (areas with the lowest risk of flooding), although the northeast of the Site is situated within Flood Zone 2 (land with a between 1 in 100 and 1 in 1000 annual probability of river flooding (1% - 0.1%)).

These ecologically sensitive areas, heritage assets and other key constraints to the Proposed Development were taken into account during the design process, and included:

- Visibility from sensitive receptors, including nearby residential properties and landscape designations;
- Presence of sensitive habitats and protected species, including woodlands, wetlands, and badger for example;
- Presence of sensitive ornithological species;
- Presence of watercourses, private water supplies, and related infrastructure;
- Presence of recreation and access features, for example Public Rights of Way (PRoWs) and railway lines; and
- Proximity to noise sensitive receptors.

The studies undertaken for the Development indicate that the key site constraints are:

- Landscape and visual effects on the landscape character and PRoWs;
- Visibility to key visual receptors including nearby properties and receptors;
- Operational noise effects on nearby properties; and
- Impacts on sensitive species and habitats.

These constraints were identified through desk studies, site surveys and analysis, including consideration of the responses received from consultees during the EIA process, predominantly at Scoping stage.