

APPLICATION NO	PA/2024/123
APPLICANT	Alan Bell
DEVELOPMENT	Hybrid application comprising of full planning permission for the construction of a new electric arc furnace and compressor building and outline planning permission for ancillary plant buildings and structures up to a maximum height of 72m associated with the new electric arc furnace (scale, appearance, landscaping and layout reserved for subsequent consideration)
LOCATION	British Steel, Brigg Road, Scunthorpe, DN16 1XA
PARISH	SCUNTHORPE
WARD	Frodingham
CASE OFFICER	Andrew Law
SUMMARY RECOMMENDATION	Grant permission subject to conditions
REASONS FOR REFERENCE TO COMMITTEE	Member 'call in' (Cllr Tony Ellerby – significant public interest) Significant public interest

POLICIES

National Planning Policy Framework (NPPF) (December 2023)

Chapter 2: Achieving sustainable development

Chapter 4: Decision-making

Chapter 6: Building a strong, competitive economy

Chapter 9: Promoting sustainable transport

Chapter 11: Making effective use of land

Chapter 12: Achieving well-designed and beautiful places

Chapter 14: Meeting the challenges of climate change, flooding and coastal change

Chapter 15: Conserving and enhancing the natural environment

Chapter 16: Conserving and enhancing the historic environment

North Lincolnshire Local Plan (NLLP) (2003)

Policy IN3: Industrial and Commercial development in the Urban Area, Principal Growth Settlements, South Humber Bank Area (including North Killingholme Airfield) and Humberside International Airport

Policy T1: Location of Development

Policy T2: Access to Development

Policy T8: Cyclists and Development

Policy T18: Traffic Management

Policy T19: Car Parking Provision and Standards

Policy LC2: Sites of Special Scientific Interest and National Nature Reserves

Policy LC4: Development Affecting Sites of Local Nature Conservation Importance

Policy LC5: Species Protection

Policy LC6: Habitat Creation

Policy LC7: Landscape Protection

Policy DS1: General Requirements

Policy DS3: Planning out Crime

Policy DS7: Contaminated Land

Policy DS11: Polluting Activities

Policy DS14: Foul Sewage and Surface Water Drainage

Policy DS15: Water Resources

Policy DS16: Flood Risk

North Lincolnshire Core Strategy (NLCS) (2011)

Policy CS1: Spatial Strategy for North Lincolnshire

Policy CS2: Delivering More Sustainable Development

Policy CS3: Development Limits

Policy CS5: Delivering Quality Design in North Lincolnshire

Policy CS6: Historic Environment

Policy CS11: Provision and Distribution of Employment Land

Policy CS17 Biodiversity

Policy CS18: Sustainable Resource Use and Climate Change

Policy CS19: Flood Risk

Policy CS20: Sustainable Waste Management

Policy CS25: Promoting Sustainable Transport

Policy CS27: Planning Obligations

Housing and Employment Land Allocations Development Plan Document (HELADPD) (2016)

Policy PS1: Presumption in Favour of Sustainable Development

Settlement Inset 36: Scunthorpe

New North Lincolnshire Local Plan (submitted for examination Nov 2022)

The new North Lincolnshire Local Plan was submitted for public examination to the Planning Inspectorate on 11 November 2022. Examination of the Plan has therefore commenced, although public hearing sessions are not anticipated until late 2024.

The Submitted North Lincolnshire Local Plan can be given some weight as a material planning consideration in the determination of planning applications. However, given the fact that the plan is at an early stage of examination this weight is currently limited. The relevant policies concerning this application are:

Policy SS1: Presumption in favour of Sustainable Development

Policy SS2: Spatial Strategy for North Lincolnshire

Policy SS3: Development Principles

Policy SS8: Employment Land Requirement (including strategic employment sites)

Policy SS11: Development Limits

Policy EC1: Employment Land Supply

Policy EC2: Existing Employment Areas

Policy DQE1: Protection of Landscape, Townscape and Views

Policy DQE3: Biodiversity and Geodiversity

Policy DQE5: Managing Flood Risk

Policy DQE6: Sustainable Drainage Systems

Policy DQE7: Climate Change & Low Carbon Living

Policy WAS1: Waste Management Principles

Policy T1: Promoting Sustainable Transport

Policy T3: New Development and Transport

Policy T4: Parking

Policy T5: Cycle and Motorcycle Parking

Policy DM1: General Requirements

Policy DM3: Environmental Protection

Policy ID1: Delivering Infrastructure

CONSULTATIONS

This section of the report provides a summary of the consultation responses received on the application. Full copies of the consultation responses can be found on the council's website.

NLC Spatial Planning

The proposed electric arc furnace (EAF) and associated works are located on brownfield land set within an extensive industrial landscape established over approximately the last 50 years.

It is considered that the proposal is in broad compliance with the provisions of the Core Strategy's Spatial Strategy by contributing to the renaissance of Scunthorpe through major industrial investment on brownfield land. The decarbonisation of steel making through the construction of the new EAF facility is in accordance with both local and national planning policy which seeks to minimise carbon emissions and to contribute to sustainable development.

The proposal falls within the wider development limit for Scunthorpe where the principle of the scheme would be in accordance with policy subject to the detailed assessment and consideration of other impacts on traffic, pollution control, the built and natural environments and achieving targeted net gains in biodiversity.

This is further reinforced by the new Local Plan, the status of which has been highlighted previously, which seeks to retain the British Steel site within the development limit for Scunthorpe.

NLC Highways (Local Highway Authority) (LHA)

No objection subject to conditions.

These conditions largely mirror those requested by National Highways and will secure the submission of a Construction Phase Traffic Management Plan (CTMP), an Operational Traffic Management Plan (OMP), and a detailed Travel Plan. A further condition is recommended to secure improvements to access arrangements at Gate A (as proposed by the applicant) prior to the development being brought into use.

Lead Local Flood Authority (LLFA) (Drainage)

No objection subject to the imposition of conditions and informative comments.

The recommended conditions aim to secure the submission and implementation of a detailed surface water drainage scheme for both the full and outline aspects of the proposed development.

NLC Environment Team (Ecology)

Habitats Regulations – Determination of Likely Significant Effect (LSE) provided. There is no LSE on the Humber Estuary SAC/SPA/Ramsar site.

If the EAF is operated alongside existing blast furnaces, this could lead to air pollution impacts on Risby Warren SSSI. It is advised that the assessed 12 month period where the two would run together is secured to mitigate this impact to an acceptable level.

The proposal will not significantly affect protected or priority species, other than nesting birds (although there is a small chance that bat roosts or water voles may yet be recorded).

Invasive species require control.

The Biodiversity Metric Assessment has been carried out fairly and reveals biodiversity enhancement of >10%, which is acceptable.

Planning conditions are proposed to minimise harm to protected and priority species and habitats and to seek a measurable net gain in biodiversity in accordance with policy CS17, the National Planning Policy Framework and the Statutory Biodiversity Metric.

NLC Historic Environment Record (Archaeology)

28/02/2024 – The Scheduled Monument of Raventhorpe Medieval Settlement is located c.1.2km southeast of the proposed development at an elevation of c.46m AOD. Woodland (Low Wood) on the edge of the steelworks largely screens the view of existing steelwork structures from the Monument. At a height of 72m (increase from 50m at Scoping) the scale and mass of the proposed furnace is likely to be visible above the treeline and has the potential to affect the setting and significance of the designated heritage asset. A representative wireline of the proposed development from a viewpoint overlooking the Scheduled Monument should therefore be submitted. This will enable the planning authority to determine whether any further assessment in line with Historic England's Historic Environment Good Practice Advice Note 3 ('The Setting of Heritage Assets') may be appropriate prior to determination of the application. Appropriate viewpoint(s) should be agreed with the planning authority; views across the Monument from Home Beat Drive would be most representative.

15/03/2024 – I can confirm that the wireframe is sufficient to make an assessment that no further work is necessary. The visualisation shows that the proposed electric arc building will sit lower in the view than the existing Boss Mill and is effectively screened by the tree belt (if assumed to be a permanent feature in the landscape).

NLC Conservation Officer

No objection.

At scoping stage it was agreed built heritage was to be scoped out of assessment, during these discussions an assessment of potential heritage impact was undertaken. The only noted building was the farmhouse identified above (Raventhorpe Farm House) and it was considered, due to overriding distance and topography, that the proposal would be of no consequence to how the significance of this heritage asset, or its setting, is experienced.

NLC Environmental Protection

Noise

No objection subject to conditions.

Conditions are recommended to secure agreed noise levels and the submission of a noise validation report within 3 months of operation. Further conditions are proposed to secure the submission and implementation of a Construction Environmental Management Plan (CEMP) and to control construction working hours.

Contaminated land

No objection subject to conditions.

A condition is recommended to secure an intrusive ground investigation prior to works commencing.

Informative comments have also been provided and recommended for inclusion on any planning permission that may be granted in relation to the potential for asbestos on site and the applicant's responsibilities under the Control of Asbestos Regulations 2012.

Air quality

No objection subject to conditions.

These conditions would secure a Construction Environmental Management Plan (CEMP) to control dust during construction; a screening assessment of construction traffic against IAQM/EPUK screening criteria and to secure an appropriate impact assessment should this be required; and an updated air quality assessment, which provides details of the proposed emission limit values and demonstrates the embedded technology within the electric arc furnace design to mitigate any air quality impacts to an acceptable level.

It is also recommended that the assessed 12 month period where the existing blast furnaces would run alongside the proposed EAF is secured as a maximum period in line with the submitted Environmental Statement and supplementary information.

NLC Economic Development Team

The proposed planning application and subsequent investment shows a commitment from the British Steel group to remain invested in steel making within our local economy. Whilst we acknowledge this is likely to lead to potential job reductions, it will enable longer term security for the steel industry in Scunthorpe. Discussions with the applicant around future use of the under-utilised site is paramount to offering a prosperous future for North Lincolnshire residents and businesses.

As a result, the Economic Development team support the application and the investment being made within our region.

Environment Agency

Protection of controlled waters

No objection subject to conditions.

These conditions will secure a remediation strategy to deal with the risks associated with contamination on the site and a verification report demonstrating completion of works set out in the approved remediation strategy.

Further conditions are recommended to secure a means of dealing with any previously unidentified contamination, to prevent the use of piling without the consent of the LPA and to prevent the use of infiltration as a means of drainage without the consent of the LPA.

Foul water drainage

26/03/2024 – We object to the proposed development as submitted because it involves the use of a non-mains foul drainage system in circumstances where it may be reasonable for the development to be connected to a public sewer, but inadequate justification has been provided for the use of a non-mains system.

05/04/2024 – We have now reviewed the response from the applicant's agent to our comments on the foul drainage proposals, forwarded to us on 26 March 2024. The response provides sufficient justification for the use of a non-mains system, specifically utilising the existing sewage network of cess pits; we therefore withdraw our objection to the proposed development.

We remind the applicant that, should they need to discharge any effluent from the cess pits at any point, any discharge of sewage or trade effluent made to either surface water or groundwater will need to be registered as an exempt discharge activity or hold a permit issued by the Environment Agency.

Permitting advice

This development will require a variation to British Steel Ltd's existing environmental permit. The permit will control emissions to air, water and land, and will include conditions in relation to noise, and diffuse and fugitive emissions of dust, from the site. The permit application must demonstrate that people and the environment will be protected from these. Mitigation is likely to be required to control these emissions and impacts and Best Available Techniques must be applied.

Detailed advice has been provided for the application to detail the EA requirements in respect of permitting, which will be dealt with via a separate application process.

Natural England

02/04/2024 – Further information is required to determine impacts on designated sites.

Natural England have requested further information/clarification with regard to operational plant emissions, traffic emissions and water quality impacts on designated sites.

08/04/2024 – Following review of the LPA's Appropriate Assessment, Natural England raise outstanding questions relating to the period where both the existing blast furnaces and the

EAF will operate together and the ecological impacts there may be during this crossover period; and air quality.

19/04/2024 – Request further information/clarification with regard to air quality impacts on Broughton Far Wood SSSI, Broughton Alder Wood SSSI, Risby Warren SSSI, and the Humber Estuary Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar, and Site of Special Scientific Interest (SSSI); and water quality impacts on the Humber Estuary.

An updated Appropriate Assessment has been submitted by the LPA to Natural England on 21/04/2024, which concludes that there is no Likely Significant Effect on designated sites. No response to this assessment had been received at the time that this report was written and members will be provided with an update on this matter at the committee meeting.

Historic England

In this case we are not offering advice. Suggest seeking the views of the council's specialist conservation and archaeological advisers.

National Highways (NH)

No objection subject to conditions.

These conditions relate to the provision of a Construction Phase Traffic Management Plan (CTMP), an Operational Traffic Management Plan (OMP) and a detailed Travel Plan.

Active Travel England

No objection subject to a condition.

The recommended condition would secure a detailed travel plan to be implemented by the applicant to secure a shift towards more sustainable modes of transport.

Anglian Water

There is no connection to the Anglian Water sewers; we therefore have no comments.

Network Rail

No observations to make.

Humberside Fire and Rescue

No objection.

Provide informative comments relating to the requirements for access for the fire service and water supplies for fire-fighting.

Humberside Police (Designing Out Crime Officer)

No objections to the proposal.

Health and Safety Executive

Do not advise, on safety grounds, against the granting of planning permission in this case. Confirm that no Fire Assessment is required.

National Gas Transmission

There are no National Gas Transmission assets affected in this location.

National Grid

There are no National Grid Electricity Transmission assets affected in this area.

Lincolnshire Wildlife Trust

The Trust wishes to register a formal objection to the proposed development.

Whilst The Trust is supportive of the applicant's decarbonisation strategy and potential benefits that this significant transitional project may achieve for the region, our objection is associated with the omission of key protected species within the Environmental Statement. We refer to Chapter 6 Biodiversity, Section 6.1 Preliminary Ecological Appraisal, and the scoping process of key habitats and species adopted by the applicant. Within Table 4.3 the applicant clearly identifies records for 3 Section 41 species of butterfly in close proximity to the site including: 76 records of Grayling (*Hipparchia semele*), 27 records of Wall (*Lasiommata megera*) and 38 records of Small Heath (*Coenonympha pamphilus*). We note the applicant references closest observations as either adjacent to the site boundary or within 100m. The applicant's narrative in the screening process then makes two sweeping statements;

"4.2.3.10 Invertebrates – The site is unlikely to support a diverse invertebrate population due to the urban and disturbed nature of the habitats present within the site boundary" and "5.3.8 Invertebrates – The site is not expected to host a diverse invertebrate population, therefore further surveys are not required."

The Trust refers to the known habitat preferences for both Grayling (chalk grassland, old quarries, earthwork and industrial sites) and Wall (disused quarries, derelict land, farm tracks and railway embankments). There is a clear alignment between these habitat preferences and the proposed development site's existing condition which, when coupled with the very close proximity of sightings drawn from the LERC database, should have led to these species being scoped-in for further assessment and elicited a recommendation for targeted ecological surveys.

We refer to the requirements and responsibilities detailed within the NERC Act (2006) placing a duty to consider biodiversity on the Local Authority, particularly for species of principle importance. The Trust is of the opinion that the Priority Species omissions within this application are significant, and would likely influence key elements of proposals design or mitigation requirements. In the first instance, we recommend the inclusion of a formal condition requiring the applicant to complete monthly preconstruction surveys over an April to early October period to assess these species at all life-history stages, which would allow for an informed assessment of impacts.

PUBLICITY

This section of the report provides a summary of the third party responses received on the application. Full copies of the responses can be found on the council's website.

There have been two rounds of public consultation undertaken and the application has been advertised by means of site notices being posted close to the site and press notices being published in the Scunthorpe Telegraph.

As a result of the consultation two written responses have been received raising the following comments:

- Would like reassurance with regard to noise intrusion.
- Has noise pollution been assessed, what are the anticipated noise levels of the furnace and will this affect residents of Broughton?
- How will it be ensured that activities will not impact on the nature present at the linear park nature reserve and ponds?

STATEMENT OF COMMUNITY INVOLVEMENT

A Statement of Community Involvement (SCI) has been submitted in support of the planning application. This document outlines the activity undertaken to engage local communities and stakeholders and to inform them of plans for the site.

Pre-application consultation and engagement for the British Steel Scunthorpe application comprised the following activities:

- Two public consultation events (8 and 9 December 2023)
- Information provided on the British Steel website regarding the proposed development
- Public notice in the Scunthorpe Telegraph and press release in other major media outlets
- Use of British Steel's social media.

74 people attended in total across the two sessions and were able to discuss the proposals and ask the project team any questions. Feedback forms were provided at the drop-in sessions for people to provide their views on the proposals. There was a combined total of 42 responses from members of the public who used the questionnaire provided at the consultation events.

The SCI confirms that feedback at the drop-in-event was largely positive; a number of recurring themes were raised. These were:

- The majority of respondents (67%) strongly support or support the proposed installation of an electric arc furnace at British Steel at Scunthorpe.
- The majority of respondents (69%) strongly agree or agree that the proposed plans are well designed and in keeping with the local setting.

- Respondents frequently raised comments about providing more details and clarifications of the proposed development.
- Respondents frequently raised concerns about the loss of jobs at Scunthorpe.
- Respondents frequently raised their support for the principle of the development, in that it will improve the environment.
- Respondents frequently raised concerns that the proposed development will be bad for Scunthorpe in general.
- Respondents frequently raised concerns that the proposed development will mean that the UK will lose the ability to manufacture virgin steel.

ASSESSMENT

Site and surrounds

Location

The proposed development site is located within the existing operational land of British Steel's Scunthorpe site, which is approximately 1km to the southeast of Scunthorpe Town Centre. The overall British Steel Scunthorpe land area is approximately 795 hectares and is predominantly industrial, used in part for manufacturing and distribution with several areas of disused land.

The proposed development site is 16.69 hectares, this includes both the electric arc furnace (EAF), compressor building and associated infrastructure. Currently, the site predominantly comprises industrial buildings, disused land and scrub land. It is located to the south of the overall British Steel site, the nearest site entrance being Gate A, located on Emmanuel Road and is accessible via the A18. The proposed development site is bounded on all sides by the existing British Steel site, including buildings, plant and service roads.

The wider British Steel site is bounded by:

- the A18 to the south, beyond which is farmland, Sweeting Thorns solar farm, Ashby Ville Nature Reserve and woodland which wraps around the south east corner of the site
- Brigg Road (the A1029) to the west, beyond which there is a large swath of employment/industrial land along Grange Lane North and Midland Road
- agricultural land to the east
- various industrial businesses, including metals, fabrication and castings uses to the north.

Site description

The site's current land-use is industrial steel making. The wider British Steelworks site is a large integrated site to which raw materials for steel manufacturing are transported and then converted into steel.

While the current land-use is steel manufacturing, there are large areas of disused land throughout the site, which is also interspersed with scrub land.

The buildings on the site comprise a mixture of large industrial shed-style buildings and smaller brick buildings. There are other built structures on the site which include steel storage tanks, industrial-style pipes and a railway line.

The site was an area of quarrying and tipping in the middle of the 20th century and is known to comprise infilled ground from former opencast ironstone mining. The area is currently known as 'Queens Car Park Site' and is predominantly used as a surface storage/laydown area. The site is largely flat, with no significant changes in elevation across the site.

A historic landfill site is shown partially within the site boundary, known as Scunthorpe Concast, which was operated by British Steel between 1981 and 1992.

There is one Water Framework Directive (WFD) classified surface water body located within the site – Bottesford Beck, running parallel to the east of Yarbrough Road.

Surrounding area

The British Steel site is located in Scunthorpe, which is defined as a major sub-regional town within North Lincolnshire's adopted Development Plan.

To the north and east of the site farmland is the predominant land-use.

Immediately west are predominantly industrial estates and businesses and the A1029 (Brigg Road). The majority of nearby sensitive receptors are located to the west of the site, on the eastern side of Scunthorpe town. The closest residential areas are located east of the site in the small settlements of Raventhorpe and High Santon. The closest residence to the project site is associated with Ashby Lodge, Greene King Pub and Carvery on the A18, south-west of the British Steel property boundary.

To the south, the site is bounded by the A18 Mortal Ash Hill. There is a solar farm and Ashby Ville nature reserve to the south of the site.

Public Rights of Way (PRoW) are located to the north-east and south-east of the site, near to the small settlements of High Santon and Raventhorpe.

There are several non-classified surface water bodies within 1km of the site, including unnamed land drains to the east, south and south-east; Ashby Ville Lake approximately 635m south-west of the site within the Ashby Ville Nature Reserve; and four unnamed ponds approximately 370m north-east, 750m east, 780m north-west, and 860m north-west of the site respectively.

Constraints

The site is located within the development limits of the major sub-regional town of Scunthorpe as defined in Settlement Inset Map 36 (Scunthorpe) of the HELADPD.

Ecological

The application site is not designated as a national or local wildlife site; however, there are a number of designated and non-designated ecological sites in the wider area. With regard to internationally designated sites, the Humber Estuary is located approximately 12.5km to the north and 8.6km to the west at its nearest points, this is designated as a Ramsar site, Special Area of Conservation (SAC), Special Protection Area (SPA) and a Site of Special Scientific Interest (SSSI).

With regard to nationally designated sites, the closest Sites of Special Scientific Interest (SSSI) are:

- Broughton Alder Wood SSSI – approximately 2.8km to the north east
- Broughton Alder Wood SSSI – approximately 3km to the east
- Manton and Twigmoor SSSI – approximately 3.1km to the south, beyond the A18 and M180
- Risby Warren SSSI – approximately 3.4km to the north.

Ashby Ville Local Nature Reserve is located approximately 0.7km to the south-west, beyond the A18.

There are also 5 locally designated Local Wildlife Sites (LWS) within 2km of the application site, these being:

- Ashbyville Lake LWS – approximately 0.7km to the south west, beyond the A18
- Manby Wood LWS – approximately 1.2km to the east
- Holme Hall Golf Course LWS – approximately 1.4km to the south
- Broughton West Wood LWS – approximately 1.5km to the east
- Sweeting Thorns LWS – approximately 1.6km to the south.

There are no Section 41 habitats (Priority Habitats) or ancient woodlands within the site boundary; however, the Section 41 habitat 'Open Mosaic' is located adjacent to the boundary.

Cultural heritage

The application site is not designated as an area of national or local archaeological importance. Nor does the site fall within, or close to, a conservation area. There are no listed buildings within or directly adjacent to the application site.

There are 2 designated heritage assets located within 1.5km of the site, these being:

- Raventhorpe medieval settlement earthworks immediately south-west of Raventhorpe Farm (Scheduled Monument), which is located approximately 1.1 km south-east

- Raventhorpe Farmhouse (Grade II listed building), which is located approximately 1.2 km south-east.

Flood risk

The application site is located in flood zone 1 of the Environment Agency flood maps and the Environment Agency has confirmed that the site is not considered to be in an area of high flood risk.

Controlled waters

There is one Water Framework Directive (WFD) classified surface water body within the site – Bottesford Beck, running parallel to the east of Yarbrough Road.

The site is also underlain by a Secondary A aquifer.

Public Rights of Way

There are no Public Rights of Way (PRoW) running through, or immediately adjacent to the British Steel site.

The nearest PRoWs are:

- BROU214 – approximately 1km to the north of the site at its nearest point
- HOLM212 – approximately 0.9km to the south-east of the site at its nearest point
- HOLM211 – approximately 0.8km to the south of the site at its nearest point (beyond the A18)
- SCUN1 – approximately 0.75km south-west of the site at its nearest point (beyond the A18).

Residential receptors

The nearest residential receptor to the site is a flat located at Ashby Lodge (Public House), approximately 0.8km to the south of the site, adjacent to the A18. This receptor is screened from the application site by existing buildings, structures and operations on the wider British Steel site. The Lakeside residential housing estate is located approximately 1km to the south west of the application site, beyond the A18 and Ashby Ville Local Nature Reserve. There are also a number of isolated residential properties on Home Beat Drive to the east of the British Steel site, approximately 1.1km east of the application site.

Other constraints

One historic landfill site is shown partially within the site boundary, known as “Scunthorpe Concast”, which was operated by British Steel between 1981 and 1992. No details are known as to what was placed within this landfill site.

The Defra strategic noise mapping identifies the following road traffic Noise Important Areas (NIAs) within 600m of the proposed development:

- 6564 and 6562 by the A18 to the south of the proposed development

- 6565 by the A18 to the south-west of the proposed development.

Planning history

The British Steel site is a historic development and there is much planning history associated with the establishment of the site and existing buildings and structures. However, due to its historic nature, this planning history is not considered to be relevant to the determination of the current planning application which seeks consent for additional buildings and structures to support the established steel works.

A planning history search has been undertaken to identify relevant planning applications within the last 5 years within and adjacent to the site. Only one recent planning application was identified and this is detailed below:

- PA/2022/1516: Planning permission to erect a steel structure containing two rail lines – approved 21/12/2022.

Due to its nature and location, this recent application will not impact, or be impacted by, the current application.

Proposal

Overview

There are 2 principal ways of making steel – the way British Steel currently manufactures steel through the basic oxygen steelmaking (BOS) (also referred to as a blast furnace (BF)) route, and the way British Steel proposes making steel in the future by using electric arc furnaces (EAF).

The current blast furnace uses coke, iron ore, sinter and limestone which are fed into the furnaces and a hot air blast of temperatures around 1,000°C helps transform the raw materials into iron.

At the BOS plant, unwanted elements like sulphur and phosphorus are removed from the liquid iron. Scrap metal and liquid iron are added together before high purity oxygen is blown at twice the speed of sound and very high pressure to manufacture the steel. When impurities have been removed and the oxygen blowing process is complete, the steel is tapped into ladles where the desired steel chemistry is achieved. The liquid steel is then cast into semi-finished products.

Electric arc furnaces are fed with a combination of steel scrap, direct reduced iron and hot briquetted iron. The heat necessary for melting the metal comes from an electric arc that arises between the electrodes and the metal. The EAF will also use natural gas burners to aid in the pre-warming of the scrap steel before it goes into the furnace.

Arc temperatures can go as high as 3,500 degrees, while the aim temperature of the molten metal is about 1,650 degrees. The liquid steel can then be cast into semi-finished products or rolled into higher-value products such as rail, constructional sections, wire rod and special profiles.

Proposed development

The proposed development is a steel manufacturing facility utilising an electric arc furnace (EAF) and has a total combined floorspace of approximately 82,500m².

This is a hybrid planning application, which means that it seeks full planning permission for certain elements of the proposal and outline permission for other elements. The outline elements of the proposal, if approved, would require a subsequent reserved matters application to agree the detailed design of those elements. At this point the local planning authority (LPA) is only considering the principle of development and access in respect of the outline elements, with matters relating to appearance, landscaping, layout and scale all reserved for subsequent approval.

The application has been submitted in hybrid form, as whilst the furnace details themselves are known and this element of the scheme is designed to an appropriate stage to support a full planning application, the associated buildings and infrastructure are not fully resolved at this time.

Full planning permission is sought to construct a new EAF and new compressor building, with associated site clearance to facilitate the construction of the facility. This site clearance includes the demolition of a small brick building (old medical building) and the removal of steel storage tanks and temporary buildings currently situated on site.

The EAF will consist of the following:

- a 130-tonne electric arc furnace
- two 130-tonne ladle furnaces
- a 130-tonne degasser
- two continuous casters.

Outline planning permission is sought for ancillary plant buildings and structures up to a maximum height of 72m. These proposals would also include new power supply and distribution facilities, a water treatment station and the construction of auxiliary facilities.

To enable the applicant to undertake a robust Environmental Impact Assessment in respect of the outline elements, a set of maximum parameters for these elements has been provided as follows:

- maximum floor space – 31,000sqm (gross floor area)
- maximum building height – 72m
- maximum number of buildings – 4
- maximum stack parameters – no more than two stacks of a maximum height of 72m
- EAF pipe connection minimum height – 14m
- EAF pipe connection maximum height – 20m.

These parameters will be secured by condition so that the detailed design presented at the reserved matters stage must comply with them. This will ensure that the detailed design of the outline elements has been robustly assessed and that no materially different or more significant environmental impacts will result.

In addition to the development proposed under this planning application, a new scrap yard would be constructed in the existing Bloom and Billet Mill (within the existing building), and ancillary equipment would be built adjacent to the new steel plant. These operations are located outside of the application boundary and do not form part of this application.

The current use of the site is as General Industrial, Use Class B2. The use of the site itself does not change as a result of the development and as all proposed elements of the scheme will be ancillary, the entire development will fall within Use Class B2.

Improvements to Gate A are being developed as part of the project but will be submitted separately to North Lincolnshire Council in due course and do not form part of the works for which planning approval is sought. The improvement works will be aimed at reducing the potential for queueing of traffic back onto the A18 by moving the position of Gate A so that it sits further into the British Steel site. The applicant has proposed that these improvement works could be secured by condition to ensure that they are carried out prior to the new EAF coming into operation.

Steel manufacturing process

The proposed development will manufacture steel by following the processes set out below:

- handling and segregation of scrap metal
- movement of scrap to the charge bay, where several days of charge ready scrap is capable of being held; the charge ready scrap is transported by conveyor from the charge bay into the EAF charging systems
- handling of raw materials, including lime and alloys, and their transfer into the charge
- charging of the EAF
- tapping of the EAF
- after tapping, the liquid steel is transferred to the ladle arc (LA) and then the vacuum degasser (VD) where it is refined by way of alloying and reheating to reach suitable final condition
- the liquid metal is then transferred to one of two continuous casting machines (CCM), where it is converted into different-sized semi-finished solid steel products of either slab (flat and semi-finished with a specific width and cross section) or bloom (intermediate step in the rolling process and these are large square sections), that can be converted for into finished steel products
- treatment of dust
- treatment of slag

- treatment of waste water
- removal and treatment of pollutants prior to emission.

The proposed development will manufacture steel using approximately 1.3 million tonnes (mt) per year of scrap steel, the majority of which will be sourced from the United Kingdom (UK). This is in comparison to the existing BF process which is more reliant on international sources. The other primary inputs are electricity, natural gas and fresh water. The EAF will use the same amount of natural gas and comparatively more electricity per annum than the existing BF; however, its reliance on iron ore is less and it will not burn coal. There is still some reliance on iron ore in the form of hot briquette iron (HBI) and direct reduced iron (DRI) to mix into the scrap steel in order to produce quality finished products.

The majority of the materials listed above will be delivered to the site by road, while the fresh water will come from the local potable water network.

The electricity and natural gas requirements will be from the national grid and from the national gas network respectively.

The nearest site entrance is Gate A which is located off the A18 on Anchor Road, south-west of the proposed development. This will be primary access for any freight traffic accessing the EAF and is expected to accommodate approximately half of staff travel to the site once the proposed development is operational.

Intermittent queueing from Gate A onto the public highway has been observed historically. Accordingly, improvements to Gate A are proposed to be developed and will be subject to future submissions to the LPA.

There are many parking areas throughout the wider British Steel site to accommodate traffic associated with both construction and operation.

10 cycle parking spaces are proposed to be provided near the staff entrance to the EAF. The usage of the cycle parking will be monitored as part of a Travel Plan.

It is anticipated that the construction period will be circa 22 months, with construction hours proposed as between the hours of 6am and 6pm weekdays, with reduced hours on weekends of between 8am and 2pm. The expected number of HGVs visiting the site during the construction period is an average of 22 HGVs a day, peaking at 30 per day for a five-month period, in each direction. These HGV trips are expected to be distributed to M180 J4 via the A18. On average, 600 construction workers are expected to visit the site per day, ramping up slowly to 900 construction workers in month eight, lasting for four months before dropping again. The origin of the workers, and how they will access the site, is not currently known.

Need for the development

The applicant has provided background information as part of the explanation which explains why this project is being brought forward, the rationale for it and how the transition from traditional (blast furnace) steelmaking to EAF steelmaking will take place on site. This rationale is presented primarily in the Planning Statement, but is also referenced within the Environmental Assessment and is as follows:

The manufacture of steel is very much a challenge – it remains a fundamental component of so many industries not least construction, but it the traditional approach involves the use of fossil fuels as part of the manufacturing process and also generates high amounts of CO2.

Decarbonisation of the process, whilst maintaining the appropriately high quality and strength that British Steel is globally known for, is a long process which British Steel is committed to. Steel manufacture is very much a strength of Scunthorpe and achieving the step change away from traditional production methods to more sustainable approaches, to enhance the long term more sustainable future of the industry overall, is concerned very much to accord with the aims of Chapter 6 in particular of the NPPF.

The change to EAF involves the biggest transformation in British Steel's history, with £1.25bn being invested in order for British Steel to become a clean, green and sustainable business. Between 7 and 9 percent of all man-made CO2 emissions are from steelmaking. As a result of this, the steel industry needs to significantly and rapidly decarbonise in order for the UK to meet its climate objectives: 78% reduction in emissions by 2035 compared to 1990 levels and achieving net zero by 2050.

Continued manufacture is however vital, with world-wide demand is expected to grow to meet rising social and economic welfare needs. Steel is also an enabling material that provides the basis for others to decarbonise. It has a key role to play in the transition to a zero carbon economy, such as through green rail transport networks or low carbon power generation.

Like companies across the globe, British Steel is focused on improving their environmental performance on the journey to net zero. Electrification will provide a significant contribution to decarbonising their operations, reducing their carbon footprint by more than 75%. It will also allow British Steel to manufacture low-embedded carbon products that their customers need, and the UK will require, for decades to come.

The proposed wider development (as outlined in chapter 3) will see the installation of 2 EAFs, one at Teesside Beam Mill (Lackenby) and the other at Scunthorpe. The proposed new furnaces, which recycle steel scrap, could be operational by late 2025 and would replace the aging iron and steelmaking operations in Scunthorpe which are responsible for the majority of British Steel's CO2 emissions.

British Steel proposes maintaining current operations until a transition to electric arc steelmaking. Detailed studies show electrification could rapidly accelerate British Steel's journey to net zero and drive them towards a sustainable future. Furthermore, it would also ensure they can deliver the clean, green products their customers require and dramatically reduce their carbon footprint.

Decarbonisation is as important to British Steel's customers as it is to themselves, and their detailed research demonstrates electric arc steelmaking will enable them to continue manufacturing the high-quality products required. Their customers want clean, green and sustainable steel and EAFs would ensure they satisfy their technical requirements.

In addition to reducing carbon emissions, British Steel's proposals would also improve air quality and reduce overall vehicle movements. All potential impacts on the environment will be carefully considered in line with the latest environmental standards and legislation. Ecology surveys have helped us understand what wildlife exists on the site and the proposals will show how a 10% net gain in biodiversity on the wider site will be achieved.

The ES provides further information relating to the need for the development in the context of UK Government legislations, as follows:

In 2021 the UK government published legislation to deliver net zero emissions across the UK by 2050. In the Sixth Carbon Budget they also set a target of a 78% reduction in emissions by 2035 from 1990 levels. It stated that all ore-based steel-making operations within the UK should be "near-zero emissions" by this date.

British Steel is the third largest emitter of CO₂ within the UK and decarbonisation is not possible if it is to remain operating as they are currently. Due to British Steel's large emissions, decarbonisation efforts are expected to contribute significantly to the UK's net zero target for 2035.

In addition to legislative requirements, consumers are now more environmentally conscious in their purchasing decisions which drives socially led decarbonisation requirements. In order to meet the needs of its customers (and the Scope 3 emission targets set within the British Steel Low Carbon Roadmap (2021), British Steel needs to consider the growing demand for low-carbon steel products in the near future.

British Steel's customers are signing up to initiatives such as Steel Zero . In order to become a member, customers make a public commitment to procure 100% net zero steel by 2050 and an interim commitment to procure, specify or stock 50% of their steel requirement by 2030. If British Steel are unable to supply a lowcarbon steel product at this time (or potentially earlier) there is a risk that it could lead to the company being unviable.

Large scale emitters within the UK, including British Steel, participate in the UK Emissions Trading Scheme (ETS). Under this scheme emitters receive a certain level of free UK Allowances (UKA) and if emissions exceed these, further UKA permits must be purchased from the market. Presently British Steel's production volumes mean there is a shortfall in UKAs and therefore an ongoing liability under this scheme. Following consultation, it is anticipated there will be further reductions in free allocations of UKA permits in the next ten years. This increases the ongoing liability to British Steel. Without decarbonising, the UK ETS scheme poses a threat to the ongoing viability of UK Steelmaking.

Moving from blast furnaces to EAF steelmaking will significantly reduce British Steels Scope 1 (direct) greenhouse gas emissions from burning fossil fuels as well as contributing to air quality improvements. Scope 2 (indirect) emissions associated with electricity generation will also reduce as the grid continues to decarbonise. Reducing reliance on raw materials imported from abroad through the use of scrap metal will reduce the Scope 3 (indirect) emissions.

Consideration of alternatives

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 states in Schedule 4, Part 2 that an EIA Report must include “*a description of the reasonable alternatives studied by the developer...and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects*”.

In addition to the requirement for consideration of alternatives, there is also a requirement to consider the likely effects if the development does not come forward. This is known as the ‘no development scenario’.

The applicant in meeting the requirements of the EIA regulations has provided the following considerations:

- likely effects in the event that the development does not come forward (i.e. the no development’ scenario)
- consideration of whether alternative locations would achieve the objectives of the current proposal
- consideration of the evolution of the design of the scheme and whether alternative forms of development would achieve the same objective.

A ‘no development’ scenario would also result in British Steel not progressing their plans for greener methods of steel production to help in their aim of becoming carbon net zero. This alternative is not seen as a viable option as given the movement towards steel with a low carbon content. Not doing anything would mean the loss of customer base and impact on the future of the business. No development would also impact on the employment and investment benefits anticipated from the proposed development both during construction and operation as well as the reduction in carbon emissions, improvement to air quality and reduction in overall vehicle movements that will result from the switch to EAF steelmaking.

Alternative locations have been considered as part of the process. An alternative area within the Scunthorpe British Steel site was considered (the ‘Redbourne Site’). This area is located centrally within the British Steel site in an open area of scrubland. This alternative was discounted due to the inability to allow for direct/hot connect materials to one of the two re-rolling facilities on the site. ‘Hot connect’ is where material comes direct from the concast machine and is charged into a reheat furnace at an elevated temperature, typically ~400-600°C, rather than the current charging temperature of ambient (hence energy saving potential). Extensive areas of Open Mosaic Habitat (a priority habitat) were also encountered in this site during initial surveys.

Alternative technology was also considered as part of the assessment. Carbon Capture and Storage post combustion at the on-site power station has been considered in terms of 100% blast furnace (BF) operation and also a hybrid solution of BF and EAF production. Due to lack of commercial technologies currently available and the costing associated with capture and storage, this was considered to be not economically viable.

Environmental Impact Assessment (EIA)

The proposed development falls within Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations') as it meets the description of development listed in Paragraph 4(1): *"Integrated works for the initial smelting of cast-iron and steel."* And the description of development in Paragraph 24: *"Any change to or extension of development listed in this Schedule where such a change or extension in itself meets the thresholds, if any, or description of development set out in this Schedule"*.

The proposed development is a Schedule 1 development and an EIA is compulsory, and an ES should be submitted with the planning application. Given that an EIA is required, British Steel did not request a formal EIA screening opinion from North Lincolnshire Council (NLC) and instead proceeded directly to EIA.

EIA is a systematic process that examines the likely significant environmental effects of a proposed development, seeks to influence the design of a project to avoid or reduce effects and maximise benefits, and proposes mitigation measures to address environmental effects that cannot be avoided through changes to the design. The purpose of EIA is to present the environmental effects of a proposed development in order that these can be understood and taken into account in the decision-making process.

An Environmental Statement submitted by an applicant sets out the developer's own assessment of the project's likely environmental effects. The assessment process by the Local Planning Authority involves consulting the public and statutory consultees about the perceived environmental effects of the development.

Prior to the formal submission of the application in January and subsequent validation by the Local Planning Authority in February, the proposed development had been the subject of a formal Scoping Opinion request, in accordance with Regulation 14 of the EIA Regulations, made on behalf of the applicant. This request, received in November 2023, was accompanied by a Scoping Report commissioned on behalf of the applicant. The Scoping Report set down the applicant's proposals on how the intended Environmental Impact Assessment was to be undertaken and gave an opportunity for consultees and other interested parties to contribute to the environmental impact assessment process. A formal Scoping Opinion was duly adopted by the Local Planning Authority in December 2023. A copy of that Opinion is available to view on the LPA's online planning register and copies of both the EIA Scoping Request and Scoping Opinion are presented in Appendix 1.1 and Appendix 1.2 of the Environmental Statement (ES) respectively.

The main topics to be considered within the ES were therefore agreed to be:

- air quality
- biodiversity
- greenhouse gases
- climate change resilience
- geology, soils and contaminated land

- human health
- noise and vibration
- socioeconomics
- traffic and transport
- water environment and flood risk
- materials and waste and
- cumulative effects.

A number of topics were agreed to be scoped out as part of the formal scoping process. These topics include:

- cultural heritage
- major accidents and disasters
- landscape and visual.

Materials and waste was initially scoped out of further assessment within the Scoping Report; however, the Scoping Opinion confirmed that it should be included for further assessment and this topic area forms part of the assessment.

Subsequent to the submission of the planning application on 31 January 2024 and its validation on 5 February 2024, additional information was provided by the applicant on 28 February 2024. This additional information related to air quality and was provided because following the submission of the application emissions data for the existing plant became available and therefore the original air quality assessment, which was based on less accurate information and a number of assumptions, was updated to improve the modelled outputs for the air quality assessment. The additional documents submitted consisted of:

- Habitat Regulations Assessment
- Air Quality Technical Note
- Post Submission – Appendix: Air Quality
- Ecology Air Quality Update Technical Note
- Amended ES Chapter 16 – Cumulative Effects
- Amended ES – Non Technical Summary.

Following receipt of these additional documents the LPA undertook another full round of publicity on the application, with re-consultation undertaken with all consultees and additional site and press notices issued.

Consideration of planning issues

The principal issues to consider in the determination of this application are assessed below and comprise the following:

- the principle of development
- consideration of the potential impacts of the development as set out in the supporting ES, including:
 - air quality
 - biodiversity
 - greenhouse gases
 - climate change resilience
 - geology, soils and contaminated land
 - human health
 - noise and vibration
 - socioeconomics
 - traffic and transport
 - water environment and flood risk
 - materials and waste
 - cumulative effects
 - landscape and visual impact
 - cultural heritage.
- other material considerations.

Principle of development

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan, unless material considerations indicate otherwise. Such other important considerations include other relevant policy and guidance, particularly national planning policy in the National Planning Policy Framework (NPPF) and other relevant Government policy statements, as well as that which is provided within the National Planning Practice Guidance (NPPG).

The development plan for North Lincolnshire comprises three parts: those policies of the North Lincolnshire Local Plan (2003) (NLLP) which were saved by a direction of the Secretary of State in September 2007, the North Lincolnshire Core Strategy DPD (2011)

(NLCS), and the Housing and Employment Land Allocations DPD (2016) (HELADPD). There is no adopted Neighbourhood Plan covering the application site.

In this particular instance there are a range of policies in the development plan to be taken into account, as well as a number of other material considerations. In considering the relationship of the proposals to the development plan, the proposal should be judged against the development plan as a whole rather than against individual policies in isolation.

The NPPF also confirms that local plan policies whilst they might be ones pre-dating the publication of the NPPF in 2012, they should not be considered out-of-date simply because of their age. This is particularly relevant within the applicable and extant planning policy context within which this particular application must be considered. The NPPF states that

“due weight should be given to relevant policies in existing plans according to their degree of consistency with this framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given)”.

The analysis that follows, therefore, assesses the proposed development against the extant planning policies contained within the Development Plan. This assessment will establish the acceptability, or otherwise, of the proposal against those policies to establish whether 'in principle' the development either is, or is not, acceptable by virtue of degree of compliance and/or conflict with policies contained within each of the relevant Development Plan documents.

Within the paragraphs that follow this 'in principle' position, lies the analysis of the proposal in respect of the effects of the proposed development upon various interests of acknowledged importance and the establishment of whether there exist any '*other material considerations*' that would outweigh/override the earlier referred '*in principle*' position established within the paragraphs that follow.

Policy context

In local planning terms the proposal site is located within the defined development limit for Scunthorpe, within the established British Steel steelworks site, but is not specifically allocated for a particular use.

Core Strategy policy CS1 (Spatial Strategy for North Lincolnshire) states that the council's spatial strategy will focus on delivering an urban renaissance in Scunthorpe and support its role as a major subregional town. Scunthorpe will be the focus for the majority of new development and growth, including housing, employment, retail, sustainable transport links, and higher order services and facilities to serve North Lincolnshire. Opportunities for economic development will be provided within existing established employment locations as well as on additional sites.

Additionally, policy CS2 (Delivering More Sustainable Development) builds on this through emphasising that the spatial strategy will deliver growth in a sustainable and balanced manner that meets the area's objectively assessed needs for new homes, jobs and infrastructure, whilst ensuring the natural and built environment is protected and enhanced. The policy states that the strategy will develop at least 131.7ha of employment land in key locations. Specifically, relating to Scunthorpe and Bottesford, the policy outlines that to maintain and strengthen its role as a key sub-regional centre, the Scunthorpe and Bottesford urban area will be the priority focus for growth in North Lincolnshire.

Policy CS11 (Provision and Distribution of Employment Land) outlines that the council will support the continued expansion and improvement of North Lincolnshire's economy in order to create a step change in the area's role regionally and nationally. Strategic employment sites have been identified predominantly in Scunthorpe, and the policy reiterates that economic development must aim to meet local employment needs.

Saved Local Plan policy IN3 (Industrial and Commercial Development within the Urban Area, Principal Growth Settlements, South Humber Bank Area, and Humberside International Airport) permits industrial development, limited infilling between buildings and redevelopment of existing sites in the Scunthorpe area, subject to a number of criteria including respecting its location and local amenity, site design, site storage, vehicle access and site landscaping.

In addition to the Development Plan policies outlined above, NLC is currently preparing a new Local Plan, which when adopted will supersede the Development Plan documents and sets out a clear vision for the future development of North Lincolnshire up to 2038. The Plan was submitted for examination in November 2022 with the hearing sessions yet to be scheduled but are anticipated late 2024. There are a number of outstanding objections to the Plan as a whole and so its policies are a material consideration, but can only be afforded limited weight in decision making.

The New Local Plan seeks to deliver growth in a sustainable and balanced manner that meet the area's objectively assessed needs for new homes, jobs and infrastructure, whilst ensuring the natural and built environment is protected and enhanced. Through section 3 of policy SS2 (Spatial Strategy for North Lincolnshire) it is stated that:

- (a) To maintain and strengthen its role as a key sub-regional centre, the Scunthorpe and Bottesford urban area will be the priority focus for growth in North Lincolnshire.
- (b) It will be the focus for the large-scale residential development through the provision of allocations in this plan, including sustainable urban extensions. Non-allocated sites within the defined development limit will also contribute accordingly. Appropriate use will be made of previously developed land and greenfield sites. Major opportunities for employment will be provided in key locations within the urban area, whilst it will be the main centre for higher order services and facilities, retail, cultural activities, leisure, and commercial development...

Under policy SS3 'Development Principles' all new development in North Lincolnshire should contribute towards the creation of sustainable communities and a sense of place. This policy provides a framework against which all proposals for new development in North Lincolnshire will be considered. Part c is particularly supportive of the promotion and encouragement of the effective use of previously developed land within an urban context.

In respect of national policy, Chapter 6 of the National Planning Policy Framework (NPPF) seeks to build a strong, competitive economy. Paragraph 85 requires planning policies and decisions to help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter

any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.

Chapter 14 of the NPPF seeks, amongst other things, to secure the transition to a low carbon future. Paragraph 157 directs that the planning system should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.

Assessment

The proposed development is in broad compliance with the provisions of the Core Strategy's Spatial Strategy by contributing towards the renaissance of Scunthorpe through major investment in the decarbonisation of steel making through the construction of the new EAF facility at British Steel Scunthorpe.

The decarbonisation of steel making through the construction of the new EAF facility is in accordance to both local and national planning policy which seeks to minimise carbon emissions and to contribute to sustainable development.

The proposed development supports the provision of employment land in this key location and secures the long-term future employment of a considerable number of local people in this key sector to the local economy as this industry seeks to develop and innovate.

Whilst the proposed development does not provide new employment land, it will support the continued use of an existing employment site and ensure that the future of the site is secured in the long-term.

The proposed electric arc furnace and associated works are located on brownfield land, within the defined development limit for Scunthorpe, where the principle of the scheme would be in accordance with policy, including policy IN3 of the NLLP, subject to the detailed assessment and consideration of other impacts on traffic, pollution control, the built and natural environments and achieving targeted net gains in biodiversity. This is further reinforced by the new Local Plan, the status of which has been highlighted previously, which seeks to retain the British Steel site within the development limit for Scunthorpe.

For the reasons outlined in the paragraphs above, it is considered that the proposed development is generally in accord with the relevant development plan policy and is, therefore, acceptable 'in principle'.

Air quality

The assessment of the effects of the proposed development in respect of air quality is included within Chapter 5 (Air Quality) of the Environmental Statement which accompanies the planning application. Additional information was provided by the applicant on 28 February 2024 in the form of an Air Quality Technical Note, which should be read alongside Chapter 5 of the ES and Post Submission Air Quality Appendix, which supersedes parts of the originally submitted Air Quality ES Appendix. In lieu of exact data for the existing plant at the site, emissions data was originally sourced from the National Atmospheric Emissions Inventory (NAEI) website and was used to calculate the operational plant assessment

results. The approach required a number of assumptions to be made, which led to uncertainty regarding the modelling predictions as discussed within the Environmental Statement (ES) Chapter 5 Air Quality. Following the submission of the planning application in January 2024, emissions data for the existing plant became available and therefore the original air quality assessment was updated to improve the modelled outputs for the air quality assessment.

This chapter of the Environmental Statement (ES) and the Technical Note that supports it, identifies the potential effects on air quality associated with the construction and operation of the proposed development. It describes the relevant air quality legislative and policy context and presents the methodology used in the assessment of the proposed development. The assessment assesses the existing air quality conditions in the vicinity of the proposed development and likely changes that would arise as a result of the construction and operational phases, including potential effects on designated wildlife sites and on human health. Mitigation measures are proposed which (where necessary) would be implemented to reduce the effect of the proposed development on air quality. The air quality assessment is supported by a number of technical appendixes and figures.

The main sources of pollutants to air associated with the proposed development are identified as:

- construction dust
- construction traffic
- operational plant
- operational traffic
- combined effects of operational traffic and plant emissions.

Construction dust

The assessment of construction dust has been carried out following IAQM guidance by assessing the magnitude of impact from earthworks, demolition, construction and trackout and identifying the risk of impacts at sensitive receptors within 350m of the works or 500m of site entrances in relation to trackout. The full method of assessment has been detailed in Appendix 5.1.

Taking into consideration the dust emission magnitude and the sensitivity of the area, the proposed development has been classified as 'Medium risk' to dust soiling and 'Medium risk' to human health impacts from demolition and as 'Low risk' to dust soiling and 'Low risk' to human health impacts from earthworks, construction and trackout (Table 5-24). At worst, the site would be classified as 'Medium risk' overall.

The assessment concludes the following:

“Specific mitigation to minimise the risk of dust soiling and human health impacts of the Proposed Development is described in Section 5.9. The mitigation measures for Medium risk sites have been recommended for the Proposed Development for the overall site and risk specific mitigation measures will be outlined for the individual construction activities.”

Construction traffic

At the time of writing, no construction traffic data was available as it is not yet known where the construction traffic will be routed. The report goes on to state that once data is available, the IAQM/EPUK screening criteria will be used to identify if a detailed assessment is required. This screening exercise is proposed to be secured by planning condition.

Operational plant

The assessment of operational plant has examined the changes in air pollutant concentrations in the surrounding area that would result from the operation of the proposed EAF.

At the time of the original planning application submission, emissions data for the existing plant was unavailable and was therefore sourced from the National Atmospheric Emissions Inventory (NAEI). This approach required a number of assumptions to be made, which led to uncertainty regarding the modelling predictions. Since this time, the emissions data from the existing plant has been received and the air quality assessment has been updated to provide more realistic modelled pollutant concentrations to inform the revised air quality assessment findings. Full details of the emission data are provided in Appendix A.

For the proposed EAF, modelling was undertaken using proxy information based on similar facilities and best practice guidance for steel and iron production. This information has been sourced from a variety of available data sources, namely the existing permit for the EAF located at Celsa Steel in Cardiff, the recent application for a EAF at the British Steel site in Teesside and best practice data from the BAT reference documents (BREF) for iron and steel production, the Integrated Pollution Prevention and Control (IPPC) guidance and the Defra process guidance note for electric furnaces.

The concentrations of pollutants as a result of operational plant emissions have been predicted for five meteorological years (2017, 2018, 2019, 2020 and 2021).

The assessment has been undertaken using two different future scenarios with the proposed development in operation alongside a future scenario without the proposed development. The scenarios are as follows:

- Do-Minimum (DM): current British Steel setup without the EAF
- Do-Something (DS) 1: includes the operation of the proposed EAF and the existing onsite sources included in the DM scenario
- Do-Something (DS) 2: includes the operation of the proposed EAF but excludes the operation of the blast furnaces and any other plant associated with producing steel using blast furnaces, which are assumed to be decommissioned in this scenario. On site sources not related to the blast furnaces have been included in this scenario.

The assessment states:

“DS1 is a temporary scenario that has been included in this assessment to assess the interim period where operation of the EAF has commenced but the existing on-

site equipment has not yet been decommissioned. This has been included in the assessment for completeness and to show any potential impacts on sensitive receptors during this temporary period. From the information provided by the client, it is understood that the duration of DS1 is anticipated to be no longer than 12 months.”

As a result of the DS1 scenario including existing sources as well as the proposed EAF, concentrations predicted in DS1 are higher than DS2, the improvements predicted in the DS2 scenario are due to the removal of blast furnaces and other related sources.

The air quality assessment provides the following conclusions on the significance of potential operational effects with regard to air quality:

“Based on the assessment results, the overall significance for the effect of the operational plant is considered to be not significant in accordance with the EPUK and IAQM land-use planning guidance, except for annual mean Cd and CrVI, as well as daily mean Cd. It is considered, based on experience of similar facilities, that with the addition of suitable mitigation measures this effect can be reduced and would no longer be significant. Mitigation measures are outlined in section 2.3.

Following best practice, the overall significance for the effect of the operational plant has also been determined using the EA’s screening criteria. The assessment indicated that the effect due to the operational plant is considered to be not significant, except for annual mean PM2.5, Cd, CrVI as well as daily mean PM10, and Cd.

As noted, the emission factors and suitable mitigation to ensure no significant effects occur will be accounted for in the detailed design and modelling will be updated to demonstrate no significant effects will occur.”

In terms of mitigation the assessment confirms that:

“The proposed EAF is required to meet BAT requirements as a minimum, so the exhaust flue(s) should be fitted with a suitable filter and in order to reduce the impacts of Cd, CrVI, PM10 and PM2.5. Once these mitigation measures are agreed, additional dispersion modelling with the revised emission data for post filtration should be undertaken, to confirm no significant effects would be introduced to the local air quality due to the Proposed Development following the implementation of mitigation.”

Operational traffic

The air quality assessment includes an assessment of potential impacts of vehicle emissions during operation. Traffic flows during operation have been compared against the EPUK/IAQM screening criteria which shows that these screening criteria are exceeded. Therefore, a detailed modelling assessment has been carried out using dispersion modelling.

The operational traffic modelling was undertaken to calculate predicted concentrations at sensitive receptor locations.

Predicted concentrations are below the annual mean air quality objective (40µg/m³) at all of the sensitive receptor locations for each modelled scenario. The highest concentration of NO₂ was recorded at receptor R39 (Queensway Flats) and was 24.8µg/m³.

Predicted concentrations are below the annual mean air quality objective (40µg/m³) at all of the sensitive receptor locations. The highest concentration of PM₁₀ was recorded at receptor R64 (Aspen Farm) and was 18.1µg/m³ in both the DM and DS scenarios.

Predicted concentrations are below the annual mean air quality target (12µg/m³) at all of the sensitive receptor locations. The highest concentration of PM_{2.5} was recorded at receptor R63 (Twigmoor Farmhouse) and was 18.1µg/m³. This is believed to be a typo as the highest concentration at this location is 9.1µg/m³.

The assessment concludes that:

“The impact at all modelled sensitive human receptor locations for the operational traffic assessment was negligible for annual mean concentrations of NO₂, PM₁₀ and PM_{2.5}.”

Combined effects

The combined impact of both operational plant and operational traffic has been undertaken for NO₂, PM₁₀ and PM_{2.5} and compared to the relevant annual mean air quality objectives to examine the combined effects for air quality.

The overall potential effects resulting from the combined effect of operational traffic and plant is considered to be not significant when considering the EPUK/IAQM guidance.

Policy context

The most relevant extant development plan policies against which to assess the proposed development's effect upon air quality are 'saved' policy DS1 of the NLLP, which requires that development proposals do not result in pollution of air, water or land; and 'saved' policy DS11 of the NLLP, which seeks to prevent development that would result in dangerous levels of polluting emissions.

Policy DM3 (Environmental Protection) of the emerging local plan similarly seeks to protect against unacceptable polluting emissions. With regards to air quality this policy requires that new developments will not have an unacceptable negative impact on air quality and will not further exacerbate air quality in the Scunthorpe Town AQMA or contribute to air pollution in areas which may result in a new AQMA. Applicants will be required to provide an air quality impact assessment to demonstrate this.

The NNPF at Paragraph 180e states that planning policies and decisions should contribute and enhance the natural environment by:

“preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water

quality, taking into account relevant information such as river basin management plans”

Paragraph 192 of the NPPF requires planning policies and decisions to:

“sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement.”

The LPA must also be mindful of the advice set out in the NPPF (para 194) that:

“the focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively.”

The proposed development is situated in the Scunthorpe Air Quality Management Area (AQMA). The Scunthorpe AQMA was declared in 2005 due to exceedances of the PM10 24 hour mean Air Quality Objective. The AQMA was reduced in size in 2018.

Planning assessment

The suite of application documents, including those received during the processing of this planning application, to which reference is made above, and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the council’s Environmental Protection team and the Environment Agency within their respective jurisdictions.

No objections or concerns have been raised by third parties in respect of air quality.

With regard to the potential impacts of the development upon air quality, the council’s Environmental Protection Officer (EPO) has confirmed that potential impacts associated related to construction dust can be adequately controlled by applying the site-specific mitigation measures for the proposed development according to the IAQM guidance. The relevant measures from the guidance should be considered in the Construction Environmental Management Plan (CEMP) for the site and are listed in Appendix 5.1. A condition is recommended to secure the submission, agreement and implementation of an appropriate CEMP prior to development commencing that would include as part of the overall plan a Construction Dust Management Plan.

With regard to construction traffic, the EPO advises construction traffic data is not currently available as it is not yet known where the construction traffic will be routed. As such it is recommended that when the Construction Phase Traffic Management Plan (CTMP) for the development is produced, this should include details of construction traffic levels and routing, having regard to the relevant IAMQ/EPUK screening criteria, including a supporting air quality assessment if the criteria is exceeded. This is proposed to be secured via a planning condition to secure a CTMP prior to the development commencing. Potential

impacts from construction traffic can be adequately mitigated via the recommended condition and suitable routing and management.

With regard to the operational phase of the proposed development, the EPO confirms that the development will require a permit under the Environmental Permitting Regulations (England & Wales) 2016 from the Environment Agency. The permit will control emissions to air, land and water and will include emission limits for relevant pollutants. The proposed EAF facility will therefore have to be designed to meet the requirements of Best Available Technique (BAT) '*Reference Document for Iron and Steel Production*' as stipulated in Industry Guidance and required by the regulator, the Environment Agency.

With this in mind, the development will be required to implement suitable mitigation measures that will reduce pollutants to ensure their impact is not significant in accordance with relevant guidance. To ensure that suitable mitigation is included in the design to meet relevant emission limits, the EPO recommends a condition be imposed that secures the submission of an air quality assessment that provides details of proposed emission limit values and demonstrates the embedded technology within the electric arc furnace design to mitigate any air quality impacts to an acceptable level.

Potential for air quality impact has been identified during the modelled DS1 scenario (the EAF running alongside the existing blast furnaces). However, the air quality assessment confirms that DS1 is a temporary scenario, which is anticipated to last no longer than 12 months. Once the existing blast furnaces have been decommissioned, then the proposed development will result in overall improvements to air quality. On this basis, in accordance with the assessment provided in the ES a suitable mechanism has been included to limit the simultaneous operation of the blast furnaces and EAF to a 12 month period following commissioning of the EAF. This mechanism will consist of a Unilateral Undertaking (UU) under Section 106 of the Town and Country Planning Act, which will secure the 12 month period via a formal legal agreement.

The Environment Agency has raised no objection to the proposed development with regard to its impact on air quality, nor has it requested additional information in this regard. As part of the Environmental Permitting regime, the applicant will be required to undertake regular monitoring and reporting of air quality on site.

Having given due regard to the expert information submitted in support of the application and the consultation responses from experts within the Environment Agency and the council's Environmental Protection department, it is considered that the risks of an adverse impact upon air quality is very low and that there would be appropriate measures to ensure the protection of air quality. Suggested conditions have been offered where the consultee is of the opinion that controls are necessary. Therefore, the proposed development, appropriately mitigated, is considered to accord with policies DS1 and DS11 of the NLLP with regard to air quality as well as the relevant policies in the emerging New Local Plan and the NPPF identified above.

Biodiversity

The assessment of the effects of the proposed development in respect of the natural environment, protected species and designated habitats, is set out within Chapter 6 (Biodiversity) of the Environmental Statement which accompanies the planning application. Additional information was provided by the applicant on 28 February 2024 in the form of an Ecological Impact Assessment – Air Quality Update Technical Note, which should be read

alongside Chapter 6 of the ES. Due to limited information available at the time of the initial assessment, as explained in the Air Quality section of this report above, assumptions were made to support the air quality dispersion modelling. As a result of this, the modelled pollutant concentrations were over-predicting, and were unlikely to be reflective of actual conditions. The original Ecological Impact Assessment was therefore not able to draw final conclusions on significance within the assessment. The subsequently submitted Technical Note presents the updated air quality modelling in relation to the identified ecological receptors and assesses the likely significant effects the proposed development will have.

Chapter 6 of the ES is supported by a Preliminary Ecological Appraisal (PEA), a Water Vole and Bat Technical Note (September 2023), a Biodiversity Net Gain Design Report and a Biodiversity Net Gain Metric Assessment.

The application has also been supported by a Stage 1 (Screening) Habitat Regulations Assessment (HRA) that has been prepared by Ove Arup and Partners Ltd (Arup).

Chapter 6 of the ES and the Technical Note that supports it, identifies the potential effects on Biodiversity associated with the construction and operation of the proposed development. It describes the relevant ecological legislative and policy context and presents the methodology used in the assessment of the proposed development.

As part of the assessment process a desk study assessment has been made with regard to internationally designated sites, nationally designated sites, locally designated sites and notable species. A number of field surveys were also undertaken for the Preliminary Ecological Appraisal, Biodiversity Net Gain Assessment and in respect of numerous targeted protected and priority species including bats, water voles, great crested newts and badgers.

The Ecological Zone of Influence (EZoI) is an area defined by the assessment in which there may be ecological features subject to impacts and subsequent effects as a result of the proposed development. The EZoI may vary for different ecological features and is defined based on the likely effects of the proposed development. An assessment of ecological features was undertaken in accordance with the following EZoIs:

- International designated sites – 10km
- Statutory and non-statutory designated sites
- Priority habitats – 2km
- Habitats – within the site and immediately adjacent to the boundary
- Invasive plant species - within the site boundary
- Bats – 100m
- Reptiles – within the site boundary
- Water vole – 20m
- Badgers – 30m

- Great crested newt – within the site boundary
- Breeding birds – 200m

The prediction of impacts and residual effects has involved an assessment of the value of each ecological feature and an evaluation of the significance of impacts (both direct and indirect) in ecological terms.

It is proposed that, as far as is practicable, mitigation measures will be embedded into the design of the proposed development. Measures considered embedded by this assessment include the following:

- habitat creation as detailed within the BNG Design Report (Appendix 6.2 – BNG Report)
- mitigation measures for protected species as set out in the Preliminary Ecological Appraisal (Appendix 6.1 - Arup PEA)
- night-time working will be avoided where practicable and artificial lighting should be focused on areas of work and should avoid areas of natural habitat and light spill should be minimised.

The assessment identifies one internationally designated site within 10km of the development site, this being the Humber Estuary SPA, SAC and Ramsar site approximately 7.4km north-west.

One nationally statutorily designated site is located within 2km of the development site boundary, this being Ashbyville Local Nature Reserve approximately 0.7km south-west.

The site boundary is located within 2km of five locally designated sites, known as Local Wildlife Sites (LWS). These LWS are:

- Ashbyville Lake LWS – approximately 0.7km south-west
- Manby Wood LWS – approximately 1.2km east
- Holme Hall Golf Course LWS – approximately 1.4km south
- Broughton West Wood LWS – approximately 1.5km east
- Sweeting Thorns LWS – approximately 1.6km south.

There are no priority habitats or ancient woodland within the site boundary; however, the priority habitat 'Open Mosaic' is located adjacent the boundary.

With regard to protected species, 3 species of bat were identified within 2km of the site boundary: Common pipistrelle, Nathusius's pipistrelle and Soprano pipistrelle. Three records of badger were identified within 2km of the site boundary. No records of otter were identified within 2km of the site boundary. Three records of water vole were identified within 2km of the site boundary, the closest of which was 1.4km south-west. 12 bird species which are either S41 Priority Species, red or amber listed Birds of Conservation Concern (BoCC) or listed on Schedule 1 of the WCA were identified within 2km of the site boundary. Records of common toad, smooth newt and great crested newt, were identified within the

site boundary. One record of common frog was identified 1.4km south of site boundary. No records of reptiles were identified within 2km of the site boundary. Records of grayling and small heath butterfly were identified adjacent to the site boundary. An additional 9 invertebrate species were identified within 2km of the site boundary.

Habitats identified on site included developed land, sealed surface, built linear features, buildings, modified grassland and mixed scrub. One watercourse, Bottesford Beck, and two unnamed ditches were identified adjacent to the site boundary.

Construction

The potential effects during the construction phase on important ecological features are identified as:

- direct mortality of species
- habitat loss, fragmentation and severance
- disturbance from noise, vibration, light and dust
- habitat degradation due to pollution.

Due to the distances between the site boundary and the designated sites brought forward to assessment, direct impacts such as habitat loss or fragmentation will not occur. However, indirect impacts due to air pollution may occur. The submitted Ecological Impact Assessment – Air Quality Update Technical Note confirms that:

“all construction impacts due to air quality will be managed by applying the site-specific mitigation measures for the Proposed Development according to the Institute of Air Quality Management (IAQM) guidance. The guidance notes that it is anticipated that with the successful implementation of effective site-specific mitigation measures, the environmental effect will not be significant in most cases. These measures will be detailed within the CEMP.

Following these mitigation measures, it is considered that air quality impacts (air pollution and construction dust) will result in a negligible impact at a regional and local level and are not significant.”

With regard to potential hydrological impacts, the ES confirms that there will be an increase in surface water runoff into Bottesford Beck during construction. It is proposed that a Construction Environmental Management Plan (CEMP) will be implemented that will include best practice measures to reduce pollution into Bottesford Beck. However, it is anticipated that there may be some temporary increases to pollution levels within the Beck due to accidental discharges during construction. Bottesford Beck flows from the site boundary south into Ashbyville LNR and Ashbyville Lake LWS. This hydrological link may act as a source of pollution during construction works. A change in water quality may impact on the functioning of the ecosystem within the designated site and have impacts on the habitats and species which it supports. However, the likelihood of such an event occurring is considered to be low, particularly once relevant measures have been put in place as part of the CEMP. The assessment concludes in this regard that:

“Therefore, effects of the Proposed Development on Ashbyville LNR and Ashbyville Lake LWS are considered to be negligible, at a regional and metropolitan county level and is not significant.”

and:

“It is therefore considered that the hydrological impacts on Bottesford Beck will result in a temporary, minor adverse impact at a local level and is not significant.”

With regard to habitats, the ES confirms that the proposed development will result in the permanent loss of modified grassland and mixed scrub, these are considered to be of local importance. This will be replaced by other neutral grassland and mixed scrub and one parcel of mixed scrub will be enhanced from ‘poor’ to ‘moderate’ condition. While the area of habitat created is less than the area that is lost, the other neutral grassland is of a higher distinctiveness and condition than the modified grassland that is lost and the mixed scrub will be a higher condition. This will lead to a higher biodiversity value following completion of the habitat creation and enhancement works equating to over a 10% net gain. The assessment confirms:

“It is therefore considered that the loss of modified grassland and mixed scrub will result in a negligible impact at a local level and is not significant.”

It has been assessed within the air quality chapter (Chapter 5: Air Quality) that there will be large to medium magnitudes of dust emissions during the construction process (including demolition). The ES asserts that the dust emitting activities assessed can be greatly reduced or eliminated by applying the site-specific mitigation measures for the proposed development according to the IAQM guidance. The guidance notes that it is anticipated that with the successful implementation of effective site-specific mitigation measures, the environmental effect will not be significant in most cases. These measures will be detailed within the CEMP. The assessment concludes in this regard that:

“It is therefore considered that degradation due to construction dust will result in a negligible impact at a regional level and is not significant.”

With regard to protected and priority species, the ES explains that surveys to establish the presence of bats are on-going and the plans for the development of Building 1 (Bloom and Billet Mill) are still being finalised by British Steel.

One water vole survey has been completed, with the second visit scheduled to take place in Spring 2024. No water vole signs have been found, but absence cannot be confirmed until both survey visits have been completed. At the time of writing, it is considered unlikely that water vole are present in the EZoI but a precautionary approach has been taken for this assessment and presence of water vole has been assumed. The construction of the new discharge point into the culverted section of Bottesford Beck will result in disturbance to water vole due to increased noise and vibration from construction activities, including drilling and piling, in the immediate area around the proposed development. However, the ES confirms that:

“as water vole are a highly mobile species, it is likely that they will move upstream away from the site boundary to a more suitable location with a tolerable level of

noise disturbance, in the unlikely event they are confirmed as being present adjacent to the site following surveys in Spring 2024.”

and goes on to conclude that:

“effects of the Proposed Development on water vole disturbance are considered to be temporary, minor adverse, at a local level and not significant.”

A similar rationale and conclusion is presented with regards to the potential for noise and disturbance during construction to impact upon badgers.

It has been identified in Chapter 13: Traffic and Transport of the ES that vehicle movements within and approaching the site boundary will increase during the construction period. As the majority of habitats within the site boundary are already sub-optimal for most species, it is unlikely that these movements will lead to an increase in species mortality. Furthermore, the amount of vehicles movements predicted are unlikely to cause an increase in species mortality, including badgers, due to the high number of vehicle movements currently within and around the site boundary.

Operation

As explained in the Air Quality section of this report above, 3 distinct development scenarios have been modelled with regards to airborne pollutants these being:

- Do-Minimum (DM): current British Steel setup without the EAF
- Do-Something (DS) 1: includes the operation of the proposed EAF and the existing onsite sources included in the DM scenario
- Do-Something (DS) 2: includes the operation of the proposed EAF but excludes the operation of the blast furnaces and any other plant associated with producing steel using blast furnaces, which are assumed to be decommissioned in this scenario. On site sources not related to the blast furnaces have been included in this scenario.

The DM scenario would see no change to operations on the site and as such does not require further assessment.

With regard to internationally designated sites the Ecological Impact Assessment – Air Quality Update Technical Note concludes that no significant air pollution changes are predicted on any of the Humber Estuary designated sites as a result of either the DS1 or DS2 scenario. Further detail in this regard can be found in the Habitat Regulations Assessment (HRA).

With regard to other designated sites, it is confirmed that:

“Three SSSI’s (Broughton Far Wood, Broughton Alder Wood and Risby Warren), one LNR (Ashbyville) and four LWS (Ashbyville Lake, Manby Wood, Broughton West Wood and Sweeting Thorns) are predicted to receive an increase in air pollution above the CL [Critical Level] for the DS1 scenario. However, due to the short-term nature of the DS1 scenario (less than 12 months), the increase in the pollutants will not cause a material change in the vegetation communities of any of the designated sites.

Therefore, the effects of the Proposed Development on designated sites under the DS1 scenario are considered to be negligible, at a national, regional and metropolitan county level and are not significant.”

Two parcels of ancient woodland are predicted to receive an increase in air pollution above the CL for the DS1 scenario. The assessment explains that:

“While woodlands are susceptible to SO2 increases causing a change in the ground flora layer, they are relatively resistant to small increases in NOx, NO2 and Total N. Furthermore, detrimental impacts to woodlands as a result of air pollution can take years to be measurable and, in most cases, management or grazing will have more of a detrimental impact within the same timeframe.

Therefore, the effects of the Proposed Development on ancient woodland under the DS1 scenario are considered to be negligible, at a regional level and are not significant, largely as a result of the relatively short-term nature to the expected changes in air pollutants (less than 12 months).”

Nine parcels of priority habitats are predicted to receive an increase in air pollution above the CL for the DS1 scenario: five parcels of deciduous woodland, two parcels of Open Mosaic Habitat (OMH), one parcel of lowland meadow and one parcel of lowland heathland.

Similar to the assessment of ancient woodland, the Ecological Impact Assessment – Air Quality Update Technical Note concludes that it is unlikely that any impacts upon these priority habitats will occur within 12 months. As such it is stated that:

“Overall, the effects of the Proposed Development on Priority Habitats under the DS1 scenario are considered to be negligible, at a regional level and are not significant.”

No significant air pollution changes are predicted on SSSIs as a result of the DS2 scenario. Ashbyville LNR and Ashbyville Lake LWS will receive a slight increase in NOx pollution (annual) over the critical level for this development scenario. The assessment explains that:

“The impacts of NOx on habitats are relatively unknown due to the slow rate of NOx deposition into the soil, but it has been observed that NOx generally causes an increase in the shoot:root ratio of plants (grasses and trees), which may or may not be beneficial depending on the species and habitat affected.

Therefore, the effects of the Proposed Development on designated sites under the DS2 scenario are considered to be minor adverse, at a regional and metropolitan county level and are not significant.”

No significant air pollution changes are predicted on designated areas of Ancient Woodland as a result of the DS2 scenario.

Four parcels of priority habitat are predicted to receive air pollution increases above the critical level for the relevant pollutant: three areas of deciduous woodland and one area of OMH. The assessment provides the following commentary and conclusion:

“Nitrogen deposition is not believed to have a major, direct impact on tree growth in the UK and poor/inappropriate management will often mimic the impacts of Nitrogen deposition. The pollution increases are relatively slight at an annual scale and as such are unlikely to be measurable within the woodland parcels.

OMH by their nature are chemically disturbed habitats, with high levels of baseline soil pollution. There is little evidence/research surrounding the impacts of air pollution on OMH, but NOx and Nitrogen deposition have little impact on improved grasslands due to their disturbed nature and are not believed to have major impact on woodland/trees.

Therefore, the effects of the Proposed Development on Priority Habitats under the DS1 [DS2] scenario are considered to be minor adverse, at a regional level and are not significant.”

With regard to potential hydrological impacts on ecological receptors during operation, Bottesford Beck flows from the site boundary south into Ashbyville LNR and Ashbyville Lake LWS. This hydrological link may act as a source of pollution during operation. A change in water quality may impact on the functioning of the ecosystem within the designated site and have impacts on the habitats and species which it supports.

Permanent water quality impacts to Bottesford Beck are anticipated due to permit-controlled discharges from the water treatment plant associated with the works and inclusion of an additional oil interceptor for land to the east of Bottesford Beck. Mitigation for this is outlined within the drainage statement (Chapter 14: Water Environment). The assessment concludes that following this mitigation, impacts on Bottesford Beck, Ashby Ville LNR and Ashby Ville LWS will not be significant.

Cumulative effects

The list of developments identified for assessing cumulative effects is presented in Appendix 16.1. Table 6-18 each of the developments with the potential for cumulative effects is examined, and an assessment of the cumulative effects presented where appropriate. Without exception the ES concludes that there will be no cumulative effects on ecological receptors with any of the identified developments.

Habitat Regulations Assessment

The application has been supported by a Stage 1 (Screening) Habitat Regulations Assessment (HRA) produced by Ove Arup and Partners Ltd (Arup). This report provides information to inform Stage 1 (Screening) of the HRA. It has been prepared to inform the ‘competent authority’ (NLC) about the implications of the proposed works on internationally important sites, as required under Regulation 63 of The Conservation of Habitats and Species Regulations 2017, as amended by the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019.

Regulation 63 of the Habitats Regulations sets out a two-stage process. The first test is to determine whether the plan / project is likely to have a significant effect on the European site, the second test (if applicable) is to determine whether the plan / project will affect the integrity of the European site.

Planning policy in respect of the HRA is set out in the NPPF at paragraphs 185–188.

The key findings of the Stage 1 (Screening) Habitats Regulations Assessment are as follows:

- Three internationally designated sites are located within 15km of the proposed development.
- No works will be taking place within the designated sites.
- The Stage 1 (Screening) assessment did not identify any likely significant effects on the internationally designated sites as a result of the construction or operation of the proposed development.
- It is considered that no further stage of the Habitats Regulations Assessment process will be required.

Following a review of the Stage 1 (Screening) HRA, the council's Natural Environment Policy Specialist undertook their own Stage 1 HRA, which also concluded that there would be no likely significant effects on the internationally designated sites as a result of the construction or operation of the proposed development.

Following consultation with Natural England and reviewing their advice and opinion that there were potential likely significant effects on the Humber Estuary designated sites, the council's Natural Environment Policy Specialist undertook a further Stage 1 (Screening) and Stage 2 (Appropriate Assessment) HRA.

The HRA at Stage 1 identifies three internationally important sites that are present within 15km of the proposed development:

- Humber Estuary SPA
- Humber Estuary Ramsar
- Humber Estuary SAC

In accordance with the advice provided by Natural England, the following potential hazards are considered as part of the HRA:

- water quality impacts
- air quality impacts – main pollutants
- air quality impacts – other pollutants.

With regard to potential water quality impacts the HRA at Stage 1 confirms the following:

“the scheme introduces a new surface water outfall to Bottesford Beck with a Class 2 Petrol Interceptor. The Class 2 full retention separators are single chamber units that treat the flow generated by a rainfall of 65mm per hour and are designed to achieve a concentration of less than 100mg/l oil under standard test conditions.

Water discharges to Bottesford Beck will need to be managed in accordance with Environment Agency (EA) consents. The EA has duties under the Water Framework Directive and is a Competent Authority in terms of the Habitats Regulations. If the EA deems that an HRA is required for the discharge consent, then they will have a duty to ensure that all control measures are in place to ensure no Adverse Effect on Integrity of the Humber Estuary SAC/Ramsar.

The submitted water quality info indicates that conventional oil interceptors and other standard measures (irrespective of HRA) will be adequate. Additional to this, Bottesford Beck (primarily) and the River Trent will provide over 10 km of natural attenuation of any polluting discharges, before they have any prospect of reaching the Humber Estuary SAC/Ramsar site...

Taking together the permit-controlled discharge, oil interceptor and natural attenuation provided by Bottesford Beck, there is no likely significant effect on the Humber Estuary SAC, SPA or Ramsar site due to water pollution."

With regard to potential air quality impacts from main pollutants the HRA at Stage 1 states:

"The submitted document, "Ecological Impact Assessment- Air Quality Update" records that "The Air Pollution Information System (APIS) was used to establish the baseline pollution levels at each receptor. Five pollutants were modelled as part of the analysis:

- Nitrogen dioxide (NO₂),
- Total Nitrogen deposition (N),
- Nitrous oxides (NO_x) - annual and daily rates,
- Sulphur dioxide (SO₂),
- Acidity.

The assessment considered the effects of air pollution on designated sites:

- Scenario DS1- Where the existing blast furnaces and the EAF are in operation simultaneously, and
- Scenario DS2- Where only the EAF will be in operation.

At present, the applicant proposes that scenario 1 would only apply for a maximum of 12 months, after which the existing blast furnaces would be closed down. As much of the air pollution under scenario DS1 is attributable to the existing blast furnaces, then closing these down would inevitably lead to air quality improvements close to the steelworks, and potentially further afield. However, scenario 1 is considered some detail in this HRA, to address the 12-month period...

In accordance with this [Natural England] advice, there is a likely significant effect on the Humber Estuary SAC, SPA and Ramsar site in relation to air pollution in terms of nitrogen deposition- nitrogen dioxide, total nitrogen, nitrous oxides. An appropriate assessment will be required in relation to this impact pathway. No significant effects have been identified in relation to sulphur dioxide or acidity.

With regard to potential air quality impacts from other pollutants the HRA at Stage 1 considers the following pollutants, in accordance with the advice provided by Natural England:

- ammonia (NH₃)
- volatile organic compounds (VOCs)
- heavy metals and other pollutants.

With regard to Ammonia, the HRA at Stage 1 concludes:

“Ammonia (NH₃) is often considered when assessing air quality impacts on the Humber Estuary. In this case, the Best Available Technology reference document (BREF) for iron and steel production discusses ammonia as a significant emission from coke ovens (relevant for the existing blast furnaces), but does not list ammonia as a pollutant of concern in the chapter on Electric Arc Furnaces (Remus et al. 2013). Ammonia is not covered by the existing site permit and has not been modelled for a comparable plant proposed for Teesside (Smith 2024).”

Direct information on whether ammonia could be released in relation to abatement measures is not available as the electric arc furnace is being designed to date and specific mitigation methods have not yet been defined. However, the applicant's consultants have advised that:

“Arup has undertaken further reviews of other steelmaking facilities in the UK that include the use of electric arc furnaces as part of their manufacturing processes. From the review of the Celsa Steel (in Cardiff, EPR/TP3639BH) and Liberty Steel UK's (in Newport, EPR/EP3830GH) environmental permits, ammonia is not permitted in their 'release to air' sections.”

The current understanding is that there are no stages of the industrial process, including and additional to reactions in the arc furnace itself, which either utilise ammonia or produce ammonia.

Regardless of the Habitats Regulations, North Lincolnshire Council Environmental Protection experts have requested the following planning condition:

“Prior to commencement of construction of the Electric Arc Furnace building, an updated air quality assessment shall be submitted to the Local Planning Authority for approval in writing. The assessment shall provide details of the proposed emission limit values and demonstrate the embedded technology within the Electric Arc Furnace design to mitigate any air quality impacts to an acceptable level. Thereafter such measures shall be installed and operational upon commissioning of the Electric Arc Furnace.”

This will deal with any residual risk of ammonia release in the unlikely event that the final design leads to the potential for ammonia emissions. This mitigation measure is an integral part of the project, regardless of the Habitats Regulations, so may be considered at the LSE screening stage.

The HRA at Stage 1 concludes in respect of ammonia:

“Overall, ammonia is not considered to be a pollutant of concern for this proposal and is not considered further in this Habitats Regulations Assessment (HRA). There is no likely significant effect on the Humber Estuary SAC, SPA or Ramsar site due to ammonia emissions.”

With regard to VOCs, the HRA at Stage 1 states:

“Volatile organic compounds (VOCs) are occasionally considered when assessing air quality impacts on the Humber Estuary. In this case, the Best Available Technology reference document (BREF) for iron and steel production states that, with Electric Arc Furnaces, “VOC emissions may result from organic substances adhering to the raw materials (e.g. solvents, paints) charged to the furnace. In the case of the use of natural coal (anthracite), compounds such as benzene may degas before being burnt off” (Remus et al. 2013).

Natural England has advised (letter of 19 April 2024) that:

“There is evidence that VOCs can impact ecological receptors – especially invertebrates, causing lethal and sublethal impacts. They can also interact with biogenic VOCs which can act as deterrents for plant herbivores, or attractants for pollinators. Although airborne VOCs are unlikely to directly affect plant health, there can be many interactive effects, including generation of ozone (VOCs and other pollutants plus sunlight), interaction with plant-generated VOCs and interactions with drought stresses etc. A summary of VOC impacts on plants is found in Cape (2002).

Although there are currently no set thresholds of harm for VOCs for ecological receptors, we do not agree that it is appropriate to totally exclude them from consideration for impacts on the Humber Estuary SPA/ SAC/ Ramsar. At present the air quality assessment and HRA has not calculated concentrations of VOCs at ecological receptors to indicate the scale of the issue and any impacts on the designated site.”

For the applicant, Arup has advised as follows:

“The potential impacts from VOCs (modelled as Benzene) emissions from the Proposed Development were modelled only for selected sensitive human receptors (residential properties, schools, hospitals and care homes). Concentrations were modelled and compared to both the annual mean and daily mean air quality standards of $30\mu\text{g}/\text{m}^3$ and $5\mu\text{g}/\text{m}^3$ respectively, as stipulated by the Environment Agency (EA) for benzene.

No modelled human receptor had a predicted concentration above either the annual mean air quality standard of $5\mu\text{g}/\text{m}^3$ or the daily mean air quality standard of $30\mu\text{g}/\text{m}^3$ in either of the two scenarios modelled (DS1 and DS2).”

The submitted Environmental Statement Air Quality Assessment Appendix 5.1 includes Figure 1-2 Modelled sensitive human receptors (see Appendix 6). This shows the closest reported/assessed human receptors to the Humber Estuary as being:

- R20 Appleby (6.4 km north-north-east of the application site; the Humber Estuary lies 6.4 km further on at Winteringham Ings)
- R31 53 Hilton Avenue (6km north-west of the application site; the Humber Estuary lies 3 km further on at Guinness)
- R69 Nuddock Wood Lakes (6.4km west of the application site; the Humber Estuary lies 2.2 km further on at Keadby Bridge)

In the absence of set thresholds of harm for VOCs for ecological receptors, Natural England has agreed to consider the standard for human receptors. The values given for all receptors set out in tables A-2 and A-3 of Appendix 7 of the ES) are all significantly below the air quality standard for human receptors.

The overall impacts for receptors R20, R31 and R69 have been determined to be negligible following the IAQM/ EPUK criteria. Furthermore, the predicted results have also been determined to comply with the EA's screening criteria. Given the distance of these receptors from the Humber Estuary, it is highly likely that the predicted annual mean VOC concentrations would be even lower at the Humber Estuary, with the result that potential impacts identified by Natural England are not likely to be significant in terms of SAC/SPA/Ramsar interest features.

The HRA at Stage 1 concludes in respect of VOC's:

“Overall, volatile organic compounds are not considered to be a pollutant of concern for this proposal and are not considered further in this HRA. There is no likely significant effect on the Humber Estuary SAC, SPA or Ramsar site due to volatile organic compounds.”

With regard to heavy metals and other pollutants the HRA at Stage 1 makes reference to the consultation response from Natural England dated 19 April 2024, which states that:

“..there is evidence for heavy metal impacts in invertebrates, which are a Humber Estuary SAC designation feature [sic] and supporting feature of the SPA. In several cases impacts have been observed at lower concentrations than can impact humans. This is because invertebrates generally cannot excrete heavy metals well, and due to their small size metals can concentrate within them more than vertebrates. For example, Monchanin et al. (2021) looked at As, Cd, Pb and Hg and found human-tolerable levels were harmful in some cases to terrestrial invertebrates.

Data on field-relevant concentrations are limited, and many laboratory experiments have been conducted at comparatively high concentrations, and not for a full life cycle. They also do not consider impacts of a “cocktail” of different metals, or in combination with other pollutants, as would be the case for the proposed development.”

The Air Quality Additional Information document submitted addresses heavy metals and a number of other potential pollutants. Applying a precautionary approach, potential significant effects on human receptors have been identified in relation to some metals, such as hexavalent chromium and cadmium. For clarity, the key receptors identified are

residential properties, rather than designated sites. The residential receptors highlighted are all relatively close the Steelworks (Appleby 6.4 km north-west or nearer), and are not near the Humber Estuary.

In the same manner as for VOCs, for human receptor locations R20, R31 and R69, the predicted modelling results for heavy metals, as provided by Arup, are set out in tables A-4 to A-26 of Appendix 7 to this document. In the absence of set thresholds of harm for heavy metals for ecological receptors, Natural England has agreed to consider the standard for human receptors. Arup has advised on these results as follows:

“Based on the attached results, the overall impacts for receptors R20, R31 and R69 have been determined to be negligible following the IAQM/ EPUK criteria, except for Cadmium and Chromium VI. When applying the EA’s screening criteria, compliance has been determined at the three human receptors of interest, except for Cadmium and Chromium VI.

For Cadmium, it should also be noted that the adverse impacts predicted for Cd are likely to be the result of the conservative emission factor applied to the proposed EAF in the dispersion modelling and this could be revised during the detailed design stage for the proposed EAF. For Cr VI, it should be aware that the existing background concentration is above the standard without the contribution from the proposed development.

It is acknowledged that additional emissions are associated with the implementation of the proposed EAF among both assessment scenarios DS1 and DS2, therefore mitigation measures are required in order to reduce significant effects on local air quality. Mitigation has been recommended in the air quality technical note prepared in February 2024, as follows:

‘The proposed EAF is required to meet BAT requirements as a minimum, so the exhaust flue(s) should be fitted with a suitable filter and in order to reduce the impacts of Cd, CrVI, PM10 and PM2.5. Once these mitigation measures are agreed, additional dispersion modelling with the revised emission data for post filtration should be undertaken, to confirm no significant effects would be introduced to the local air quality due to the Proposed Development following the implementation of mitigation.’

Once again, it should be noted that these human receptors are nearest to the Humber Estuary, and they are not considered to be representative of ecological sites.”

For most of the heavy metals, given the distance of receptor locations R20, R31 and R69 from the Humber Estuary, it is highly likely that the predicted values would be even lower at the Humber Estuary, with the result that potential impacts identified by Natural England are not likely to be significant in terms of SAC/SPA/Ramsar interest features. However, Cadmium and Chromium VI require further assessment.

The council’s Environmental Protection Officer (EPO) has assessed air quality impact, from a human receptor perspective and has confirmed that the development is required to meet Best Available Techniques (BAT) requirements as a minimum, so the exhaust flue(s)

should be fitted with a suitable filter and in order to reduce the impacts of Cd, CrVI, PM10 and PM2.5.

Conditions recommended by the EPO will secure suitable mitigation measures that will reduce pollutants to ensure their impact is not significant in accordance with relevant guidance. The HRA concludes in this regard that:

These mitigation measures are an integral part of the project, regardless of the Habitats Regulations, so may be considered at the LSE screening stage.

The mitigation measures are expected to effectively address concerns from Environmental Protection in relation to Cadmium and Chromium VI at receptors R20, R31 and R69 in terms of human impacts. Given the distance of receptor locations R20, R31 and R69 from the Humber Estuary, it is highly likely that the predicted values would be even lower at the Humber Estuary, with the result that potential impacts identified by Natural England are not likely to be significant in terms of SAC/SPA/Ramsar interest features.

Assessment of Welsh permits (Natural Resources Wales 2015 & 2016), as provided by the applicant, reveals that at these EAFs, the only heavy metal for which aerial emissions are controlled is mercury. The EAFs in question lie very close the Severn Estuary SAC, SPA and Ramsar site, which has similar interest features to the Humber Estuary (see figs 1 and 2 below). As the permits were issued by the Statutory Nature Conservation Body for Wales, it may be assumed that that these measures were deemed to be adequate to protect the interest features of these sites...

Construction impacts on air quality will be minimised by following best practice guidance.

Therefore, there will be no likely significant effect on the conservation objectives any of European designated sites within the zone of influence as a result of direct emissions to air, when considering the project alone in relation to "other pollutants" as described above."

In conclusion, the Stage 1 HRA determines, in accordance with advice provided by Natural England, that the plan or project is likely to have a significant effect alone or in combination with other plans and projects on the Humber Estuary Special Protection Area (SPA) and Ramsar site and the Humber Estuary Special Conservation Area (SAC).

The potential impacts requiring appropriate assessment at Stage 2 are identified as air pollution in terms of nitrogen deposition- nitrogen dioxide, total nitrogen, and nitrous oxides.

In respect of Nitrous Oxides (NO_x), the HRA at Stage 2 concludes that:

"In terms of NO_x at South Ferriby, the predicted environmental concentration is less than the NO_x critical level, according to the applicant's submitted data. This indicates that overall, the conservation objectives would not be undermined by NO_x deposition in this location (Natural England letter 02 April 2024). This conclusion applies even when the existing blast furnaces and the EAF are in operation simultaneously (applicant's scenario DS1)...."

It is therefore possible to conclude that the proposed EAF plant would have no adverse effect on the integrity of the Humber Estuary SAC/Ramsar site due to emissions of nitrous oxides (NOx)."

For Nitrogen deposition in respect of SAC/Ramsar habitats, the HRA concludes that:

At Receptor ER10 (South Ferriby), both the background deposition rate (17.8) and the projected additional dry deposition rate with background deposition (17.9) are above the lower level. This applies to scenario DS1, which is the most polluting scenario. Therefore, in this scenario, there is identified potential for harm to the most sensitive plant communities of upper saltmarsh...

At Winteringham Ings and South Ferriby, saltmarsh and reedbed habitats are constrained by floodbanks which have recently been improved by the Environment Agency, due to damage caused by the 2013 tidal surge and the potential for future overtopping. Intertidal habitats in this area are inundated by a high proportion of tides and APIS notes that nitrogen deposition is likely to be of low importance for intertidal habitats as the inputs are probably significantly below the large nutrient loadings from river and tidal inputs...

Furthermore, it may take 3-5 years for the effects of increased N deposition to have material effects on plant communities. In upper saltmarshes, there is some concern that N deposition could affect patterns of plant growth and interspecific competition (Boorman & Hazelden 2012). However, such process may take years to play out. Therefore, it appears that a temporary minor increase in nitrogen deposition would not be likely to have such effects.

Overall, it is possible to conclude that the proposed EAF plant would have no adverse effect on the integrity of the Humber Estuary SAC/Ramsar site due to nitrogen deposition."

In respect of traffic emissions of ammonia and NOx the HRA concludes:

"Tables 13.7 and 13.9 of the Traffic and Transport chapter of the submitted environmental statement show that the 1,000 ADT increase threshold is only predicted to be exceeded on a short section of the A18 by the Steelworks entrance in Scunthorpe (1860 AADT), and then only during the construction period of 22 months (i.e. not the operational period). The heavy goods vehicle threshold is only predicted to be exceeded in the operational phase, and then only on the main roads directly connecting the M180 motorway to the steelworks (430 AADT). No HGVs are predicted to travel to the steelworks other than from the two nearest junctions on the M180. This indicates with some certainty that the AADT screening threshold will not be exceeded for roads within 200 metres of the Humber Estuary SAC, SPA or Ramsar site.

Irrespective of the Habitats Regulations, construction phase and operational phase travel plans will be secured by planning conditions in order to address the concerns of National Highways and North Lincolnshire Council Highway Development Services. These consultees will inevitably require evidence that vehicle movements

will be minimised and directed along the most efficient routes. Access via the M180 junction 4 and the A18 dual carriageway will be prioritised.

Overall, there is not likely to be a material increase in vehicle movements, and thus traffic emissions within 200 metres of the Humber Estuary SAC, SPA or Ramsar site.”

For nitrogen deposition in respect of SPA/Ramsar waterbirds, the HRA at Stage 2:

“When existing blast furnaces at the steelworks cease to operate, only the EAF will be in operation. This is the applicant’s Scenario DS2. In this scenario aerial emissions of all pollutants will decrease. In this scenario, there will be no increase over the critical level or critical load within the Humber Estuary SAC, SPA or Ramsar site for any of the pollutants considered.

Considering the project alone, there is no adverse effect on the integrity of the Humber Estuary SAC or Ramsar site in terms of NOx or nitrogen deposition on saltmarsh or other habitats. As a consequence of that, there is no adverse effect on the integrity of the Humber Estuary SPA or Ramsar site in relation to the related bird species.”

In terms of air pollution, the following plans and projects have been identified that could contribute significantly to the effects of NOx and nutrient nitrogen deposition within the Humber Estuary SAC, SPA and Ramsar site and thus have in-combination effects with the proposed development:

- Keady 2 Power Station
- Keadby 3 Power Station
- North Lincolnshire Green Energy Park (NLGEP)
- New North Lincolnshire Local Plan (projected increase in vehicle movements within 200 metres of the estuary).

With regard to potential in-combination effects, the HRA at Stage 2 identifies that:

“As the proposed EAF is around 8 km east of the other projects, it is likely that prevailing winds would carry any emissions of ammonia and nitrogen from there to different parts of the estuary compared to those projects.”

Turning to the emerging New North Lincolnshire Local Plan, the HRA at Stage 2 confirms:

“Projections suggest that the Local Plan policies would not lead to a significant increase in vehicle movements at Keadby Bridge or South Ferriby. Assessment carried out by East Riding of Yorkshire Council indicate that air pollution due to vehicle emissions is not likely to have a significant effect near the Humber Bridge (James Durham, pers. comm.). Therefore, the EAF project is not likely to act in combination with the proposed submission North Lincolnshire Local Plan (2022) in relation to the effects of air quality on the Humber Estuary.”

Overall, it is concluded that the project is not likely to act in combination with other plans or projects to produce an adverse effect on the integrity of the Humber Estuary SAC, SPA or Ramsar site.

The HRA concludes that there will be no adverse effect on the Integrity of the Humber Estuary SPA and Ramsar site arising from air pollution in terms of nitrogen deposition-nitrogen dioxide, total nitrogen and nitrous oxides.

A copy of the updated HRA was provided to Natural England on 21 April 2024. At the time that this report was written no updated response has been received by Natural England to confirm whether they agree with the council's updated HRA. This matter will be updated verbally at the planning committee meeting.

Policy context

The relevant extant development plan policies against which to assess the proposed development's effect upon the natural environment, including protected species, are 'saved' policy LC2 of the NLLP, which seeks to protect SSSI's and National Nature Reserves; 'saved' policy LC4 of the NLLP, which seeks to protect areas of local nature conservation importance; 'saved' policy LC5 of the NLLP, which requires development proposals to have no adverse impact on protected species; 'saved' policy DS1 of the NLLP, which requires developments to have no adverse effect on features of acknowledged importance, including species of nature conservation importance; and policy CS17 of the NLCS, which seeks to retain, protect and enhance features of biological interest and secure biodiversity gains from developments.

Policy DQE3 (Biodiversity and Geodiversity) reiterates this protection of the biodiversity of North Lincolnshire through, amongst other things, requiring that all development schemes protect, manage and enhance natural capital, the network of habitats, species and sites of international, national and local importance (statutory and non-statutory).

Chapter 15 of the NPPF seeks to conserve and enhance the natural environment through a number of policies.

Paragraph 180 seeks to enhance the natural and local environment by, inter alia:

- (d) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- (e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.*

Paragraph 186 directs local planning authorities to apply the following principles when determining planning applications:

- (a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

- (b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- (c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- (d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

Paragraph 188 confirms that, *“The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”*

Planning assessment

The suite of application documents including those received during the processing of this planning application to which reference is made above and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the council’s Natural Environment Policy Specialist (NEPS) and Natural England within their respective jurisdictions.

Two third party comments have been received in respect of ecological matters. One is a general comment, which seeks assurance that the Linear Park [Bottesford Beck] Nature Park and ponds will not be impacted. The other response is an objection to the proposed development on behalf of Lincolnshire Wildlife Trust. This objection relates to a perceived omission of key protected species within the Environmental Statement; these species being grayling, wall and small heath butterflies. A more detailed summary of this objection is included in the Consultations section of this report above and a full copy is available on the council’s online planning register.

In response to the objection by Lincolnshire Wildlife Trust, the council’s Natural Environment Policy Specialist has provided the following commentary:

“Other consultees have raised concerns about priority species of butterfly potentially being affected by the proposal- namely the grayling, wall and small heath butterflies. This in turn is due to the ES highlighting these species as being recorded “immediately adjacent” to the application site or within 100 metres. In my experience, these species tend to be widespread within open mosaic habitats in the steelworks, and are accordingly generally recorded to 4-figure grid references i.e. references describing an area of 1km x 1km. The nearest records that I have seen have been attributed to “Yarborough Warren (South)” and the grid square SE9309. Although the point SE9300 0900 is immediately adjacent to the application site, the

quarry within SE9309 is around 300 metres away and will be unaffected by the proposals. Similarly, the submitted habitat survey map in the preliminary ecological assessment report (ES 3.2.1) shows habitats, such as acid grassland, that could support these butterflies. However, these habitats lie outside the red line boundary of the application. Baseline habitats are more accurately recorded on drawing 1 of the submitted Biodiversity Net Gain Design Report.”

On this basis it is considered that the Environmental Statement provides a robust assessment of potential impact upon protected and priority species. The Natural Environment Policy Specialist has confirmed that the survey methods used, and the survey effort deployed are appropriate for the site in question. There is considered to be no significant impact upon grayling, wall or small heath butterfly populations as a result of this proposal.

With regard to the potential impacts on other ecological receptors and biodiversity, the council's NEPS has advised that:

“The submitted “Ecological Impact Assessment- Air Quality Update” indicates that if the proposed Electric Arc Furnace (EAF) is operated in conjunction with the existing blast furnaces, this could increase annual NOx deposition at Risby Warren SSSI above the critical load. This could have significant impacts on lichen heath communities and acid and calcareous grassland plant communities, contrary to saved Policy LC2 which safeguards the interest features of SSSIs.”

If the EAF is operated alone, with the existing blast furnaces becoming unused, this would remove the significant impact due to this project. It is currently proposed that the existing blast furnace would cease to be used within 12 months of operation of the EAF... If all furnaces continue to be used, then mitigation measures at Risby Warren may be required.

Therefore, whilst the operation of the proposed EAF in tandem with the existing blast furnaces on the British Steel site have the potential to result in significant adverse impacts on Risby Warren SSSI, the NEPS confirms that this impact would not accrue once the existing blast furnaces are decommissioned as much of the air pollution is attributable to the existing blast furnaces. The decommissioning of the existing blast furnaces would inevitably lead to air quality improvements close to the steelworks, and potentially further afield. From discussions with the applicant, it is anticipated that the existing blast furnaces would continue to operate in tandem with the new EAF for a period not exceeding 12 months, at the end of which both existing blast furnaces are expected to be decommissioned. On this basis, in accordance with the assessment provided in the ES a suitable mechanism (UU) has been included to limit the simultaneous operation of the blast furnaces and EAF to a 12 month period following commissioning of the EAF. With this mechanism in place, it is considered that there will be no significant adverse impact on Risby Warren SSSI.

Much as for Risby Warren SSSI, the decommissioning of the existing blast furnaces within 12 months of commissioning of the EAF would reduce the effects of air pollution below the baseline level at both Broughton Alder Wood SSSI and Broughton Far Wood SSSI.

Applying UKHabs classification, the vast majority of the application site comprises “developed land- sealed surface”, buildings, and “other developed land”. There are small

patches of dense scrub, modified grassland, and other neutral grassland. A measurable net gain is proposed to be delivered on-site by the planting and enhancement of scrub and some improvement of grassland. The NEPS has checked the submitted statutory biodiversity metric and confirmed that it appears to have been completed fairly and accurately. The overall result is a measurable net gain in habitat units of 1.25 units or +13.05%, which is acceptable. No hedgerows or watercourses (other than a small length of culvert) will be affected.

The Natural Environment Policy Specialist has recommended conditions to minimise harm to protected and priority species and habitats and to secure the proposed measurable net gain in biodiversity. A condition would secure the submission of a Species Protection Plan detailing measures to avoid harm to bats, water voles and nesting birds during demolition, clearance and construction works; details of road gullies and road drainage design to minimise harm to amphibians; and, prescriptions for dealing with non-native invasive species identified on site. A further condition will secure the proposed biodiversity enhancement, through additional planting and aftercare of mixed native scrub and neutral grassland of high biodiversity value in suitable soils. A final condition will secure the implementation of both the Species Protection Plan and the Biodiversity Management Plan in accordance with agreed timings.

Subject to the recommended conditions the Natural Environment Policy Specialist has raised no objection to the proposed development in respect of the potential impact on ecological receptors, or biodiversity grounds.

Having reviewed the submissions of the expert consultants appointed in support of the application, the responses received in objection to the application and taking into account the consultation responses from the Natural England and the council's own Natural Environment Policy Specialist it is considered that the proposed development is unlikely to have any adverse impact on protected or notable species or habitats and that mitigation of the effects of the development with regard to the natural environment, including the proposed biodiversity enhancements, are both appropriate and proportionate. Notwithstanding representations received in opposition to the proposed development, which are acknowledged and understood to be material concerns, the proposed development, appropriately mitigated as put forward by the applicant within the submitted details is considered to accord with policies DS1, LC2, LC4, and LC5 of the NLLP and policy CS17 of the NLCS as well as the relevant policies in the emerging New Local Plan and the NPPF identified above.

Greenhouse gases

The assessment of the effects of the proposed development in respect of greenhouse gas emissions is provided within Chapter 7 of the Environmental Statement (ES). This chapter of the ES identifies the potential effects from Greenhouse Gas (GHG) emissions associated with the construction and operation of the proposed development.

Chapter 7 summarises the legislative and policy framework related to GHG emissions, details the methodology used for the assessment and describes the existing and projected future local and regional baseline environment in the area surrounding the proposed development. Following this, the design, mitigation, and residual effects of the proposed development are assessed, along with any limitations of the assessment.

Chapter 7 of the ES is supported by a technical appendix (Appendix 7.1) which provides full details of the Greenhouse Gas Emissions Assessment, assumptions, and limitations.

This assessment determines whether the proposed development may affect the ability of the UK Government to meet its carbon reduction targets. A study period of 25-years has been used throughout the assessment to capture the emissions associated with the proposed development from its opening in 2025 up to 2050.

The Green House Gas (GHG) baseline is taken as the continuation of the current situation in which the proposed development is not delivered, with the existing blast furnaces continuing to operate at a similar scale and pattern to historic operations.

The methodology focuses on assessing the impact of the proposed development on GHG emissions by quantifying the net GHG emissions arising from each lifecycle stage (construction and operational stages).

The information used to inform this carbon assessment has come from a combination of project specific information available at the current design stage alongside publicly available industry benchmarks that can be used to provide a preliminary estimate of embodied carbon emissions and operational energy use (and carbon emissions).

Construction

The construction process contributes to GHG emissions through the extraction, production and delivery of materials and on-site energy consumption during construction activities. This includes:

- embodied GHG emissions associated with the extraction and manufacturing of required raw materials for construction of the proposed development
- GHG emissions from fuel consumption of vehicles used to transport materials to site
- GHG emissions from fuel/energy consumption of plant for on-site construction activities.

The ES confirms that:

“The largest source of emissions during the construction phase of the Proposed Development is expected to arise from construction materials. Within this, A1-A3 emissions (sourcing, processing and manufacture) account for 83% of total construction emissions.”

and that:

“On the basis that construction emissions result in an increase from the baseline, it is reasonable to conclude that they will result in an adverse effect. The emissions from the construction phase are small when considered in the context of national Carbon Budgets. The total estimate construction phase GHG emissions would represent 0.012% of the total Fourth Carbon Budget (five-year period).”

Operation

For the assessment of GHG emissions associated with the operation of the proposed development, the study takes account of emissions associated with the extraction, processing, and transport of input raw materials. Annual emissions are estimated for each year within the 25-year study period. In addition, GHG emissions associated with the proposed development's operational (including process) energy consumption is considered within the assessment.

The ES explains that:

“Due to the complexity and magnitude of global emissions contributing to climate change, it is not currently possible to determine the direct effect of a single project's emissions on the global climate. Therefore, for the purposes of this chapter, and in accordance with IEMA guidance, the significance criteria for the GHG assessment will take account of the Proposed Development's GHG emissions in the context of policy, and specifically relative to a comparable baseline, so as to understand consistency with the UK's target of net zero by 2050. This will consider the absolute/gross GHG emissions arising from the Proposed Development. These GHG emissions will be considered in the context of the UK's Carbon Budgets and whether the Proposed Development contributes to reducing GHG emissions consistent with a 1.5°C compatible trajectory towards net zero by 2050.”

It continues to consider the limitations of the GHG assessment as:

- *The calculations assume a scrap steel carbon factor of 0kgCO₂e per kg as this assessment only considers the steel-making process and details of the processing required to convert the scrap steel to a usable feedstock are currently unknown.*
- *The calculations assume both electricity and natural gas usage in the steel making process. The natural gas factor used in the modelling is from the DESNZ GHG Conversion factors and is kept constant beyond 2023. This is due to the uncertainties around future alternatives e.g. hydrogen that will be used in the steel making process in future years; and*
- *The electricity GHG factors used are from the DESNZ Green Book Supplementary Guidance and was last updated in November 2023. There is therefore some uncertainty in the rate of decarbonisation of electricity factors in future years as a result of recent policy announcements from UK Government.*

With regard to operational GHG emissions the ES provides the following commentary:

“During the operational phase of the Proposed Development, use-related emissions will contribute significantly to the total GHG emissions of the Site and typically represent the largest component of Proposed Development emissions when considered in aggregate over the whole study period. The GHG assessment has included the emissions impacts arising from feedstock supplies, as well as the operational energy profile, in order to allow for appropriate contextualisation of impacts. The transition from the site's operations from using the existing feedstocks (i.e. iron ore, coal and coke) with feedstocks for the Proposed Development (i.e.

scrap steel and iron) align with wider national and industry policy to support decarbonisation of steel making and wider decarbonisation of industry in the UK.”

The largest source of emissions during the operational phase of the proposed development is expected to arise from the input of raw materials, including the associated transport of raw materials to the site.

The ES concludes that the Do Something scenario (EAF) has considerably lower operational GHG emissions than the current baseline position due to the raw material input and associated transportation.

With regard to raw material input it is confirmed that:

“The emissions for the DS scenario are based off the assumption that the scrap steel feedstock has a carbon factor of 0kgCO₂e per kg. If processing of the scrap steel is required then in reality, the carbon factor will be non-zero, albeit low.”

With regard to the transportation of raw materials the ES states:

“There is a reduction in GHG emissions in the DM and DS scenarios up to 2050 due to the decarbonisation of both road and shipping transport methods. The estimation of rates at which transport will decarbonise between 2025 and 2050 are based on the projections included within the UK Transport Decarbonisation Plan. The GHG emissions for the DS scenario are considerably lower than the emissions for DM as the scrap steel feedstock will be sourced entirely from the UK, whereas the DM raw materials are sourced globally.”

Finally, with regard to operational energy use emissions, the assessment confirms that there is:

“a very large reduction in operational energy reflecting the shift from use of predominantly coal/coke for heating to the EAF process relying more heavily on electricity. The DS scenario sees reducing operational emissions over time as this electricity use decarbonises out to 2050.”

In overall conclusion the GHG emissions assessment states that:

“The UK is reliant on increasing electric arc furnace processes as part of the national trajectory to net zero in 2050, given the contribution that steelmaking has to other sectors like construction. The Climate Change Committee’s Balanced Net Zero Pathway includes electrification of manufacturing and construction processes, therefore this pathway is dependent in part on including electric arc furnaces for steelmaking - in order to reduce emissions from this sector at the rate necessary for the industry to achieve the 2050 net zero target. As highlighted in UK Steel’s Net Zero Steel report, electrification plays a major role in achieving the target for decarbonisation in the sector by 2035. For decarbonisation beyond 2035, the target is for hydrogen-based steelmaking which is only achievable with electric arc furnaces.

On this basis it is concluded that GHG Emissions associated with the Proposed Development result in a Beneficial Significant Effect.”

Policy context

The relevant development plan policy with regard to greenhouse gas emissions is policy CS18 of the Core Strategy for North Lincolnshire. This policy promotes development that utilises natural resources efficiently and sustainability. It includes a series of specific requirements, including (amongst others):

4. *Meeting required national reductions of predicted CO₂ emissions by at least 34% in 2020 and 80% in 2050 by applying the following measures on development proposals. Requiring all industrial and commercial premises greater than 1,000 square metres to provide 20% of their expected energy demand from on-site renewable energy until the code for such buildings is applied nationally. Where developers consider these Codes and targets cannot be met on the basis of viability, they will be required to provide proof through open book discussions with the council at the planning application stage.*
5. *Ensuring building design reduces energy consumption by appropriate methods such as high standards of insulation, avoiding development in areas subject to significant effects from shadow, wind and frost, using natural lighting and ventilation, capturing the sun's heat, where appropriate.*
6. *Supporting development that minimises the consumption and extraction of minerals by making the greatest possible reuse or recycling of materials in new construction, and by making best use of existing buildings and infrastructure.*
9. *Supporting development that will help to reduce the need to travel for people using that Development.*
10. *Ensuring development and land use helps to protect people and the environment from unsafe, unhealthy and polluted environments, by protecting and improving the quality of the air, land and water.*

Spatial Objective 11 of the emerging New Local Plan seeks, amongst other things, to promote the use of low and zero carbon technologies and decarbonisation by encouraging appropriate building design, supporting businesses to adapt and decarbonise and promoting sustainable land management.

Policy DQE7 (Climate Change and Low Carbon Living) of the New Local Plan set out the requirements of applications to be designed to mitigate the impact of climate change and minimise carbon emissions to meet the climate change challenge.

Paragraph 157 of the NPPF directs that the planning system should “*support the transition to a low carbon future in a changing climate...*” and that it should “*shape places in ways that contribute to radical reductions in greenhouse gas emissions...*”.

Paragraph 159 goes on to state that new development should be planned in ways that:

(b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the government's policy for national technical standards.

Planning assessment

The ES provides an appropriate assessment of greenhouse gas emissions. The ES acknowledges that there are a number of unknowns at this stage due to uncertainties around final technologies to be installed, materials to be used in the construction of the development and other matters including vehicles/equipment to be used both in construction and during the operational phase of the development.

The replacement of the existing blast furnaces with the proposed EAF will result in a significant reduction in greenhouse gas emissions compared to the existing baseline position. Greenhouse gas emissions associated with the EAF running in tandem with the existing blast furnaces beyond the anticipated 12 month period have not been assessed. As such a Unilateral Undertaking (UU) is proposed to limit the simultaneous operation of the blast furnaces and EAF to a 12 month period following commissioning of the EAF, which will ensure that the significant reduction in greenhouse gas emissions and associated benefits will be secured.

It is noted that criterion 4 of policy CS18 of the NLCS imposes a restriction upon new commercial premises greater than 1,000 square metres to provide 20% of their expected energy demand from on-site renewable energy. The aim of this requirement is to secure a reduction in CO₂ emissions in North Lincolnshire of 80% by 2050. This matter is acknowledged by the applicant and assessed as part of the submitted Planning Statement.

It should be noted that the overarching aim of policy CS18 is the promote development that utilises natural resources as efficiently as possible. The applicant considers that the proposed development aligns with this policy aspiration, particularly it is noted that:

“The switch to using a high proportion of recycled materials will significantly reduce the consumption of natural resources and would reduce waste through recycling scrap steel, sourced domestically. In particular, the reduction in use of fossil fuels as a direct fuel source will reduce consequently reducing on-site carbon emissions.”

With regard to criterion 4 specifically the Planning Statement provides a robust justification as follows:

- *The manufacture of steel requires very large amounts of reliable and consistent energy, over 500,000MWhrs of electricity per year, and it is not considered that on-site renewable energy is a practicable proposition nor that this policy requirement was framed with such an energy reliant and intensive industry in mind.*
- *The proposed development is not a new site or business but a replacement for a long-established industrial process, with the proposals predicated on achieving significant long-term reduction in CO₂ emissions and de-carbonising the production process in comparison to the baseline of doing nothing. Furthermore, it is expected that the National Grid will continue to decarbonise with increasing amounts of National grid energy being via low carbon and renewable energy technologies. Therefore, the proposals align with the intent and spirit of this Policy.*

- *Moving from blast furnaces to EAF steelmaking will significantly reduce British Steel's Scope 1 (direct) greenhouse gas emissions from burning fossil fuels as well as contributing to air quality improvements.*
- *Scope 2 (indirect) emissions associated with electricity generation will also reduce as the grid continues to decarbonise.*
- *Reducing reliance on raw materials imported from abroad through the use of scrap metal will reduce the Scope 3 (indirect) emissions.*

The applicant's justification highlights the benefits of the proposed development in delivering a significant reduction in greenhouse gas emissions. It also highlights the impracticality of compliance with criterion 4 for such an energy intensive operation. On balance it is considered that the proposed development is in general accordance with policy CS18 and the Development Plan as a whole, in that it represents a sustainable form of development that results in a significant reduction in CO₂ by driving the decarbonisation of a key industry and major emitter.

Based on the assessment set out in the ES and Planning Statement, the development raises no issues in respect of greenhouse gases and no conflict with planning policy has been identified in this regard.

Climate change resilience

The assessment of the effects of the proposed development in respect of climate change resilience is provided within Chapter 8 of the Environmental Statement (ES). This chapter of the ES identifies the potential effects of climate change on the construction and operation of the proposed development and other identified environmental receptors affected by the proposed development. It begins by setting out the policy context in respect of climate change and resilience.

Two separate assessments have been undertaken in respect of the climate resilience topic:

- Climate Change Resilience (CCR) assessment – this will identify what climate changes are expected to occur in the future, and the vulnerability of the proposed development to those identified changes in climate.
- In-combination Climate Change Impact (ICCI) assessment – this will identify where a changing climate will combine with or exacerbate environmental impacts arising from the proposed development, resulting in significant effects on environmental receptors within the scope of the EIA which are not present under current climate conditions.

Chapter 8 of the ES is supported by a technical appendix (Appendix 8.1) which provides full details of the CCR assessment justifications and conclusions.

With regard to the construction phase the ES concludes that:

“All weather and climate-related risks to construction activities are expected to be mitigated through best practice site management, including relevant specific measures set out in the Outline Construction Environmental Management Plan (CEMP). The best practice site management measures and relevant specific measures will provide a level of resilience to the scheme throughout construction.

Taking this mitigation into consideration, both the climate change resilience and in-combination climate change impacts assessments during construction have been scoped out.”

This conclusion is largely based on the fact that it is expected that construction will take place within the next two years, and it is not considered that climate change will significantly increase the vulnerability of the proposed development during this time period.

Climate Change Resilience (CCR) Assessment

The study area for the CCR assessment is the area within the red line boundary for the site and includes all potential climate hazards for infrastructure and assets associated with the proposed development. Information regarding historical climate conditions for the proposed development were obtained from the UKCP18 observed climate datasets.

The CCR assessment considers the resilience of the proposed development to the physical impacts of climate change. The ES confirms that the relevant (IEMA) guidance defines Climate Change Resilience as the *“ability to respond to changes in climate. If a receptor or project has good climate change resilience, it is able to respond to the changes in climate in a way that ensures it retains much of its original function and form. A receptor or project that has poor climate change resilience will lose much of its original function or form as the climate changes”*.

The CCR assessment qualitatively assesses the impacts and risks of climate change on the scheme based on professional expertise and judgement.

The following climate change hazards have been considered in the CCR risk assessment:

- extreme heat
- drought
- flooding
- storm events.

During the operational phase of the proposed development, there is potential for the anticipated changes to the climate and extreme weather events to impact on the proposed development in the medium to longer term.

The significant risks identified as significant within the preliminary CCR assessment are:

- extreme heat causing heat related illness for staff
- overheating of buildings, making working within in them difficult and adding risks to staff.

The ES confirms that British Steel are already aware of the impacts of extreme heat. They have a Hot Weather Plan with an array of mitigation measures designed to ensure the safety of staff, to protect equipment and ensure that operations are not impacted by extreme weather. These plans are proposed to be continued in the future and adapted where necessary.

In-combination Climate Change Impact (ICCI) Assessment

The ICCI assessment determines the extent to which climate change exacerbates a potential effect of the proposed development on any environmental receptors.

The ICCI assessment followed the same approach to assessing impacts, identifying receptors, and determining significance as for each of the individual ES topics, but with the added consideration of future climate change projections.

The initial assessment of significant environmental receptors was conducted by each environmental discipline as per each relevant topic chapter. Once all other environmental disciplines had completed their assessments, reviews took place between the climate resilience team and the relevant environmental expert. The assessment of significance was completed by the climate change specialist and environmental specialists from the relevant topics working together to provide a qualitative assessment of significance.

While each environmental lead did not conclude the climate change projections would exacerbate the impacts outlined in each topic chapter, the following topics noted areas for further consideration:

- *Chapter 5: Air Quality – as per the air quality chapter, all assessment conclusions will need to be updated as part of the permitting requirements; however, it is unlikely that the climate change projections will have a significant impact.*
- *Chapter 6: Biodiversity – not all spring surveys have been completed at time of assessment, this may impact the assessment conclusions if any surveys find any additional receptors (i.e. water vole) not currently included within the biodiversity assessments. However, it is unlikely that the climate change projections will have a significant impact.*
- *Chapter 11: Noise and Vibration – an increase in rainfall and strong winds, and extreme events are likely to degrade the material of the acoustic louvres around the main building faster than currently. It is likely this will require more frequent maintenance; however, this is not likely to be a significant impact.*
- *Chapter 13: Traffic and Transport – it is not likely that climate change projections will have a significant impact on the receptors scoped into the assessment however, it may be that flooding on the Site could reroute operational HGVs around the wider British Steel site. However, it is unlikely that the climate change projections will have a significant impact.*
- *Chapter 14: Water Environment and Flood Risk – the current design of drainage of the Site is sized for a 1 in 100-year storm event with a 40% uplift for climate change, it may be that within the operation of the Proposed Development the Site may start to see exceedance events (e.g. 1 in 200 year events etc). This is likely to cause flooding on the Site. In addition, the private ditch on the Site that collects surface water drains through the inceptor pond and therefore if there is increased flow into this ditch there is the potential for petrol or oils to be washed out of the inceptor pond. Finally, with an increase in water across the Site there is potential for further pollutants (e.g. ammonia) to be immobilised in the silt around culverts into the surrounding water courses. Further*

details are provided within the Water Environment chapter; however, it is unlikely that climate change projections will alter the current significance conclusions.

The ICCI assessment concluded that there were no significant In Combination Climate Change Impacts identified during the operation of the proposed development on the basis that no new significant effects were identified.

The ES concludes that no additional mitigation for climate resilience effects are considered necessary.

Policy context

The relevant development plan policy with regard to climate change is policy CS18 of the Core Strategy for North Lincolnshire. This policy promotes development that utilises natural resources efficiently and sustainability, specifically with regard to climate change. It includes a series of specific requirements, including (amongst others):

1. *Meeting high water efficiency standards and incorporating new technologies to recycle and conserve water resources.*
2. *Requiring the use of Sustainable Urban Drainage Systems (SuDS) where practicable.*
3. *Supporting the necessary improvement of flood defences and surface water infrastructure required against the actions of climate change and preventing development in high flood risk areas wherever practicable and possible.*
4. *Meeting required national reductions of predicted CO2 emissions by at least 34% in 2020 and 80% in 2050 by applying the following measures on development proposals. Requiring all industrial and commercial premises greater than 1,000 square metres to provide 20% of their expected energy demand from on-site renewable energy until the code for such buildings is applied nationally. Where developers consider these Codes and targets cannot be met on the basis of viability, they will be required to provide proof through open book discussions with the council at the planning application stage.*
5. *Ensuring building design reduces energy consumption by appropriate methods such as high standards of insulation, avoiding development in areas subject to significant effects from shadow, wind and frost, using natural lighting and ventilation, capturing the sun's heat, where appropriate.*
6. *Supporting development that minimises the consumption and extraction of minerals by making the greatest possible reuse or recycling of materials in new construction, and by making best use of existing buildings and infrastructure.*
7. *Supporting development that seeks to minimise waste and facilitates recycling and using waste for energy where appropriate.*
8. *Ensuring that development and land use in areas close to the Humber Estuary and rivers responds appropriately to the character of the area, in the interests of preserving and making best use of limited resources.*

9. *Supporting development that will help to reduce the need to travel for people using that Development.*
10. *Ensuring development and land use helps to protect people and the environment from unsafe, unhealthy and polluted environments, by protecting and improving the quality of the air, land and water.*

Consideration of climate change is embedded throughout the emerging New Local Plan. Spatial Objective 11 seeks to address and reduce the causes and impacts of climate change in North Lincolnshire, contributing to achieving safer environments and communities. Amongst other things it seeks to promote the use of low and zero carbon technologies and decarbonisation by encouraging appropriate building design, supporting businesses to adapt and decarbonise and promoting sustainable land management.

Policy DQE7 (Climate Change and Low Carbon Living) of the New Local Plan set out the requirements of applications to be designed to mitigate the impact of climate change and minimise carbon emissions to meet the climate change challenge.

Chapter 14 of the NPPF also seeks to meet the challenge of climate change. Paragraph 157 directs that the planning system should “*support the transition to a low carbon future in a changing climate...*” and that it should “*shape places in ways that contribute to radical reductions in greenhouse gas emissions...*”.

Paragraph 159(b) goes on to state that new development should be planned in ways that:

- (b) *can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the government’s policy for national technical standards.*

Planning assessment

The ES provides an appropriate assessment of climate change and resilience.

The Environment Agency (EA) provided advice to the Applicant at the Scoping stage, these comments were incorporated into the ES. The EA has provided formal comments in response to consultation on this planning application and have raised no objections in respect of climate change resilience.

Based on the assessment set out in the ES the development raises no issues in terms of climate change resilience.

In view of the above the development complies with National Policy in the NPPF and Policy CS18 of the NLCS.

Geology, soils and contaminated land

The assessment of the effects of the proposed development in respect of geology, soils and land contamination is provided within Chapter 9 of the Environmental Statement (ES). This chapter of the ES identifies the potential effects on geology, soils and contaminated land associated with the construction and operation of the proposed development. It starts by setting out the policy and legislative context associated with this development.

The site comprises of an industrial area in the southeast of the existing steelworks, with several large mill buildings to the west and south of the site, a smaller building in the north-east corner and open space to the centre and east of the site.

The study area used for the assessment of ground conditions, soil and land contamination has been defined by the red line site boundary plus a 250m buffer around this boundary. The assessment is supported by a Geotechnical and Geoenvironmental Desk Study, which is presented in Appendix 9.1 and is available on the council's electronic planning register. This desk study establishes the current baseline conditions and was compiled from a review of readily available published information, including historic mapping, satellite imagery, historic ground investigation data, and third-party reports.

Historically the site was used for agricultural purposes and was located adjacent to ironstone quarries. The report confirms by the 1960s, the ironstone quarries had expanded onto the site, with several sludge beds and slag heaps in the vicinity. An airstrip was also located immediately east of the site. Records indicate that there are two landfills adjacent to the site operated by British Steel: Scunthorpe Concast Landfill (1981–1992) and Yarborough Quarry (2020–).

During the early 1970s when the site was being restored, the former opencast quarries were infilled to create the current ground profile within the site. Arup has reviewed previous reports and noted that in an Atkins (2021) Geotechnical and Geo-Environmental Desk Study, that *“the backfill material comprised of quarry waste, capped with slag and may be up to 20m thick”*. The new development included mill buildings, tanks, overhead pipelines, and railway sidings. Opencast ironstone workings were operated to the east of the site throughout the 1970s.

The site is presently used for surface parking, known as Queens Car Park, and the storage of materials. Tanks, pipelines, railway sidings, drains as well as several large former steelworks buildings remain on site.

The site is underlain by the Frodingham Ironstone Member overlain by superficial deposits of sand, peat and clay. However, within the main site, all natural superficial deposits were removed, as the bedrock was used for opencast mining for ironstone extraction, with subsequent infill. Bedrock of Scunthorpe Mudstone Formation is expected to underlie the infilled ground where ironstone has been fully excavated. From the published geological records, there are two faults which are recorded 280 and 380 m north-west of the site, which trend in a northwest-southeast direction.

The underlying bedrock (Frodingham Ironstone Member) is classified as a Secondary A Aquifer; however, the Scunthorpe Mudstone Formation, which underlies the Frodingham Ironstone, is a Secondary B aquifer. The site is not within a Groundwater Source Protection Zone (SPZ).

The closest water feature to the site is the Bottesford Beck, which was rerouted from its original course on the western boundary of the site, to the east of the site. The beck is now culverted across the east of the site. There is another large body of surface water approximately 250m to the north of the site, which, based on historical mapping data, is understood to be a flooded ironstone mine.

No site-specific Unexploded Ordnance (UXO) risk assessment has been completed for the area as it is considered likely that the site is at low risk of UXO. However, the report

recommends that a site-specific detailed UXO risk assessment is completed prior to ground investigation and construction.

In addition to the provided desk-based study, the ES confirms that:

“A phase of intrusive ground investigation is assumed to be undertaken at later stages in the project design and will inform the development of mitigation measures (i.e. remediation). The conclusions of this assessment will be revisited taking into consideration the additional data. Any changes will be addressed through a remediation strategy and/or contractor’s remedial implementation plan however, significant changes to the proposed works are not foreseen. The results of any site investigation will be assessed and reported via the planning process prior to construction.”

The ES has identified a number of embedded mitigation measures that will be in place to mitigate against any land contamination effects. These measures are as follows:

- *Dust generated from areas of contaminated soils during dry weather is a potential means for migration of contaminants to both site workers and adjacent site users. Dust suppression measures should be used during site works i.e. damping down or sheeting of exposed soils. Use of appropriate site controls, abatement measures and monitoring will mitigate against potential risks.*
- *Prior to demolition of buildings/plants, an asbestos survey should be undertaken, and any asbestos contaminated waste must be disposed of appropriately at a licensed waste facility.*
- *Asbestos containing materials are expected to be present in site soils, it is likely that the greatest potential risks will be during earthworks and construction, when soils are disturbed and may allow fibres to be released into ambient air. Therefore, works will need to be carried out by a competent contractor and, where necessary, a suitably qualified experienced asbestos specialist, and employ methods to control risks to on-site workers and adjacent site users.*
- *Contractors working on the Site will require appropriate Health and Safety briefings on the types of contaminants known to exist on site and the possibility of unexpected contamination. Procedures should be in place in the event that unexpected contamination is encountered. Contractors should be provided with personal protective equipment (PPE) appropriate for the contamination expected.*
- *Positioning of the stockpiles away from the river [Bottesford Beck] or any active surface water drainage to limit any impact of surface runoff on Bottesford Beck in event of extreme rainfall event or site flooding.*
- *Condition survey of existing drainage runs. Repair where necessary. Remove and/or seal redundant drainage runs.*
- *Raw materials and fuel to be stored on site in accordance with relevant Environmental Protection Regulations.*

- *Use of appropriate pile types to prevent the creation of preferential pathways, in accordance with the guidance provided by the Environment Agency: Piling into Contaminated Sites.*
- *Zetica report assesses UXO risk on site as low. Appropriate mitigation measures include awareness briefings to site staff. Contractor to determine whether clearance certification for pile locations is required.*
- *Risk assessment and selection of appropriate grade of concrete for the ground conditions.*
- *Risk assessment and selection of appropriate potable water pipe materials for the ground conditions.*

Consideration has been given to the impacts on human health receptors and environmental receptors during the construction phase.

With regard to the impacts on human health receptors the main effects for construction workers would result from the excavation of potentially contaminated materials, exposure to contaminated dust and groundwater and ground gas. It is considered that the embedded mitigation as detailed above including safe working practices, use of appropriate PPE, and implementation of a CEMP, there would be *negligible* effect to construction workers and users of adjacent sites and therefore the potential impacts are confirmed to be *not significant*.

With regard to the impacts on environmental receptors the ES has identified several plausible pollutant linkages to controlled water. These are the exposure of contaminated soils due to the removal of hardstanding, resulting in additional infiltration of rainwater; accidental leaks and spills during construction; and piling activities that could drive contaminant down into the groundwater. Overall the assessment concludes that the *“sensitivity of receptors is low for the Secondary B Aquifer and medium for Bottesford Beck and the Secondary A aquifer”*. As such the magnitude of the potential impacts, with embedded mitigation, is considered to be either *negligible* or *minor* and therefore *not significant*.

The conceptual model has identified that unexploded ordnance may pose an explosion risk to construction workers and adjacent site users if encountered during excavation works or piling activities during construction. General risk mapping shows the site to be of low risk however the magnitude of impact is assessed to be *moderate*. The effect is assessed to be *minor adverse* and not *significant*.

In conclusion, no significant construction phase impacts have been identified, owing to the implementation of embedded mitigation measures. Further ground investigation prior to construction is required to characterise the risk presented from contaminated soil and groundwater, ground gas and UXO; this will be secured by condition. An asbestos survey and removal should also be conducted prior the demolition of any buildings or associated infrastructure.

Potential impacts during operation have been scoped out, as any contamination identified during the construction phase would be subject to remediation. As a result, no significant impacts would be anticipated during operation of the proposed scheme.

Policy context

The most relevant extant development plan policies against which to assess the proposed development's effect upon land contamination and ground conditions are 'saved' policy DS1 of the NLLP, which seeks to prevent development from resulting in pollution of water, air or land; 'saved' policy DS7 of the NLLP, which requires contamination to be overcome by remedial measures or improvements; 'saved' policy DS15 of the NLLP, which seeks to protect the quality and quantity of water resources; and policy CS18 of the NLCS which seeks, inter alia, to protect people and the environment from unsafe, unhealthy and polluted environments, by protecting and improving the quality of the air, land and water.

Policy DM1 (General Requirements) of the emerging New Local Plan also confirms that planning permission will only be granted if:

it can be demonstrated that the levels of potentially polluting emissions, including effluent, leachates, smoke, fumes, gases, dust, steam, smell or noise do not pose a danger by way of toxic release; result in land contamination; pose a threat to current and future surface or underground water resources; or create adverse environmental conditions likely to affect nearby developments and adjacent areas.

Sections 11 (Making effective use of land) and 15 (Conserving and enhancing the natural environment) of the NPPF are relevant in the consideration of the application.

Paragraph 180 states that planning policies and decisions should contribute to and enhance the natural and local environment by:

- (e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.*
- (f) *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

Paragraph 189 requires planning decision to ensure that:

- (a) *a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);*
- (b) *after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and*
- (c) *adequate site investigation information, prepared by a competent person, is available to inform these assessments.*

Paragraph 190 makes it clear that *"Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner."*

Together these policies all seek to protect against the potential for contamination and to remediate existing contaminated sites.

Planning assessment

The suite of application documents and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the council's Environmental Protection team and the Environment Agency within their respective jurisdictions.

No objections or concerns have been raised by third parties in respect of contamination.

With regard to the potential impacts of the development upon ground conditions, soils and land contamination, the council's Environmental Protection Officer (EPO) makes reference to Section 6 of the submitted desk study, which includes a Geotechnical and Geoenvironmental Risk Register. The report concludes that:

“Ground investigation will be required to develop a better understanding of the geoenvironmental and geotechnical risks at The Site, to inform contamination risk assessments and remediation strategy, and for geotechnical design purposes. The geotechnical and geoenvironmental risk register identifies mitigation is available and can be implemented as part of the proposed scheme to address all identified ground-related risks”.

The EPO has confirmed that they agree with the recommendations for an intrusive ground investigation to establish the extent and nature of contamination to inform risk assessments and a development-specific remediation strategy, as well as informing geotechnical assessment and scheme design. A condition is recommended to secure the proposed intrusive ground investigation prior to commencement of development.

The EPO has also confirmed in respect of asbestos that:

“An appropriate survey should be undertaken to identify any asbestos containing materials in existing buildings or elsewhere on the application site (including fly-tipped waste or demolition rubble). Asbestos containing materials must be safely removed prior to demolition and site clearance, or conversion of existing buildings, to avoid causing risks to public health and the environment. Asbestos contaminated waste must be disposed of appropriately at a licenced waste facility. The legal requirements for managing and working with asbestos are set out in the Control of Asbestos Regulations 2012.”

Subject to the recommended conditions the recommended conditions the EPO has raised no objection to the proposed development with regard to the potential impacts of land contamination of the risk to public health in this regard.

Having given due regard to the expert information submitted in support of the application and the consultation responses from the council's Environmental Protection department. It is considered that the risks of an adverse impact in respect of the contamination of land or controlled waters is low and that there would be appropriate measures to ensure adequate protection. Suggested conditions have been offered where the consultee is of the opinion that controls are necessary. Therefore, the proposed development, appropriately mitigated, is considered to accord with policies DS1, DS7 and DS15 of the NLLP and policy CS18 of

the NLCS with regard to contamination as well as the relevant policies in the emerging New Local Plan and the NPPF identified above.

Human health

The assessment of the effects of the proposed development in respect of human health is provided within Chapter 10 of the Environmental Statement (ES). This chapter identifies the potential effects on Human Health associated with the construction and operation of the proposed development. It starts by setting out the policy and legislative context associated with this topic area.

The Human Health assessment considers the impacts of the proposed development on health determinants (social, economic and environmental factors that influence health) and the resulting effects on the health of the population within the study area.

This chapter is supported by a technical appendix providing the health assessment evidence review (Appendix 10.1).

The Health assessment's study area considers populations within a 1.5km radius from the site and makes an assessment of the proposed development in respect of both the construction and operational phases.

Construction

With regard to construction traffic the assessment assumes that the majority of traffic will travel to/from the M180 via the A18 and A15. It concludes that:

“it would be unlikely that there would be any significant change in severance, non-motorised user amenity or fear and intimidation along the A18 due to construction traffic. Therefore, the magnitude of traffic and connectivity impacts is considered to be negligible... No adverse effects on vulnerable groups in the study area, such as children, has been identified.”

The assessment of neighbourhood amenity considers changes to the perceived quality of and/or use of the local environment arising from combined environmental effects (noise, air quality, visual impacts and traffic effects). This includes effects experienced by the affected communities in residential properties and other sensitive receptors, and in the public realm including streets, footpaths and public spaces.

It is noted that the area directly around the site is industrial land. The site is separated from community receptors and public realm by the adjacent industrial areas and concluded that:

“No significant residual air quality, noise, visual or traffic effects resulting from construction activity or construction traffic have been identified. No potential health effects have been identified as a result of individual noise, air quality or traffic effects. Based on these assessments and taking into account the distance of the site from populated areas and public spaces within the study area, the magnitude of change in neighbourhood amenity is assessed to be negligible.”

With regard to publicly accessible green space, the assessment identifies Ashby Ville Nature Reserve approximately 650m south of the site of the proposed development, just

south of the A18; but considers that most users will access this space via residential areas and footpaths to the west of it, rather than crossing the A18. *“Therefore, the magnitude of impact on access to and quality of this green space is considered to be negligible.”*

With regard to employment and economics, the assessment identifies that:

“The construction phase of the Proposed Development will result in a small temporary increase in construction employment opportunities within the study area. The identified 515 FTE construction jobs equates to approximately 0.3% of the population of North Lincolnshire (including the working-age and nonworking-age population). The proportion of jobs likely to be taken up by local people is not known, but it is considered that skilled and managerial roles would be more likely to be undertaken by the contractor’s existing staff, with a higher proportion of low skilled and low paid jobs available to local people. Therefore, this is considered to result in a negligible magnitude of impact on employment and economics.”

and:

“there are high levels of income and employment deprivation in the study area and North Lincolnshire, indicating a high proportion of people who are economically vulnerable... Income levels can determine the quality of people’s accommodation, food and healthcare provision which are key determinants for quality of life and health outcomes.”

This section of the report concludes that the proposed development would result in a *minor beneficial* health effect, which is considered *not significant*.

There are no specific commitments in place for apprenticeships, links to local colleges or other measures to promote training opportunities to the local community during the construction of the proposed development. Therefore, the construction phase is considered to result in a *negligible* magnitude of impact on local education and training.

Operation

The assessment of operational traffic presents a similar assessment and conclusion to that of construction traffic, this being that:

“traffic and transport effects during the operation phase do not result in any noticeable changes in respect to severance, non-motorised user amenity, and fear and intimidation, and are not significant.”

With regard to neighbourhood amenity it is concluded that:

“taking into account the distance of the site from populated areas and public spaces within the study area, the magnitude of change in neighbourhood amenity is assessed to be negligible.”

The assessment of employment and economics cross-references Chapter 12 (Socioeconomics) of the ES, which states:

“while the proposed Electric Arc Furnaces (EAFs) will eventually replace the existing blast furnaces, British Steel intend to retain and operate the existing blast furnaces until there has been a complete transition to the EAFs. The timeline for this transition is unclear. Therefore, at this stage, it is not possible to ascertain the impact of this transition on job numbers. Whilst it is acknowledged that the change in operations will result in changes to employment, this is associated with the cessation of operation of the blast furnaces rather than the construction of the EAFs.”

There are anticipated to be 194 full time equivalent (FTE) direct, indirect and induced jobs associated, in isolation, with the operation of the new EAFs. However, the eventual cessation of the blast furnaces has the potential to impact existing job numbers within the wider site of the proposed development. In this regard, the assessment concludes:

“These additional jobs will be relevant to people with work experience in the manufacturing sector within North Lincolnshire, but the proportion of jobs that will be taken up by local people is not known. Therefore, the magnitude of impact on employment and economics is considered to be negligible.”

Similar to the assessment of construction impacts, a minor beneficial health effect, which is considered *not significant* is also predicted, due to high levels of income and employment deprivation being identified in the study area.

The assessment also considers potential future inward investment that may accrue as a result of the proposed development as follows:

“The transition to EAFs represents a shift toward more sustainable industries within the study area, North Lincolnshire and the Humber region as a whole, as part of the transition to net zero carbon. It is understood that this transition is necessary for the resilience of the industry and the continued provision of employment opportunities. The contribution of the Proposed Development to the decarbonisation of the Humber region has the potential to promote increased investment and result in wider economic benefits for the region, including more employment opportunities. This could in turn result in increased access to good employment and associated income levels which would improve quality of life and health outcomes in the study area and North Lincolnshire. While effects from future inward investment relating to the Proposed Development are difficult to quantify, the magnitude of impact on employment and economics is considered to be low.”

With regard to education and training, the report assumes that on-site training will be provided through jobs associated with the operation of the EAF and states that:

“As the population of North Lincolnshire employed in elementary or process, plant and machine operations related jobs is higher than the national average¹⁹ (13% and 14% compared to 7% and 10%, respectively) this specific industrial training would be relevant to the existing workforce. The transition from blast furnaces to EAFs is important for the transition to net zero carbon; therefore, related training is advantageous for the existing workforce and potential future employees.”

However, there are no specific commitments in place for apprenticeships, links to local colleges or other measures to promote training opportunities to the local community during

the operation of the proposed development. Therefore, the operation phase is considered to result in a negligible magnitude of impact on local education and training.

With regard to mitigation, the report recommends that a Local Labour Agreement (LLA) should be established for both the construction and operational phases of the development, to encourage the uptake of training, apprenticeships, employment opportunities of the proposed development by people living in North Lincolnshire. A Construction Environmental Management Plan (CEMP) will be provided prior to construction commencing, setting out and requiring industry best practice mitigation for any construction related health effects.

Policy context

Chapter 14 (Sustainable Communities) of the NLCS emphasises that *“all local people have ready access to those services and facilities they need for their everyday lives and that they contribute positively to the health and well-being of the community.”*

The supporting text to Chapter 14 of the NLCS at paragraph 14.4 refers to delivering sustainable development in accordance with national planning policy. Under the Planning Policy Statement (PPS), sustainable development is required to:

“contribute to the creation of safe, sustainable, liveable and mixed communities with good access to jobs and key services for all members of the community”.

Paragraph 14.6 of Chapter 14 of the NLCS states *“Major development proposals such as large mixed-use areas or urban extensions should have regard to the potential health impacts of proposals.”*

The emerging New North Lincolnshire Local Plan sets clear visions and objectives for future development, addressing needs and opportunities in relation to housing, the economy, community facilities, and infrastructure.

Paragraph 2.43 identifies health inequalities as a key challenge and opportunity for the Local Plan, with the goal of improving health outcomes across the entirety of the North Lincolnshire population.

The Local Plan references health as a factor in spatial objectives. Spatial Objective 9 (Enabling Improved Quality of Life) identifies the wider benefits of natural environment, capital, ecosystem services and green infrastructure on health outcomes.

Policy SS3 (Development Principles) outlines requirements that new development contributes toward healthy communities and places and considers the health impact of development and the needs of existing and future users.

Policy CSC1: Health and Wellbeing lists principles to improve health and wellbeing in North Lincolnshire. These include:

Making the potential for achieving positive mental and physical health outcomes a priority when considering all development proposals.

Chapter 2 of the NPPF (Achieving sustainable development) indicates at paragraph 8 that there are three overarching objectives for sustainable development, including a social objective with supports healthy communities by:

“fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being”

Chapter 8 (Promoting healthy and safe communities) at paragraph 96 outlines the policy aim of achieving *“healthy, inclusive, and safe places”*.

Planning assessment

The ES provides an appropriate assessment of potential public health impacts of the proposed development.

Based on the assessment set out in the ES the development raises no issues in terms of public health. Overall, subject to the proposed mitigation in respect of Local Labour Agreements it is considered that the proposed development would have minor positive impacts with regards to economic impacts and opportunities for training and negligible impacts with regard to connectivity and neighbourhood amenity.

In view of the above the development complies with the aspirations of Chapter 14 of the NLCS and National Policy in the NPPF identified above.

Noise and vibration

The assessment of the effects of the proposed development in respect of noise and vibration is set out in Chapter 11 of the submitted Environmental Statement (ES). This chapter identifies the potential effects of noise and vibration associated with both the construction and operation of the proposed development. It starts by setting out the policy and legislative context associated with this topic area.

Several technical appendixes support this chapter of the ES, including an environmental sound survey, a glossary of acoustic terminology and details of construction and operational noise assumptions.

An environmental sound survey has been conducted to determine the existing noise climate at the sensitive receptors located near to the proposed development site. The location and methodology of the surveys was discussed and agreed with the council’s Environmental Protection Officer (EPO).

The site is located within the British Steelworks in Scunthorpe. Attended measurements were taken at multiple locations in the surrounding area, to the east and south of the main steelworks site. The environmental sound survey confirms that:

“The sound environment around the Proposed Development site is of an urban nature and ambient sound levels are dominated by activities at the existing steelworks as well as the Queensway Industrial Estate. The main existing transportation sources are the A18, Brigg Road, A1077, M180 and contribution from other smaller local roads.”

Potential noise and vibration effects of the proposed development have been assessed for both the construction and operational phases of development.

Construction

The assessment proposes site working hours of 8am to 6pm Monday to Friday and 8am to 1pm on Saturdays, and that HGV movements and construction works on site shall not be permitted outside these without prior written approval from the Local Planning Authority.

Noise from site clearance, piling, foundation works, and concrete works has been assessed. The assessment has assumed that all activities will take place at the same time as this is the worst-case scenario. The noise assessment identifies no exceedances over the impact thresholds for any of the activities and it is stated that this is because *“the distance between the construction site and the closest receptors is around 600 to 900m”*.

On this basis, noise impacts associated with the construction of the proposed development are concluded to be not significant.

Similarly, it is stated that as all receptors are over 600m away from the site, it is very unlikely that there will be any significant levels of vibration.

As the majority of all construction work will take place during the daytime, no evening or night-time HGV movements due to construction traffic are anticipated to take place.

Embedded mitigation at the construction phase will include the implementation of an agreed Construction Environmental Management Plan (CEMP) and the adoption of Best Practicable Means (BPM) by the appointed contractor.

Controlling construction noise will be achieved by a selection of appropriate plant and techniques, scheduling of noisy activities to avoid the quietest times of day, minimising unnecessary noise and putting in place a robust approach to investigating and responding to noise complaints.

Operation

With regard to operational noise the assessment concludes that:

“the rating level does not exceed the background sound level at locations 2 and 3. At location 1, the predicted rating sound level is slightly in excess of the measured noise level by approximately 1dB(A) during the night-time. This is a marginal exceedance and therefore has been assessed as not significant. It is concluded that operational noise impacts of the Proposed Development result in not significant effects.

It is important to highlight that due to a lack of detailed information on noise emissions from the EAF, a precautionary approach has been adopted. In this worst-case scenario, the sound power level of the sources has been assumed to be at the higher end of the range indicated in the JRC Reference Report – Best Available Techniques (BAT) Reference Document for Iron and Steel Production... In reality, depending on the stage of steel melting, noise levels may be lower.”

The assessment makes the assumption that the EAF building features basic weather louvres without any acoustic treatment for its openings. The assessment also assumed the building envelope is constructed of steel panels with a minimum sound reduction index. Additionally, it is assumed that no internal acoustic treatment, such as the use of absorptive materials, has been applied to the EAF building. In practice, the facility's openings could be designed to provide greater sound attenuation, and providing sound absorbing materials, along with the housing or enclosure of the loudest components, may provide effective means to reduce internal noise levels.

The assessment also concludes that all traffic links are predicted to be subject to negligible impacts. This is based on the anticipated closure of the existing blast furnaces within 12 months of the commissioning of the EAF. Therefore, the operational road traffic noise is assessed as not significant.

There is no anticipated increase to the number of train movements associated with the operation of the proposed development. There may be a reduction in train movements once the existing blast furnaces cease operation. As such, operational railway noise and vibration are assessed as not significant.

Policy context

The most relevant extant development plan policies against which to assess the proposed development's effect upon noise are 'saved' policy DS1, which requires that new developments do not result in unacceptable loss of amenity to neighbouring land uses; and 'saved' policy DS11, which requires that developments do not create environmental conditions likely to affect nearby developments and adjacent areas.

Policy DM1 (General Requirements) of the emerging New Local Plan confirms that planning permission will only be granted if:

“it can be demonstrated that the levels of potentially polluting emissions, including effluent, leachates, smoke, fumes, gases, dust, steam, smell or noise do not pose a danger by way of toxic release; result in land contamination; pose a threat to current and future surface or underground water resources; or create adverse environmental conditions likely to affect nearby developments and adjacent areas.”

Chapter 15 (Conserving and enhancing the natural environment) of the NPPF also seeks to prevent unacceptable harm as a result of noise pollution, at Paragraph 191 it states that:

“planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.”

Paragraph 191(a) states that policies and decisions should:

“mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life.”

Planning assessment

The suite of application documents and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the council's Environmental Protection team and the Environment Agency within their respective jurisdictions.

Two third party comments have been received in response to the public consultation exercises undertaken by the LPA. Both of these comments refer to noise and seek assurances that the proposed development will not result in adverse impact to local residents.

With regard to the potential impacts of the development in respect of noise and vibration, the council's Environmental Protection Officer (EPO) has provided the following advice confirmed that operational noise levels were agreed to be set to not exceed existing background levels identified at the closest sensitive receptors. They go on to confirm that background sound level has been determined to be LA90,T = 45dB and that this sound level is considered to be representative of the dwellings closest to the proposed development at night.

As the facility is expected to operate 24 hours a day seven days a week, noise emissions are presented in the report for night-time as it is the worst-case scenario. If noise emissions are effectively controlled for the night-time, then they are expected to remain acceptable levels for the daytime.

The rating level, according to guidance, has been calculated as 46dB which gives a 1dB excess over background at Location 1, which is considered to be a low impact and not significant. At Location 2 and 3, the rating level is equal to or below background, therefore the impact is considered to be Low.

It is concluded, in the noise assessment, that operational noise impacts of the proposed development therefore result in not significant effects.

It is reported that noise from operational noise sources will be controlled through design to ensure compliance with the agreed noise criteria.

The EPO has stated in their response that *"It is essential that the agreed noise levels are met and complied with to ensure compliance with WHO guidelines values"*.

With the above in mind, the EPO raises no objection to the proposed development in respect of noise or vibration. Subject to conditions to secure the agreed noise rating levels and to secure the submission of a noise validation report within 3 months of commencement of operation to demonstrate that these levels are being met.

Conditions are also recommended to secure construction working hours and the submission and implementation of an appropriate CEMP.

The council's EPO also notes that the site will be subject to regulation by the Environment Agency (EA) under an environmental permit and will therefore be subject to operating conditions. These conditions will include noise controls.

The EA has provided comments on the planning application and raises no concerns with regards to noise. This response also confirms that the development will require a variation to British Steel Ltd.'s permit under the Environmental Permitting Regulations (England & Wales) 2016 and that the permit controls emissions to air, water and land and will include conditions in relation to noise. Robust advice on permitting is provided for the applicant to consider when making their permit application.

Having due regard to the submission of expert consultants appointed in support of the application and the responses of the council's Environmental Protection officer. It is considered that the mitigation, via the use of planning conditions, of the effects of the development with regard to noise are appropriate and proportionate and will adequately protect the amenity of neighbouring residential properties. It is considered that, subject to the recommended conditions, the proposed development accords with policies DS1 and DS11 of the NLLP with regard to protecting the amenity of surrounding land uses as well as the relevant policies of both the emerging New Local Plan and the NPPF identified above.

Socioeconomics

The assessment of the effects of the proposed development in respect of its socioeconomic impacts is provided within Chapter 12 of the Environmental Statement (ES). This chapter identifies the potential effects on socioeconomics associated with the construction and operation of the proposed development. It starts by setting out the policy and legislative context associated with this topic area.

The study area for the socioeconomic assessment has been identified by considering the relevant geographical areas within which socioeconomic impacts are likely to occur. The socioeconomic impacts are expected to be most significantly felt within North Lincolnshire and adjacent surrounding local authority areas. Therefore, the primary study area for the socioeconomic assessment comprises North Lincolnshire, North East Lincolnshire, West Lindsey, Bassetlaw, Doncaster, East Riding of Yorkshire, and Hull local authority areas.

In considering the limitations and assumptions of the assessment, the ES confirms the following:

“Defining an appropriate reference case is important in ensuring a robust assessment of potential impacts arising from the Proposed Development.

For the purposes of this assessment, the reference case is that without the Proposed Development, the existing operations at the British Steel site would continue (in the short term). It is acknowledged that the Proposed Development is part of British Steel's decarbonisation agenda which is required to ensure the continued long-term viability of the company. In the medium to long term, in the absence of the Proposed Development, British Steel would need to find an alternative solution to decarbonise their current operations. The implications of this on existing and future jobs within the Site is not known at this stage.

The proposed Electric Arc Furnaces will eventually replace the existing aging blast furnaces however British Steel intend to retain the existing blast furnaces and continue to operate them until they fully transition to electric arc steeling. The timescales for this transition are unclear however the blast furnaces will continue to be used even when the proposed new furnaces are operational. Therefore, at the time of writing, it is not possible to ascertain the impact of this transition on job

numbers and whilst it is acknowledged that the change in operations will result in changes to employment this is associated with the cessation of operation of the blast furnaces rather than the construction of the Electric Arc Furnace.”

The estimated construction cost used to undertake this assessment is £500m. This is an indicative high-level estimate which has been used for the purposes of undertaking the socio-economic assessment. The actual construction cost may therefore be different.

With regard to embedded mitigation, it is proposed that to mitigate any potentially adverse effects (including noise, vibration, air quality, and construction traffic movements) experienced by local residents during construction via a Construction Environmental Management Plan (CEMP). This will require standard, well-tested mitigation measures to be put in place by the contractor to reduce any potential adverse impacts from construction and to protect the amenity of the nearby local population. To ensure that the employment benefits of the proposed development are captured locally, it is envisaged that a Local Labour Agreement will also be agreed.

The assessment takes account of both the construction and operational phases of the development.

Construction

There will be direct employment effects through the construction of the proposed development as well as wider effects through indirect and induced effects. During the construction phase, employment would be generated directly in construction and through both the supply chain (indirect impacts) and wage expenditure (induced impacts).

The assessment predicts that:

“the Site could be expected to support approximately 3634 person-years of employment over the build period. Standard convention considers that one permanent FTE construction job is equivalent to ten person-years of direct employment. Therefore, the creation of 3634 person years of employment is equivalent to the creation of approximately 363 FTE direct construction jobs (gross).”

The analysis estimates that the net construction effect within the study area could equate to 515 FTE construction jobs including direct, indirect and induced employment and concludes that:

“As a result of the temporary direct, indirect and induced employment created during construction, there is considered to be a medium magnitude of change on the study area labour market which has a medium sensitivity. This results in a moderate beneficial effect, which is considered significant.”

An estimate of the uplift in GVA productivity generated through construction of the Proposed Development has been calculated based on the GVA per construction worker within the Yorkshire and the Humber region based on 2021 figures:

“the GVA is estimated to be approximately £35.5 million representing an annualised uplift. The construction industry in the study area generates £2.1 billion annually34

therefore an uplift of £35.5 million is considered to represent a medium magnitude of change on the study area which is considered to be of medium sensitivity.”

As a result of the GVA to the study area economy resulting from the net additional construction employment, there is considered to be medium magnitude of change on the study area economy, which results in a moderate beneficial effect, which is considered significant.

The creation of jobs during the construction phase would increase the number of people present on-site during working hours over the construction programme. It is anticipated that a Local Labour Agreement, will be in place; this will ensure that most of the construction workforce are likely to be nearby local residents, travelling from their permanent residence.

The duration of the construction phase (22 months) is unlikely to lead to construction workers moving from their current place of residence. Across the course of the construction period, the number of construction workers will rise and fall to reflect the stage of development reached and associated workforce requirements.

There may be a small number of construction workers travelling from further afield resulting in increased local demand for accommodation during the construction period comprising temporary bed and breakfast, hotel accommodation, or short-term rentals in the private sector. The use of temporary accommodation is expected to have positive impacts on the local economy through the additional demand for accommodation and the subsequent expenditure in the area from this activity. However, there may also be adverse effects due to the potential for increased rent (and accommodation costs) which could impact the local population who rely on the rental market. The ES confirms that the magnitude of this potential impact is negligible because of the low leakage anticipated from the construction workforce, combined with the short-term and temporary nature of the potential effect.

Given the temporary nature of the construction phase and the workforce which is expected to be predominantly made up of local people, there is no expected impact upon local school and healthcare facilities from the construction phase and therefore this has not been assessed further.

Operation

With regard to operational employment, the assessment provides the following commentary:

“The proposed Electric Arc Furnaces will eventually replace the existing aging blast furnaces however British Steel intend to retain the existing blast furnaces and continue to operate them until they fully transition to electric arc steel making. The timescales for this transition are unclear, however the blast furnaces will continue to be used even when the proposed new furnaces are operational. Therefore, at the time of writing, it is not possible to ascertain the impact of this transition on job numbers and it has therefore been assumed that there are no jobs lost as a direct result of the Proposed Development.

The employment generated as a result of the Electric Arc Furnaces therefore represents additional employment.”

The applicant has provided an estimate of operational employment associated with the operation of the EAF. It is estimated that once completed and fully operational, the proposed development could create 200-250 headcount jobs. The assessment goes on to convert the predicted head count jobs into FTE jobs and concludes that this figure will be 194 FTE jobs.

The assessment concludes that:

“As a result of the permanent direct, indirect and induced employment created during operation, there is considered to be a low magnitude of change on the study area labour market which has a medium sensitivity. This results in a minor beneficial effect, which is considered not significant.

As stated in Section 12.4.6, it is important to acknowledge that the transition to electric arc steeling and the eventual cessation of operation of the blast furnaces is likely to impact on existing job numbers within the wider site. At the time of writing, it is not possible to ascertain the impact of this transition on job numbers. Therefore, whilst the operational jobs have been considered to represent additional employment, this wider context should be borne in mind.”

It is estimated that the total net additional employment would create a GVA of approximately £9.6 million within the study area, which would occur annually and in perpetuity. Within the study area, the industry termed ‘manufacture of metals, electrical products and machinery construction’ generates £1.7 billion annually therefore an uplift of £9.6 million is considered to represent a low magnitude of change on the study area.

In addition to employment and the resulting economic impacts, the assessment also considers the wider economic impacts of the proposed development and provides the following analysis:

“The Proposed Development will support the shift towards more sustainable, technologically advanced and clean growth industries as part of the transition to net zero. It also makes an important contribution towards the decarbonisation of the industrial cluster in the Humber, in accordance with national, regional and local policy.

The Humber Vision 2030 (2022) states that the Humber presents the largest industrial decarbonisation opportunity in the UK given that the Humber has long been the most carbon intensive region in the country. The Proposed Development aligns with the vision for investment to drive economic growth and a decarbonised future for the country and presents an opportunity to make a positive contribution to the areas net zero ambition.

It is assumed that a new development of this nature could act as an important catalyst for further investment by businesses and investors both to the study area and to the wider region, to take advantage of the critical mass of industrial decarbonisation opportunities in the region.

The catalytic effect of new development on levels of inward investment is difficult to quantify. Given the scale of the Proposed Development, it is assumed that it will

generate some catalytic effects in terms of improving the business and investment profile of the study area and the regional economy.

As a result of the potential for wider economic impacts due to inward investment, there is considered to be a moderate magnitude of change on the Yorkshire and the Humber economy which has a medium sensitivity. This results in a moderate beneficial effect, which is considered significant.”

Policy context

The relevant extant development plan policies against which to assess the proposed development's effect upon the water environment are policy CS2 of the NLCS, which seeks, inter alia, to achieve sustainable economic development to support a competitive business and industrial sector; and policy CS11 of the NLCS, which supports development within North Lincolnshire that meets local employment needs and maximises special locations.

The emerging Local Plan states that North Lincolnshire's economy is prosperous and has an ever-developing diversity. It supports 74,000 jobs and is home to over 5,500 businesses including major companies such as Associated British Ports (ABP), Able UK, British Steel, BAE Systems, C. Spencer, Eastern Airways, Nisa Today, Phillips 66, Singleton Birch, Wren and Prax Group.

Policy EC2 (Existing Employment Areas) supports the expansion of existing businesses provided that:

- a. existing buildings are reused where possible;
- b. they do not conflict with neighbouring land uses;
- c. they will not impact unacceptably on the local and/or strategic highway network; and
- d. the proposal would not have an adverse impact on the character and appearance of the area.

Paragraph 7 of the NPPF outlines that *“the purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development, and supporting infrastructure in a sustainable manner.”*

The objectives of sustainable development include at Paragraph 8 of the NPPF:

- a) *an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.*

Paragraph 85 of the NPPF states that:

“planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on

the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development.”

Paragraph 87 of the NPPF states that *“planning policies and decisions should recognise and address the specific locational requirements of different sectors.”*

Planning assessment

The suite of application documents and the accompanying Environmental Statement have been scrutinised and advice provided by the council’s Economic Development team.

No third-party comments or objections have been received in relation to the socioeconomic impacts of the proposed development.

The ES provides an appropriate assessment of socio-economic related matters.

The council’s Economic Development team has raised no objection to the assessment provided within Chapter 12 of the ES and have provided the following commentary in support of the proposal:

North Lincolnshire Council launched our Economic Growth Plan 2023-2028 in February 2023 highlighting our ambitions for the region... The proposed development highlighted within the application will support the regional aspirations and touch on all the priorities.

The North Lincolnshire Economic Region has a proud history of being at the forefront of the UK Steel sector, epitomised by the success of the integrated steelworks site. However, the steel industry has seen a significant fluctuation in performance and customer demands as focus has been placed on moving the UK and World Economy to Net-Zero. The steel sector is a significant participant in the Humber Industrial Cluster which is at the forefront of the UK’s drive for Net-Zero.

To put that in context, the Humber Industrial Cluster emits more CO2 than any other industrial cluster; 30% more than the next largest. At the same time, the region is a significant contributor to the UKs economy - £18bn is generated in the Humber each year with 360,000 jobs supported in industries such as refining, petrochemicals, manufacturing and power generation and through their associated supply chains. The steel sector as a comparison, is the largest single sector contributing to the emissions within the Humber with the data showing in 2019 it equated to approximately 4.5 MtCO2e/Year. Electrification of the Steel making process has been highlighted as having the potential to abate circa 1.9 MtCO2e/year and therefore the proposal offers a rapid move for the steel industry to move towards a greener future.

The drive for Green Steel is being driven by market forces, with customers needing to obtain green steel within their supply chain to ensure that they are meeting their own Net-Zero ambitions. If British Steel cannot find a suitable option for delivering green steel the long-term viability of the business would be placed into question. Whilst it is acknowledged the loss of the blast furnaces will create an impact on employment, the alternatives to offering a green solution are limited. Whilst hydrogen-based steelmaking is an emerging technology, there are no

demonstration plants operating in the world, let alone commercial operating plants. Hydrogen-based steelmaking is technically feasible; however, it is not expected to be imminently commercially feasible in the UK due to several barriers. The main barrier is access to cost-competitive hydrogen, which the industry does not expect to be available until after 2035, at the very earliest. Therefore, EAF technology offers an immediate solution to allow for steel making to continue within the heart of Scunthorpe for generations to come.

The investment being proposed by the applicant, British Steel, would signify the single largest investment into the Scunthorpe site for a generation. The steel works site, through employment and supply chain, are a significant cornerstone in our local economy and, as a result, it is imperative that we offer a viable solution.”

The Economic Development team conclude that:

“The proposed planning application and subsequent investment shows a commitment from the British Steel group to remain invested in steel making within our local economy. Whilst we acknowledge this is likely to lead to potential job reductions, it will enable longer term security for the steel industry in Scunthorpe.”

The development proposed under the current planning application represents a significant investment in one of North Lincolnshire’s major businesses and a key local industry. The proposed development is anticipated to deliver 363 FTE jobs during the predicted 22-month construction period and a further 194 FTE jobs as a result of the operation of the EAF. The applicant within the ES sets out an undertaking to work with the council via a Local Labour Agreement to seek where possible to deliver training, apprenticeships and long-term jobs to residents in the local area, which will maximise the potential benefits from the scheme.

Both the socioeconomic assessment presented in Chapter 12 of the ES and the advice provided by the Economic Development team acknowledge that the electrification of the steelmaking process has the potential to impact on future employment levels at the British Steel site due to the eventual decommissioning of the existing coal/coke fired blast furnaces. Whilst this future impact cannot be quantified at the present time, it must be borne in mind when considering the socioeconomic impacts of the proposed development.

There are currently approximately 3,000 people employed across the Scunthorpe Steelworks site, with approximately 200 people employed directly within the existing blast furnaces and a number of other jobs and processes across the site that are linked to the operation of the blast furnaces. The number of jobs that will be lost as a result of the switch to EAF steelmaking is not known at this time. It is proposed that the existing blast furnaces will continue to operate whilst the EAF is being constructed and for a period of time following the commissioning of the EAF (anticipated to be 12 months). During this construction and testing period there will be an increase in employment on the site as detailed above. When and how the transition from traditional blast furnaces is completed is largely a commercial decision for the Applicant; however there will be an overall reduction in jobs across the steelworks site once the existing blast furnaces cease to operate. For the purposes of this assessment, and due to the unknowns regarding employment impacts, it is necessary to consider a worst-case scenario, which is that all of the jobs associated with the current blast furnaces would be lost as a result of the proposed development. As explained, this is a worst-case scenario only and actually job losses are expected to be lower; however as this cannot be confirmed at the current time then a worst-case position

must be taken to undertake a robust balance of the socioeconomic impacts of the development.

In considering this issue, it is recognised that the overarching rationale for the proposed development, as described in the submitted Planning Statement, is to allow British Steel to make a significant strategic shift into the production of 'green steel'. In a move to significantly reduce CO₂ emissions to help the company (the UK) meet its targets in the move towards net-zero. This shift aligns with national and local policies, which seek to secure sustainable development, with a particular emphasis on delivering reductions in CO₂ emissions. It is also understood to be driven by market forces, with customers needing to obtain green steel within their supply chain to ensure that they are meeting their own Net-Zero ambitions. In this regard, the applicant has confirmed that their customer base are already making purchases and queries based on carbon intensity, with an increasing number of queries from the construction industry and particularly the rail industry. Consequently, there is a growing demand and shift from the customer base to require a move towards low carbon steel. For these reasons the applicant has advised that current approach to steelmaking at Scunthorpe is not viable in the long-term. As such the proposed development is stated to be vital to securing the long-term viability and more sustainable future of the Steel Works in Scunthorpe.

The applicant has also confirmed that they have tried to evaluate how decarbonisation could occur using other technologies such as Carbon Capture and Storage, however there is no precedent example of CCS being used at scale for steel making. Where CCS is being deployed for steel it only captures a proportion of the carbon emissions. Given that there is no viable example of the use of this technology at scale, to move to CCS would require the installation of a carbon capture plant and carbon pipeline with substantial cost with no guarantee that it will address the carbon emissions. In respect of hydrogen, this is not yet an available technique and therefore would not reasonably be deployed before 2030 when there is a need for immediate decarbonisation to meet the demands of the customer base for 'green steel'. There are therefore no other reasonably available technologies which could be deployed within the required timescale.

The applicant concludes that:

“Technology change will inevitably lead to employment rationalisation however, the construction of the EAF will ensure that the operation of the steelworks is maintained and futureproofed to meet future business needs, including maintaining highly skilled workers within the industry. This will include staff redeployment where feasible.”

On balance, even considering the predicted worst-case scenario in respect of the closure of the existing blast furnaces the proposal is considered to result in long-term economic and social benefits by securing the long-term future of this key employment site and delivering a significant reduction in CO₂ emissions and improvements to air quality. These benefits are considered to weigh heavily in favour of the proposed development and to outweigh the adverse impacts. As such the development accords with policies CS2 and CS11 of the NLCS and Chapter 6 of the NPPF.

Traffic and transport

The assessment of the effects of the proposed development in respect of traffic and transport is set out in Chapter 13 of the Environmental Statement (ES). This chapter identifies the potential effects on transport associated with both the construction and operation of the proposed development. It starts by setting out the policy and legislative context associated with this topic area.

Construction

Following the Scoping exercise a number of potential environmental impacts were identified for assessment in respect of the construction phase. These were:

- severance of communities
- non-motorised user amenity
- fear and intimidation.

It is assumed, for the purposes of the assessment, that all construction workers will drive one person per vehicles to/from the site. While unlikely to happen in practice, this provides a reasonable worst-case as the basis of the assessment.

On average, 600 construction workers are expected to visit the site per day, ramping up slowly to 900 construction workers in month eight, lasting for four months before dropping again. The peak of 900 has been assessed as a worse-case scenario for construction.

In the absence of any other information, Census journey to work data has been used to estimate where construction employees will come from and travel home to in order to estimate distribution of traffic on the highway network.

All HGVs are assumed to travel to/from the M180 via the A18 and A15. HGVs are expected to average 22 per day, peaking at 30 per day for a 5-month period. The peak of 30 per day has been assessed as a worse-case scenario for construction.

The assessment explains that the relevant 'IEMA, 2023' guidance sets out that changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight', 'moderate' and 'substantial' changes in severance, respectively.

The highest increase in traffic during construction is 8.5% (all vehicles) and 3.7% (HGVs) which occurs on the A18 between the junctions with A1029 and B1398. Therefore, there is unlikely to be any noticeable changes in the perception of severance non-motorised user amenity during the construction phase.

No changes to the perceived level of fear and intimidation are forecast to occur on any link within the study area during the construction phase.

Operation

In the early phases of operation (c.6 months), there will be slight increases in staff on the wider British Steel site overall of net + c.50 staff per shift owing to the proposed development. The shift patterns of the additional operational staff are likely to be 07:00-19:00 and 19:00-07:00. Therefore, all movements on and off the site are outside of traditional peak periods on the highway network.

The initial six-month period also reflects the highest operational HGV flows, of net + c.215 (430 movements) per day over existing flows to/from the wider British Steel site overall.

After this initial six-month period, staff numbers and deliveries to/from the British Steel site overall, and therefore traffic, will drop steadily to be lower than existing traffic generated at the site currently, owing to the steady switchover from coke-fired blast furnaces to the proposed electric arc furnaces.

It is estimated that total vehicle movements will be reduced by c.-445 (c.-990 movements) per day from a point c.10 months after opening of the electric arc furnaces and then remain at this lower level in perpetuity.

As with construction traffic, census journey to work data has been used to estimate where employees will come from and travel home to in order to estimate distribution of traffic on the highway network. All operational HGVs are assumed to travel to/from the M180 via the A18 and A15.

The initial six-month period has been chosen for assessment of operational effects as this reflects the peak traffic during the operational phase, albeit it is temporary. Beyond this time period, traffic falls to be less than existing as outlined above.

Using the 2025 (opening year) with and without development traffic data, as set out earlier in this chapter, the roads within the study area have been assessed for existing levels of fear and intimidation, and any changes owing to the addition of operational phase related development, based on example thresholds and formulas.

A change to the level of perceived fear and intimidation is forecast to occur on one link: the A18 from the junction of A1029 (Brigg Road) to the junction with the B1398 (Kirton Road) during the operational phase. The assessment confirms that:

“This change is primarily due to the additional 430 daily HGV movements causing a change from 1,648 to 2,078 HGVs on this particular highway link. This leads to a higher Degree of Hazard Score... The resultant change is considered to be “Medium” in terms of magnitude of impact.”

The ES goes on to assess the identified potential change in fear and perception in more detail as follows:

“This section of road does not have any designated crossing points or formal footways on either side of the road, primarily because it does not have any activity of note on either side of the road, or indeed along it, that would attract significant footfall. The only exceptions are; the two Public Rights of Way (PRoW), 211 and 212, that terminate at/near the A18 along the section in question; and one residence (receptor R06).”

PRoW 211 terminates at the A18 adjacent to Ashby Ville Nature Reserve and there appears to be an informal track over Emanuel Bridge linking the two. This short section of path is protected by crash barriers and guard railing and is c.10m in length. No pedestrians have been observed using this during various site visits. undertaken.

PRoW 212 starts/terminates at the layby located on the north-eastern side of the south-eastern bound carriageway, located 200m from the junction with B1398. This PRoW does not link with any others along this section of the A18.

There is an informal path along the north-eastern side of the A18 between the layby and Gate A. The section closest to Gate A is paved before transitioning into a dirt path up to the layby. No pedestrians have been observed using this during various site visits undertaken.

Receptor R06 is one residence which is set back from the A18 on the north-eastern side.”

Overall, it is summarised that pedestrian activity along/across this section of the A18 is minimal.

As outlined above, the operational assessment undertaken considers the first six-month period only as this reflects the peak traffic during the operational phase. Beyond this time period, traffic across the British Steel site falls to be less than is generated currently in the existing situation. Therefore, the change is temporary, and there will be a long-term reduction in overall traffic to/from the site in perpetuity.

The assessment concludes:

“Taking the local considerations outlined above into account, along with the likely temporary nature of the possible effects, it can be concluded that it would be unlikely that there would be any significant change in the perceived level of fear and intimidation along the A18 from the junction of A1029 to the junction with the B1398 during the operational phase that would be worthy of further consideration or mitigation.”

Policy context

The most relevant extant development plan policies against which to assess the proposed development's effect upon highway safety are 'saved' policy T1 of the NLLP, which requires developments that generate significant vehicle movements to be located in urban areas or where there is good access to transport networks; 'saved' policy T2 of the NLLP, which requires all new developments to be served by a satisfactory access; and 'saved' policy T19 of the NLLP, which requires car parking to be provided that will meet the needs of the business.

A number of policies in the emerging New Local Plan also relate to considerations of traffic and transport, these being policy SS3, which seeks to reduce the need to travel and minimise car use and where possible improve more sustainable travel modes; policy T1, which addresses the detail of transport considerations including the focus on more sustainable travel choices; policy T2, which promotes public transport including rail and bus networks and may seek contributions from developers accordingly; and policy T3, which requires development to be supported by a Transport Assessment Travel Plan, to support sustainable travel options, bring forward transport infrastructure if need to accommodate demand, have satisfactory access arrangements and not to have an adverse impact on the current network.

Paragraph 114 of the NPPF states that:

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- (a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- (b) safe and suitable access to the site can be achieved for all users;*
- (c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

Paragraph 115 of the NPPF states:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

Paragraph 117 of the NPPF states:

“All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.”

Planning assessment

The suite of application documents and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the council’s Highways Officer, Active Travel England and National Highways within their respective jurisdictions.

No third-party comments have been received in relation to traffic and transport concerns.

The construction period is expected to last for 22 months, with the maximum number of HGV two-way movements peaking at 60 per day for approximately five months. The peak number of car movements is 1800 two-way movements per day for four months, with an estimated 1400 two-way daily car movements for 11 months.

The anticipated shift pattern is 7am to 7pm and 7pm to 7am, the majority of staff movements will therefore occur outside of the peak hours on the highway network and should not have a significant impact on the operation of the highway network. It is noted that the applicant is willing to agree to an appropriately worded condition which prevents shift changeover coinciding with the peak hour periods on the highway network.

There are no changes proposed the onsite parking provision as there is sufficient capacity on site to accommodate staff.

There is an expected to be an overall increase in staff for approximately the first six months of the electric arc furnace coming into operation. Shift patterns are expected to be 7am to 7pm and 7pm to 7am, so again the majority of movements will occur outside of the peak

hours on the highway network and should not have a significant impact on the operation of the highway network.

After the initial six months, although HGV movements to the site will increase, overall vehicle movements to/from the site are expected to significantly decrease as a result of the switch over from the coke fired blast furnaces to the electric arc furnace.

With regard to the potential impacts of the development in respect of traffic and transport, the council's Highways Officer (HO) has confirmed that the impacts of construction traffic can be appropriately mitigated via the submission and implementation of a Construction Phase Traffic Management Plan (CTMP). A condition is recommended to secure the CTMP.

The HO officer welcomes the applicant's proposal to improve the Gate A access arrangements to prevent queuing back of traffic onto the A18, which can occur at busy times. The proposed improvements would see the security barrier located much further back into the site, with additional lanes added. These proposals are seen as a betterment to the existing situation as they will increase stacking capacity within the site and prevent tailbacks onto the A18. However, it is noted that these improvement works do not form part of the current planning application. A condition is recommended to secure the proposed improvement works prior to the EAF becoming operational; it is also recommended that a specific requirement is included in the CTMP condition in respect of the management of construction traffic at Gate A to avoid queueing during construction.

Further conditions are recommended to secure the submission and implementation of an Operational Traffic Management Plan (OMP) and a detailed Travel Plan, which seeks to promote sustainable access to the site for staff.

Subject to the recommended condition the council's HO raises no concerns or objections to the proposed development.

National Highways have also commented on the planning application and their advice mirrors that of the council's HO. This being that, subject to conditions to secure a CTMP, and OMP and a detailed Travel Plan, they have no objection to the proposed development.

Active Travel England (ATE) have also provided comments, confirming that:

"it is agreed that a Travel Plan to encourage a shift towards more sustainable modes of transport can be secured by condition as set out in the consultation responses provided by National Highways and local highway authority. However, in preparing the Travel Plan, ATE would recommend that the baseline mode share be revisited to ensure that meaningful mode shift targets and measures to achieve these are set. As above, this should be informed by existing travel survey data for the site."

Having given due regard to the submission of the expert consultants appointed in support of the application and the consultation responses from the National Highways, Active Travel England and the council's own Highways Officer, the proposals are considered acceptable insofar as their effects on traffic and highway safety. It is therefore considered that the proposal accords with policies T1, T2 and T19 of the NLLP with regard to its impact on the

local highway network as well as the relevant policies of the emerging New Local Plan and the NPPF identified above.

Water environment and flood risk

The assessment of the effects of the proposed development in respect of the water environment and flood risk is set out in Chapter 14 of the Environmental Statement (ES). This chapter identifies the potential effects on the Water Environment and Flood Risk associated with both the construction and operation of the proposed development.

Chapter 14 is supported by 3 technical appendixes, these being a Flood Risk Assessment, a Drainage Strategy and a Hydrogeological Impact Assessment.

The Water Environment and Flood Risk scoping study area is defined by the proposed development footprint and the site boundary plus a 1km buffer. The 1km study area was selected based on professional judgement of the potential impacts and pathways related to the project.

Bottesford Beck is located within the site, running parallel to the east of Yarbrough Road. Unnamed land drains exist to the east, south and south-east of the site within the study area. Ashby Ville Lake is located approximately 635m south-west of the site, within the Ashby Ville Nature Reserve. Four unnamed ponds are located approximately 370m north-east of the site, 750m east of the site, 780m north-west of the site, and 860m north-west of the site. There are no surface water drinking water safeguard zones within the study area.

With regards to groundwater, the site and surrounding area are underlain by the Lower Trent Erewash – Secondary Combined WFD groundwater body. The site is directly underlain by Infilled Ground, which is Made Ground backfilled following the quarrying that has taken place at the Steel Mill site.

The site is underlain by a bedrock Secondary A aquifer (Frodingham Ironstone) although most of this stratum is expected to have been removed through quarrying. Secondary A aquifers comprise permeable layers that can support local water supplies and may form an important source of base flow to rivers.

To the east of the site within the study area there are several secondary (undifferentiated) bedrock aquifers. Secondary (undifferentiated) bedrock aquifers are aquifers where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of rock type and only have a minor value.

Below the Frodingham Ironstone is the Scunthorpe Mudstone Formation, which may present directly below the Infilled Ground below the site. This is a Secondary B aquifer which are mainly lower permeability layers that may store and yield limited amounts of groundwater.

There are no superficial drift aquifers underlying the site or study area. Groundwater is expected to be present within the infilled ground which is directly below the site. This material does not have an aquifer classification and is likely to be contaminated.

There are no groundwater Source Protection Zones (SPZs), licenced or unlicenced groundwater abstractions, groundwater drinking water safeguard zones, or springs located within the site or study area.

The entirety of the proposed development, including the site and the surrounding study area are located within Flood Zone 1, which is defined as having a low probability of flooding – less than 0.1% annual probability of river or sea flooding.

Across the proposed development, including the site and surrounding study area there are localised areas of low (area has a chance of flooding of between 0.1% and 1% each year) to high (area has a chance of flooding of greater than 3.3% each year) surface water flood risk, likely to be associated with localised depressions owing to the topography of the landscape.

There is no evidence of historical flood events at the site of the proposed development nor within the surrounding study area.

The existing drainage networks are fully described in the Drainage Statement. This includes plans showing the location of existing infrastructure. Existing private surface water and foul drainage networks are present on site.

Construction

The potential impacts of construction on and from the Water Environment and Flood Risk has been assessed on typical construction methods and sequencing. The surface water and foul water drainage proposal is detailed in the supporting Drainage Statement.

With regards to potential impacts on surface water quality, the assessment confirms that:

“All surface water features within the Site boundary have the potential to be directly impacted by runoff, spills, and discharges. Effects could also impact the integrity of surface water features in the wider study area. The drainage infrastructure, including pollution control measures, would be constructed in advance of other elements of the design so that appropriate drainage measures are, as far as practicable, in place before further construction works take place. Impacts may however still occur and are expected to be temporary because by the combination of natural processes (e.g., running water diluting and dispersing any contaminants and biogeochemical processes) plus remedial clean-up action which would be expected to take place should any pollution be identified as a result of identification following use of spill kits.

It is assumed that a CEMP will be implemented for the proposed works which will include best practice measures such as pollution prevention measures. As such it is anticipated that there will be a negligible magnitude of impact.”

Sources of potential pollutants to groundwater quality include accidental spills (e.g. fuel from vehicles/plant), sediment laden waters from excavation activities/dewatering or from water contaminated during specific activities, such as concrete pouring/washing. Pathways will likely be created via piling between the existing contaminated groundwater and the underlying aquifers. The assessment concludes that:

“Measures are assumed to be included in the CEMP such as adherence to the contents of the best practice guidance which will reduce groundwater quality impacts to negligible magnitude of impact. This would result in a:

- *Slight adverse significance of effect for the Secondary A aquifer (High value receptor);*
- *Neutral significance of effect for the Secondary (undifferentiated) aquifers (Medium value receptor);*
- *Neutral significance of effect for the Secondary B aquifer (Medium value receptor); and*
- *Neutral significance of effect for the unclassified Infilled Ground Aquifer (Low value receptor).*

All effects are considered to be not significant.”

With regards to groundwater quantity, changes to groundwater levels and flows arising from construction activities, primarily dewatering; earthworks and intrusive investigation works may occur creating new flow paths for groundwater. Significant dewatering is not anticipated at the site since the proposals have no basement structures. Minor changes in groundwater recharge due to site construction activity may also affect groundwater levels and flow below the site. The assessment concludes that:

“Measures are assumed to be included in the CEMP such as adherence to the contents of the best practice guidance which will reduce groundwater quantity impacts to negligible magnitude of impact. This would result in a:

- *Slight adverse significance of effect for the Secondary A aquifer (High value receptor);*
- *Neutral significance of effect for the Secondary (undifferentiated) aquifers (Medium value receptor);*
- *Neutral significance of effect for the Secondary B aquifer (Medium value receptor);*
- *Neutral significance of effect for the unclassified Infilled Ground Aquifer (Low value receptor); and*
- *Slight adverse significance of effect for the groundwater body (High value receptor).*

All effects are considered to be not significant.”

In the absence of appropriate construction mitigation, changes to flood risk because of construction can arise from potential changes to permeable area on site. There is the potential for inappropriate siting of construction compounds/welfare facilities etc. where surface water flow paths could be impeded, resulting in increases in flood risk. It is not anticipated that construction activities and compounds (which will be managed by the CEMP) or the physical changes to the site will pose flood risk to the study area, including designated sites, because of the embedded mitigation in the design. The site is also considered to be in an area at low risk of flooding.

Operation

The assessment of operational impacts has considered the potential for impacts on and from the Water Environment and Flood Risk. The assessment has considered information contained within the Flood Risk Assessment and Drainage Statement.

The Drainage Statement has been designed to prevent surface water pollution resulting from the proposed development. These measures are outlined in Section 14.5, which including that outfalls will be subject to oil interception to minimise the risk of downstream surface water pollution.

With regard to surface water quality during operation, the assessment confirms that:

“Permanent water quality impacts to Bottesford Beck are anticipated due to permit-controlled discharges from the water treatment plant associated with the works and inclusion of an additional oil interceptor for land to the east of Bottesford Beck. As such it is anticipated that there will be a minor adverse magnitude of impact. For the Bottesford Beck which is a High value surface water receptor, this would result in a slight adverse significance of effect. For the unnamed land drains, Ashby Ville Lake, and unnamed ponds which are all Low value surface water receptors, this would result in a neutral significance of effect. These effects are considered to be not significant.”

The effects upon surface water quantity are principally related to increased surface water runoff. The proposed development will increase the area of hardstanding provided across the site. The Drainage Statement has been designed to accommodate increases in surface water runoff resulting from increases of impermeable area across the site. These measures are outlined in Section 14.5. The assessment confirms that:

“For the Bottesford Beck which is a High value surface water receptor, this would result in a slight adverse significance of effect. For the unnamed land drains, Ashby Ville Lake, and unnamed ponds which are all Low value surface water receptors, this would result in a neutral significance of effect. These effects are considered to be not significant.”

Operation of the proposed development may result in fuel leakages and spillages from vehicles parked on the proposed site. Considering the likely variable permeability of the infilled ground below the site, no significant migration to groundwater of the spilled substances is likely. In addition, these would be intercepted by the site drainage. Therefore, the potential impact of the proposed development during operation on the underlying groundwater is considered to be negligible magnitude of impact.

Changes in recharge to the infilled ground below the site due to increased hardstanding and roof area may have minor effects on groundwater levels below the site. The changes are unlikely to be significant and is expected to have a negligible magnitude of impact on the groundwater system.

Increases in the area of hardstanding provided across the site can increase surface water flood risk through reducing the potential for infiltration into the ground. The drainage design has accounted for surface water runoff and has proposed sufficient attenuation and

drainage, including to account for increase in surface water runoff associated with future climate change.

While the impacts of climate change are likely to affect the water environment, no significant effects are predicted as a result of the incorporation of embedded mitigation into the proposed development design, such as the proposed drainage having been designed to accommodate climate change allowances.

Policy context

The relevant extant development plan policies against which to assess the proposed development's effect upon the water environment are 'saved' policy DS14 of the NLLP, which states that developments will not be permitted if they *"adversely affect the quality and quantity of water resources...unless the impact is mitigated to an acceptable level"*; and policy CS19 of the NLCS, which takes a risk based sequential approach to determine the suitability of land for development that uses the principle of locating development, where possible, on land that has a lower flood risk and seeks to deliver Sustainable Urban Drainage Systems where possible.

The emerging New Local Plan also contains relevant policies in respect of the water environment, these being policy DQE5, which seeks to minimise the risk and impact of flooding through directing new development to areas with the lowest probability of flooding, that development addresses the effective management of all sources of flood risk, that development does not increase the risk of flooding elsewhere and to ensure the wider environmental benefits in relation to flood risk; and policy DQE6, which outlines that development proposals should in the first instance (before infiltration) consider water re-use measures to encourage the conservation and management of surface water, wherever feasible.

The NPPF at Paragraph 173 states:

"When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment."

Paragraph 175 states:

"Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate."

Planning assessment

The suite of application documents and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the Lead Local Flood Authority (LLFA), Anglian Water and the Environment Agency (EA) within their respective jurisdictions.

No third-party comments have been received in relation to flood risk, drainage or water quality concerns.

Policy requires that new major development is supported by appropriate infrastructure; the final detail of the drainage system is required to be agreed but neither the LLFA, Anglian Water, or the EA raise objection to the development.

The LLFA have requested conditions relating to the final design details and drawings that identify the proposed drainage infrastructure at the site to serve the development. Conditions relating to drainage have been agreed with the applicant in order to facilitate the granting of planning permission. Based on the information within the FRA and the DS that all drainage will be managed privately on site by the operators, Anglian Water have no comment to make on the application.

The EA did initially raise an objection that no consideration had been given to the possibility of connecting into mains drainage for foul sewerage from the site. The applicant provided the following response to this objection:

“We note the EA’s position in respect of foul drainage. In respect of this, we would point out that the proposal seeks to make best use of the existing sewage network of cess pits and effluent management which has excess capacity in the system given the reduction in the operational foot print of the works over the last 10 years. It would not seem reasonable nor the best use of resources to require a connection to the mains drainage system when the current system operates sufficiently and can accommodate the flows assumed from the new Electric Arc Furnace. We note the reference here to NPPG in particular, Reference ID: 34-020-20140306 but in our view this reflects guidance for connections for new developments rather than re-development proposals for sites which are appropriately served by an adequate non-mains drainage connection.”

Following a review of this additional justification provided by the applicant, the EA confirmed that they had no further concerns in respect of foul drainage and removed their objection in this regard.

The EA have also provided comments with regards to the potential for contamination to impact controlled waters. They confirm that the site is in a sensitive location with respect to controlled waters and specifically the underlying Secondary A aquifer and the Bottesford Beck. The EA provide the following advice with regards to controlled waters (surface waters and ground water):

“Given the significant historic heavy industry potentially contaminative land use and the absence of a risk rating, we would anticipate significant risk to controlled waters from on-site and off-site sources of contamination. The report acknowledges that these risks warrant further investigation through site investigation and risk assessment. We have no objection to this conclusion in principle in so far as it relates to controlled waters.

The PRA [Preliminary Risk Assessment] report should be updated to provide an indicative risk assessment rating in line with LCRM guidance, with clear associated contaminant linkages relating to specific contaminants, and include the magnitude of risk to groundwater. The updated PRA report should be provided to the Local Planning Authority and the Environment Agency consulted, as part of any future submissions.

Prior to undertaking the site investigation and Generic Quantitative Risk Assessment, an appropriate scope of investigation should be created using the updated PRA report to design site investigation to gather data to assess the risks arising from the specific contaminant linkages identified.”

The EA raise no objection to the proposed development subject to a number of planning conditions which would secure the following:

- Prior to development - a remediation strategy to deal with the risks associated with contamination of the site in respect of the development.
- Prior to use - a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation.
- Prior to piling works – a site-specific piling risk assessment.

The EA also recommend a condition to prevent the use of drainage systems for the infiltration of surface water to the ground unless an assessment of the risks to controlled waters has been undertaken and agreed and a final condition setting out the procedure to be followed should previously unidentified contamination be found during construction.

Having reviewed the submissions of the expert consultants appointed in support of the application, and taking into account the consultation responses from the Environment Agency, the LLFA and Anglian Water, it is considered that there would be appropriate measures in place to ensure the protection of ground and surface water and nearby watercourses and that the development would not be at unacceptable risk of flooding. The proposed development, appropriately mitigated by the recommended conditions, is considered to accord with the requirements of policy DS14 of the NLLP and policy CS19 of the NLCS with regard to the protection of the water environment and flood risk, as well as the relevant policies of the emerging New Local Plan and the NPPF identified above.

Materials and waste

The assessment of the effects of the proposed development in respect of waste and materials is set out in Chapter 15 of the Environmental Statement (ES). This chapter of the Environmental Statement (ES) identifies the potential effects on Material Assets and Waste associated with the construction and operation of the proposed development.

The EIA Regulations require that new developments must identify, describe, and assess the direct and indirect significant effects of the use of natural resources and the production of waste.

Appropriate study areas have been established for the Material Assets and Waste assessment as outlined in the IEMA Guidance.

The ‘development study area’ consists of the operational site Boundary and any additional areas required for temporary use.

The ‘expansive study area’ consists of three geographical areas. The Yorkshire and Humber Region is used for the availability of materials. The East Midlands Region is used for the capacity of waste management infrastructure (inert and non-hazardous landfill). In addition, the expansive study area for hazardous waste landfill capacity is within England.

The Waste Framework Directive, as it has been incorporated into UK legislation, sets out the necessary measures to ensure that waste is recovered or disposed of without endangering human health or causing harm to the environment and includes permitting, registration and inspection requirements. The Directive as incorporated into UK Law also requires the UK to take account of the Waste Hierarchy including appropriate measures to encourage firstly the prevention of waste production, and secondly the recovery of waste by means of recycling, re-use or reclamation or any other process with a view to extracting secondary raw materials, or the use of waste as a source of energy.

The proposed development will result in additional resource consumption and waste generation during the construction and operational phases which will impact on waste management infrastructure capacity. Therefore, an assessment of the impacts of the proposed development on material stocks and waste management infrastructure has undertaken.

Construction

With respect to material assets, impacts relate to the extraction of primary raw materials and the production of construction materials. The proposed development will not sterilise any mineral safeguarding sites across the development study area.

In terms of waste, potential environmental effects are primarily related to the production, movement, transport, processing use and disposal of waste from the proposed development.

The proposed development has the potential to generate large amounts of construction, demolition and excavation (CD&E) waste which could potentially affect the capacity of waste management infrastructure in the expansive study area. Potential effects could include the temporary use of waste management facilities capacity (during treatment) and a permanent decrease in landfill capacity (disposal).

The old medical building and existing infrastructure such as steel tanks which will need to be demolished. Material arising from demolition of these structures, is likely to consist of hard and inert materials, soils, rock and stones, wood (including vegetation), brick, concrete, steel and other miscellaneous metals. The ES estimates 652 tonnes of waste will arise from the demolition of the old medical building. It also states:

“There is potential that some of the existing structures contain asbestos. There are Asbestos Surveys for the existing infrastructure and the presence of asbestos will be confirmed prior to demolition. Any asbestos contaminated waste will be disposed of appropriately at a licenced waste facility.”

The proposed development are striving for a neutral cut and fill therefore it is assumed there will be no waste generated during excavation. Based on the current cut and fill assessment, it is unlikely that excavated materials will be required to be exported offsite or imported material will be brought onto the proposed development.

The estimated construction waste for the proposed development is 7,012 tonnes, this gives a total estimated CD&E waste from the proposed development of 7,664 tonnes. It is predicted that 90% of the construction, demolition and excavation arisings will be recycled and as such the total waste requiring disposal is anticipated to be 766 tonnes. With regard to these predictions the assessment states that:

“The last published data indicated that England was achieving a recovery rate of 93.8% for non-hazardous construction waste. Therefore, a recycling and recovery rate of CDW of 90% is expected to be achieved on the Proposed Development.”

The assessment goes on to demonstrate (through tables 15-23, 15-24 and 15-25) that the proposed development will have a slight, or negligible impact on landfill void capacity, non-hazardous waste disposal capacity and hazardous waste disposal capacity in the ‘extended study area’.

Operation

With respect to materials, impacts relate to the extraction of primary raw materials and the production of materials to be used in operation. The assessment confirms that:

“Minimal materials will be consumed during operation as the Proposed Development is anticipated to use a high proportion of scrap metal feedstock for steel production, rather than primary steel making from ores contributing to circular economy, maximising waste products and greatly reducing energy required.”

In terms of waste, likely environmental impacts are primarily related to the production, movement, transport, processing use and disposal of waste from the proposed development. The proposed development has the potential to generate operational waste which could potentially affect the capacity of waste management infrastructure in East Midlands region. The proposed development also has the potential to generate hazardous wastes such as steel slag and mill scale. This could potentially affect the capacity of waste management infrastructure, particularly limited hazardous waste infrastructure in England. In this regard, the assessment confirms that:

“British Steel currently maximises onsite re-use and recycling of by-products from steel manufacture (for example, waste iron oxide briquetting and iron rich scale) and it is anticipated that onsite reuse and recycling would continue to be maximised with EAF production.”

The ES predicts that there will be a total of 269,245 tonnes of waste associated with the operational phase of the development, with 262,245 tonnes (97%) being diverted from landfill and 7,000 tonnes (3%) being disposed offsite in landfill.

The ES confirms that the proposed waste to landfill will equate to less than 0.1% of landfill capacity for both hazardous and non-hazardous waste.

Overall, the impacts associated with operational waste are considered to be negligible.

Mitigation

In respect of mitigation during construction, the ES confirms that the proposed development will adopt Designing Out Waste principles for material and waste to include:

- *Design for re-use and recovery: identifying, securing, recycling, treating and using materials that already exist onsite or can be sourced from other projects;*
- *Design for materials optimisation: simplifying layout and form to minimise material use, using standard design parameters, balancing cut and fill, maximising the use of renewable materials and materials with recycled content;*

- *Design for offsite construction: maximising the use of prefabricated structure and components, encouraging a process of assembly rather than construction;*
- *Design for the future (deconstruction and flexibility): identify how materials can be designed to be more easily adapted over an asset lifetime and how de-constructability and de-mount ability of elements can be maximised at end of first life; and*
- *Design for waste efficient procurement: identify and specify materials that can be acquired responsibly, in accordance with recognised industry standards.*

More efficient use of materials would make a major contribution to reducing the environmental effects of construction including reducing demand for landfill and the depletion of finite, natural resources.

For construction waste it is confirmed that:

“A Site Waste Management Plan (SWMP) will be developed during the design stage of the Proposed Development... It will be used throughout the design process, to promote 'designing out waste' and the development of a waste strategy through the construction stage. It will also be used to monitor waste arisings and optimise the strategy going forward. During construction it will be updated by the Contractor and will include a number of actions to achieve sustainable resource and waste management.”

In respect of mitigation during operation, the assessment confirms that:

“The Proposed Development will be fully compliant with the Environmental Permitting Regulations, and other relevant permitting requirements which will be required before the Site can be operated. Once obtained the environmental permit will contain conditions on management, operations, emissions, monitoring and record keeping / reporting, including the consideration of Material Assets and Waste aspects. To obtain an environmental permit, the operator must make an application to demonstrate they will be able to comply with the conditions of the environmental permit. The application will need to include risk assessments, management plans / procedures and demonstration of the application of Best Available Techniques (BAT). The content of which will depend on the technology employed, the risks associated with it, and the Site's setting. Therefore, it is expected that the mitigation for the management of Material Assets and Waste effects will be specified within the environment permit conditions.”

Policy context

The most relevant development plan policies against which to assess the proposed development's effect with regard to materials and waste are and 'saved' policy DS11 of the NLLP, which requires that new developments do not create environmental conditions likely to affect nearby developments or adjacent areas; and policy CS20 of the NLCS, which states that the council will consider new and enhanced facilities for the treatment and management of waste in broad strategic areas, which includes Scunthorpe and that sustainable waste management will be promoted through the integration of facilities for waste minimisation, re-use, recycling and composting, in association with the planning, construction and occupation of new development.

Policy WAS1 of the emerging New Local Plan outlines that development that encourages and supports the minimisation of waste production, and the re-use and recovery of waste materials will normally be supported.

The NPPF at Paragraph 8(c) states that part of the environmental objective for achieving sustainable development is:

“to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.”

The NPPF also states at Para 216(b) that planning polices should:

“so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously”.

Planning assessment

The suite of application documents and the accompanying Environmental Statement with its Technical Appendices have all been scrutinised by the relevant experts including the Environment Agency (EA) within their respective jurisdictions.

No third-party comments have been received in relation to materials and waste concerns.

The ES provides an appropriate assessment of waste and materials management.

With regard to construction activities, this it to include the preparation of a Site Waste Management Plan (SWMP) which forms part of the embedded mitigation measures within the proposed Construction Environmental Management Plan (CEMP).

During operation it is proposed that an Operational Waste Management Plan (OWMP) will be implemented.

The EA has confirmed that the development will require a variation to British Steel Ltd's permit under the Environmental Permitting Regulations (England & Wales) 2016 and that this will include conditions relating to raw materials and waste management. Detailed advice has been provided for the Applicant regarding the permitting requirements.

Having given due regard to the fact that the site will be subject to a Waste Management Plan as part of its Environmental Permit, which will be agreed with and monitored by the Environment Agency, the mitigation proposals put forward by the applicant and given the fact that the Environment Agency, who are the key regulator with regard to waste, have raised no objection to the planning application, it is considered that the proposed development poses no unacceptable risk with regard to the production, storage and/or disposal of waste. It is considered that the proposal complies with the relevant requirements of policies DS11 of the NLLP and CS20 of the NLCS as well as those relevant policies of the emerging New Local Plan and the NPPF identified above.

Cumulative effects

The assessment of the potential cumulative effects in respect of the proposed development is set out in Chapter 16 of the Environmental Statement (ES). This chapter outlines the legislative framework for inter-relationship and intra-relationship effects, the methodology, the baseline conditions and the likely significant effects associated with the demolition, construction and operation of the proposed development. Mitigation measures required to reduce the cumulative effects of the proposed development are also described, where relevant.

Cumulative effects are characterised by two different types of effects:

- Intra-relationship effects: effects on a receptor that arise as a result of the combination of topic specific effects (e.g. noise, air quality, traffic) at the proposed development; and
- Inter-relationship effects: effects that arise due to the interaction of the proposed development with 'other existing and/or approved developments' within geographic proximity to the proposed development.

Chapter 16 assesses both inter-relationship and intra-relationship effects. Inter-relationship effects are considered within each topic specific chapter of the ES and are summarised within Chapter 16. Intra-relationship effects are assessed solely within Chapter 16.

The baseline conditions in terms of the cumulative effects assessment includes the construction and operation of the proposed development. Any 'other existing and/or approved developments' that have been constructed in advance of the proposed development works commencing also form part of the baseline.

Intra-relationship effects

The assessment of intra-relationship cumulative effects has considered likely significant effects that may arise during all phases of the proposed development (construction and operational phases).

There are various potential interactions which were identified during both construction and operation of the proposed development. The assessment found the following potential interactive effects:

- *During construction there is potential for emissions in the local area to increase due to an increase in construction related traffic (Air Quality, Greenhouse Gases and Traffic and Transport);*
- *During the construction phase it is anticipated that there will be a small increase in construction related employment opportunities which could result in a minor positive effect for residents of the wider Scunthorpe area. (Socioeconomics and Human Health);*
- *The Proposed Development is expected to be operation in December 2025. Between 2025 and 2050 the greenhouse gas emissions are anticipated to reduce as a result of less reliance on fossil fuel and more of the input materials (namely scrap steel) being sourced locally as opposed to being transported in from other countries.*

As a result this will potentially improve air quality. (Greenhouse Gases and Air Quality); and

- *The operation of the EAF uses less water than the existing BF process. Some of the water used in the process is collected from the site. Precipitation could possibly increase in the future as a result of climate change and this could lead to more surface runoff on site and potentially increase the likelihood of flooding in the future. However, with planning and embedded mitigation the effects are not likely to be significant.*

No significant adverse intra-relationship effects have been identified subject to the mitigation measures detailed in respect of each topic area.

Inter-relationship effects

In order to assess the inter-relationship cumulative effects of the proposed development with 'other existing and/or approved developments' within geographic proximity to the proposed development, the National Infrastructure Planning, Advice Note Seventeen approach was undertaken. This methodology follows a four-stage process, as outlined below:

- Stage 1 – Establishing a Zone of Influence (ZOI) and identifying a list of 'other developments' which could potentially interact with the proposed development.
- Stage 2 - Analysing the list obtained in Stage 1 and identify the other developments that may have a significant effect on the environment, economy or community when assessed cumulatively with the proposed development. Providing a justification as to why the other developments that will result in no cumulative effects can be scoped out of the assessment and to develop a new list of sites that can progress to Stage 3.
- Stage 3 - Gathering all required information for the other developments on the new list.
- Stage 4 - Assessing the likely residual effects as a result of the inter-relationship between the proposed development and cumulative developments.

The Zone of Influence was established in Stage 1, as being 5 kilometres (km) from the boundary of the proposed development. This approach was agreed with the local planning authority at the Scoping stage. A buffer of 5 km was drawn around the proposed development boundary, and a list of 'other existing and/or approved developments' was collated.

The list from Stage 1 was analysed and 7 developments were identified that could have a significant effect on the environment, economy or community when assessed cumulatively with the proposed development. These developments are:

- PA/2023/1815 - Unit 3, Eastgate Park, Queensway Industrial Estate - Planning permission to install three external air source heat pump units – Approved with conditions on 8 January 2024.

- PA/2023/1399 - North Lindsey College, Kingsway, Scunthorpe - Planning permission to erect a three-storey college building, maintenance shed, associated high quality soft landscaping and additional parking and pedestrian provisions and partial demolition of redundant buildings - Approved with conditions on 15 December 2023.
- PA/2023/1554 - 1, Banbury Road, Scunthorpe - Planning permission for the erection of a gymnasium – Approved with conditions on 14 December 2023.
- PA/2023/1724 - Former car park, Dunstall Street, Scunthorpe - Outline planning permission for up to 40 flats, comprising over 4 levels (ground, first, second and third) with 10 flats per level, vehicle access amendments and associated parking (layout, landscaping, scale and appearance reserved for subsequent consideration) – Pending decision.
- PA/2023/1370 - Accident Claims Representatives, Winterton Road, Scunthorpe - Demolition of existing car showroom and construction of new car showroom (Sui Generis) with associated workshop and valet bays, including material change of use of former car parts outlet to body shop and associated external alterations – Pending decision.
- PA/2021/1038 - The Crosby Hotel, Normanby Road, Scunthorpe - Planning permission to erect eight two-bedroomed dwellings and two three-bedroomed dwellings and associated works (including demolition of the existing building on the site) – Pending decision.
- PA/2022/706 - Land North Of, Warren Road, Scunthorpe - Outline planning permission to erect 21 business storage units with all matters reserved for subsequent consideration - Pending decision.

It is noted that, subsequent to the production of the ES, planning application PA/2023/1370 has been determined by the LPA and permission was granted subject to conditions on 13 March 2024.

The assessment considers the potential for cumulative effects associated with:

- air quality
- biodiversity
- greenhouse gases
- climate change resilience
- geology, soil and contaminated land
- human health
- noise and vibration
- socioeconomics
- traffic and transport

- water environment and flood risk
- materials and waste.

Without exception, the assessment identifies no potential cumulative effects in respect of the identified projects.

Planning assessment

The ES provides an appropriate assessment of potential cumulative effects of the proposed development. No significant intra, or inter-relationship effects have been identified.

The LPA agreed the approach to assessing cumulative impacts at the Scoping stage, including agreeing the list of 'other developments' used for the assessment of inter-relationship effects.

A range of mitigation measures (such as implementation of a CEMP and CTMP during construction etc.) have been identified throughout the ES, within the individual technical chapters, which will prevent unacceptable intra-relationship effects from occurring.

Landscape and visual impacts

An assessment of the effects of the proposed development in respect of its impact on the landscape and visual amenity is provided within the submitted Planning Statement, the application is also accompanied by a Design and Access Statement.

With regards to landscape and visual impacts, the Planning Statement concludes that:

“The proposed development will be contained within an established industrial site and will not have significant impact on the wider landscape. The stacks are lower than other existing stacks within the British Steel site and surrounding area, as demonstrated within the Design and Access Statement which accompanies the application. The site is not located within a designated landscape character area and the existing development comprises functional infrastructure to support the operation of the steelworks.”

Landscape and Visual Impacts were scoped out of the Environmental Statement at the Scoping stage. This was agreed with the LPA.

Policy context

The relevant extant development plan policies against which to assess the proposed development's effect upon landscape and visual impact are 'saved' policy DS1 of the NLLP, which requires all new development to respect and where possible retain and/or enhance the existing landform; 'saved' policy LC7 of the NLLP, which requires special attention to be given to the protection of the scenic quality and distinctive local character of the landscape; and policy CS5 of the NLCS, which requires new developments to be well designed and appropriate for their context.

Policy DQE1 is the most relevant policy of the emerging New Local Plan and requires that development proposals that would cause unacceptable harm and do not respect and

protect the distinctive character and quality of the landscape or important features or views will not be permitted.

Chapter 12 (Achieving well-designed places) of the NPPF relates to landscape and visual impact considerations.

NPPF Paragraph 135 sets out the aim of planning policies to ensure that developments:

- (a) *will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;*
- (b) *are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;*
- (c) *are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities)*

Planning assessment

No third party comments have been received raising landscape and visual impact concerns.

The application site is not located in any area designated either nationally or locally for its landscape importance.

The site falls within the Lincolnshire Edge Landscape Character Area (LCA) and Industrial Landscape Character Type. The key characteristics of the Lincolnshire Edge – Industrial Landscape LCT are:

- Flat, bleak, predominantly hard landscape overwhelmed by large scale industry and unmanaged land.
- Areas of high enclosure provided by density and scale of industry, ranging to openness with views across expanses of brownfield land.
- Along its western edge there is some boundary trees and vegetation which break up some of the views to the east.
- On its eastern edge, tree and hedgerow cover has established well to screen views to the west when using the PROW network.
- Along the southern edge (Mortal Ash Hill) significant screening using broadleaved trees has been planted since 2000.
- Complex character exaggerated by lack of cohesive structure. Area dominated by industry and associated infrastructure, i.e. roads, railway lines, security fencing, electricity poles, etc.
- There are no statutory heritage or ecological designations present within this LCT. However, on previously developed land around quarries and the steelworks, important open mosaic habitats have developed, supporting a wide diversity of plants and invertebrates and protected species.

- The PROW network is contained to the north-eastern edge, near to the small settlement of Santon.

The application site forms part of the existing established Scunthorpe steel works facility. It is characterised by a flat, open expanse of hardstanding used for car parking and storage, and is defined to the north, south and west by large scale, rectilinear buildings. It is crossed by a series of service roads which serve the adjoining buildings and by suspended utilities. Vegetation is limited to relatively small areas of grassland along the roads or self-seeded scrub in areas of hardstanding, which creates an unmanaged appearance.

The character of the site is generally representative of the wider Lincolnshire Edge – Industrial Landscape LCT.

The site has a strong industrial character with existing influences from the adjacent steel works. Built form in and around the site is largely utilitarian in nature and often appears dilapidated. The proposed development would represent an intensification of built form and contribute to the established character of the site and local area. The massing and materiality would generally reflect the surrounding built form albeit in improved condition which would help the proposed development to integrate with the wider steel works.

The proposed development would be in keeping with LCT Lincolnshire Edge – Industrial Landscape and the site character, so there would be significant change to the key characteristics.

With regard to visual impact, the site is strongly contained by built form and structural vegetation which would screen the majority of the proposed development in nearby views. The upper levels of the building would rise above surrounding built form so would be experienced in mid to long distance views around the eastern edge of Scunthorpe. From the public footpaths between Broughton and Scunthorpe and the residential properties west of Ashby Vile, the proposed development would adopt similar massing and materiality as other industrial development currently experienced in these views. This would reduce the influence of the proposed development on the local skyline and help to visually integrate it into wider views.

There would be a barely perceptible change to the character and composition of the views experienced by recreational users of public footpaths between Broughton and Scunthorpe, and residents of properties west of Ashby Vile Nature Reserve as a result of the proposed development.

Taking into account the absence of any significant impacts upon the local landscape, it is considered that the proposed development would not result in adverse visual impacts or impacts upon the local landscape. Therefore, the proposed development as set out in the submitted details is considered to accord with policies DS1 and LC7 of the NLLP and policy CS5 of the NLCS with regard to its effect on landscape and visual impact as well as those relevant policies of the emerging New Local Plan and the NPPF identified above.

Cultural heritage

No formal assessment of cultural heritage has been presented within the suite of application documents. Heritage impacts were scoped out of the Environmental Statement at the Scoping stage. This was agreed with the LPA.

Policy context

The most relevant extant development plan policies against which to assess the proposed development's effect upon heritage assets are 'saved' policy DS1, which requires that developments do not have adverse effects on features of acknowledged importance, including Scheduled Ancient Monuments, archaeological remains, listed buildings and Conservation Areas; and policy CS6 of the NLCS, which to protect, conserve and enhance North Lincolnshire's historic environment, as well as the character and setting of areas of acknowledged importance including historic buildings, conservation areas, listed buildings (both statutory and locally listed), registered parks and gardens, scheduled ancient monuments and archaeological remains.

Policy HE1 of the emerging New Local Plan relates to the historic environment. This policy requires new development to protect, conserve and seek opportunities to enhance the historic environment of North Lincolnshire. Where a development proposal would affect the significance of a heritage asset (whether designated or non-designated), including any contribution made to its setting, it must be informed by proportionate historic environment assessments and evaluations.

Paragraph 200 of the NPPF states:

"In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. "

Planning assessment

There are no designated or non-designated heritage assets within the site.

The area of the site is a car park between two existing buildings which were constructed in the early 1970s on the site of a disused ironstone quarry. As a result of the level of past construction within the site, no previously unrecorded archaeological remains are likely to be present.

The closest designated heritage asset is more than 1km from the site. This asset, Raventhorpe medieval settlement earthworks scheduled monument, as well as the nearby Grade II listed Raventhorpe farmhouse, both have an existing setting which includes the British Steel site. They are located on the eastern side of a small area of woodland which provides some screening, but the steelworks extend to less than 500m from the two heritage assets. The proposed development is not considered to alter this baseline in any way which would have an impact on the significance of the two designated heritage assets.

Although there would be temporary changes in traffic movements along the adjacent roads, this would not alter the settings of any heritage assets in the area due to the baseline use of these roads for steelworks related traffic.

The maximum height of the proposed development has increased since the Scoping stage. As a result, the council's Historic Environment Officer requested a representative wireframe from a viewpoint overlooking Scheduled Monument of Raventhorpe Medieval Settlement to ensure that there would be no impacts on this monument that require further assessment. The applicant subsequently provided this representative wireframe and the HEO confirmed that:

“the wireframe is sufficient to make an assessment that no further work is necessary. The visualisation shows that the proposed electric arc building will sit lower in the view than the existing Boss Mill and is effectively screened by the tree belt.”

The council's Conservation Officer (CO) has also provided comment on the planning application, offering the following advice:

“At scoping stage it was agreed built heritage was to be scoped out of assessment, during these discussions an assessment of potential heritage impact was undertaken. The only noted building was the farmhouse identified above [Raventhorpe Farmhouse] and it was considered due to overriding distance and topography that the proposal would be of no consequence to how the significance of this heritage asset, or its setting is experienced.”

The submitted representative wireframe has demonstrated that there will be no previously unidentified impact upon Raventhorpe Farmhouse as a result in the increase in height from the Scoping stage.

English Heritage have raised no objection to the proposed development and have advised the LPA to make use of the advice of their own in-house heritage advisors.

Having given due regard to the consultation response from the council's HEO and CO, it is considered that the risks of an adverse impact being caused to heritage asset's historic importance or heritage value, arising from the proposed development is very low. It is considered that the proposal accords with policies DS1 of the NLLP and CS6 of the NLCS with regard to its impact on heritage assets as well as those relevant policies of the emerging New Local Plan and the NPPF identified above.

Mitigation

Chapter 17 of the ES summarises the predicted residual effects of the proposed development (those effects remaining following mitigation).

A schedule of mitigation measures for the construction and operational phases is presented in Table 17-1. These measures are discussed in full in the relevant technical chapters of this ES and are referred to in the relevant sections of this report above (Air Quality, Biodiversity etc.).

Table 17-1 has been used in conjunction with the consultee responses received in preparing the list of planning conditions. The conditions have been agreed with the applicant prior to the report being finalised.

The application has not generated the need for contributions/requirements through a Section 106 agreement. Matters relating to off-site highway works, local employment and bio-diversity enhancements are to be delivered through the use of planning conditions. There is therefore not considered to be a need for the Local Authority to enter into a legal agreement with the applicant for the delivery of these matters. However, a Unilateral Undertaking is proposed by the applicant to secure a maximum period of 12 months for the DS1 scenario (both the existing blast furnaces and EAF working in tandem) to ensure that the proposal aligns with the environmental assessments presented in the ES and that the benefits of the scheme, particularly with regards to air quality improvements, are delivered. This legal agreement will be prepared and signed by the applicant.

Other material considerations

The application has been considered by Humberside Fire & Rescue who have offered no detailed representations in relation to the proposed development. The fire brigade have made reference to access and water supplies in relation to the proposed development site and have offered the following comments:

“It is a requirement of Approved Document B5, Section 15 Commercial Properties or B5, Section 13 for Domestic Premises that adequate access for fire fighting is provided to all buildings or extensions to buildings.

Where it is a requirement to provide access for high reach appliances, the route and hard standing should be constructed to provide a minimum carrying capacity of 26 tonnes.

Adequate provision of water supplies for fire fighting appropriate to the proposed risk should be considered. If the public supplies are inadequate it may be necessary to augment them by the provision of on-site facilities. Under normal circumstances hydrants for industrial unit and high risk areas should be located at 90m intervals. Where a building, which has a compartment of 280m² or more in the area is being, erected more than 100m from an existing fire hydrant, hydrants should be provided within 90m of an entry point to the building and not more than 90m apart. Hydrants for low risk and residential areas should be located at intervals of 240m.

These are not matters that the planning system would control, however will be included as an informative to the decision to alert the applicant to the fire brigades position.

The application has been considered by Humberside Police, and specifically their Designing Out Crime Officer who has raised no objection to the proposed development.

Conclusion

The application has been supported by an EIA as Schedule 1 development as well as a number of other technical documents forming the overall planning submission. The methodology and scope of the ES is acceptable and is considered a robust document which properly outlines the baseline conditions of the site, the impact of the construction of the proposed development and its future operation.

As stated earlier in this report, Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan, unless material considerations indicate otherwise. As discussed within the Assessment section of the report, above, the proposed development is considered to accord with the development plan policies that are deemed relevant to the determination of this application. This includes those policies relating to sustainable development and economic development, such as policies CS2 and CS11 of the NLCS and policy IN3 of the NLLP. Furthermore, it is considered that the development does not conflict with those policies seeking to prevent unacceptable harm from being caused to residential amenity, highway safety, ecology, water resources or flooding.

The proposed development is considered to result in positive benefits to the local area, including, improvements to air quality, a reduction in overall vehicle movements, job creation during construction and testing, inward investment to the area and other associated economic benefits.

That there will be future job losses due to the electrification of the steelmaking industry is acknowledged; however, the proposed development is stated to be essential to securing the viability and sustainable future of the Scunthorpe Steelworks. These benefits are considered to weigh heavily in favour of the development when applying the planning balance.

The proposed development also receives support at the local and national policy levels in the contribution that the development could make towards the nation's targets for reductions in CO₂ emissions. British Steel is the third largest emitter of CO₂ within the UK and decarbonisation is not possible if it is to remain operating as they are currently. Due to British Steel's large emissions, decarbonisation efforts are expected to contribute significantly to the UK's net zero target for 2035.

In terms of mitigation these matters have been addressed through a suite of planning conditions that have been drafted in response to advice offered by statutory consultees and in response to the findings and conclusions of the ES. Further consideration of a number of matters will also be further addressed at the Reserved Matters stage of the outline element of the proposed development.

Having assessed the proposed development with respect to both development plan policy and other material considerations to which the authority must have due regard, it is considered, on balance, that there are no material adverse impacts of the development that would significantly and demonstrably outweigh the benefits and therefore, in accordance with paragraph 11 of the NPPF, it is recommended that planning permission is merited.

Equality Act 2010 - 149 Public Sector Equality Duty

During the detailed consideration of this application an equality impact assessment has been undertaken, including within Chapter 10 (Human Health) of the submitted ES, which demonstrates that due regard has been given to the duties placed on the LPAs as required by the Equality Act. As part of the assessment of the application/proposal due regard has been given to the following relevant protected characteristics:

- age

- disability
- gender reassignment
- pregnancy and maternity
- race
- religion or belief
- sex
- sexual orientation.

The LPA is committed to:

- (a) eliminating discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010.
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

In addition, the LPA, in the assessment of this application/proposal has given due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it. This approach involves.

- (a) removing or minimising disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic.
- (b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it.
- (c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

The LPA has taken reasonable and proportionate steps to meet the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities, as part of this planning application/proposal.

Due regard has been given to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves. Particular consideration has been given to the need to:

- (a) tackle prejudice
- (b) promote understanding.

Finally, the LPA recognises that compliance with the duties in this section may involve treating some persons more favourably than others; but that is not to be taken as permitting conduct that would otherwise be prohibited by or under this Act.

RECOMMENDATION

Subject to no adverse comments being received from Natural England in respect of the updated Habitat Regulations Assessment (HRA) and subject to the completion of a formal Unilateral Undertaking under Section 106 of the Town and Country Planning Act 1990 to secure a decommissioning timeframe for the existing blast furnaces, the committee resolves:

- (i) it is mindful to grant full planning permission for the construction of a new electric arc furnace and compressor building and outline planning permission for ancillary plant buildings and structures up to a maximum height of 72m associated with the new electric arc furnace (scale, appearance, landscaping and layout reserved for subsequent consideration);**
- (ii) the full planning permission so granted for the construction of a new electric arc furnace and compressor building to be subject to the following conditions:**

1.

The development must be begun before the expiration of three years from the date of this permission.

Reason

To comply with section 91 of the Town and Country Planning Act 1990.

2.

The development hereby permitted shall be carried out in accordance with the following approved documents and plans:

- Environmental Statement, dated 31 January 2024
- Planning Statement, dated 31 January 2024
- Design and Access Statement, dated January 2024
- Site Location Plan, ref: 289608-01 Rev P03
- Red Line Boundary, ref: 297639_01 Rev P03
- Site Location Plan, ref: BSS-GGA-XX-XX-DR-A-0001 Rev P01
- Proposed Site Plan, ref: BSS-GGA-XX-XX-DR-A-0003 Rev P01
- Proposed Ground Plan, ref: BSS-GGA-10-XX-DR-A-0001 Rev P01
- Proposed Roof Plan, ref: BSS-GGA-10-XX-DR-A-0002 Rev P01
- Proposed Elevations 1, ref: BSS-GGA-01-XX-DR-A-0003 Rev P01
- Proposed Elevations 2, ref: BSS-GGA-01-XX-DR-A-0004 Rev P01
- Compressor House Proposed Ground Plan, ref: BSS-GGA-00-XX-DR-A-0001 Rev P01
- Compressor House Proposed Roof Plan, ref: BSS-GGA-00-XX-DR-A-0002 Rev P01
- Compressor House Proposed Elevations, ref: BSS-GGA-00-XX-DR-A-0003 Rev P01.

Reason

For the avoidance of doubt and in the interests of proper planning.

3.

Prior to any development above damp proof course (DPC), details shall be submitted to and approved in writing by the local planning authority of the make, type and colour of all external facing materials to be used in the construction of the electric arc furnace (EAF) and compressor house buildings and only the approved materials shall be used.

Reason

To ensure that the building is in keeping with its surroundings in the interests of visual amenity, in accordance with policy DS1 of the North Lincolnshire Local Plan.

and the outline planning permission so granted for ancillary plant buildings and structures up to a maximum height of 72m associated with the new electric arc furnace (scale, appearance, landscaping and layout reserved for subsequent consideration) to be subject to the following conditions:

4.

Approval of the details of the layout, scale and appearance of the building(s), and the landscaping of the site, (hereinafter called 'the reserved matters') shall be obtained from the local planning authority in writing before any development is commenced.

Reason

The application has been made under Article 5(1) of the Town & Country Planning (Development Management Procedure) (England) Order 2015.

5.

Plans and particulars of the reserved matters referred to in condition 4 above, relating to the layout, scale and appearance of any buildings to be erected, and the landscaping of the site, shall be submitted in writing to the local planning authority and shall be carried out as approved.

Reason

The application has been made under Article 5(1) of the Town & Country Planning (Development Management Procedure) (England) Order 2015.

6.

Application for approval of the reserved matters shall be made to the local planning authority before the expiration of three years from the date of this permission.

Reason

To comply with the provisions of Section 92 of the Town and Country Planning Act 1990.

7.

The development hereby permitted shall be begun either before the expiration of five years from the date of this permission, or before the expiration of two years from the date of approval of the last of the reserved matters to be approved, whichever is the later.

Reason

To comply with the provisions of Section 92 of the Town and Country Planning Act 1990.

8.

The development hereby permitted shall be carried out in accordance with the following approved documents and plans:

- Environmental Statement, dated 31 January 2024
- Planning Statement, dated 31 January 2024
- Design and Access Statement, dated January 2024
- Site Location Plan, ref: 289608-01 Rev P03
- Red Line Boundary, ref: 297639_01 Rev P03
- Outline Application Areas, ref: 297639_01 Rev P04

and shall not exceed the limits defined in the Development Parameter table presented in section 3.1.1 of the Planning Statement as follows:

- Maximum floor space of 31,000 sqm (gross floor area)
- Maximum building height 72m AOD
- Maximum number of buildings 4
- Maximum stack parameters – No more than 2 stacks of maximum height of 72m each
- EAF pipe connection minimum height of 14m
- EAF pipe connection maximum height of 20m.

Reason

For the avoidance of doubt and in the interests of proper planning.

Conditions relating to both the full and outline permissions:

9.

No part of the approved development, other than site preparation, demolition and clearance works, shall commence until a construction environmental management plan (CEMP), for that part, has been submitted to and approved in writing by the local planning authority. The development shall thereafter take place in accordance with the approved details. The CEMP shall include the following:

Noise and vibration:

- (a) the works, and the method by which they are to be carried out;
- (b) the noise and vibration attenuation measures to be taken to minimise noise and vibration resulting from the works, including any noise limits; and
- (c) a scheme for monitoring the noise and vibration during the works to ensure compliance with the noise limits and the effectiveness of the attenuation measures.

Light:

- (a) specified locations for contractors' compounds and materials storage areas;
- (b) areas where lighting will be required for health and safety purposes;
- (c) the location of potential temporary floodlights;

- (d) the identification of sensitive receptors likely to be impacted upon by light nuisance;
- (e) proposed methods of mitigation against potential light nuisance, including potential glare and light spill, on sensitive receptors.

Dust:

- (a) site dust monitoring, recording and complaint investigation procedures;
- (b) the identification of receptors and the related risk of dust impact at all phases of the development, including when buildings and properties start to be occupied;
- (c) the provision of water to the site;
- (d) dust mitigation techniques at all stages of development;
- (e) the prevention of dust trac;
- (f) communication with residents and other receptors;
- (g) a commitment to cease the relevant operation if dust emissions are identified either by regular site monitoring or by the local authority;
- (h) a 'no burning of waste' policy.

Reason

To protect the amenity of local residents and other sensitive receptors in accordance with policy DS1 of the North Lincolnshire Local Plan.

10.

No part of the development approved by this planning permission shall commence, save for geotechnical surveys and other investigations for the purpose of assessing ground conditions, until a remediation strategy to deal with the risks associated with contamination of land and groundwater, has, for that part, been submitted to, and after consultation with the Environment Agency, approved in writing by the local planning authority. This strategy will include the following components:

- (i) A preliminary risk assessment which has identified:
 - all previous uses;
 - potential contaminants associated with those uses;
 - a conceptual model of the site indicating sources, pathways and receptors;
 - potentially unacceptable risks arising from contamination at the site.
- (ii) A site investigation scheme, based on (i) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

- (iii) The results of the site investigation and the detailed risk assessment referred to in (ii) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
- (iv) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (iii) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the written consent of the local planning authority. The scheme shall be implemented as approved.

Reason

To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of pollution in line with policy DS7 of the North Lincolnshire Local Plan and paragraph 180 of the National Planning Policy Framework.

11.

Prior to the final commissioning of the electric arc furnace (EAF), a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reason

To ensure that the site does not pose any further risk to the environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with policy DS7 of the North Lincolnshire Local Plan and paragraph 180 of the National Planning Policy Framework.

12.

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to, and approved in writing by, the local planning authority. The remediation strategy shall be implemented as approved.

Reason

To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of pollution from previously unidentified contamination sources at the development site. This is in line with policy DS7 of the North Lincolnshire Local Plan and paragraph 180 of the NPPF.

13.

No development, other than site preparation, demolition and clearance works shall take place until a construction phase traffic management plan (CTMP) has been submitted to and approved in writing by the local planning authority, in consultation with National Highways. The CTMP shall include details of:

- (i) a pre/post construction condition survey of the carriageway to identify any defects and how they will be rectified;
- (ii) all associated traffic movements, including delivery vehicles and staff/construction movements;
- (iii) any abnormal load movements;
- (iv) contractor parking and welfare facilities;
- (v) storage of materials;
- (vi) traffic management requirements, including the means of controlling the deposition of mud onto the adjacent highway, along with appropriate methods of cleaning the highway, as may be required; and
- (vii) details of construction traffic levels and routing having regard to the relevant screening criteria within Table 6.2 of 'IAQM/EPUK Guidance: Land-Use Planning & Development Control: Planning For Air Quality' including a supporting air quality assessment undertaken if the criteria is exceeded.

Once approved, the plan shall be implemented, reviewed and updated as necessary throughout the construction of the development.

Reason

In the interests of highway safety and to mitigate any adverse impact from the development on the strategic highway network in accordance with policy T19 of the North Lincolnshire Local Plan and Department for Transport Circular 01/2022.

14.

Prior to development being brought into use, a detailed travel plan which seeks to promote sustainable access to the site for staff, whilst controlling and monitoring the impact of staff trips in relation to agreed targets, shall be submitted to and approved in writing by both National Highways and the local planning authority. Once approved, all conditions and requirements of the plan shall be implemented and retained at all times. Any variations to the approved plan shall be approved in writing by the local planning authority, in consultation with National Highways.

Reason

To ensure that the proposed development operates in a safe and sustainable manner with minimal disruption to the highway network.

15.

Prior to the development being brought into use, an operational traffic management plan (OMP) shall be submitted to and approved in writing by both National Highways and the local planning authority. The OMP shall include details of:

- (a) how staff shift patterns are secured outside of the morning and evening peak hours on both the local highway and strategic road network;

- (b) what measures will be implemented to minimise HGV deliveries/exports during the network peak hours;
- (c) what measures will be implemented to prevent the queuing of vehicles on the A18, whilst waiting to access the site at Gate A.

Once approved, all conditions and requirements of the plan shall be implemented and retained at all times. Any variations to the approved plan shall be approved in writing by the local planning authority, in consultation with National Highways.

Reason

In the interests of highway safety and to comply with policy T19 of the North Lincolnshire Local Plan.

16.

The development shall not be brought into use until improvements to the existing access arrangements at Gate A have been completed in accordance with details submitted to and approved in writing by the local planning authority.

Reason

To ensure that the development is served by a safe and suitable access in accordance with policy T2 of the North Lincolnshire Local Plan.

17.

Prior to commencement of construction of the electric arc furnace building, an updated air quality assessment shall be submitted to the local planning authority for approval in writing. The assessment shall provide details of the proposed emission limit values and demonstrate the embedded technology within the electric arc furnace design to mitigate any air quality impacts to an acceptable level. The agreed mitigation measures shall be installed prior to the commissioning of the electric arc furnace and shall be retained thereafter.

Reason

In the interests of amenity and public health in accordance with policies DS1 and DS11 of the North Lincolnshire Local Plan.

18.

The BS 4142:2014 + A1:2019 Rating Level of the development hereby permitted shall not exceed the typical background sound level at any time at any noise sensitive property as determined in report reference: Scunthorpe Electric Arc Furnace, Environmental Statement, Chapter 11: Noise and Vibration, Reference 297639-02 Issue 1, dated 31 January 2024. The measurements and assessment shall be made according to BS4142:2014 + A1:2019.

Reason

In the interest of amenity in accordance with policies DS1 and DS11 of the North Lincolnshire Local Plan.

19.

Within three months of the electric arc furnace being brought into operation, a sound validation report shall be submitted to and agreed in writing by the local planning authority. The report shall demonstrate that condition 18 has been complied with. The measurements

and assessment within the validation survey shall be made according to BS4142:2014 + A1:2019.

Reason

In the interest of amenity in accordance with policies DS1 and DS11 of the North Lincolnshire Local Plan.

20.

Construction, demolition and site clearance operations shall be limited to the following days and hours:

- 8am to 6pm Monday to Friday
- 8am to 1pm on Saturdays.

No construction, demolition or site clearance operations shall take place on Sundays or public holidays.

HGV movements shall not be permitted outside these hours during the construction phase without prior written approval from the local planning authority.

Installation of equipment on site shall not be permitted outside these hours without prior written approval from the local planning authority.

Reason

In the interest of amenity in accordance with policies DS1 and DS11 of the North Lincolnshire Local Plan.

21.

No development shall take place until a species protection plan has been submitted to and approved in writing by the local planning authority. The plan shall include:

- (a) details of measures to avoid harm to bats, water voles and nesting birds during demolition, vegetation clearance and construction works;
- (b) details of road gullies and road drainage designed to minimise harm to amphibians; and
- (c) prescriptions for the management of invasive non-native species, including Cotoneaster species during demolition, vegetation clearance and construction.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

22.

Within three months of the commencement of development, the applicant or their successor in title shall submit a biodiversity management plan to the local planning authority for approval in writing. The plan shall include:

- (a) prescriptions for the enhancement, planting and aftercare of mixed native scrub and neutral grassland of high biodiversity value in suitable soils;
- (b) details to confirm that the measures proposed will provide a measurable net gain in biodiversity value of least 10% in accordance with the statutory biodiversity metric;
- (c) proposed timings for the above works in relation to the completion of the electric arc furnace.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

23.

The biodiversity management plan and species protection plan shall be carried out in accordance with the approved details and timings, and the approved features shall be retained thereafter, unless otherwise approved in writing by the local planning authority. Prior to the operation of the approved electric arc furnace, the applicant or their successor in title shall submit a report to the local planning authority, providing evidence of compliance with the biodiversity management plan and species protection plan.

Reason

To conserve and enhance biodiversity in accordance with policies CS5 and CS17 of the Core Strategy.

24.

No part of the authorised development may commence, other than site preparation, demolition and clearance works, until a detailed surface water drainage scheme, for that part, has been submitted to and approved in writing by the local planning authority. The scheme shall be based on sustainable drainage principles and an assessment of the hydrological and hydro-geological context of the development and must be based on the submitted Environmental Statement Chapter 14 Water Environment and Flood Risk, job number 297639-02, prepared by Ove Arup and Partners Ltd, dated 31/01/2024 . The drainage scheme shall demonstrate that surface water run-off generated up to and including the 1 in 100 year critical storm (including an allowance for climate change which should be based on the current national guidance) will not exceed the run-off from the existing site. It shall also include details of how the resulting completed scheme is to be maintained and managed for the lifetime of the development so that flood risk, both on and off the site, is not increased.

Reason

To prevent the increased risk of flooding, to improve and protect water quality, and to ensure the implementation and future maintenance of the sustainable drainage structures in accordance with policy DS16 of the North Lincolnshire Local Plan, and policies CS18 and CS19 of the North Lincolnshire Core Strategy.

25.

The drainage scheme shall be implemented in accordance with the approved submitted details, completed prior to the electric arc furnace being brought into operation, and thereafter retained and maintained in accordance with the scheme for the life of the development unless otherwise agreed in writing with the local planning authority.

Reason

To prevent the increased risk of flooding, to improve and protect water quality, and to ensure the implementation and future maintenance of the sustainable drainage structures in accordance with policy DS16 of the North Lincolnshire Local Plan, and policies CS18 and CS19 of the North Lincolnshire Core Strategy.

26.

No drainage systems for the infiltration of surface water to the ground are permitted other than with the written consent of the local planning authority. Any proposals for such systems must be supported by an assessment of the risks to controlled waters. The development shall be carried out in accordance with the approved details.

Reason

To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants, in line with paragraph 180 of the National Planning Policy Framework.

27.

Piling or any other foundation designs using penetrative methods shall not be carried out other than with the written consent of the local planning authority, following consultation with the Environment Agency. The development shall be carried out in accordance with the approved details. A site-specific piling risk assessment is required to be submitted to and approved by the local planning authority, following consultation with the Environment Agency, prior to commencing piling works.

Reason

To ensure that any proposed penetrative foundation solutions do not harm groundwater resources in line with paragraph 180 of the National Planning Policy Framework.

Informatives

1.

In determining this application, the council, as local planning authority, has taken account of the guidance in paragraph 38 of the National Planning Policy Framework in order to seek to secure sustainable development that improves the economic, social and environmental conditions of the area.

2.

The developer's attention is directed to the Environmental Permitting Advice provided by the Environment Agency in their consultation response dated 3 April 2024, a copy of which can be found on the council's online planning register.

3.

Discharge rate and connection into Bottesford Beck must be agreed with the Environment Agency (Main River).

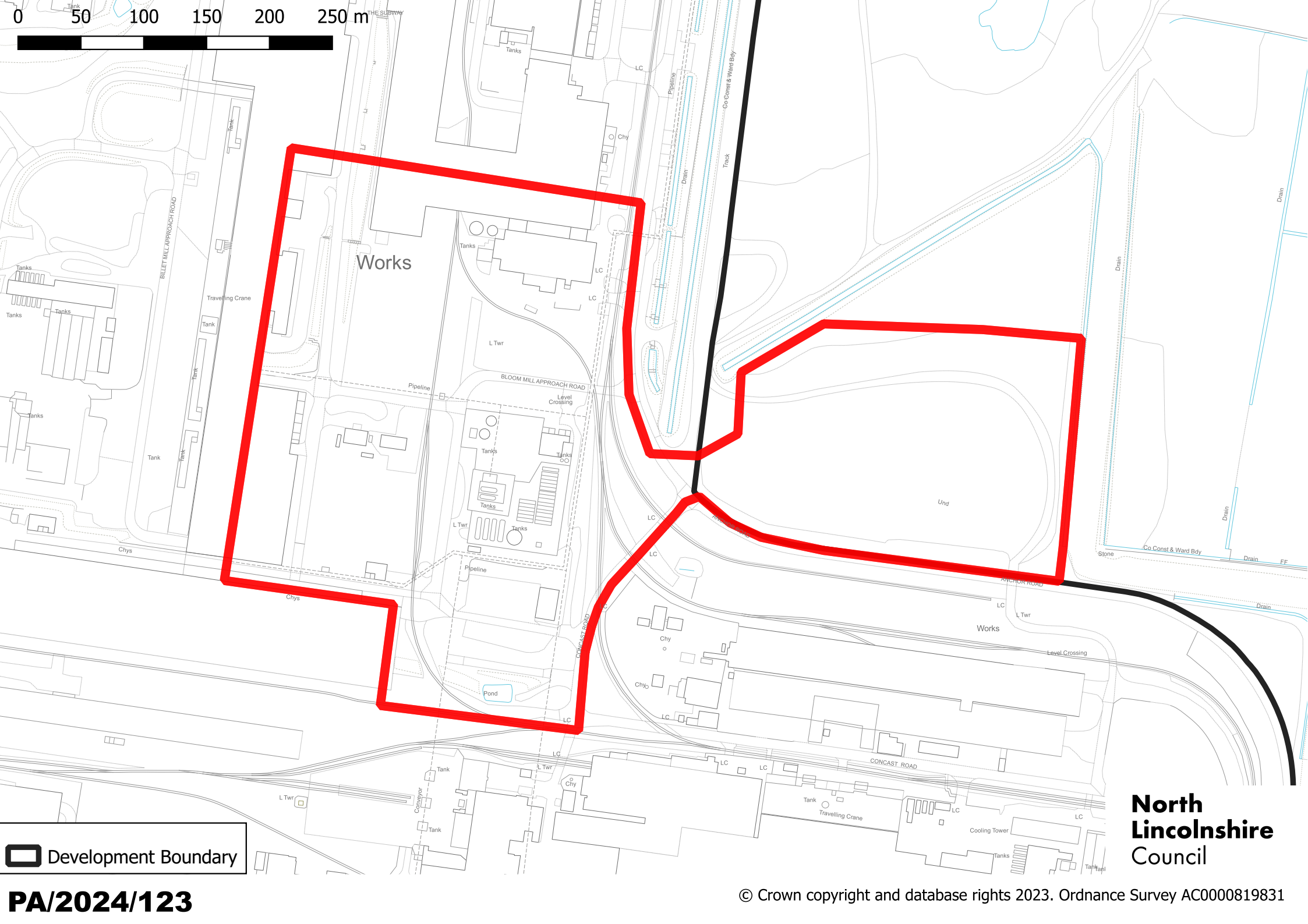
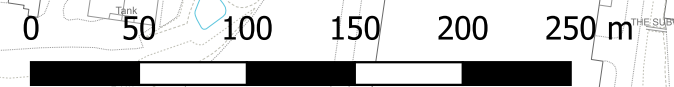
4.

An appropriate survey should be undertaken to identify any asbestos-containing materials in existing buildings or elsewhere on the application site (including fly-tipped waste or demolition rubble). Asbestos-containing materials must be safely removed prior to

demolition and site clearance, or conversion of existing buildings, to avoid causing risks to public health and the environment. Asbestos-contaminated waste must be disposed of appropriately at a licensed waste facility. The legal requirements for managing and working with asbestos are set out in the Control of Asbestos Regulations 2012.

5.

The developer's attention is directed to the informative advice provided by Humberside Fire and Rescue within their consultation response dated 22 February 2024 in relation to the requirements in respect of access for fire services and water supplies for fire-fighting.

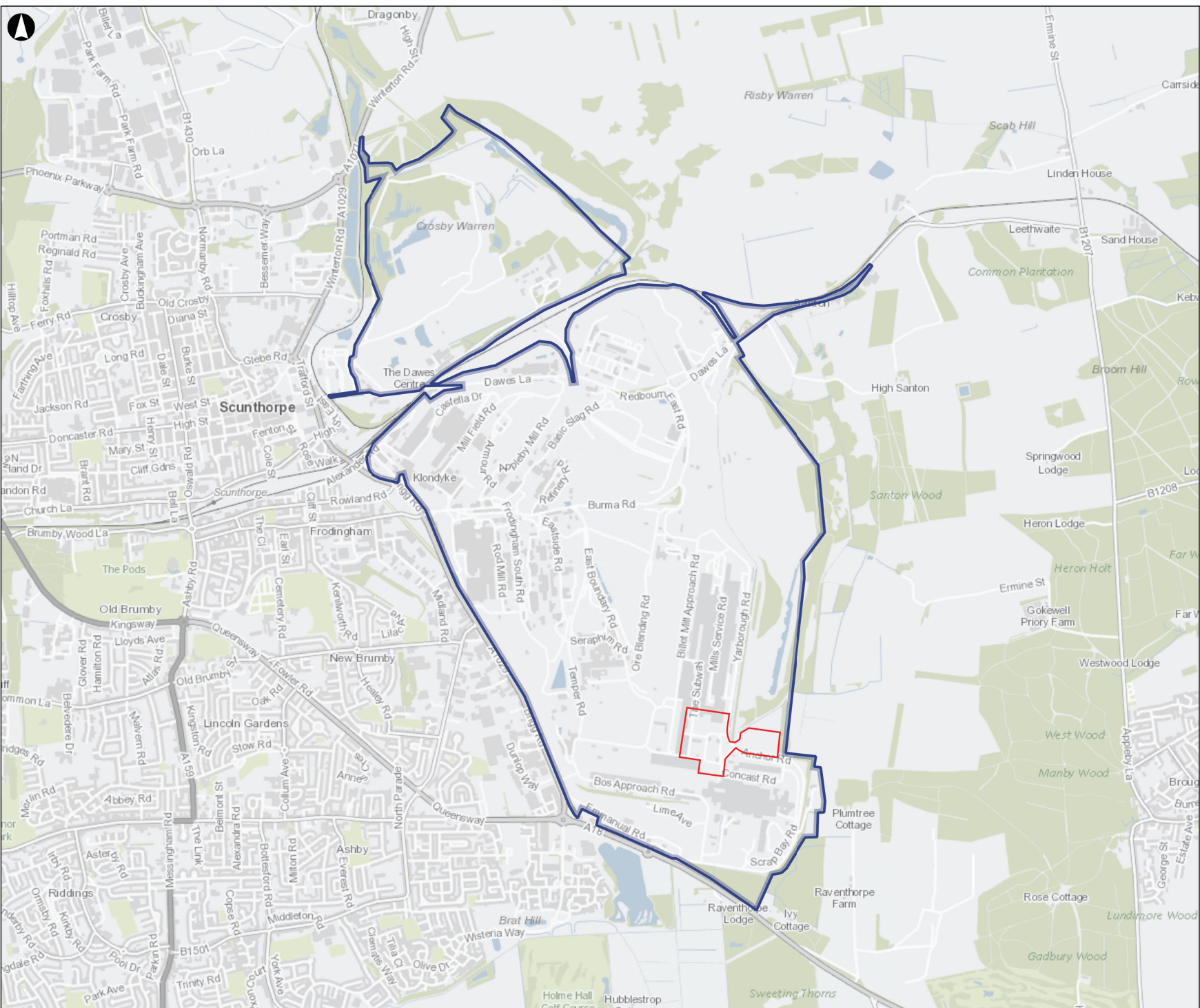


Development Boundary

PA/2024/123

**North
Lincolnshire
Council**

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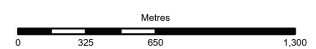


Red Line Boundary 16.69 ha
 Land owned by British Steel

A3

11/6/2024 12:58 PM

Coordinate System: British National Grid
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Rev	Date	By	Chkd	Appd	Authd
P03	16/01/2024	AF	--	--	--

ARUP

8 Fitzroy Street
 London W1T 4BQ
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Client
British Steelworks

Project Name
British Steelworks

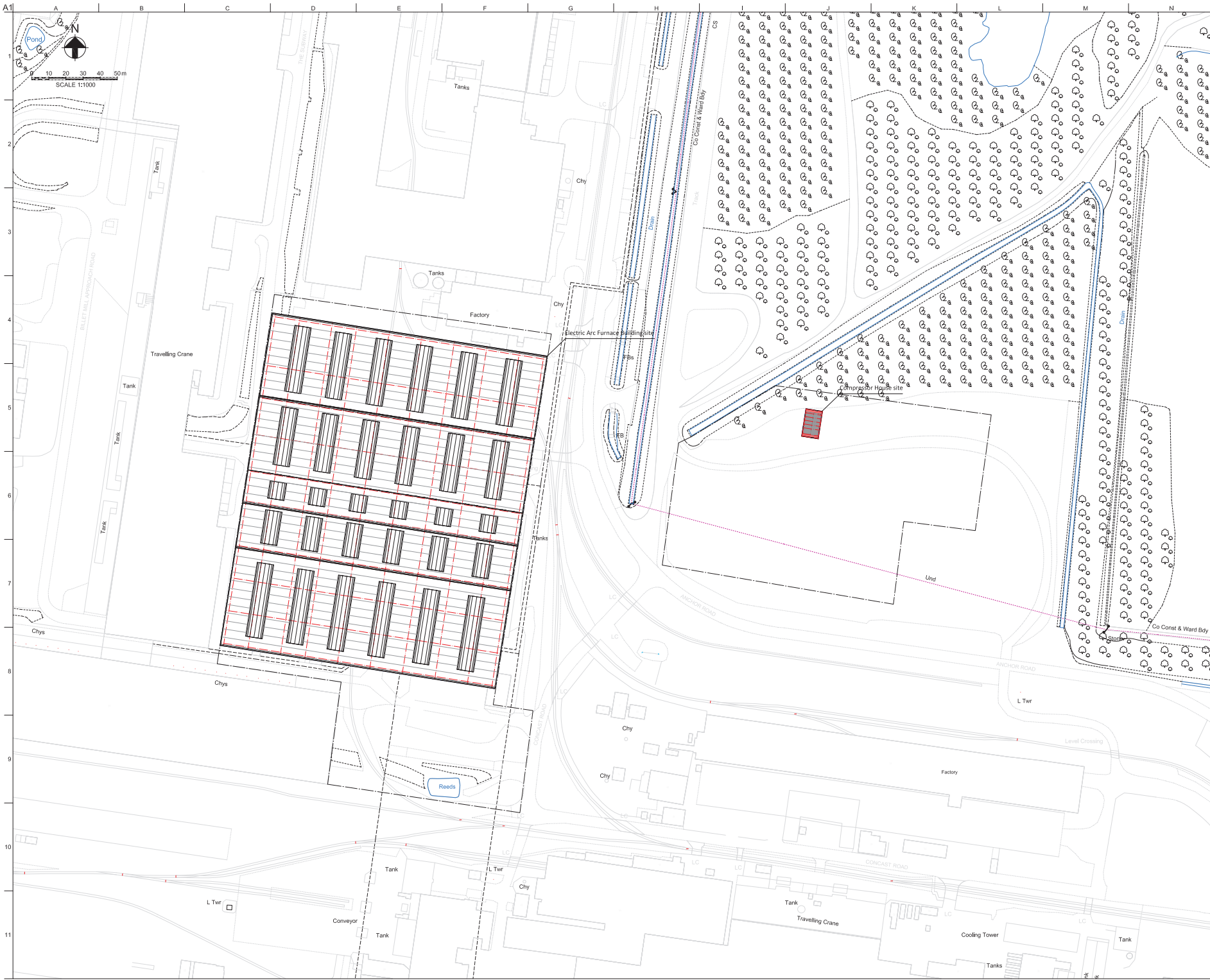
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Scale at A3
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Role
Planning

Reference Only
 Project Number
289608-01

Rev
P03



Notes

■ Detailed Planning Application Buildings

A	31/01/24	xxx	xxx	xxx
Issued For Information				
Rev	Date	By	Chd	Appr

ARUP

90 Floor, 3 St Pauls Place
 Norfolk Street, Sheffield S1 2JE
 Tel: +44 (0)114 276247 Fax: +44 (0)114 275953
 www.arup.com

Client
British Steel

Project Title
**New Electric Arc Furnace
 At British Steel Scunthorpe**

Drawing Title
Proposed Site Plan

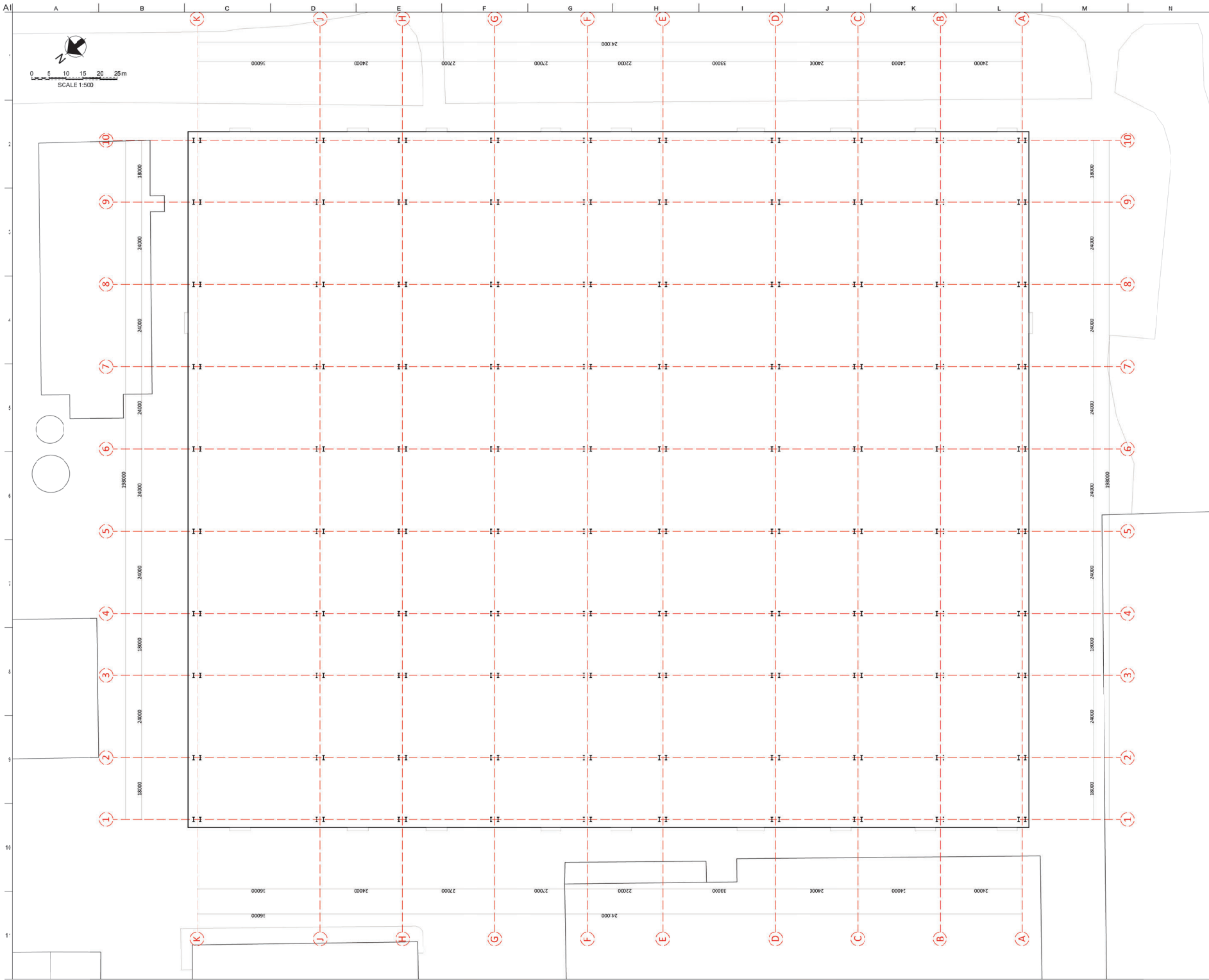
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Role: Civil

Subtitled: S2 - Suitable for Information

App. job No: **297639** Rev: **P01**

Name: **BSS-GGA-XX-XX-DR-A-0003**



Notes

1. Notes XXXXX

Development Areas
 Detailed Planning Application Buildings

A	31/01/24	xxx	xxx	xxx	xxx
Issued For Information					
Rev	Date	By	Ctd	Appt	

ARUP

6th Floor, 3 St Paul's Place,
 Norfolk Street, Sheffield S1 1JE
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 www.arup.com

Client
British Steel

Project Title
**New Electric Arc Furnace
 At British Steel Scunthorpe**

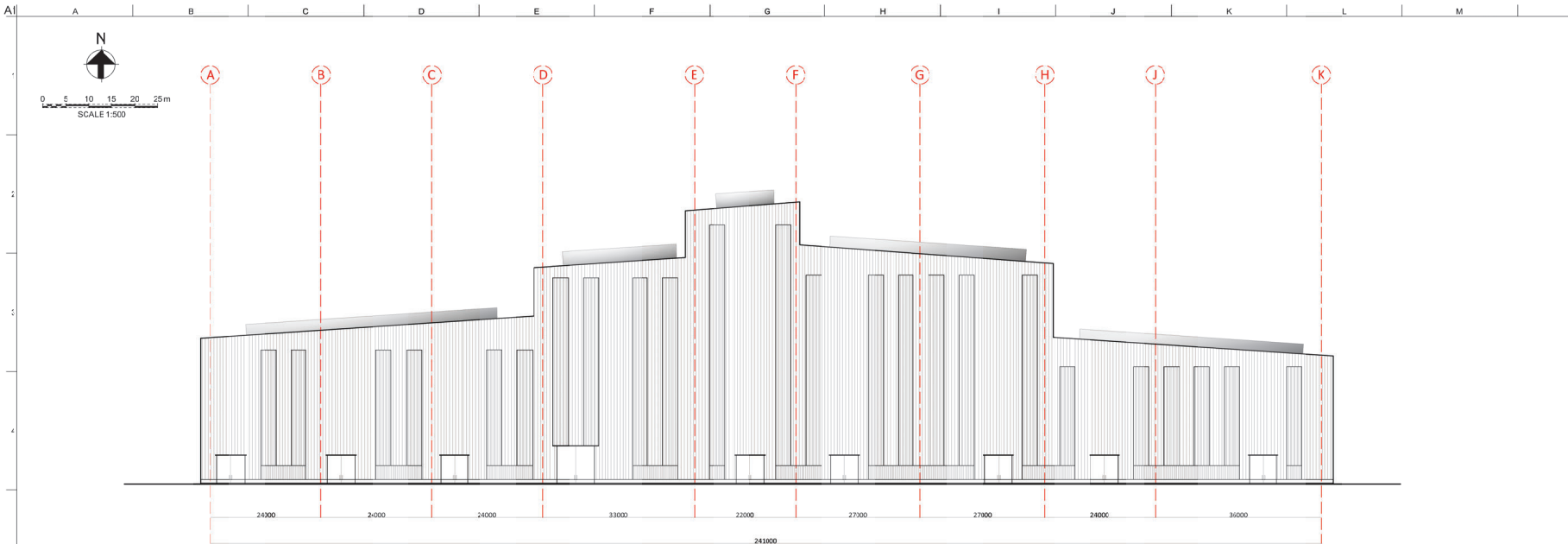
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Scale of A1: 1:500

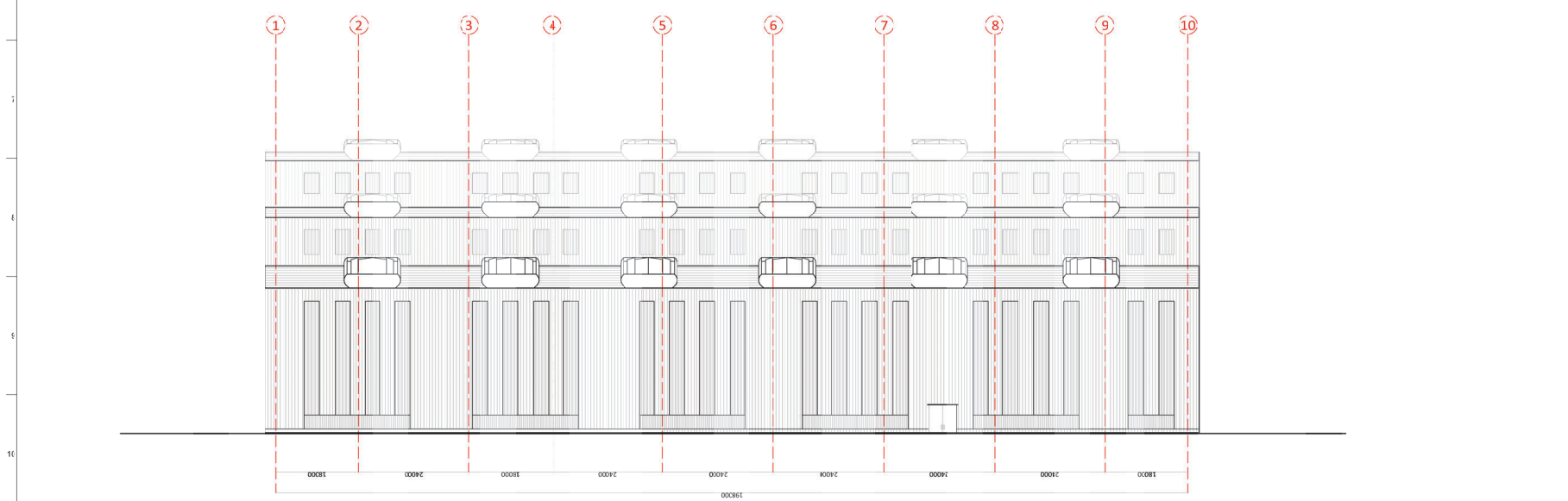
Role: Civil

Suitability: S2 - Suitable for Information

Arup Job No: **297639** Rev: **P01**
 Name: **BSS-GGA-10-XX-DR-A-0001**



1 Proposed Elevation - East
1:500 Scale



2 Proposed Elevation - South
1:500 Scale

Notes

- 1. Notes XXXXX
- Development Areas
 Detailed Planning Application Buildings

A	31/01/24	xxx	xxx	xxx
Issued For Information				
Rev	Date	By	Chkd	Appt

ARUP

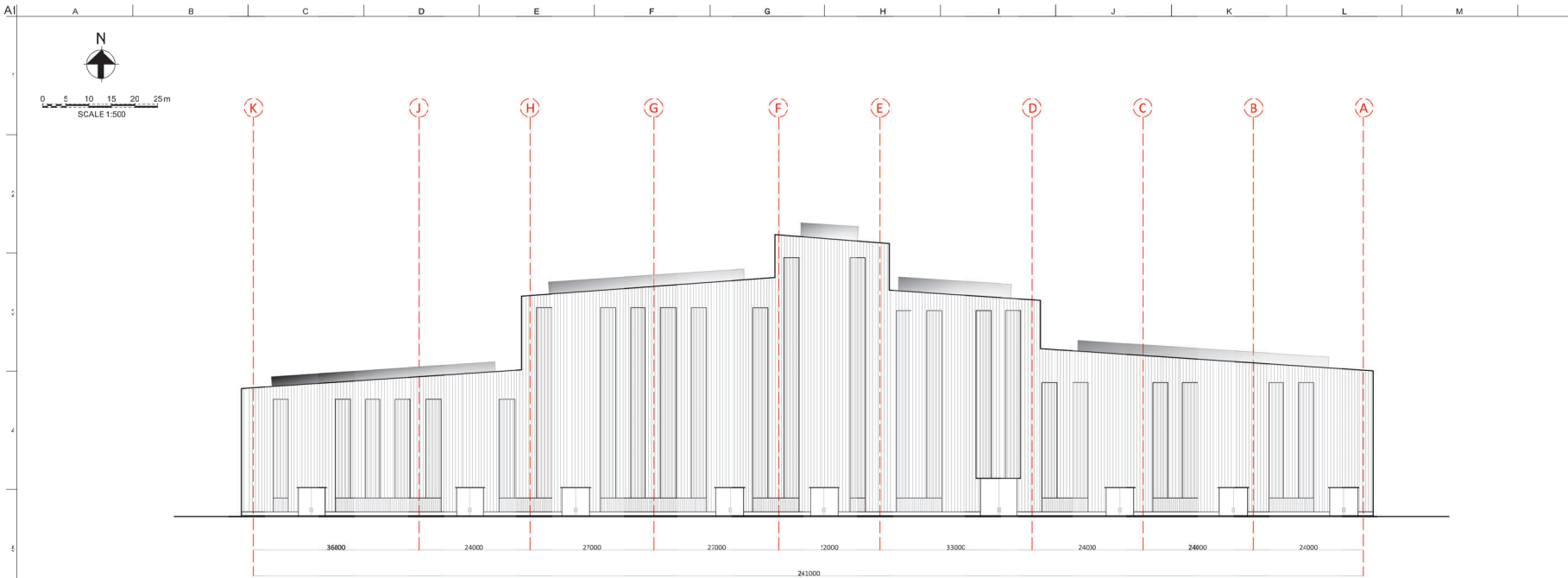
5th Floor, 3 St Pauls Place,
 Norfolk Street, Sheffield S1 1JE
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 www.arup.com

Client
British Steel

Project Title
**New Electric Arc Furnace
 At British Steel Scunthorpe**

Drawing Title
Proposed Elevations 1

Scale of A1	1:500
Role	Civil
Suitability	S2 - Suitable for Information
App. Job No.	297639
Rev	P01
Name	BSS-GGA-01-XX-DR-A-0003



1 Proposed Elevation - West
1:500 Scale



2 Proposed Elevation - North
1:500 Scale

Notes

1. Notes XXXXX

- Development Areas
- Detailed Planning Application Buildings

A	31/01/24	xxx	xxx	xxx
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Client
British Steel

Project Title
**New Electric Arc Furnace
At British Steel Scunthorpe**

Drawing Title
Proposed Elevations 2

Scale of A1
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Role
Civil

Suitability
S2 - Suitable for Information

Arup Job No.
297639

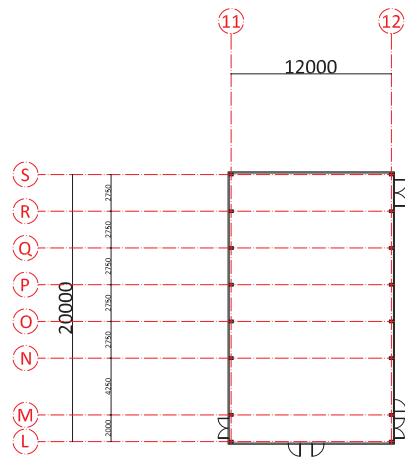
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Name
BSS-GGA-01-XX-DR-A-0004



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Notes

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Rev	Date	By	Chkd	Appr



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Client
British Steel

Project Title
**New Electric Arc Furnace
At British Steel Scunthorpe**

Drawing Title
**Compressor House
Proposed Ground Plan**

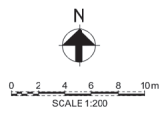
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Role: Civil

Submittal: S2 - Suitable for Information

Arup Job No. 297639	Rev P01
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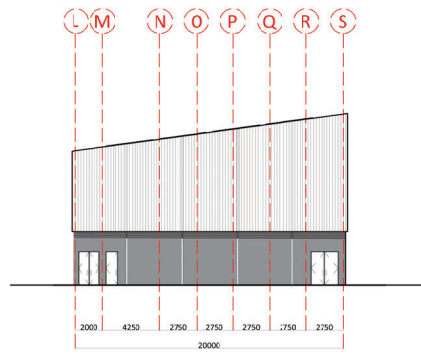
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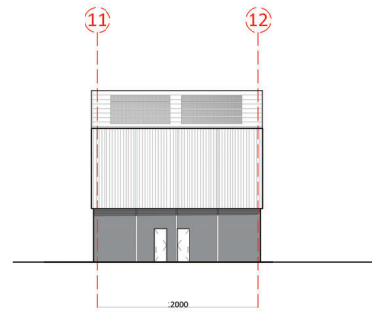
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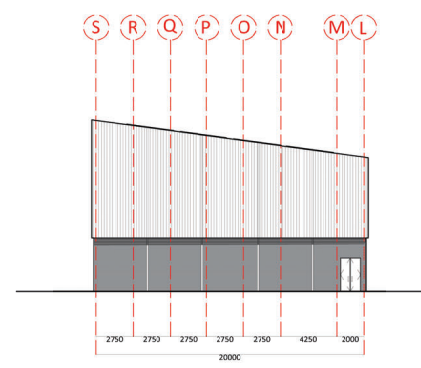
- Development Areas
- Detailed Planning Application Buildings



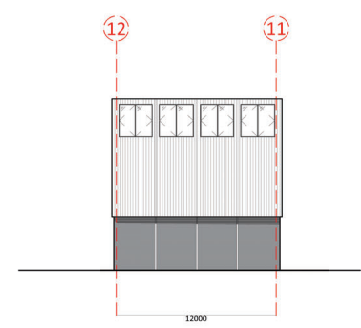
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1:200 Scale



2 Proposed Elevation - South
1:500 Scale



3 Proposed Elevation - West
1:200 Scale



4 Proposed Elevation - North
1:200 Scale

A	31/01/24	xxx	xxx	xxx
Issued For Information				
Rev	Date	By	Chkd	Appt

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Client
British Steel

Project Title
**New Electric Arc Furnace
At British Steel Scunthorpe**

Drawing Title
**Compressor House_
Proposed Elevations**

Scale of A1
1:200

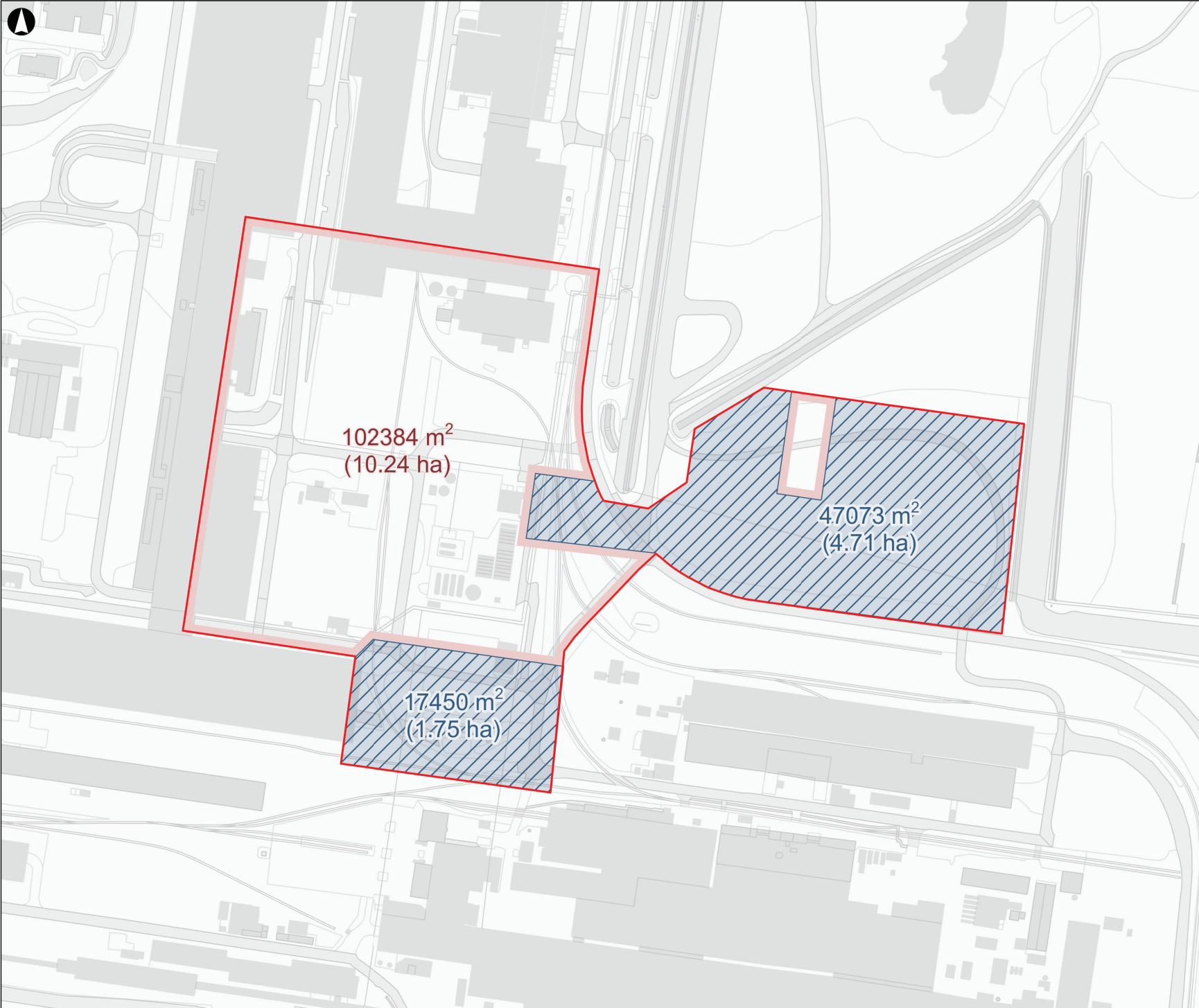
Role
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Suitability
S2 - Suitable for Information

App. Job No.
297639

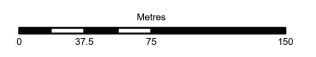
Rev
P01

Name
BSS-GGA-00-XX-DR-A-0003



- Red Line Boundary
16.69 ha
- Outline Application Areas
6.45 ha
- Remaining Area
10.24 ha

Coordinate System: British National Grid
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204	18/01/2023	AF	--	--	--
Rev	Date	By	Chkd	Appd	Authd

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Client
British Steelworks

Project Name
British Steelworks

Drawing Title
Outline Application Areas

Scale at A3
1:3,000

Role
Planning

Setability
Reference Only

Project Number 297639_01	Rev P04
Drawing Number -	