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3. The Site and Surrounding Area

3.1. Site Location

- 3.1.1. Keadby Next Generation Power Station (the 'Proposed Development') comprises land within and adjacent to the boundary of the existing Keadby Power Station site near Scunthorpe, Lincolnshire and falls within the administrative area of North Lincolnshire Council (NLC) (the 'Site'). The Keadby Power Station site currently encompasses the operational Keadby 1 and Keadby 2 Power Stations including the Keadby 2 Power Station Carbon Capture Readiness reserve space. The location of the Site, which is approximately centred on national grid reference (NGR) 481961, 412101 is shown in **Environmental Statement (ES) Volume III Figure 1.1: Site Location Plan (Application Document Ref. 6.4)**.
- 3.1.2. The Site boundary is shown on **ES Volume III Figure 3.1: The Proposed Development Site (Application Document Ref. 6.4)** and **ES Volume III Figure 3.2: Aerial Photo of the Proposed Development Site (Application Document Ref. 6.4)**. The final Site boundary for the purposes of the DCO Application, including land for associated connections and temporary land required during construction of the Proposed Development, has been refined through ongoing studies and the responses to the Applicant's consultation.
- 3.1.3. This Chapter is supported by **ES Volume III Figure 3.1 to Figure 3.4 (Application Document Ref. 6.4)**.

3.2. The Site and existing land-use

- 3.2.1. The Site encompasses an area of approximately 77.1 hectares (ha), of which approximately 26.7ha of land is proposed for construction laydown.
- 3.2.2. Multiple land uses together make up the Site, with the different areas described in turn below and shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**. These terms have been used throughout the ES to describe land use zones within the Site. Distances to environmental receptors reported within the ES are measured relative to the areas illustrated on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**.
- 3.2.3. The Site is divided into the following areas of permanent and temporary land use (the proposed use is described in more detail in **ES Volume I Chapter 4: Proposed Development (Application Document Ref. 6.2)**):
- Main Site;
 - Ancillary Facilities;

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- Water Connections (comprising the Water Abstraction, the Public Water Connection and the Water Discharge Corridor);
- Electrical Connections;
- Waterborne Transport Off-loading Area;
- Construction Laydown Areas;
- Access routes (comprising the Access Road, Skew Construction Access Route, Emergency Access Route and Construction Access Haul Route);
- A18 Gatehouse Utility Connections;
- Connections to Keadby 1 and Keadby 2 Power Stations; and
- Potential Biodiversity Mitigation and Enhancement Area.

The Main Site

- 3.2.4. The Main Site (shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**) is located approximately 4.1km to the west of the town of Scunthorpe, to the north-west of the existing Keadby 1 and Keadby 2 Power Stations. The village of Keadby is the nearest settlement which lies immediately adjacent to the Site boundary and approximately 1km east of the Main Site at its closest point (refer to **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**).
- 3.2.5. The Main Site is where the built development associated with the CCGT including the turbines, boiler, exhaust gas treatment, stack(s) and some ancillary plant as well as the cooling infrastructure, will be located.
- 3.2.6. The Main Site, which covers an area of 13.8ha, is located within an area of the Keadby Power Station site called Keadby Common, although this is not designated as Common Land. This part of the Keadby Common was historically associated with a former coal-fired power station that was demolished in the 1990s. Until circa 2017/ 2018, this area was used for arable production. The northern areas of Keadby Common where the Main Site is located are occupied by improved grassland.
- 3.2.7. The Main Site has a drain on each boundary (four drains in total as shown in **ES Volume III Figure 12.1: Surface Waterbodies and their Attributes (Application Document Ref. 6.4)**) and one drain across the middle. The drain across the north of the Main Site is referred to in the ES as 'Drain 1'; it forms part of Glew Drain and is designated as a Local Wildlife Site (LWS) immediately north-east of the Main Site.
- 3.2.8. Overhead electricity transmission lines are present in the vicinity of the Main Site (see **ES Volume III Figure 3.4: Constraints within 5km of the Proposed Development Site (Application Document Ref. 6.4)**), associated with the existing National Grid Electricity Transmission (NGET) 400kV Substation to

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the east of the Main Site. In the vicinity of the overhead lines, a swathe of unmanaged semi-improved grassland and pockets of scattered scrub occur.

- 3.2.9. The approximate central point of the area where the main operational components of the Proposed Development would be sited in the Main Site is NGR 481961, 412101.

Ancillary Facilities for the Main Site

- 3.2.10. To the south of the Main Site, the land comprises extensive hardstanding areas which were formerly used as laydown areas during the construction of the Keadby 2 Power Station. Some of this land will be required for permanent ancillary facilities as shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**, namely the natural gas reception compounds and internal access roads.
- 3.2.11. Another area for ancillary facilities to the west of Keadby 2 Power Station is shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)** – this is the location of the control and administration building and storage building. The redundant (decommissioned) tanks located in this area will be dismantled and removed from the Site to enable the Proposed Development.
- 3.2.12. An existing high pressure (HP) gas pipeline which runs along Bonnyhale Road (see **ES Volume III Figure 3.4: Constraints Within 5km of the Proposed Development (Application Document Ref. 6.4)**) and is operated by National Gas Transmission plc ('NGT') ('7 Feeder Eastoft') is located within the Site, to the north of North Soak Drain. Subject to agreement with NGT, natural gas will be supplied via a tie-in to this HP gas transmission network. It is proposed that a minimum off-take connection (MOC) will be constructed, and natural gas will be transferred via a below ground pipeline corridor within the Site to connect to National Gas Transmission's apparatus, where the gas would be metered and conditioned to that required for the Proposed Development. The indicative pipeline route is wholly within the Site as shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**.

Land Within the Wider Keadby Power Station Site

- 3.2.13. The Site includes land within both Keadby 1 and Keadby 2 Power Stations for the purposes of facilitating connections to the Proposed Development for electricity, water and other necessary infrastructure as well as to provide temporary access during construction for Abnormal Indivisible Loads (AIL). A

description of land use within the wider Keadby Power Station site is provided in Section 3.4 below.

Water Connections

- 3.2.14. Cooling water for the proposed CCGT will be abstracted from the Stainforth and Keadby Canal. **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)** shows the location of the Water Abstraction Corridor included within the Site. The canal also currently supplies cooling water to Keadby 2 Power Station via a pumping station and interconnecting pipework.

- 3.2.15. The channel of the canal is navigable, approximately 35m wide and several metres deep with low vertical artificial banks formed of stone. This part of the canal falls within the boundary of the Stainforth and Keadby Canal Corridor LWS, which is designated for its aquatic flora and associated bankside habitats.

- 3.2.16. Treated effluent from the Proposed Development will be directed to the River Trent and discharged through the existing Keadby 1 Power Station outfall which is also utilised to discharge treated effluent from Keadby 2 Power Station. The Site therefore includes existing pipework corridors currently associated with Keadby 1 and Keadby 2 Power Stations – this Water Discharge Corridor is shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**.

- 3.2.17. The Water Discharge Corridor crosses Chapel Lane adjacent to the curtilages of residential properties before crossing fields which are managed for arable crop production, and traversing beneath a number of unnamed dry ditches and/ or wet drains including Eastoft Moors Drain / Warping Drain, an ordinary watercourse maintained by the Isle of Axholme and North Nottinghamshire Water Level Management Board (IoAaNNWLMB) ('the IDB') before its outfall location on the western bank of the River Trent. No construction works are anticipated to be required on the existing discharge pipeline, although some maintenance works may be undertaken (refer to **ES Volume I Chapter 5: Construction Programme and Management (Application Document Ref. 6.2)**).

- 3.2.18. A Towns Water Connection will also be required, connecting to infrastructure on Chapel Lane. The location of the Public Water Connection is indicatively shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**

Electrical Connections

- 3.2.19. The existing 400kV Substation owned and operated by NGET is included within the Site for the purposes of providing an electrical connection for the

Proposed Development into the NGET system. The 400kV Substation comprises electrical generation and transmission equipment on a hardstanding surface within a secure fenced compound.

- 3.2.20. Any works undertaken within the substation would be the responsibility of NGET.
- 3.2.21. The electrical connection cables from the Main Site into the 400kV Substation may be routed into the western or eastern side of the Substation, depending on which existing substation bay NGET propose to connect it into. The Site includes land to enable either option to be delivered.

Construction and Operational Access Route and Gatehouse

- 3.2.22. Access to the Site during construction and operation would be via the existing access roads from the A18. Perpendicular and skewed construction access points off the A18, built for construction vehicles during construction of Keadby Wind Farm and previously used by all construction vehicles associated with the Keadby 2 Power Station, would be used to access the Site. Circa 1.5km of recently planted hawthorn hedgerow runs along the access road between the A18 and North Pilfrey Bridge; this will be undisturbed by the Proposed Development.
- 3.2.23. North Pilfrey Bridge was constructed in 2012/13 for the Keadby Windfarm Project. It passes over the Scunthorpe to Doncaster passenger rail line, the Stainforth and Keadby Canal and towpath, and North and South Soak Drains (Main Rivers) and is proposed to be utilised for construction and permanent access into the Site. Site access continues via Bonnyhale Road and onwards towards the Site along existing private access roads. It is not proposed to undertake any works to North Pilfrey Bridge; rather it is included in the Site boundary for the purposes of providing temporary access during construction and permanent access to the Main Site during operation.
- 3.2.24. Alongside the access road to the Site from the A18, a small permanent gatehouse/ security building is proposed. This gatehouse will include a vehicle waiting area - refer to **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**.
- 3.2.25. Where the access road meets the A18, it crosses over Hatfield Waste Drain via an existing bridge known as Mabey Bridge. Mabey Bridge will be replaced in order that it is capable of serving the Proposed Development over its 25 year lifetime. Further details are provided in **Chapter 4: The Proposed Development (Application Document Ref. 6.2)** and **ES Volume I Chapter**

5: Construction Programme and Management (Application Document Ref. 6.2).

Emergency and Temporary Access Routes

- 3.2.26. An emergency vehicle access road from the northern boundary of the Main Site is also included within the Site. This route would cross the existing Drain 1 (Glew Drain) bounding the north of Keadby Common using a new bridge crossing and then utilise existing farm access tracks, which are currently also used as operations and maintenance access tracks for the existing Keadby Windfarm, connecting towards Chapel Lane. The indicative location of the route is shown on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**.

- 3.2.27. This access track and new bridge would not be utilised during construction or normal operation of the Proposed Development; it would only be utilised as a secondary point of access and egress for emergency vehicles and/ or pedestrians in the event of an emergency.

- 3.2.28. The Site also incorporates land that was used as a temporary construction haul road for Keadby 2 Power Station from the Waterborne Transport Offloading Area (see **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**) into the Keadby Power Station site from the east, for the purposes of transporting AIL that have been delivered and unloaded at the Waterborne Transport Offloading Area (which has been recently acquired by Keadby Generation Limited and is described further in a separate section of this chapter).

- 3.2.29. This additional AIL route commences at the Waterborne Transport Offloading Area, crosses a short section of the B1392 and then incorporates an existing temporary haul road that runs to the east of PD Port Services freight yard, through an agricultural field (owned by the Keadby Developments Limited). The temporary haul road has been constructed using geotextile separation membrane with granular compacted stone laid on top, using temporary steel bridges to span over drainage ditches. The additional AIL route then crosses the existing hardstanding 'Outage' area and into the existing Keadby 1 Power Station Site.

- 3.2.30. This temporary haul road is the subject of a planning permission (PA/2021/188) granted by NLC in March 2021 which amends conditions 7 and 8 of PA/2019/1595 to extend the time period for the restoration and decommissioning of the haul road (previously required to be restored following completion of construction of Keadby 2 Power Station). The haul road has been temporarily retained following completion of Keadby 2 Power Station construction in order that it can be beneficially used for construction access to the Site, prior to its restoration. It is therefore included within the Site boundary. Effects associated with its retention as a temporary haul road

to access the Site during construction, use by the Proposed Development for the purposes of AIL deliveries and subsequent restoration are included in the environmental assessments of this ES (**ES Volume I Chapters 8-20 (Application Document Ref. 6.2))**).

Waterborne Transport Offloading Area

- 3.2.31. An existing level hardstanding area within the Site (shown as the Waterborne Transport Offloading Area on **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**) comprises a river wharf with a short stretch of access road, bounded by grassed earth embankments directly adjacent to the River Trent and to the north of Keadby Lock which provides access to the Stainforth and Keadby Canal. The area incorporates a reinforced concrete slab which can be used for the positioning of temporary cranes for lifting and transfer of AIL components/ equipment. Use of this area for the Proposed Development would be consistent with the use of this area for AIL deliveries during construction of Keadby 2 Power Station. The Waterborne Transport Offloading Areas includes a small (circa 5m wide) section of the River Trent to allow for temporary oversail associated with the unloading by crane from moored vessels.

Construction Laydown Areas

- 3.2.32. A number of construction laydown areas are included within the Site boundary (see **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)** and refer to **ES Volume I Chapter 5: Construction Programme and Management (Application Document Ref. 6.2)**). It is anticipated that up to approximately 26.7ha of land will be required for construction laydown (refer to **ES Volume III Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**).
- 3.2.33. To the south of the Stainforth and Keadby Canal, adjacent to the construction and operational access road from the A18, an area of farmland under intensive arable management is included within the Site boundary for use as temporary construction laydown. South of the Stainforth and Keadby Canal and west of North Pilfrey Bridge, an area of mown improved grassland and land used for Keadby 2 Power Station laydown is also included as a laydown area. It is anticipated that these areas would be used as a contractor's compound and include construction staff car parking.
- 3.2.34. The existing hardstanding construction laydown areas and contractor facilities utilised by Keadby 2 Power Station, which are located to the south of

the Main Site are also included within the Site. An overhead line crosses this land and a pylon within the area would provide some constraints for working.

[Additional Areas for Landscaping and Biodiversity Provision](#)

- 3.2.35. Additional areas of land are included within the Site boundary for landscaping and biodiversity provision. These additional areas are within SSE's ownership and are further described in the **Outline Landscape and Biodiversity Management and Enhancement Plan (LBMEP) Report (Application Document Ref. 5.10)**.

3.3. Refinement of the Site Boundary Since EIA Scoping and Preliminary Environmental Information (PEI) Report

- 3.3.1. The Site boundary was refined (reduced in extent) between the submission of the EIA Scoping Report and the Preliminary Environmental Information (PEI) Report as follows:
- a corridor for a connection to the River Trent for cooling water abstraction was removed because the Applicant discounted the river water abstraction option (cooling water will be abstracted from the Stainforth and Keadby Canal);
 - a corridor for a very wide temporary haul route option around the northern side of Keadby 1 and 2 Power Stations was removed because the Applicant confirmed this very wide haul route is not required for the Proposed Development;
 - the Northern Powergrid 132kV substation and a corridor for a 132kV electrical connection to the substation was removed because the Applicant discounted the 132kV electrical connection option (electricity export will be to the NGET 400kV substation within the Site); and
 - a small area for improvements to the A18 at the Site entrance (provision of a right turn lane into the Site) was removed because it was not required for the right turn lane into the Site.
- 3.3.2. The Site boundary has been further modified since the publication of the Preliminary Environmental Information (PEI) Report as follows:
- inclusion of additional land around the junction of the access road with the A18 to allow for utility connections to the proposed A18 gatehouse;
 - an increase in the width of the Site boundary around Mabey Bridge in order to accommodate the replacement bridge;
 - an increase to the area allowed for the natural gas connection to the NGT natural gas supply network to facilitate the most direct natural gas connection route within the Site;

- inclusion of land to the south-east of the 400kV Substation to allow for an alternative electrical connection route into the 400kV Substation;
- inclusion of additional land in the Stainforth and Keadby Canal to accommodate the working area required for construction of the canal water abstraction infrastructure;
- inclusion of land to the south of Railway Wharf to enable access to an additional anchor point for vessels using the Waterborne Transport Offloading Area;
- minor refinements to remove small areas of third party land which are no longer considered to be required.

3.4. Site Topography

- 3.4.1. Land within and surrounding the Site is generally low lying at elevations below 10m Above Ordnance Datum (m AOD) and with very shallow gradients. Surrounding area topography is illustrated on **ES Volume III Figure 14.2: Topography (Application Document Ref. 6.4)**
- 3.4.2. According to the Environment Agency Digital Terrain Model, the ground level varies from a low point of approximately -0.6m AOD, to a high point of 6.7m AOD within the Main Site, with average levels of circa 1.0m AOD across.
- 3.4.3. A notable steep ridge is present immediately to the west of the Main Site (outside the Site boundary) where land associated with the former Keadby Ash Tip is in excess of 19m AOD.
- 3.4.4. Levels on the Keadby 1 and Keadby 2 Power Station sites are slightly elevated compared to the surrounding land within the Site, with levels typically between 1.0 - 3.0m AOD. Levels within the construction laydown areas (farmland) south of the Stainforth and Keadby Canal are typically circa 1.0m AOD.
- 3.4.5. The A18 carriageway is also at a slightly higher level (circa 2.5m AOD) than surrounding lower lying land, whilst levels at the proposed small permanent gatehouse/ security building on the Site access road are circa 1.5-2.0m AOD.

3.5. Wider Keadby Power Station

- 3.5.1. Keadby 1 Power Station was built on the site of a former coal fired power station which was operational between 1952 and 1984. The Keadby 1 Power Station was commissioned in 1996 and comprises two F Class gas turbines (230MWe each) fitted with dry low NO_x burners. Each gas turbine exhausts

through a heat recovery boiler with the combined steam output passing to the condensing steam turbine (nominal capacity of 260MW). The windshields for the two combined cycle gas turbine (CCGT) stacks are 60m high and the two gas turbine stacks are 47m high.

- 3.5.2. The total thermal input for the Keadby 1 gas turbines and steam turbine is approximately 1,329 MW thermal output (MWth). A standalone auxiliary gas turbine of 25MW electrical output (75MW thermal input) operates in open cycle mode, with a 50m high stack and provides additional supply to the grid during high demand periods and for main plant start up during black start conditions.
- 3.5.3. Keadby 1 Power Station is fuelled by natural gas which is supplied via an underground pipeline from an Above Ground Installation (AGI). Within the AGI is the local gas treatment plant that consists of a storage vessel, injection unit, instrumentation and associated pipework, mercaptan (odorant) storage and injection, pressure/ temperature regulation, pig trap facilities (inspection of the spur), filtration, metering, boiler house, heat exchangers, gas chromatograph, flow computers and associated telemetry.
- 3.5.4. The River Trent provides water for direct cooling for Keadby 1 Power Station. Boiler make-up water is sourced from the Stainforth and Keadby Canal. The River Trent is used for discharge of treated cooling water from Keadby 1 Power Station.
- 3.5.5. All electrical output from Keadby 1 Power Station is exported to the NGET system via the existing NGET 400kV Substation.
- 3.5.6. Adjacent to the west of Keadby 1 Power Station is Keadby 2 Power Station; a CCGT power station with capacity of up to 910MW electrical output which was constructed between 2019 and 2023 following the grant of a variation to an existing Section 36 consent in 2016.
- 3.5.7. Keadby 2 Power Station comprises the following components:
 - an H Class gas turbine generator;
 - waste heat recovery boiler;
 - a condensing steam turbine generator;
 - hybrid cooling towers;
 - control room and instrumentation system;
 - water treatment plant; and
 - cooling water abstraction and discharge pipework.
- 3.5.8. Combustion gases from Keadby 2 Power Station are released through a single stack (75m in height). The key elements of the power station are

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distributed between two areas: a main power island in the eastern part of the Keadby 2 Power Station site which incorporates the power generating equipment including the turbines, boilers and associated buildings; and a western part of the Keadby 2 Power Station site, which contains the hybrid cooling towers and an area of land set aside for carbon capture readiness purposes.

- 3.5.9. Keadby 2 Power Station is fuelled by natural gas supplied from the existing National Gas Transmission System, via a new AGI. A new pipeline within the boundary of the Keadby 2 Power Station site has been built to connect into the existing AGI used by Keadby 1 Power Station.
- 3.5.10. Cooling water for Keadby 2 Power Station is sourced from the Stainforth and Keadby Canal.

3.6. Site History

- 3.6.1. Available historic Ordnance Survey (OS) maps have been studied to determine the previous land uses within and surrounding the Site, as detailed in **ES Volume II Appendix 13A: Phase 1 Desk Based Assessment Addendum (Application Document Ref. 6.3)**. The mapping shows no notable development within the Keadby Power Station site until 1967 – 1969 editions when a power station is shown as having been developed in the central/ eastern area of the Site, with electricity transmission cables and pylons originating from the power station, that span across the centre of the Site. This was a former coal fired power station which was operational between 1952 and 1984, and which was demolished by the early 1990s.
- 3.6.2. On the 1967 – 1969 editions, railway lines are shown to occupy the south-western area of the Site north of the Stainforth and Keadby Canal, leading towards and terminating at the power station. Adjacent to the railway lines is a conveyor system, which is likely to have been used for the transport of materials and fuels, such as coal, from trains to the power station.
- 3.6.3. An area of marshland is shown as present on the 1967 – 1969 editions in the south-west of the Site north of the Stainforth and Keadby Canal, along with a small refuse heap, with tracks leading to and from this. Three tanks of unknown contents are also shown south and east of the power station and are inferred to be associated with the former power station. Keadby Common Farm is shown as present at the centre of the Site. Drains are mapped within the Site boundary. To the east of the Site, an increase in properties on the 1967 – 1969 editions is noted. A pond and a tank are also shown as present

on the eastern-most spur of the Site. Multiple tanks occupy the land south of the power station on the 1978 – 1982 mapping.

- 3.6.4. No notable changes occur at the Site until 1991 – 1994 editions when the power station is mapped as disused. Within the Site to the east, jetties are shown as now present on the River Trent, with a pumping station located inland where the pond and tanks are located. Keadby Common Farm is now absent from mapping.
- 3.6.5. Mapping from 1995 shows that the power station previously present (and disused) is now an electricity generation station and a change in site layout is noted. The railway and conveyor system that was previously present terminating at the power station is now absent from the mapping. A set of small tanks and a single tank is located to the west; five tanks run parallel to the south, and an additional set of tanks are located east of the electricity generation station. Further west from the electricity generation station, towards the centre of the Site, are three large tanks. The refuse heap and area of marsh land to the south-west of the Site are now absent from mapping. A large electricity substation is now present within the north of the Site with electricity transmission cables and pylons connected to the electricity generation station and associated overhead cables leading off-site to the north, south and west. A building and mast are present to the north of the electric generation station. No notable changes are shown on Google Earth imagery from 2003, 2008 and 2015.
- 3.6.6. Extensive historical landfilling has been identified on-site and off-site in close proximity (to the west) (refer to **ES Volume II Appendix 13A: Phase 1 Desk Based Assessment Addendum (Application Document Ref. 6.3)**). This is illustrated on **ES Volume III Figure 3.4: Constraints within 5km of the Proposed Development (Application Document Ref. 6.4)**.
- 3.6.7. **ES Volume II Appendix 13A: Phase 1 Desk Based Assessment Addendum (Application Document Ref. 6.3)** also describes the historical land-use associated with the construction laydown areas (agricultural fields) according to maps from the National Library of Scotland dated 1885, 1905 – 1906 and 1948. These indicate that the access road from the A18 and the proposed construction laydown areas in adjacent agricultural fields were agricultural fields during this time period. Historical maps viewed on Google Earth Pro indicate that this area has been agricultural land and contained a track since 2002. On these maps, North Pilfrey Farm and Pilfrey Farm have been present since 1885. Although there is a data gap between 1948 and 2002,

given the surrounding land uses, it is considered likely that the land use remained agricultural during this period.

3.7. Potential Sensitivities/ Receptors within the Surrounding Area

- 3.7.1. When undertaking an EIA, it is important to understand which receptors should be considered as part of the assessment. A number of environmental receptors relevant to the EIA have been identified within and outside the boundary of the Site, as shown on **ES Volume III Figure 3.4: Constraints within 5km of the Proposed Development (Application Document Ref. 6.4)** and the Figures accompanying **Chapters 8-20 (Application Document Ref. 6.2)**. Each of these is detailed in the relevant topic chapter of the ES, and as such, this list is not exhaustive. Where distances are quoted in this ES, the distance is defined (unless otherwise stated) as the shortest distance between the receptor and the closest point of the boundary of the Site or part thereof (e.g. Main Site).
- 3.7.2. Key receptors for each topic area have been identified as part of the assessment process and details are included in the relevant technical chapters (**ES Volume I Chapters 8 - 20 (Application Document Ref. 6.2)**). A summary is also provided below.

Surrounding Land-Use

- 3.7.3. Beyond the current Keadby Power Station site, land uses are predominantly arable farming. Various types of power infrastructure have been developed near to the Site in recent years, including overhead electricity transmission and distribution infrastructure and the Keadby Windfarm Project to the north which became operational in 2014. Additional wind turbines and electricity transmission and distribution infrastructure is present over the wider surrounding area. Residential uses and canal and river related uses are found in the nearby villages of Keadby and Gunness. The former Keadby Ash Tip is located immediately west of the Main Site.

Residential Receptors

- 3.7.4. The nearest settlement is the village of Keadby which is located immediately adjacent to the Water Discharge Corridor and approximately 1km east from the Main Site at its closest point.
- 3.7.5. Other settlements located nearby to the Main Site include: Crowle (4.0km) and Ealand (3.0km) to the west; Althorpe (2.2km) to the south-east and Gunness (1.8km) to the east on the eastern bank of the River Trent. Closer to the Main Site are a small number of residential areas and individual

residential properties. Those closest residential and other sensitive receptors to the Site include:

- properties along Trent Road including Blacksmiths Cottage (former Trentvale Preparatory School), No. 7 and 8 Mariners Arms Flats and No. 19 Trent Side – the closest of this group of properties is located immediately adjacent to (within 5m of) the potential biodiversity mitigation and enhancement area;
- a pair of semi-detached residential properties ‘Holly House’ and ‘Hawthorn House’ located 0m (Hawthorn House) and 35m (Holly House) west of the Water Discharge Corridor on Chapel Lane;
- properties along Chapel Lane, located 50m east of the Water Discharge Corridor;
- a single residential property (No. 5 Trent Side), approximately 40m east of the Construction Access Haul Route and approximately 20m west of the Waterborne Transport Offloading Area;
- an individual property at Vazon Bridge, approximately 50m south of the Site boundary, adjacent to the Stainforth and Keadby Canal;
- Scunthorpe Sea Cadets – Boat Station located approximately 55m south of the Site boundary, adjacent to the Stainforth and Keadby Canal;
- Pilfrey Farm, immediately to the north of the Gatehouse Utility Connection Works and approximately 250m east of the skew construction access road from the A18;
- farms along Bonnyhale Road including Ealand Warpings approximately 190m north-west of the construction and operational Access Route and North Pilfrey Farm located 225m west of North Pilfrey Bridge;
- North Moor Farm located approximately 500m north of the Emergency Access Route between the Main Site and Chapel Lane;
- Keadby Grange, approximately 510m east of the Construction Laydown Areas, within the agricultural fields north of the A18;
- Boskeydyke Farm located approximately 1.1km north of the Water Discharge Corridor;
- Amcotts Grange located approximately 1.4km north of the Water Discharge Corridor; and
- Ealand Poultry Farm, located on Bonnyhale Moor Road, approximately 1.6km west of the Main Site.

- 3.7.6. A property 'Red House' shown on OS base planning was demolished in 2019 and is therefore not included as a receptor for the purposes of the EIA.
- 3.7.7. Potential effects on residential receptors are considered in a number of chapters including **ES Volume I Chapter 8: Air Quality (Application Document Ref. 6.2)**, **Chapter 9: Noise and Vibration (Application Document Ref. 6.2)**, **Chapter 10: Traffic and Transport (Application Document Ref. 6.2)**, **Chapter 14: Landscape and Visual Amenity (Application Document Ref. 6.2)** and **Chapter 17: Population and Human Health (Application Document Ref. 6.2)**.

Ecological Receptors

- 3.7.8. Designated nature conservation sites within 15km of the Site are presented in **Table 3.1. ES Volume III Figure 11.1: Statutory Nature Conservation Designations (Application Document Ref. 6.4)** indicates the locations of these sites.

Table 3.1: Statutory Ecological Designations within 15km (shown in order of distance from the Site)

Name	Type	Approximate distance from the Site (km)
Humber Estuary	Ramsar	0.0
Humber Estuary	SSSI	Within the land required by the Proposed Development, the River Trent has been identified as a water discharge location, and during construction the existing infrastructure associated with the Waterborne Transport Offloading Area adjacent to the River Trent is proposed to be used to facilitate offloading of AIL, as has been undertaken for Keadby 2 Power Station construction.
Humber Estuary	SAC	
Crowle Borrow Pits	SSSI	1.2
Hatfield Chase Ditches	SSSI	1.4
Eastoft Meadow	SSSI	3.7
Belshaw	SSSI	5.2
Thorne & Hatfield Moors	SPA	5.5

Name	Type	Approximate distance from the Site (km)
Thorne Moor	SAC	5.5
Thorne, Crowle and Goole Moors	SSSI	5.5
Conesby (Yorkshire East) Quarry	SSSI	7.0
Epworth Turbary	SSSI	7.4
Risby Warren	SSSI	7.6
Hatfield Moor	SAC	8.2
Hatfield Moors	SSSI	8.2
Messingham Heath	SSSI	8.9
Messingham Sand Quarry	SSSI	8.9
Humber Estuary	SPA	9.1
Tuetoos Hills	SSSI	9.1
Haxey Turbary	SSSI	9.5
Rush Furlong	SSSI	9.7
Hewson's Field	SSSI	10.5
Manton and Twigmoor	SSSI	10.8
Scotton and Laughton Forest Ponds	SSSI	11.3
Broughton Far Wood	SSSI	12.2
Broughton Alder Wood	SSSI	12.5
Scotton Beck Fields	SSSI	13.0

Name	Type	Approximate distance from the Site (km)
Scotton Common	SSSI	13.0
Laughton Common	SSSI	13.0
Manton Stone Quarry	SSSI	13.5
Haxey Grange Fen	SSSI	14.0
Cleatham Quarry	SSSI	14.3
Castlethorpe Tufas	SSSI	14.6
Mother Drain, Misterton	SSSI	14.7
Misson Training Area	SSSI	14.7
Cliff Farm Pit	SSSI	14.8

3.7.9. Non-statutory ecological sites in the vicinity of the Site are presented in **Table 3.2** and illustrated on **ES Volume III Figure 11.2: Non-statutory Nature Conservation Designations (Application Document Ref. 6.4)**.

Table 3.2: Non-statutory Ecological Designations (Local Wildlife Sites) within 2km (shown in order of distance from the Site)

Name	Approximate distance (metres) from the Site
Hatfield Waste Drain	0 - crossed by the existing Mabey Bridge to be replaced
Keadby Boundary Drain	0 – adjacent, to the west of Keadby Common (the Main Site)
Stainforth and Keadby Canal Corridor	0 - the canal water abstraction would take water from the LWS and may use infrastructure adjacent to that installed for Keadby 2 Power Station

Name	Approximate distance (metres) from the Site
North Engine Drain, Belton	20 - south of the Mabey Bridge replacement works at the entrance off the A18.
South Soak Drain, Keadby	25 – south-east of the Water Abstraction Corridor
Keadby Wetland	25 – south of the Water Abstraction Corridor
River Torne	45 - south of the Mabey Bridge replacement works at the entrance off the A18.
Keadby Wet Grassland	50 – south of the canal water abstraction
Three Rivers	90 - south of the Waterborne Transport Offloading Area
South Engine Drain, Belton	100 - south of the Mabey Bridge replacement works at the entrance off the A18.
Keadby Warping Drain	300 - crossed by the buried pipeline for the existing line of discharge from Keadby 1 Power Station

- 3.7.10. The potential effects of the Proposed Development on designated ecological sites and other ecological receptors are considered in **ES Volume I Chapter 11: Biodiversity and Nature Conservation (Application Document Ref. 6.2)**, with supporting information provided in **ES Volume I Chapter 8 (Application Document Ref. 6.2) Chapter 9 (Application Document Ref. 6.2)** and **Chapter 12: Water Environment and Flood Risk (Application Document Ref. 6.)**.

Transport Receptors

- 3.7.11. Access to the Site would be via the existing tarmacadam private access road from the A18. Two construction access points off the A18 were built for accessing Keadby Windfarm Project and were used by construction vehicles associated with the Keadby 2 Power Station construction project. The access road crosses Hatfield Waste Drain via the existing Mabey Bridge and continues north and then east towards the Main Site, crossing the Stainforth and Keadby Canal and the Scunthorpe to Doncaster passenger rail line on the North Pilfrey Bridge, constructed in 2012. The access road then links to the private Bonnyhale Road and onwards towards the Main Site along

existing private access roads. This access route is shown on **ES Volume III Figures 3.1-3.3 (Application Document Ref. 6.4)**.

- 3.7.12. The wider Keadby Power Station site is accessed from the B1392, a single-carriageway road that serves the village of Keadby. The B1392 joins the A18 trunk road approximately 0.8km south of the Waterborne Transport Offloading Area at a junction to the west of the village of Althorpe. This access is not proposed to be used for the Proposed Development.
- 3.7.13. The highway network in the vicinity of the Site is shown in **ES Volume III Figure 10.1: Highways Links within Study Area (Application Document Ref. 6.)**.
- 3.7.14. Chapel Lane is an adopted highway providing local access from Keadby village through the land associated with Keadby 2 Power Station and Keadby 1 Power Station towards Vazon Bridge. Chapel Lane bridge and level crossing (NGR 482501 411528) located approximately 20m south of the Site boundary provides access for local residents at Vazon Bridge. Sections of Chapel Lane are included in the Site where crossings are required, for example, to construct the Water Connection Corridor and the Electrical Connections. Proposals for temporary traffic management during works to provide connections across Chapel Lane are described in **ES Volume I Chapter 5: Construction Programme and Management (Application Document Ref. 6.2)**. With the exception of such works, Chapel Lane will not be used by construction traffic or construction staff during construction of the Proposed Development.
- 3.7.15. Other roads within the Site include Ealand Road/ Bonnyhale Road which is a private road which runs east-west through the Site.
- 3.7.16. Trent Road, North Road and West Road are all roads facilitating the movement of site traffic within the current Keadby 1 Power Station site and the Keadby 2 Power Station within the Site boundary. These are not public roads.
- 3.7.17. The Stainforth and Keadby Canal, managed by the Canal and River Trust, is located to the south of the majority of the Site. A small section of the Canal is included in the Site boundary where the proposed canal water abstraction will be located. At the intersection with the River Trent, Keadby Lock is present which provides access to the Stainforth and Keadby Canal from the River Trent for freight and pleasure craft.
- 3.7.18. Also running across the Site to the south of the majority of the Site (and running beneath Pilfrey Bridge, which provides access into the Site), the Scunthorpe to Doncaster passenger rail line is present; there are no existing

connections or sidings into the Keadby Power Station site. A passenger service is provided by TransPennine Express every hour in each direction.

- 3.7.19. No public rights of way (PRoW) are located within the Site boundary. The nearest PRoW are shown on **ES Volume III Figure 14.3: Landscape Context (Application Document Ref. 6.4)** but are summarised below:
- KEAD 10: a bridleway which runs north-south from Chapel Lane to a point north of Warping Drain. The southernmost point of this footpath is approximately 40m from the Water Discharge Corridor;
 - Footpath CROW11 located along Bonnyhale Road, approximately 250m north-west of the access road for the Site; and
 - Footpath KEAD 9 which runs parallel to Warping Drain east-west from the northern terminus of Footpath KEAD 10 approximately 500m north of the Main Site. Footpath LUDD9 joins Footpath KEAD 10.

- 3.7.20. A permissive 'traffic-free cycle route' south of the Stainforth and Keadby Canal is also noted together with a number of other PRoW located within the wider surrounding areas.

Air Quality Receptors

- 3.7.21. There are no Air Quality Management Areas (AQMA) within the Site or surrounding areas. The closest AQMA is located approximately 6.2km to the east of the Site in Scunthorpe and is designated for the exceedance of the 24 hour PM₁₀ limit value (refer to **ES Volume III Figure 3.4: Constraints within 5km of the Proposed Development (Application Document Ref. 6.4)**). Based on Defra forecast models and local authority monitoring data, no exceedances of the EU standards have been identified in the vicinity of the Site.

Geological and Hydrogeological Receptors

- 3.7.22. According to the **Phase 1 Desk Based Assessment Addendum (ES Volume II Appendix 13A (Application Document Ref. 6.3))**, the local geology is characterised by approximately 12m to 17m of alluvium and drift deposits of clay, silt and sand, with occasional peat layers recorded at various depths between 0.45m and 1.6m thickness. These superficial deposits overlie the Mercia Mudstone Formation which shows evidence of near surface weathering, the extent to which decreases with increasing depth. Although not mapped, made ground is expected across the Site, given the historical phases of development that have taken place.
- 3.7.23. The results of a previous hand augering survey across the northern part of the Main Site and the construction laydown areas (refer to **ES Volume I**

Chapter 15: Cultural Heritage (Application Document Ref. 6.2)) provided results that were broadly consistent with the published geology.

- 3.7.24. The Environment Agency classifies the underlying superficial geology as Secondary A aquifer and the Mercia Mudstone as a Secondary B aquifer. The Site does not contain or lie within or in close proximity (<1km) to any Source Protection Zones (SPZ).
- 3.7.25. Groundwater levels within the historical borehole records indicate generally shallow groundwater levels within the superficial geology of between 0.9m - 3.0m below ground level (bgl). Occasionally, deeper groundwater strikes were recorded between 5.4m - 6.9m bgl.

Hydrological Receptors

- 3.7.26. **ES Volume III Figure 12.3: Fluvial and Tidal Flood Risk (Application Document Ref. 6.4)** illustrates that the Site and surrounding areas lie within the extensive floodplain of the tidal River Trent which flows in a northerly direction towards the Humber Estuary.
- 3.7.27. The Flood Map for Planning illustrates that the entire Site and surrounding environs is within the Environment Agency's indicative Flood Zone 3. Flood Zone 3 is land assessed as having a 1 in 100 or greater annual probability of river flooding (>1% Annual Exceedance Probability or AEP), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5% AEP) in any year. However, land north of the canal (which includes the majority of the Site) benefits from flood defences (embankments) along the River Trent. Further information can be found in **ES Volume II Appendix 12A: Flood Risk Assessment (Application Document Ref. 6.3)**.
- 3.7.28. The study area has a complex surface water hydrology and a long history of land drainage. The Site and land north of the Stainforth and Keadby Canal is within the IoAaNNWLMB area.
- 3.7.29. The Water Discharge Corridor into which cooling water discharge is emitted from the existing Keadby 1 Power Station traverses beneath Warping Drain (also known as Eastoft Moor Drain) which is an artificial waterbody classified as an Ordinary Watercourse and flows east and into the tidal River Trent via sluice gates.
- 3.7.30. Adjacent to the west of the Site at its closest point is Keadby Boundary Drain, an Ordinary Watercourse, which runs south to north. At the point where

Keadby Boundary Drain joins Warping Drain via a sluice, there are flood gates on Warping Drain.

- 3.7.31. The IoAaNNWLMB-maintained Glew Drain, an open watercourse, exists on the northern boundary of the Main Site. A further IoAaNNWLMB-maintained open watercourse Drain B ('Keadby Common Drain') intersects Glew Drain along Chapel Lane. Keadby 1 Power Station is permitted to discharge clean surface water into this drain under the consent of the IDB. Keadby 2 Power Station also maintains a consent to discharge surface water drainage and other non-process water to an IDB maintained drain which runs parallel to Drain B called Kelsey Drain. From here the discharge flows into the Trent via the IDB open water drains to the north of Chapel Lane.

- 3.7.32. Lying generally to the south of the majority of the Site beneath North Pilfrey Bridge, there are a number of watercourses running parallel west to east. These include North Soak Drain and South Soak Drain which flow either side of the Stainforth and Keadby Canal. The watercourses flow via a sluice gate into the Three Rivers and flow on towards Keadby Pumping Station, a pumping station draining the Isle of Axholme located east of Station Road (B1392). Keadby Pumping Station connects with the River Trent via sluice gates and an outfall located approximately 90m south of the Waterborne Transport Offloading Area. These watercourses are classified as Main Rivers.

- 3.7.33. The Stainforth and Keadby Canal follows a relatively direct course from west to east, running for approximately 24km from Bramwith Junction, (where it meets the New Junction Canal and the River Don Navigation) to Keadby Lock, where it joins the River Trent. There is a lock at both ends with Keadby Lock controlling passage to the River Trent.

- 3.7.34. Although the majority of the Site, including the Main Site, lies at a distance (1.3km) from the River Trent, small parts of the Site lie adjacent to the River Trent mean high water springs (MHWS). This includes the Waterborne Transport Offloading Area, as well as very minor areas of the Water Discharge Corridor as shown on **ES Volume III Figure 3.3** Indicative Parts of the Site Plan (**Application Document Ref. 6.4**). The River Trent is a large (approximately 150m wide) tidal watercourse. An engineered flood embankment maintained by the Environment Agency is present along the eastern bank of the river.

Cultural Heritage Receptors

- 3.7.35. **ES Volume III Figure 15.1: Location of Designated Heritage Assets** (**Application Document Ref. 6.4**) illustrates that there are no World Heritage Sites, scheduled monuments, grade I or II* listed buildings, conservation areas, registered parks and gardens, registered battlefields or protected wreck sites within the Site. A number of non-designated heritage assets are

recorded in the North Lincolnshire Historic Environment Record (HER) within the Site (see **ES Volume III Figure 15.2: Locations of Non-Designated Heritage Assets (Application Document Ref. 6.4)**).

- 3.7.36. Outside of the Site boundary, the closest assets are the scheduled monument (also a grade II listed building) at Keadby Lock on the Stainforth and Keadby Canal [NHLE 1005204], located adjacent to the Waterborne Transport Offloading Area. One further scheduled monument lies approximately 4.4km north-east of the Site at Flixborough Saxon Nunnery and Site of All Saints Medieval Church and Burial Ground [NHLE 1009382].
- 3.7.37. The closest listed building to the Site is the Grade II listed Keadby Lock on the Stainforth and Keadby Canal [NHLE 1342734], which is also a scheduled monument as described above. Other listed buildings in the study area (designated as 3km from the Site boundary with an extension to 5km for designated assets of the highest value (namely, World Heritage Sites, Scheduled Monuments and Grade I and II* listed buildings)) are concentrated in its settlements at Keadby, Althorpe, Gunness, Ealand and Crowle. The study area contains two notable Grade I listed buildings, both called the Church of St Oswald; one in Althorpe [1083258], and one in Crowle [1346672]. The remaining listed buildings are all Grade II and comprise church vicarages, rectories, houses, public houses, shops and small number of former farmhouses.
- 3.7.38. The nearest conservation area is located in Crowle approximately 3.2km west of the Site and provides the context and setting for some 14 listed buildings including the Grade I listed Church of St Oswald [1346672].
- 3.7.39. The non-designated Isle of Axholme area of Special Historic Landscape Interest (saved policy LC14 of the North Lincolnshire Local Plan) is centred on Epworth, with a northern boundary approximately 2km south of the Main Site.
- 3.7.40. A number of non-designated standing buildings are also identified in the North Lincolnshire HER within 1km of the Site.
- 3.7.41. A number of below ground non-designated heritage assets are recorded on the North Lincolnshire HER within or in the immediate vicinity of the Site. Within the Site, these include (refer to **ES Volume III Figure 15.2: Locations of Non-Designated Heritage Assets (Application Document Ref. 6.4)**)
 - a findspot comprising deer antlers - uncovered in peat of probable Bronze Age date during construction of the former Keadby Power Station in 1951 [HER 15717];
 - a cropmark to the north-west of Pilfrey Farm – interpreted as a possible large rectangular enclosure, measuring c.80m across. Other linear marks

within the field appear to be warping drains, so together may represent a warping compartment [HER 21639];

- peat deposits up to 2.4m deep, recorded during an auger survey in 2012. The peat contained fragments of birch and alder, together with large oak tree remain [MLS22432];
- a palaeochannel – representing a former pre-historic watercourse just west of the River Trent mapped from air photographs in 2003 [HER 22755];
- alignment of a post-medieval land improvement drain [HER 24691] – located within the Water Discharge Corridor;
- the site of a former unnamed post-medieval farmstead, demolished in the 19th century [HER 25874]; and
- Possible Romano-British settlement site [MLS17311] located within the Biodiversity Mitigation and Enhancement Area.

3.7.42. Additional cultural heritage assets identified during geophysical survey are described in **ES Volume II Appendix 15A: Heritage Desk Based Assessment (Application Document Ref. 6.3)**.

3.7.43. Beyond the Site, additional non-designated heritage assets recorded on the HER comprise further prehistoric peat deposits, findspots of Roman coins, a Romano-British female ‘bog body’, and evidence of medieval and post-medieval settlement including land improvement.

Landscape and Visual Receptors

3.7.44. The Site lies within the Humberhead Levels National Character Area (NCA) which is a flat, low-lying and large-scale agricultural landscape (Natural England, 2014). There is widespread evidence of drainage history, in particular from the 17th century, in the evidence of ditches, dykes and canalised rivers. The flat landscape enables extensive, unbroken views where vertical structures including power stations and wind turbines, are prominent.

3.7.45. The Site lies within the Trent Levels Landscape Character Area (LCA) within the North Lincolnshire Landscape Character Assessment and Guidelines (Estell Warren Landscape Architects, 1999). This LCA is characterised as a flat, open floodplain landscape with long distance views with little diversity in character.

3.7.46. The Site and its immediate surroundings are heavily influenced by industrial structures of the existing Keadby Power Station site as well as Keadby Wind Farm, overhead electricity pylons and transmission lines converging near the

existing Keadby 1 and Keadby 2 Power Stations. There are no natural features of noteworthy landscape value within the Site.

- 3.7.47. The surrounding area is largely arable, with local villages including Keadby village directly east of the Site. The extent of views available to receptors range from close proximity to long distance views. A number of receptors are located at the edge of villages, along roads and along PRow where the landform is low lying. The rising landform in the east and localised areas of slightly raised ground around the Isle of Axholme in the south-west allows for elevated long-distance views towards the Site.

- 3.7.48. Further information can be found in **ES Volume I Chapter 14: Landscape and Visual Amenity (Application Document Ref. 6.2)**.
[Agricultural Land Classification](#)

- 3.7.49. Provisional Agricultural Land Classification (ALC) plans available from magic.gov.uk and provide guidance on the ALC where agricultural land is to be developed. These plans indicate that the majority of the Site (including the Main Site) is located within land classified as Grade 2 (very good).

- 3.7.50. Land within the Construction Laydown Areas south of the Stainforth and Keadby Canal, north of the A18 are classified as Grade 1 land (excellent quality) under the Provisional ALC. Consideration of temporary impacts and effects on soils during construction is provided in **ES Volume I Chapter 5: Construction Programme and Management (Application Document Ref. 6.2)**. A Soil Resources Survey and final Soil Resources Plan will be covered in the final CEMP, proposed to be secured by a Requirement of the **Draft DCO (Application Document Ref. 3.1)**. The **Outline CEMP (Application Document Ref. 7.4)** includes an Outline Soils Resources Plan from which the final Soil Resources Plan will be developed.

3.8. References

- Estell Warren Landscape Architects (1999) *North Lincolnshire Landscape Character Assessment and Guidelines*. Available online: <http://www.planning.northlincs.gov.uk/planningreports/localplan/spg5landscapecharacterassessment.pdf>. [last accessed: 25.07.2025].
- DEFRA *Magic Maps* Available online <https://magic.defra.gov.uk/> [last accessed: 25.07.2025].
- HMSO (2009) Eels (England and Wales) Regulations 2009 (SI 2009 No. 3344). Available online: <https://www.legislation.gov.uk/uksi/2009/3344/made> [last accessed: 25.07.2025].
- Natural England (2014) *NCA Profile: 39 Humberhead Levels (NE339)* Available online: <http://publications.naturalengland.org.uk/publication/1843305?category=587130> [last accessed: 25.07.2025].