Redcar and Cleveland Borough Council

Planning (Development Management)

APPLICATION NUMBER:	R/2023/0793/ESM	
LOCATION:	BRITISH STEEL LACKENBY WORKS REDCAR TS6 7RP	
PROPOSAL:	REDCAR TS6 7RP HYBRID APPLICATION TO INCLUDE DETAILED PLANNING PERMISSION FOR THE ERECTION OF STEEL MANUFACTURING FACILITY (ELECTRIC ARC FURNACE) AND OUTLINE PERMISSION FOR ASSOCIATED BUILDINGS, APPARATUS AND INFRASTRUCTURE (ALL MATTERS	

Planning Application Details (redcar-cleveland.gov.uk)

APPLICATION INTRODUCTION AND REPORT STRUCTURE

The application to which the below report relates in one that is supported by an Environmental Impact Assessment (EIA). The layout and general structure of the report therefore differs from those applications that are not supported by an EIA, and that members of the Regulatory Committee would be more familiar with.

The layout of the report includes, as with all applications a description of the site and the proposed development, along with details of the supporting documents, with the relevant policies and consultation responses following.

The report then considers the individual chapters within the submitted document referred to as the 'Environmental Statement' (ES). Technical matters relating to the proposed development are dealt within in Chapter D to O of the ES. In considering these technical matters the report will provide a summary from the individual chapters contained within the ES including the following headings:

- Baseline
- Potential Effects of Development
- Mitigation and Monitoring
- Residual Effects
- Conclusions

Each chapter's assessment will conclude with a planning assessment within which consideration will be given to compliance with national and local policy along with responses from the relevant consultees. The planning assessment

will also detail any resulting planning conditions relevant to that technical chapter.

The report concludes with a recommendation along with the list of the proposed conditions.

APPLICATION SITE AND DESCRIPTION

The submission is a hybrid application to include detailed planning permission for the erection of steel manufacturing facility (electric arc furnace) and outline permission for associated buildings, apparatus and infrastructure (all matters reserved). The application relates to land at British Steel, Lackenby Works, Redcar. The development site is approximately 19.83ha in area and is largely made up of buildings, structures and areas of hardstanding.

The applicant within the submitted Planning Statement has provided an overview description of the proposed development. The Planning Statement details this as:

As details of certain aspects of the Electric Arc Furnace (EAF) development are still to be finalised, planning permission is being sought for both detailed elements and outline elements of the scheme. Essentially, the main building, housing the Electric Arc Furnace, is submitted for detailed permission whilst associated buildings, structures and open areas (i.e. for storage, servicing and parking) are submitted for outline permission. As such, the description of development for the application is as follows:

"Hybrid application to include detailed planning permission for the erection of steel manufacturing facility (electric arc furnace). Outline permission for associated buildings, apparatus and infrastructure (all matters reserved)".

Detailed Element

The use is general industrial (Use Class B2), as a place for the manufacturing of steel. The buildings, structures, storage, and parking areas associated with the main EAF building will be ancillary and, therefore, the entire development falls within Use Class B2.

A detailed building design has been prepared for the main EAF building which accommodates around one quarter of the overall application site. The proposed building provides a gross external area of 37,526sqm, accommodated within a building with a stepped roofline up to a maximum height of 53.04m. The development has been designed to provide a modern, high-quality environment, adopting appropriate quality materials and finishes.

The overall building design is configured to accommodate the successful functioning of an EAF, and the layout has been carefully developed to achieve a configuration that satisfies operational requirements. This includes a covered conveyor link from the EAF building directly into the existing Lackenby Beam Mill. By the nature of the proposed development, no soft landscaping is proposed within the site.

Outline Element

Outline consent is sought for the remaining 15.65 hectares to be occupied by ancillary buildings, apparatus and infrastructure associated with the operation of the EAF.

Detailed layouts and designs are not yet finalised for all these elements, however parameters will be imposed on any outline permission granted in order to control the scale and impacts of the development brought for approval at the 'Reserved Matters' stage. One of those parameters is that no more than 30,000sqm (GEA) of floorspace will be developed within the outline area. Maximum heights of buildings and structures are also set by parameters, as explained in Section 5.0.

The location, scale and layout will be dictated by operational/functional requirements of the EAF building and the end user, British Steel.

Access and Parking

Approval of the final access arrangements are not being sought as part of this development. However, the development is likely to take its primary access from the existing British Steel Gatehouse off the roundabout junction on the Trunk Road. Further access points connecting to internal roads throughout the wider Teesworks area are also likely to be available, which will connect to the public highway at various points along the A66/Trunk Road. Final access arrangements will be determined at the reserved matters stage.

Parking to serve the development will be provided as a combination of existing parking in the wider British Steel complex as well as new parking provided within the application site.

In respect of the latter, the final layout and number of parking spaces will be determined at the reserved matters stage. At this outline stage, assumptions as to parking requirements have been made in the accompanying Transport Assessment.

Hours of Operation

The new EAF facility will operate 24 hours a day, seven days a week.

The detailed plans relating to the proposed development are:

Proposed Site Plan (Dwg No. 1852-TEE-P-10.02 Rev A) Proposed Floor Plans (Dwg No. 1852-TEE-P-20.01 Rev A) Proposed Roof Plan (Dwg No. 1852-TEE-P-20.02 Rev B) Proposed Elevations (Dwg No. 1852-TEE-P-30.01 Rev B)

The application has been submitted with the following documents;

- Design and Access Statement
- Planning Statement including Statement of Community Involvement
- Ecological Impact Assessment
- Flood Risk Assessment and Drainage Strategy
- Transport Assessment
- Travel Plan
- Habitats Regulation Assessment

The ES includes the following technical chapters

- Chapter A Introduction
- Chapter B Scope and Methodology
- Chapter C Site and Scheme Description
- Chapter D Transport
- Chapter E Noise and Vibration
- Chapter F Air Quality
- Chapter G Hydrology and Hydrogeology
- Chapter H Ground Conditions
- Chapter I Socio Economics
- Chapter J Waste and Materials Management
- Chapter K Climate Change and Resilience
- Chapter L Landscape and Visual Impact
- Chapter M Accidents and Disasters
- Chapter N Cumulative Effects
- Chapter O Mitigation and Monitoring

During the consideration of the application an addendum to the submitted ES was submitted by the applicant on 24th January 2024. The Environmental Statement Addendum (ESA) has been subject to public consultation in accordance with the EIA Regulations for the required 30-day period.

Accompanying the ESA, other documents have been submitted in support of the application including:

- Updated Design and Access Statement
- Updated Ecological Impact Assessment
- Updated Habitat Regulations Assessment

The following outlines the timeline the application has progressed through before being presented to Regulatory Committee

Application received as valid on 18/12/23 Initial consultation on ES to expire on 28/01/24 ES Addendum submitted by applicant on 24/01/24 Consultation on ES Addendum commenced on 02/02/24 Consultation on ES Addendum to expire on 03/03/24 Regulatory Committee Date 03/04/24 16 week target determination date 08/04/24 Councillor Learoyd has requested that the application be determined by Regulatory Committee in accordance with the provisions set out within the Council Constitution under Part 160(g)

DEVELOPMENT PLAN

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that applications for planning permission be determined in accordance with the development plan unless material considerations indicate otherwise.

NATIONAL PLANNING POLICIES

National Planning Policy Framework (NPPF) (December 2023)

REDCAR & CLEVELAND LOCAL PLAN (2018)

SD1 Sustainable Development SD2 Locational Policy SD3 Development Limits SD4 General Development Principles SD5 Developer Contributions SD6 Renewable and Low Carbon Energy SD7 Flood and Water Management LS4 South Tees Spatial Strategy ED6 Promoting Economic Growth N1 Landscape N2 Green Infrastructure N4 Biodiversity and Geological Conservation TA1 Transport and New Development TA2 Improving Accessibility Within the Borough and Beyond

OTHER POLICY DOCUMENTS

Tees Valley Joint Minerals and Waste Core Strategy Development Plan Document (September 2011)

PLANNING HISTORY

R/2023/0862/PND Prior notification for demolition of buildings and structures. Prior Approval Not Required 09/01/24

RESULTS OF CONSULTATION AND PUBLICITY

There have been two rounds of consultation and the application has been advertised by means of a press notice, site notice and neighbour notification letters.

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

- No detail as to the potential impact of dust emissions from the proposed steelmaking plant.
- No cost benefit analysis of waste heat recovery which should always be carried out as part of the permission to operate a plant of this nature.
- Large amount of the raw materials for the new plant will be transported to the site by road. The site is already linked to rail lines which would provide a far more efficient and environmentally beneficial transport route.
- Existing junction from the A1085 into the Lackenby site is in a poor state and presents a danger to both cyclists and pedestrians travelling on the path adjacent to the Eastbound carriageway toward Redcar as the path crosses the entrance to Lackenby works. With the proposed increase in traffic, particularly heavy traffic, to the site this junction will significantly increase this hazard. With the aim of workers at the site increasingly using public transport, walking and cycling to access the site, as stated in the planning application, this junction requires some redesign incorporating a safer crossing for both pedestrians and cyclists.

Natural England

(01/02/24)

FURTHER INFORMATION REQUIRED TO DETERMINE IMPACTS ON DESIGNATED SITES

As submitted, the application could have potential significant effects on the

- North York Moors Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI)
- Teesmouth and Cleveland Coast Special Protection Area (SPA), Ramsar site, and SSSI.

Natural England requires further information in order to determine the significance of these impacts and the scope for mitigation. The following information is required:

- The air quality assessment should be updated to include a full assessment of all potential emissions, including nutrient nitrogen and ammonia
- An assessment of air quality impacts to special interest features of the SSSI
- Clarification from the applicant regarding the Critical Level for SO2 used in their assessment
- An update to the in combination assessment to include assessment of additional emissions (ammonia and nutrient nitrogen) and the SSSI special interest features

• An assessment of the potential impacts to water quality arising from discharges of process-related wastewater

Without this information, Natural England may need to object to the proposal.

(19/02/24)

Natural England does not currently have sufficient information on the proposal's anticipated emissions to air and water to provide substantive advice on the potential impacts on nearby designated sites. Please refer to Natural England previous consultation response for full details on the further information we require (ref. 462437, dated: 01 February 2024). We have attached our previous response to the accompanying email for your convenience.

We understand that your authority is considering progressing this application to planning committee in advance of the requested further information being provided and that the applicant has proposed to secure the provision and assessment of this further information by way of planning condition.

The usual practice for environmental assessments, including those under the Habitats Regulations, is to understand the extent of impacts on designated sites prior to making a decision on a development proposal. There are many reasons for this approach, including to ensure environmental effects are considered together with socio-economic factors, to allow any necessary avoidance or mitigation measures to be most effectively designed into proposals and, importantly, to ensure that any planning permission that is granted is capable of being delivered in accordance with the Conservation of Habitats and Species Regulations 2017 and/or the National Planning Policy Framework (paragraph 186).

However, if your authority deems that the proposed approach is appropriate in this instance, Natural England has the following comments on the wording of any conditions:

1. Their discharge should be required prior to the commencement of the development rather than the operation to ensure outstanding details are fully worked through and resolved before development begins.

2. They should refer to all the potentially affected designated sites, rather than only the Teesmouth and Cleveland Coast Special Protection Area (SPA) site. The potentially affected designated sites comprise:

- a. North York Moors Special Area of Conservation (SAC)
- b. North York Moors Site of Special Scientific Interest (SSSI)
- c. Teesmouth and Cleveland Coast SPA
- d. Teesmouth and Cleveland Coast Ramsar site
- e. Teesmouth and Cleveland Coast SSSI

3. They should specify that assessment of potential impacts on the SSSIs will be needed in line with paragraph 186 of the NPPF, as well as a Habitats Regulations Assessment of the SAC, SPA and Ramsar sites.

Ultimately, any decision on the appropriateness of conditions is for your LPA to make, taking into account the relevant tests for planning conditions.

Natural England welcomes working with your authority and the applicant to review the detailed information as it becomes available, and we will prioritise providing substantive advice (subject to the extent and complexity of the material).

Temple Group (RCBC Retained Ecologists)

As discussed, our opinion is that it would be preferable to have a completed HRA submitted with the application, which would be prepared on a precautionary basis making use of such parameters as are available and the commitment to a condition that sets out the envelope of parameters for the equipment required to scrub the emissions; the specification of the equipment would then be conditioned. However, it is understood that the applicant is not comfortable with that position, not having specifications for the equipment at this stage, and is willing to accept the onus of risk with regards to any objection post-determination as a result of completing the HRA as a condition.

While this is not a standard approach, as has been demonstrated, there is precedent and Natural England, although reluctant, have given leeway to apply this option. Therefore, we do not see any barriers with regard to Natural England's position or the Habitat Regulations to the Authority accepting this approach and agree that the condition, as proposed, is appropriate.

It should be noted that the Redcar & Cleveland adopted local plan (2018) Policy N4 states that: Development requiring Appropriate Assessment will only be allowed where: a. it can be determined through Appropriate Assessment at the design stage that, taking into account mitigation, the proposal would not result in adverse effects on the site's integrity, either alone or in combination with other plans or projects. 'At design stage' would normally be taken to mean that this is included at application, but may be construed to extend to detailed design, as would be the case in this situation.

Alongside this, we strongly recommend that the applicant provides a response at this time to Natural England to address each point, including.:

- Water quality during construction will be managed by a CEMP, which will be required through a condition;
- Water quality during normal operation can be concluded to have no LSE with regards nitrogenous pollutants as there are no nitrogen compounds in the process that the water is used for;
- The conditioned HRA will include consideration of all relevant pollutants, in addition to NOx and SO2 and will take account of all relevant SSSI components of the IIWS; and

 Clarification of the critical level for SO2 used in the current HRA – either to confirm it is appropriate, or to clarify that the appropriate level will be applied in the conditioned HRA.

Environment Agency

(24/01/24)

Whilst we have no objections to this application as submitted, we would like to provide the below advice to the applicant:

Movement of waste off-site – Advice to Applicant The Environmental Protection (Duty of Care) Regulations 1991 for dealing with waste materials are applicable to any off-site movements of wastes. The code of practice applies to you if you produce, carry, keep, dispose of, treat, import or have control of waste in England or Wales.

The law requires anyone dealing with waste to keep it safe and make sure it's dealt with responsibly and only given to businesses authorised to take it. The code of practice can be found here: Waste duty of care code of practice - GOV.UK (www.gov.uk)

If you need to register as a carrier of waste, please follow the instructions here: https://www.gov.uk/register-as-a-waste-carrier-broker-or-dealer-wales There are some waste exemptions which don't need to be registered. These are called Non Waste Framework Directive (NWFD) exemptions. These relate to the process of gathering waste together and storing it at the place where it's produced. Although you don't have to register this exemption, you must still comply with the terms and conditions of the exemption.

Further information on the NWFD 2 temporary storage at the place of production and relevant conditions can be found here: Waste exemption: NWFD 2 temporary storage at the place of production - GOV.UK (www.gov.uk)

Whilst we acknowledge the ambition that there will be no surplus waste requiring off-site disposal during the excavation phase of this development. You are reminded that all waste must be classified in accordance with the WM3 (waste classification) guidance. All waste which is classified using a mirror entry list of Waste Code can only be classified as non-hazardous if there is evidence to support the classification. If there is no evidence, the waste must be assumed to have been misdescribed. It is the duty of the producer of the waste to ensure waste is analysed and assessed in line with the WM3 guidance document. Carrying out the sampling and analysis is only one part of the waste classification process. A hazardous property assessment is required to determine whether any of the substances in the waste breach hazardous thresholds.

A waste assessment should include:

- a sampling plan
- lab analysis
- interpretation of the results

If you require any local advice or guidance please contact your local Environment Agency office: Teesdale House, Lingfield Way, Darlington, DL1 4GQ. Telephone: 0370 850 6506 Environmental Permitting Regulations – Advice to Applicant This development will require a permit under the Environmental Permitting Regulations (England & Wales) 2016 from the Environment Agency. We recommend that the applicant makes use of the Environment Agency's enhanced pre-application service to discuss the issues likely to be raised. Details of this service can be found here: Get advice before you apply for an environmental permit - GOV.UK (www.gov.uk)

We do not have enough information to know if the proposed development can meet our requirements to prevent, minimise and/or control pollution at this point.

We recommend that the developer considers parallel tracking the planning and permit applications as this can help identify and resolve any issues at the earliest opportunity. Parallel tracking can also prevent the need for postpermission amendments to the planning application. We would welcome a joint discussion with the applicant and planning authority to discuss this further.

Activities controlled by Environment Agency permit, consent or licence -Advice to Applicant The permit will control emissions to air, water and land and will include conditions in relation to noise and dust (diffuse and fugitive) emissions from the site.

Your permit application must demonstrate that people and the environment will be protected from these emissions. Mitigation is likely to be required to control these emissions and impacts.

This may include:

- Managing scrap deliveries and processing scrap within a building with appropriate acoustic controls to reduce noise emissions.
- Receiving and storing scrap metal in a building with impermeable pavement and sealed drainage to prevent land contamination and contaminated runoff.
- Mitigation measures in relation to the storage of raw materials to prevent fugitive dust emissions.
- Slag processing may also have to occur within a building with the appropriate extraction to prevent fugitive dust emissions.

Noise emissions – Advice to Applicant Environmental Statement (ES) Chapter *E* (Noise) Section E3.15 states that the applicant has committed to noise levels within the wider building meeting 80 dB LAeqT. It is recommended that

the sound 'fingerprint' of an Electric Arc Furnace (EAF) is assessed prior to the commencement of the development to ensure that suitable mitigation measures are in place during the design phase.

Consideration of 1/3 Octave Frequency Bands should be included in the final design to ensure that any acoustic abatement systems are effective at mitigating the noise levels emitted from EAF operations.

Nitrogen Dioxides – Advice to Applicant The development is in a location with several other significant planning applications and permit applications that may be made in the short to medium term.

We note in ES Chapter F (Air Quality) of your application that you have modelled NOx emissions at 100 mg/m3. Section F5.20 states: "The maximum 1-hour PC concentration is greater than 10% of the AQS at seven receptors resulting in an impact descriptor of Minor Adverse. The maximum 1-hour PC concentration between 20% and 50% of the AQS at three receptors resulting in an impact descriptor of Moderate Adverse." Section F5.19 states that there are no predicted exceedances of the hourly mean NO2 standard (200 μ g/m3 not to be exceeded more than 18 times per year) when the combined contributions from road traffic and EAF emissions are considered at the modelled 100 mg/m3 level.

It is also noted in Section F5.66 that when the emissions are modelled at 25 mg/m3, which is the NOx emission limit at the CELSA Manufacturing (UK) Limited plant in Cardiff, regulated by NRW, that all predicted process contributions would have an impact descriptor of Negligible and therefore would be considered Not Significant.

The best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for iron and steel production do not specify a NOx emission limit for Electric Arc Furnaces. We will not be able to determine your permit application or consider setting an appropriate emission limit until we have received all the required information. The applicant should be advised that we will seek to minimise emissions where possible to prevent air quality impacts.

Surface Water – Advice to Applicant The application states that the resulting discharge from the site will be treated on site prior to discharge to the wider BSL complex drainage. However, there are no further details provided of the volumes or character of the effluent or how the effluent from the process will be treated, and whether the existing systems on site can treat it appropriately. Further information will be required at the permit application stage on drainage of the site.

Drainage water from the scrap storage area may be contaminated with oils and other pollutants. Contaminated run-off may be minimised by receiving and storing scrap metal within a building on an impermeable pavement with sealed drainage. Land and Groundwater Protection – Advice to Applicant The application does not describe how raw materials, wastes and scrap will be stored on site. The scrap brought to site may be contaminated with oils which may pollute the land. This can be minimised by ensuring all scrap storage is undertaken on a concrete surface with sealed drainage.

EAF steel slag is alkaline with a pH between 11-12 and contains metals of high toxicity and thus has potential to cause pollution. If slag storage areas are uncovered, it may generate a high pH runoff containing dissolved metals when it rains. The runoff may cause contamination of land and groundwater or surface water unless stored undercover on an impermeable surface with sealed drainage.

The applicant will have to address these points during the permit application stage.

Please do not hesitate to contact me if you have any questions regarding the advice in this letter.

Northumbrian Water

(09/01/24)

Thank you for consulting Northumbrian Water on the above proposed development. In making our response to the local planning authority Northumbrian Water assesses the impact of the proposed development on our assets and assesses the capacity within our network to accommodate and treat the anticipated flows arising from the development. We do not offer comment on aspects of planning applications that are outside of our area of control.

It should also be noted that, following the transfer of private drains and sewers in 2011, there may be assets that are the responsibility of Northumbrian Water that are not yet included on our records. Care should therefore be taken prior and during any construction work with consideration to the presence of sewers on site. Should you require further information, please visit https://www.nwl.co.uk/services/developers/

The application and supporting Flood Risk and Drainage Strategy confirms that all drainage will be managed privately on site by the site operators and therefore, we do not have any specific comments to make for this application. Should additional information be submitted which changes this approach please do reconsult Northumbrian Water.

Active Travel

(20/12/23)

Following a high-level review of the above planning consultation, Active Travel England has determined that standing advice should be issued and would encourage the local planning authority to consider this as part of its assessment of the application. Our standing advice can be found here:

https://www.gov.uk/government/publications/active-travel-englandsustainabledevelopment-advice-notes

ATE would like to be notified of the outcome of the application through the receipt of a copy of the decision notice, in addition to being notified of committee dates for this application.

Cleveland Fire Brigade

(10/01/24)

Cleveland fire Brigade offers no representations regarding the development as proposed.

However Access and Water Supplies should meet the requirements as set out in:

Approved Document B Volume 2 :2019, Section B5 for buildings other than Dwellings

It should be noted that Cleveland Fire Brigade now utilise a Magirus Multistar Combined Aerial Rescue Pump (CARP) which has a vehicle weight of 18 tonnes. This is greater than the specified weight in AD B Vol 2 Section B5 Table 15.2.

Cleveland Fire Brigade also utilise Emergency Fire Appliances measuring 3.5m from wing mirror to wing mirror. This is greater than the minimum width of gateways specified in B Vol 2 Section B5 Table 15.2.

Recommendations

Cleveland Fire Brigade is fully committed to the installation of Automatic Fire Suppression Systems (AFSS) in all premises where their inclusion will support fire safety, we therefore recommend that as part of the submission the client consider the installation of sprinklers or a suitable alternative AFS system.

Further comments may be made through the building regulation consultation process as required.

Cleveland Police

(19/01/24)

I recommend applicant actively seek Secured By Design accreditation, full information is available within the SBD Commercial 2023 Guide at www.securedbydesign.com I encourage contact from applicant/agent at earliest opportunity, if SBD Certification is not achievable you may incorporate some of the measures to reduce the opportunities for crime and anti-social behaviour.

Once a development has been completed the main opportunity to design out crime has gone. The local Designing Out Crime Officer should be contacted at the earliest opportunity, prior to submission and preferably at the design stage.

- The National Planning Policy Framework 2023 paragraph 92(b), which states that Planning policies and decisions should aim to achieve healthy, inclusive and safe places which are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion...
- The National Planning Policy Framework 2023, paragraph 130(f) which states that "Planning policies and decisions should ensure that developments create places that are safe, inclusive and accessible... and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience".
- Redcar & Cleveland Local Planning Policy also states within SD4 (General Development Principles) part m. create a healthy, active, safe, and secure environment, and Policy ED1 part e. enhancing the appearance, safety, and environmental quality of the centre.
- Another material consideration is Section 17 of The Crime and Disorder Act 1998.

Further information on the Secured By design initiative can be found on www.securedbydesign.com.

Although not an SBD requirement, Redcar & Cleveland along with many other areas nationwide suffers from offences of metal theG. These include copper piping, boilers, cables, and lead flashing. Buildings under construction are particularly vulnerable. I recommend that alternative products be utilized where possible. Many new builds are now using plastic piping where building regulations allow and alternative lead products.

Strong consideration should also be given in relation to the provision of On-Site Security throughout the lifespan of the development. There is information contained within the Construction Site Security Guide 2021 also on the SBD website that may assist.

(15/02/24)

In relation to this application, my previously submitted comments are still valid.

National Highways

(26/01/24)

Recommended Non-Approval - It is recommended that the application should not be approved until 19 April 2024.

Reason: To ensure that the A1053 trunk route continues to serve its purpose as part of a national system of routes for through traffic in accordance with Section 10 (2) of the Highways Act 1980, and in the interests of highway safety.

(16/02/24)

Further to the provision of additional information from the applicant team and a period of concentrated discussions this week, I provide here National Highways' response to the consultation regarding the above application. Accordingly, I enclose a National Highways Planning Response (NHPR 22-12) – Formal Recommendation to an Application for Planning Permission, dated 16 February 2024, recommending that conditions should be attached to any planning permission that may be granted.

The conditions, as detailed in the NHPR 22-12, align with the discussions we have had and our review of the application, but in summary cover the requirement for:

- a Construction Traffic Management Plan;
- an Operational Management Plan; and
- a monitoring scheme and consideration of trip levels in the morning and evening peak periods at the A1053 (Greystone Road) / A1085 (Truck Road) and A174/A174/A1053 (Greystone Road) / High Street.

In relation to the trip level condition, we have entered the proposed impacts of this development into the 'Trigger Calculator' (as attached) based upon the agreed figures from the revised Transport Assessment.

In addition, and on the basis of which we have been able to reach the above outcome, the parties (National Highways, the applicant team and yourself) have agreed that there is an additional commitment to complete further actions. These will be fully detailed and agreed in a Memorandum of Understanding (MoU), but will cover:

 Upon approval of the three planning applications (this application, the Teesworks Transport Hub (R/2023/0800/OOM) and Teesworks Service Centre (R/2023/0482/OOM)), a commitment to submit S.96A applications to amend the conditions associated with the five outline Teesworks permissions (R/2020/0819/ESM, R/2020/0820/ESM, R/2020/0821/ESM, R/2020/0822/ESM and R/2020/0823/ESM). These S.96A applications would seek to reference the full collection of applications referred to here with a view to the consideration of trip levels in the morning and evening peak periods at the A1053 (Greystone Road) / A1085 (Truck Road) and A174/A174/A1053 (Greystone Road) / High Street.

 A commitment to develop, at the earliest opportunity, a mechanism that enables reference to the consideration of trip levels in the morning and evening peak periods at the A1053 (Greystone Road) / A1085 (Truck Road) and A174/A174/A1053 (Greystone Road) / High Street, outside of the planning applications themselves. This would overcome the planning challenges faced on this application and would provide a more efficient way of dealing with applications in the future.

We look forward to agreeing the detail of this MoU at the earliest opportunity.

In relation to the second element of the MoU, having in essence applied the principles of the intended approach to the current Electric Arc Furnace application, it is considered that this would be a reasonable approach for other applications. Furthermore, from our discussions this week, we are aware that a commission is being advanced to progress this intended approach with the transport consultant involved in the Electric Arc Furnace application.

I trust that the above and attached are clear and sufficient for your requirements. Please do not hesitate to contact me should you have any queries.

Health and Safety Executive

(07/02/24)

HSE's Advice: Do Not Advise Against, consequently, HSE does not advise, on safety grounds, against the granting of planning permission in this case.

Redcar and Cleveland Borough Council (Development Engineers)

(29/02/24)

The existing use classification has been retained as B2, with an allocated floor space area of 67,526 sqm, of which 37,526 sqm is in detail, and 30,000 sqm an outline.

The development is situated in an area of existing industry and an employment zone, which is served by a range of accessibility options including a wide provision for sustainable transport modes that can be utilised by the applicant. These modes are discussed and considered in the Transport Assessment and Travel Plan, which have been prepared and submitted in support of the application. These documents promote active and sustainable travel, although the TA indicates that 82% of employees travelling to the site will be via car. The site will initially primarily be served by the Lackenby Works entrance, which is an arm off the A1085 roundabout, located approximately 1km to the north east of the A66.

The unit will operate over a 24-hour period, with the primary access to the site via the Lackenby Works main entrance 'Lackenby Gate' at the Trunk Road roundabout, immediately east of the site. Three other points of access to the site footprint are also indicated on plans. Arrangements for those accesses form part of the outline consent and will also be the subject of separate planning applications.

Unlike traditional steelmaking methods which involve heavy transportation of raw materials such as iron ore and coal, the EAF primarily utilises scrap steel and is electrically powered. Consequently, the forecast traffic flows are significantly reduced when compared with the traditional steel making process. Details of the transportation of the scrap required for the site will be delivered by; 60% rail, 20% road and 20% internal road / quarry. With the potential for rail freight improvements to further alleviate deliveries by road.

Assuming the site generates 250 employees, over a 24-hour period 408 two way trips will be created. In terms of deliveries 110 HGV movements will be generated over the same period. The cumulative impact being 518 two-way movements. It is noted that the start and end time of the shifts are not during the peak periods.

Baseline data from 2019 submitted as part of the TA indicates average daily flows over a 24 hour period being approximately:

- 22,000 on the A66 West of Tees Dock Road
- 16,000 Trunk Road in vicinity of main site access
- 13,000 A1053 Greystones Road

Target interventions have been identified at the following locations:

- Greystones roundabout (A174 / A1053 Greystone Road);
- A1085 Trunk Road roundabout (A1053 Greystone Road / A1085 Trunk Road); and
- Tees Dock Road roundabout (A66 / Tees Dock Road)

Further analysis should be undertaken of the Lackenby Works entrance, which is the primary point of access for the site. The mitigation works associated with Tees Dock roundabout should also form part of this modelling exercise. These roundabouts form part of Redcar & Cleveland's strategic road network, their operational capacity should be tested and appropriate mitigation offered should it be required.

The developer is preparing plans associated with its Operational Management and Construction Traffic Management, these plans will be the subject of condition by National Highways, for which Redcar & Cleveland Highway Authority should be a mandatory consultee. Details of cycle parking and associated provisions have not been provided but have been discussed in the TA and Travel Plan. The proposal is to create 20 cycle spaces, we would encourage further provision to ensure cycling is promoted as a legitimate alternative, as a result this provision will be the subject of condition to provide secure and sheltered cycle parking with associated facilities.

The vehicular parking provision forms part of the outline consent, a car parking accumulation exercise indicates that no fewer than 151 spaces will be required at any one time. The tees valley design guide and specification provide guidance on provisions. A condition is required to ensure the parking provision is adequate to meet the needs of the proposal. The Transport Assessment refers to the allocation of 10% of spaces for use as EV charging bays.

Recommendation

It is for the above reasoning we would recommend approval of the application subject to condition.

CONDITIONS:

Cycle Store Details Required

The development hereby approved shall not be brought into use until covered and secure cycle parking facilities, have been provided in accordance with drawing(s) to be submitted to and approved in writing by the Local Planning Authority. Such drawings to show the position, design, materials and finishes thereof. Thereafter the cycle parking facilities shall be retained in perpetuity for the sole purpose of parking cycles.

Reason; To ensure a satisfactory form of development and in the interests of highway safety having regard for local plan policy and sections 9 and 12 of the NPPF.

Car Parking

The development hereby approved shall not be brought into use until the areas for vehicle parking have been constructed and laid out in accordance with the approved drawing '1852-TEE-P-10.02A - Proposed Site Plan', or such plans which are subsequently submitted to and approved in writing by the Local Planning Authority. Such areas shall thereafter be retained in perpetuity for the sole purpose of parking vehicles.

Reason; To ensure a satisfactory form of development and in the interests of highway safety having regard for local plan policy and sections 9 and 12 of the NPPF.

Method of Works Statement

The development hereby approved shall not be commenced until a detailed method of works statement has been submitted to and approved in writing by the Local Planning Authority. Such statement shall include at least the following details;

- a) Routing of construction traffic, including signage where appropriate;
- b) Arrangements for site compound and contractor parking;
- c) Measures to prevent the egress of mud and other detritus onto the public highway;
- d) A jointly undertaken dilapidation survey of the adjacent highway;
- e) Program of works; and,
- f) Details of any road/footpath closures as may be required.

The development must be carried out in accordance with the approved details.

Reason: To ensure that the development can be carried out in a manner that will not be to the detriment of amenity of local residents, free flow of traffic or safety of highway users having regard for local plan policy.

Redcar and Cleveland Borough Council (Local Lead Flood Authority)

(22/01/24)

The LLFA have reviewed the application for outline permission for matters reserved for erection of Steel manufacturing facility at Lackenby works, in principle the LLFA have no objections subject to further design details and drawings identifying proposed drainage layout for the site and conclusions regarding changes to culverted watercourses running through the site. We would therefore require our standard LLFA conditions 1, 2 and 3 to be further clarified and met in the full application.

(21/02/24)

The LLFA have reviewed the additional information and confirm that no further comments are to be made. The previous comments dated 22/01/2024 still apply.

Redcar and Cleveland Borough Council (Natural Heritage Manager)

(08/01/24)

I would not object, but any mitigation which involves tree planting on or of site should be pursued/supported.

Redcar and Cleveland Borough Council (Environmental Protection) (Contaminated Land)

(04/01/24)

I note that an environmental statement has been submitted in support of this

application. Chapter H covers ground conditions and appendix H provides a desk top survey for the site.

The conclusions and recommendations from the Geo-Environmental Phase I Assessment Report states that the current and historical use of the development Site is considered to represent a significant potential source of contamination. The assessment recommends that intrusive investigations will be required to inform the design of foundations, services and pavements for the new development and provided samples for environmental testing to confirm ground conditions. The result of the investigation would allow detailed design of any remediation works, and/or gas protection measures (if required).

In order to minimise the environmental impact I would recommend the inclusion of the full contaminated land condition onto any planning permission which may be granted:

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

Redcar and Cleveland Borough Council (Environmental Protection) (Nuisance)

(08/01/24)

NOISE

I note that an environmental statement has been submitted in support of this application. Chapter E covers a noise assessment and appendix E provides a baseline noise survey.

From the baseline noise survey, the prediction of operational noise has been undertaken using noise modelling software with Information provided by British Steel.

The resultant noise impacts at Noise Sensitive Receptors have been determined to be not significant.

However, as this is a calculated prediction and as the EAF plant design is not finalised I would recommend that noise monitoring is carried once the EAF is in production to verify the calculated results.

The assessment also states that a CEMP will be produced which will detail methods to be used to restrict construction noise such that it does not exceed the criteria at Noise Sensitive Receptor 1.

In order to minimise the environmental impact I would recommend the inclusion of the following conditions onto any planning permission which may be granted:

 Prior to the development being brought into permitted end use a validation report must be prepared, which is subject to the approval in writing of the Local Planning Authority verifying that the model calculated noise levels confirm with the levels modelled in Environmental Statement Chapter and Appendix E

REASON: To ensure the creation/retention of an environment free from intrusive levels of noise and activity and in the interests of the amenity of the area.

• Prior to commencement of construction, a CEMP shall be submitted to and approved in writing by the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide the development.

i Methods of demolition;

ii) Measures to control the emission of noise dust and vibration during the construction period.

REASON: To protect the amenity of nearby residents and in the interests of highway safety.

AIR QUALITY

I note that an environmental statement has been submitted in support of this application. Chapter f covers an Air noise assessment and appendix F provides an Air Quality Impact Assessment.

The EAF facility will be designed to meet the requirements of BAT as stipulated in guidance and required by the industry regulator, The Environment Agency.

A detailed dispersion modelling using the ADMS suite of modelling software has been undertaken to predict the concentrations of NO2, PM10,PM2.5, SO2, heavy metals, mercury and dioxins at existing sensitive human receptors and concentrations of NOx and SO2 at designated ecological receptor locations within the study area, due to emissions from road traffic and the EAF process emissions, in conjunction with predicted future background concentrations.

No exceedances of the AQSs/EALs are predicted for any pollutant at any of the sensitive human receptors. There is no risk of exceedance of the relevant annual mean critical level for NOx or SO2 at any of the designated ecological sites within the study area.

As stated before the facility will be operated in accordance with Statutory guidance and regulated by the Environment Agency I have no objections.

Redcar and Cleveland Borough Council (Place Development and Investment Team)

(23/01/24)

No observations

Redcar and Cleveland Borough Council (Business Growth Team)

(16/01/24)

From a Business Growth perspective, we welcome this proposed development which will positively contribute towards the Council's regeneration and climate change priorities, helping facilitate the path towards Net Zero.

The development proposal highlights it will deliver 200-300 construction jobs (over 18 months + additional cross sector, spin-off jobs during each year of construction across the UK economy) and create 185 new green energy jobs when fully operational.

We welcome the applicant's commitment to work with Redcar & Cleveland Borough Council to deliver training and apprenticeship schemes during the construction phase, creating valued opportunities for local residents and similarly to collaborate with the Council, to maximise opportunities to recruit local residents into the operational jobs to be created on site. Introductions to our local Grangetown Training and Employment Hub can be facilitated. We would also be keen to explore opportunities in supporting the applicant from a supply chain perspective.

We are keen to offer support and work closer with the applicant as they look to develop and deliver their positive plans linked to local employment, education and social value. For future correspondence please contact business@redcar-cleveland.gov.uk

Redcar and Cleveland Borough Council (Archaeology Consultant) (NEAR)

(29/01/24)

1. The site is within an area previously assessed under an EA application made by South Tees Development Corporation (R/2020/0820/ESM) and is now accompanied by a further, updated ES. The relevant ESs do not have a chapter in relation to the below ground archaeological heritage, however the submitted Site Description Document of the current ES refers to the site in relation to the settings of the nearest listed buildings and conservation areas.

2. The current ES, Chapter C (Site and Scheme Description) notes as follows.

C2.13 There are no designated or undesignated heritage assets within the Site or within the immediate vicinity. [our italics]. There are no Public Rights of Way ('PROW') within the Site. The Site is not within an Air Quality Management Area ('AQMA'). There are no designated ecological sites within Site. We agree with sentence underlined above but make the following observations.

3. Historic mapping shows the current application site to be relatively undeveloped in the nineteenth century, after which (the mid twentieth century) it then became almost entirely built over for heavy industrial use. Prior to the great development of the 1950s, the site contained buildings known as 'Low farm', visible as early as 1857 on the first edition (1:10,560 scale) of OS mapping of the area. However, the buildings were at the southern end of the Lackenby Beam Mill, whose construction will have removed all traces of the previous construction.

4. Non-designated assets (HER 5658 (Ironworks reservoir) and HER 5659 (Lackenby Iron works, both of nineteenth century date)) are recorded by the HER immediately to the north of the development site, but any remains of structures constituting these sites (if they subsist) are outside and therefore will not be directly affected by the development.

5. Recommendation: In view of the above observations, no archaeological mitigation is recommended in this instance.

CONSIDERATION OF PLANNING ISSUES

The main considerations in the assessment of the application are;

- The principle of development and compliance with development plan policy
- Consideration of the impact of the development as set out in the supporting ES
- General development management issues as identified in the ES and the
- Effectiveness of the mitigation strategy set out in the ES

Development Plan Context and General Policy Assessment

The Development Plan for the purposes of the Act is the adopted Redcar and Cleveland Local Plan May 2018.

Assessment of the Environmental Statement (ES) topic areas and relevant planning policy

The remainder of this report deals with topic areas set out in the ES, the responses of key consultees, overall conclusions and the proposed mitigation strategy informed by the ES.

The ES confirms the development falls within part 4 of Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) relating to the production and processing of metals where the area of new floorspace exceeds 1,000 square metres.

Chapter A – Introduction

Chapter A sets out the scope and structure of the ES and the relevant topic chapters. These reflect the informal scooping exercise that was carried out with the Local Planning Authority prior to the submission of the application.

The ES is comprised of three volumes:

- Volume 1 Main Technical Assessments Chapter C of Volume 1 sets out the site description and scheme proposals, as well as the planning policy background and a consideration of alternatives and the 'no development' scenario. It also includes details on the construction methodology and 'embedded mitigation'. Chapters D to M comprise the detailed technical assessments. Chapter N considers interrelated and cumulative effects and Chapter O considers mitigation, compensation and monitoring measures arising from the technical assessments.
- Volume 2 Figures and Appendices to the Technical Assessments -Volume 2 includes the technical appendices and figures, which accompany some of the technical chapters set out above.
- Volume 3 Non Technical Summary The Non-Technical Summary is intended to ensure that the detailed technical assessments contained within the Environmental Statement (Volume 1) are accessible to the general public. It is presented in a summarised and succinct form, avoiding jargon and technical language.

Volume 1 as detailed above consists of various chapters that deal with the technical assessment of the proposed development. The structure of this volume is as follows;

- Chapter A Introduction
- Chapter B Scope and Methodology
- Chapter C Site and Scheme Description
- Chapter D Transport
- Chapter E Noise and Vibration
- Chapter F Air Quality
- Chapter G Hydrology and Hydrogeology
- Chapter H Ground Conditions
- Chapter I Socio Economics
- Chapter J Waste and Materials Management
- Chapter K Climate Change and Resilience
- Chapter L Landscape and Visual Impact
- Chapter M Accidents and Disasters

- Chapter N Cumulative Effects
- Chapter O Mitigation and Monitoring

Each of the technical assessments are formatted as follows:

- Overview: Brief review of relevant policy and legislative context
- Methodology: Confirmation of the detailed topic specific assessment methodology, consultation undertaken and confirmation on how the assessment relates to the standard significance criteria adopted for the EIA
- Baseline: Consideration of Baseline Conditions including an identification of sources of information, site history, current environmental conditions and future trends/anticipated changes to current conditions that could be anticipated without the scheme
- Assessment of Impacts: Identification of the potential effects including a summary of those resources/receptors likely to be affected, the sensitivity of those receptors to accommodate change; the degree of change resulting from the proposal; the change of events or pathways linking cause to effect and a prediction of the significance of effects in terms of nature, extent and magnitude including whether it is direct/indirect, short/long term, permanent/temporary, beneficial/adverse;
- Mitigation: The scope for incorporating mitigation measures to avoid, reduce, remedy or compensate for any identified effects; and
- Residual Effects: Identification of any effects remaining after mitigation.

The ES has confirmed the relevant planning policy context against which the application should be considered against. At a national level this is recognised to the be the National Planning Policy Framework (NPPF December 2023) and at a local level the Redcar and Cleveland Local Plan (2018) and the Local Plan Policies Map (2018).

The preparation of the ES has been co-ordinated by Lichfields which is accredited with an Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark.

Chapter B – Scope and Methodology

To establish the scope of the Environmental Statement, an informal scoping exercise was undertaken with officers within Redcar and Cleveland Borough Council and other key technical consultees. A summary of the discussions that have taken place on each technical chapter are set out in Section 3.0 of each individual chapter, with any relevant correspondence appended to the relevant chapter. The overall approach to scoping, in terms of topics to be scoped in and out, was agreed through submission and approval of an informal Scoping Note to the Council, which can be found at Appendix B1 of the ES. Based on the submitted Scoping Note, the scope of the application was agreed by email which is included at Appendix B2 of the ES. The main topics to be considered within the ES were therefore agreed to be:

- Transportation assessing construction and operational effects;
- Noise and Vibration assessing construction and operational effects;
- Air Quality assessing construction and operational effects;
- Hydrology and Hydrogeology assessing construction and operational effects;
- Ground Conditions assessing construction effects. It is proposed to scope out operational effects from the assessment on the following grounds:

a Any contamination that is present on each site would be dealt with during the construction phase and therefore the risk from historic contamination during operation would be Negligible and Not Significant;

b Whilst the proposed operational sites are industrial and therefore may have hazardous substance present they would need appropriate permits and would be governed by legislation in order to operate safely, therefore the risk from new contamination with this tertiary mitigation in place, would be Negligible and Not Significant;

c It is also noted that post development the sites would mainly be covered by hardstanding and therefore this would also reduce the risk of contamination is spillage events, due to leaching etc.

- Socio-Economics assessing construction and operational effects;
- Waste and Materials Management assessing construction and operational effects;
- Climate Change and Resilience assessing construction and operational effects;
- Landscape and Visual Impact assessing construction and operational effects; and
- Accidents and Disasters assessing construction and operational effects.

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

- Ecology
- Glint and Glare
- Wind Environment
- Above Ground Heritage
- Archaeology
- Human Health

The reasoning behind scoping these topics out are set out in table B2.1 of the ES.

The EIA has been completed with reference to best practice and relevant legislation and has addressed all those matters that are required to be assessed to consider the environmental effects of the proposed development. This includes those arising from the scheme itself as well as those temporary effects arising during the construction phases.

The general approach to the EIA has been set out within the ES as:

The EIA has been prepared in accordance with the requirements of the 2017 EIA Regulations (as amended) and with reference to best practice including that published by IEMA ('IEMA'). All information required to identify the likely significant environmental effects of the development, as defined by Schedule 4 of the Regulations has been provided as part of the ES. The ES also complies with the requirements of paragraphs 18(3), 18(4) and 18(5) which define what comprises an ES. Evidence is provided at Tables B1.2 and B1.3 (above).

The purpose of the ES is to ensure that information on the environmental issues associated with the Proposed Development, and any mitigation or monitoring required to address adverse effects, is set out in a form to assist in decision making and for stakeholders.

The potential environmental effects have been assessed for each relevant aspect by comprising the existing and likely future environmental conditions (in the absence of the Proposed Development) with the conditions that would exist if the Proposed Development is brought forward. The ES has been informed by desk-based studies, surveys, fieldwork, consultation and other investigations as recorded in Chapters D to M of this ES.

Due to the nature of the Proposed Development, and in particular its anticipated lifetime beyond 100 years, decommissioning effects are not relevant and have not been considered.

The assessment includes a consideration of policy and legislation of relevance as well as considering comments received by consultees during the pre-submission period.

The likely environmental effects of the development have regard for the following:

- The magnitude of the impact (i.e. its extent, duration, frequency and severity);
- The sensitivity of a particular receptor to a given impact (i.e. including its adaptability of the degree to which it can avoid or adapt to an impact; how tolerant it is to accommodate a particular impact; how it can recover following an impact; and how valuable, rare or important a receptor may be); and
- The probability or likelihood that an identified impact might occur (adopting a precautionary or worst-case approach where necessary).

The identified effects have then been classified by reference to a list of EIA significance criteria as follows:

- *Major beneficial;*
- Moderate beneficial;
- Minor beneficial;
- Neutral/negligible;
- Minor adverse;
- Moderate adverse; and
- Major adverse.

Mitigation measures are identified in the individual ES chapters and the relevant mechanisms for delivering these and monitoring their effectiveness. These matters are brought together in Chapter O of the ES.

The structure of the technical assessments through the individual chapters is consistent. The approach to the chapters is described by the applicant as follows:

1 Brief review of relevant policy and legislative context;

2 Confirmation of the detailed topic specific assessment methodology, consultation undertaken and confirmation on how the assessment relates to the standard significance criteria adopted for the EIA (see below);

3 Consideration of Baseline Conditions including an identification of sources of information, site history, current environmental conditions and future trends/anticipated changes to current conditions and could be anticipated without the scheme (e.g. future baseline);

4 Identification of the potential effects including a summary of those resources/receptors likely to be affected, the sensitivity of those receptors to accommodate change; the degree of change resulting from the proposal; the change of events or pathways linking cause to effect and a prediction of the significance of effects in terms of nature, extent and magnitude including whether it is direct/indirect, short/long term, permanent/temporary, beneficial/adverse;

5 The scope for incorporating mitigation measures to avoid, reduce, remedy or compensate for any identified effects; and

6 Identification of any effects remaining after mitigation (e.g. residual effects).

The cumulative impacts resulting from the proposed development are set out within Chapter N of the ES.

Prior to the submission of the application, a pre application public consultation exercise was undertaken. This took the form of a two day event on the 5th and 6th December 2023 at Redcar Racecourse. The event was advertised in both the Middlesbrough Evening Gazette and Northern Echo as well as the

applicant undertaking their own press release. During the two day event 86 people attended.

Consultation also took place with key stakeholders in advance of the application being submitted. This engagement was used to inform the EIA process for each of the technical chapters as set out in Chapters D to M of the ES.

Chapter C – Site and Scheme Description

This chapter describes the site and its relationship to the wider area, a description of the steel manufacturing development on land at the existing British Steel works, explains the proposed development assumptions that have formed the basis of the EIA, and considers the design rationale behind the proposed development.

The chapter is supported by the following appendices:

- Appendix C1: On Site Infrastructure Plans
- Appendix C2: Detailed Plans
- Appendix C3: Parameter Plans
- Appendix C4: Demolition Plan
- Appendix C5: Demolition Method Statement.

The ESA has been supported by the following appendices:

- Appendix 1: Site Location Plan
- Appendix 2: Updated Detailed Plans and Updated Parameter Plan
- Appendix 3: Updated Demolition Plan

The development site is approximately 19.83ha in area and is largely made up of buildings, structures and areas of hardstanding. There is however a belt of woodland along the southern boundary of the site with other pockets of vegetation across the remainder of the site. As part of the ESA an updated site location plan has been provided at Appendix 1 which is also included at Figure 2.1 and is included below for information.



The site largely contains buildings and structures associated with the Teesside Beam Mill (TBM) which is located to the northeast of the site. The buildings at the site are mainly large industrial shed style buildings along with other ancillary brick-built buildings. There are also various tanks, pipework and railway lines and overhead cranes. The southern part of the site is currently used for storage of steel slab and bloom which is then rolled into sections in the TBM.

The site is largely flat with a prevailing ground level across the majority of the site being 10m AOD.

The site is accessed from the Lackenby Gate roundabout on the A1085, while there is a private road network across the site, including a road running northeast to south-west along the eastern side of the site.

Historically a freight rail network operated across the wider Teesworks area including the application site, parts of which are still operational. The 'Major Operators Freight Rail', which is an operational rail line used for bringing steel

slab into the TBM, has one spur which runs into the site from the north, and a second spur which, for the most part, runs outside of the site adjacent to the western boundary, and enters the site via an industrial shed towards the south of the western boundary.

A number of watercourses are also present across the wider Teesworks area. In relation to the application site, Kinkerdale Beck runs in a north south direction across the eastern side of the site via an underground culvert at approximately 5m in depth. There is also a cross connector which links Kinkerdale Beck to Boundary Beck via an underground culvert in the northern part of the site.

The River Tees is located approximately 2km to the north west of the application site. This is part of the Teesmouth and Cleveland Coast Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI). This area includes intertidal sand and mudflat, saltmarsh and freshwater grazing marsh, saline lagoons, sand dune and shingle, rocky shore and shallow coastal waters that are able to support national and international bird species.

The Teesmouth and Cleveland Coast Ramsar site, which covers the terrestrial parts of the SPA is located approximately 2km to the northwest of the site with Dabholm Gut being the closest part of it to the application site.

The nearest listed building is the Grade II* listed Baptist Church at South Bank which is located 2.3km to the west of the application site. The site is not visible from the listed building as it is physically and visually separated from South Bank by intervening industrial developments, trees and the A66.

The nearest conservation area is the Wilton Conservation area, which is approximately 2.1km to the south of the site and is physically and visually separated from it by the Wilton International industrial area.

The closest residential receptors to the site are the residential dwellings approximately 450m to the south west of the site which are separated from the application site by the A1053 and areas of open land at Grangetown. Beyond these dwellings there are residential areas at Eston (approximately 1.7km south west), Teesville (approximately 2.5km south west) and South Bank (approximately 2km west). These residential areas are all separated from the site by intervening roads, open space and/or industrial estates.

The applicant has provided greater levels of detail relating to the proposed development. The following text from the ES outlines the description of development for both the detailed and outline elements of the scheme:

The description of development for the application is as follows:

"Hybrid application to include detailed planning permission for the erection of steel manufacturing facility (electric arc furnace). Outline permission for associated buildings, apparatus and infrastructure (all matters reserved)". The use is general industrial (Use Class B2), as a place for the manufacturing of steel. Planning permission is sought for a total of 67,526 sqm of floorspace comprising 37,526 sqm in detail and up to 30,000 sqm in outline. The buildings, structures, storage, and parking areas associated with the EAF will be ancillary and, therefore, the entire development falls within Use Class B2. The EAF and ancillary development will operate 24 hours a day, seven days a week.

The EAF will be a single 130 tonne (t) EAF, comprising a continuous charging furnace with a tap-to-tap time of approximately 40 minutes (this is the time between steel batches being produced (with associated slag) and available to be moved to the next stage of the process) and a production rate of 150t/hour. It is expected that the EAF will have an annual production capacity of 1.3Mt.

The quantity of scrap metal to be used in the process is to be 1.4 million tonnes per year.

The structures of the EAF building include the following:

- Three scrap bays, each with Electric Overhead Travelling ('EOT') cranes;
- Further bays, each with multiple EOT cranes and comprising:

a An EAF bay; b A refining bay; c A liquid steel receiving bay; d Two continuous casting bays; and e A runout bay.

Ancillary facilities in the EAF building include a series of small rooms and summarised below as:

- Transformer building'
- Electrical room for scrap preheating;
- Hydraulic valve room for scrap preheating;
- EAF tapping operation room;
- LV electrical room;
- Hydraulic room;
- HV room;
- Transformer room;
- Operation room;
- Hot repair operation room;
- Material feeding MCC room and operation room;
- Vacuum degasser transformer room;
- Mechanical pump room and electrical room;
- Slag treatment room;
- Duty room.

To enable the outline proposals to be properly assessed, development parameters have been set for the outline area, informed by the baseline site information and an understanding of potential BSL requirements. The Parameter Plan is provided in Appendix 2 of the ESA.

Development	Amount/use		
Parameter	Original Parameter Plan	Revised Parameter Plan	
Use Class	B2 (General Industry) E (Office) (maximum of 10% of outline floorspace)	B2 (General Industry) E (Office) (maximum of 10% of outline floorspace)	
Maximum Floor Space	17,000 sqm / 182,986 sqft (Gross External Area)	30,000 sqm / 322,917 sqft (Gross External Area)	
Finished Floor Level	Minimum 10.00m AOD	Minimum 10.00m AOD	
Maximum Building/ Structure Height	20m (not to exceed a maximum AOD height of 30m)	20m (not to exceed a maximum AOD height of 30m)	
Maximum Air Separation Column Parameters	One Air Separation Column of a maximum height of 65m (not to exceed 75m AOD)	One Air Separation Column of a maximum height of 65m (not to exceed 75m AOD)	
Minimum and Maximum Stack Parameters	No more than five Stacks of a minimum height of 30m and a maximum height of 45m (not to exceed 55m AOD) Each Stack to be no more 6m wide	No more than three Stacks of a minimum height of 25m and a maximum height of 55m (not to exceed 65m AOD) Each Stack to be no more 7m wide	
Access	Access is reserved and details will be submitted at the Reserved Matter stage of the planning process however 4 indicative vehicular access points are shown on the Parameters Plan.	Access is reserved and details will be submitted at the Reserved Matter stage of the planning process however 4 indicative vehicular access points are shown on the Parameters Plan.	

Table 2.2 of the ESA sets out the parameters for the outline element of the development.

The outline element of the Proposed Development will comprise no more than 30,000 sqm of use class B2/E floorspace and is likely to be delivered across a variety of small buildings and structures which house infrastructure and equipment required to facilitate the operation of the EAF. The maximum building and structure height will be 20m from ground level and will not exceed 30m AOD across the outline area of the Site.

The Parameter Plan allows for the provision of up to three stacks with a minimum height of 25m and a maximum height of 55m, and a maximum width of 7m within the shaded area. The stacks are column structures from which gaseous emissions are released following treatment.

Within the ES the applicant has set out the key construction parameters that have been assessed as part of the EIA process. The broad assumptions within the ES are described as:

For the purpose of this EIA, it is assumed that demolition works, as described below, take place within the construction phase; therefore effects arising from demolition are captured within the assessment of effects 'during construction' set out within Chapters D to M. It is also assumed that the development life of the Site will be a minimum of 30 years and there are no plans to decommission the Proposed Development. No assessment of decommissioning will therefore be undertaken as it would not be reasonable to try and undertake an assessment of the environmental impacts at this time.

It can be assumed that construction phase for the site will last for a period of 18 months as follows:

- Demolition is anticipated to commence in January 2024 and last for approximately three months;
- Construction is anticipated to commence in Spring 2024; and
- The Proposed Development is anticipated to become operational in late 2025 C4.4

A Framework Construction Environmental Management Plan (FCEMP) is being designed into the scheme as tertiary mitigation and will therefore form part of the embedded mitigation for the Proposed Development. It is proposed that the measures and key principles set out within the FCEMP will be taken forward in detailed Construction Environmental Management Plans (CEMPs) and that this will be secured by an appropriately worded planning condition. The mitigation measures/key principles within the CEMP are taken into account in each technical assessment when assessing potential effects, rather than being assessed as part of the residual effects.

The FCEMP key principles/mitigation measures are set out within the submitted ES at parts C4.30 to C4.33.

The measures set out in the FCEMP include:

- Site Management and Communication
- Site Preparation
- Transport
- Biodiversity and Ecology
- Noise and Vibration
- Air Quality and Dust Management
- Waste Management and Flooding
- Ground Conditions
- Waste and Materials Management
- Climate Change

As required by the EIA regulations due consideration needs to be given to reasonable alternatives to the proposed development. 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; and
- 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 is likely to result in the site remaining in its existing use as storage for the adjacent Teesside Beam Mill. If this were to the case the existing environment is considered to remain the same or evolve over the passage of time. 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. No development would also impact on the employment and investment benefits anticipated from the proposed development both during construction and operation.

Alternative locations have been considered as part of the process. Consideration was given to the provision of one large EAF at Scunthorpe to help in delivering British Steel's Low Carbon Road Map. The provision of one larger EAF was however discounted as being a viable alternative due to requiring a new National Grid connection that was not achievable before 2034. British Steel therefore progressed the most viable and timely option, which was to pursue two EAF's, with one at Scunthorpe and one at Lackenby both of which are existing steel making facilities under British Steel's control.

In the preparation of the ES no other versions of the submitted Parameter Plan or detailed designs of the building were initially explored as the building has been designed to meet operational requirements of an EAF. The proposed EAF building has been sited in the part of the site for operational reasons due to the proximity to the adjacent Teesside Beam Mill to allow for internal transfer of product.

Following the submission of the application and the supporting ES, an ES Addendum has been submitted due to the increase in the site area and changes to proposed size of the building. The alterations that have been made are not as a result of consideration of alternatives for the development, they have been for operational purposes.

Chapter D – Transport

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of transport. The chapter has been prepared by SYSTRA Ltd.

The Chapter is supported by the following technical appendices:

- Appendix D1: Transport Assessment;
- Appendix D2: Travel Plan.

The ESA has been supported by the following appendix:

• Appendix 5.1: Transport Assessment Update

Baseline

In establishing the baseline position, consideration has been given to the location of the site, its operational context and the current operations undertaken by British Steel at the site. The proposed development site is currently accessed via the exiting British Steel Lackenby Main Entrance from the roundabout on the A1085 Trunk Road. It is proposed that this access point will act as the primary access/egress point to the site, however 3 potential additional indicative access points form part of the outline application as identified on the Parameters Plan.

Consideration has been given to relevant planning history in the area including outline applications across the Teesworks site, as well as other applications including the Dorman Point Training Facility and Steel House Park and Ride.

The surrounding road network and its wider context have been considered. The ES notes that the key roads in the vicinity of the site include:

- A1085 (Trunk Road)
- A1053 (Greystones Road)
- A66
- A174
- A1042 (Kirkleatham Lane)

The ES also acknowledges that as part of previously consented outline applications across the Teesworks site, highway mitigation works have been agreed and are to be carried out when the appropriate triggers are met. These works include alterations to the following junctions:

- Greystones roundabout (A174 / A1053 Greystone Road);
- A1085 Trunk Road roundabout (A1053 Greystone Road / A1085 Trunk Road); and
- Tees Dock Road roundabout (A66 / Tees Dock Road)

There is noted to be an extensive private road network both within the proposed development site and the wider Teesworks area.

Consideration has been given to sustainable modes of transport and access to the proposed development site including walking, cycle provision and public transport including buses and rail services.

An assessment has been made with regard to multi-modal trip distribution. The distribution modelling considers the method of travel to work as set out in Table D4.3, with the predominant method being by car or van at 82%. The ES considers however that, the location of the nearby urban settlements and various sustainable transport infrastructure such as bus services, cycle links,
pedestrian routes suggests that there is potential for trips to / from the site to be undertaken by sustainable modes.

An assessment of Personal Injury Collision Records has been made within the study area as set out in Figure D4.6 of the ES. Consideration has been given to the previous 5 years data as set out in Table D4.5 of the ES. The conclusions of the assessment of the data within the ES is that from a review of the location of the collisions, there were no clusters identified, with collisions occurring across the network, therefore suggesting that there is no underlying road safety issues within that study area.

Baseline traffic data has been provided based on the information from the Department for Transport road traffic statistics. The details of this are illustrated in Table 5.2 of the ESA and included below:

	D 14	a	2025 Base - Committed	+	2025 Base Committed Developme	+ + Proposed nt	Increase (%)		
Link	Description	Sensitivity	Total AADT	AADT HGV	Total AADT	AADT HGV	Total AADT	AADT HGV	
1	A174 - West of A1053	Medium	41596	1960	41819	2038	0.5%	4.0%	
2	A66 -West of A1053	Low	48820	2899	48984	29 77	0.3%	2.7%	
3	A1053 - Greystone Road	Low	37170	2097	37452	2175	0.8%	3.7%	
4	A1085 - Trunk Road south of Lackenby Gate	Low	47999	1472	48469	1628	1.0%	10.6%	
5	A174 - Between A1053 and A1042	Medium	56142	1553	56202	1553	0.1%	0.0%	
6	A174 - East of A1042	Medium	38078	1067	38197	1067	0.3%	0.0%	
7	A1042	Medium	17982	245	18042	245	0.3%	0.0%	
8	A1085 Trunk Road north of Lackenby Gate	Medium	47999	1472	48311	1628	0.6%	10.6%	
9	Broadway	Medium	25558	705	25582	705	0.1%	0.0%	

In establishing the future baseline should the development not come forward, the assessment has been carried out to include traffic flows associated with cumulative schemes / 'committed developments' near the proposed development. The developments considered in the assessment are set out at paragraph D4.80 of the ES.

Potential Effects of Development

Embedded Mitigation

The ES identifies a number of embedded mitigation measures relating to transport matters in the design of the proposed development.

It is proposed that a walking and cycling network will be provided across the site to link into existing facilities across the wider site and the surrounding area including the Lackenby Gate roundabout entrance. Final details of these will be confirmed and delivered through planning a planning condition. The site will also seek to link into existing sustainable transport modes in the vicinity of the site.

The proposed development is to operate on a 24 hour basis. Due to shift changes it is proposed that there would be 41 two-way vehicle movements in the AM and PM peak periods. In order to ensure this impact is limited to the assessed numbers the applicant is proposing an Operational Management Plan (OMP) that will detail such movements and numbers that would impact on the highway network.

A Construction Traffic Management Plan (CTMP) for the construction stage, and a Framework Travel Plan relating to the operational stage of the proposed development are also proposed.

The ES proposes that a CTMP would include the following measures:

- Construction programme and phasing;
- Quantification of construction movements;
- Working hours;
- Measures to minimise construction traffic impacts (delivery control, sustainability, speed limits, designated haul routes, staff induction, workforce travel arrangements, signage etc.); and
- Communication arrangements with the Council.

A Travel Plan (TP) will be implemented at the proposed development site when complete, with a set of principles established by the Framework Travel Plan to encourage sustainable travel modes.

Both of these matters are to be secured by way of planning conditions.

During Construction

The ES details that during the construction phase of the development, there will be a need for deliveries of materials including heavy construction products. These deliveries will generate HGV trips as well as traffic movements associated with those employed to support the construction processes. These combined trip movements, to and from proposed development site has the potential to impacts upon existing residential properties and other receptors in the vicinity of the site and en-route. It is proposed that where possible, these impacts will mitigated through the provision of a CTMP as detailed in the embedded mitigation measures above.

An assessment has been made based on a construction programme provided by the applicant. The ES acknowledges that construction activities have the potential to take place concurrently with other developments taking place in the vicinity including the Net Zero Teesside development. To provide a robust assessment of the proposed development, traffic movements associated with committed development works have been added into the calculations to ensure a robust cumulative assessment of the construction impacts. The construction vehicle forecast during peak construction activities is set out in Table D5.1 of the ES as below.

Construction activity		2024	4					202	5										
constru		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Phase One																		
	Establishment of site access for heavy vehicles and																		
1.1	cranes and ground preparation for construction	10	25	25															
	infrastructure					_													
2	Phase Two																		
2.1	Fencing the site and establishing a temporary	5	10	10	5														
2	Phase Three																1		
3	Establishment of domountable site offices	ł															1		
	construction laydown pade, site amenities, storage																		
3.1	facilities electric generators, temporary water				10	20	20	20	30	30	10	20	20	20	10	20			
0.1	storage tanks, wastewater management and fuel					~~	~~		~	~		~~	20			20			
	supply facilities																		
4	Phase Four	t																1	
	Establishment of temporary site drainage for	t			-												-		
4.1	stormwater control				5	10	10	10	15	15	10	10	10	10	10	10	5		
5	Phase Five	1										•							
5.1	Connection of site infrastructure services.	1														5	10	10	5
Α	General & Misc																		
A1	Workforce & Visitors	200	200	200	300	300	300	300	600	600	300	300	300	300	300	300	200	200	200
A2	Misc LGVs	10	10	10	10	10	20	20	30	30	20	20	10	10	10	10	10	10	10
	-																		
2	Cars	164	164	164	246	246	246	246	492	492	246	246	246	246	246	246	164	164	164
š.	LGV Total	10	10	10	10	10	20	20	30	30	20	20	10	10	10	10	10	10	10
a	HGV Total	15	35	35	20	30	30	30	45	45	20	30	30	30	20	35	15	10	5
0	All Vehicles Total	189	209	209	276	286	296	296	567	567	286	296	286	286	276	291	189	184	179
Sr.	Cars (based on 81% Census mode share)	328	328	328	492	492	492	492	984	984	492	492	492	492	492	492	328	328	328
3	LGV Total	20	20	20	20	20	40	40	60	60	40	40	20	20	20	20	20	20	20
8	HGV Total	30	70	70	40	60	60	60	90	90	40	60	60	60	40	70	30	20	10
-	All Vehicles Total	378	418	418	552	572	592	592	1134	1134	572	592	572	572	552	582	378	368	358

The ES acknowledges that the final routing of construction traffic is not yet known, however it is anticipated that most of the traffic will travel either via the A66 of the A174. The ES has made a high level forecast assumption that 50% of construction traffic will travel to/from the A66 West and 50% of construction traffic will travel to/from the A174 West;

The ES concludes in relation to construction impacts:

During the construction phase, all links are forecast to experience a change in traffic below the screening thresholds for further detailed assessment of environmental impacts. Even with the robust assumptions relating to the level of trips and routing on these links.

The identified links do not require further assessment of Severance, Pedestrian and Cyclist Amenity and Fear and Intimidation as they fall below the IEMA threshold. The effects on all links have therefore been screened out of the assessment and the resulting effects are considered 'Negligible' and 'Not Significant.'

In addition, it should be noted that construction deliveries can be scheduled to occur outside of both the morning and evening peaks to reduce any remaining cumulative impact on the highway network.

During Operation

The ES acknowledges that during the operation of the proposed development there will be an increase in traffic movements on local roads and potentially further afield. In screening the proposed development, this has been conducted against the 2025 Base Annual Average Daily Traffic (AADT) flows including those committed developments previously detailed. The year 2025 has been chosen as an assumed opening/commencement of operations year based on the construction schedule associated with the development.

In calculating the AADT flows, these have been carried out using the anticipated arrival / departure profile, based on a typical shift pattern of 'day shift', 'backshift' and night shift', occurring in a 24-hour period. The forecasted traffic impact is detailed within Table D5.3 of the ES, the conclusions of which are below.

New Staff Ve	ehicle Trips*				New Delivery Vehicle Trips**						Increased trips to Lackenby Engineering Stores***						
Period	Shift	Arrive	Depart	Two Way	Process Materials	Scrap Delivery	Delivery Arrival	Delivery Departure	Delivery Two Way	Van Arrive	Van Depart	Van Two Way	HGV Arrive	HGV Depart	HGV Two Way		
Total 204 204 408 14 34 48				48	48	96	15	15	30	7	7	14					
*Staff vehicl	e trips: 204	arrivals, 204	4 departures, 4	408 two-way	AADT assumi	ng 250 emplo	yees and 82%	Census mode	share for Lack	enby area (Redcar and	Cleveland oo	3).				
**Delivery vehicle trips: Process Materials 14 HGV vehicle loads, scrap delivery 34 HGV vehicle loads = 96 delivery vehicle HGV two-way trips daily.																	
***Engineer	ing stores: V	an deliverie	es to increase l	by 15 vans pe	er day and HGV	/ deliveries to	increase by 7 l	HGVs per day:	= 30 two-way	van trips an	d 14 HGV t	wo-way trips	laily.				

This has been updated through the ESA as follows:

Total		204	204	408	24	39	8	71	71	142	15	15	30	7	7	14
	*Staff vehicle trips: 204 arrivals, 204 departures, 408 two-way AADT assuming 250 employees and 82% Census mode share for Lackenby area (Redcar and Cleveland 003).															
	**Delivery vehicle trips: Process Materials 24 HGV vehicle loads, scrap delivery 39 HGV vehicle loads = 142 delivery vehicle HGV two-way trips daily.															
	***Engineering stores: Van deliveries to increase by 15 vans per day and HGV deliveries to increase by 7 HGVs per day= 30 two-way van trips and 14 HGV two-way trips daily.															

The following assumptions have also be used in the assessment:

- Assumed 50 employees will arrive for a typical day shift during standard working hours
- Assumed remainder of employees will arrive depart based on a typical shift pattern of 'day shift', 'backshift' and night shift', occurring in a 24hour period.
- Applicant has stated that 60% of scrap metal is expected to be delivered by UK rail, 20% by UK road and 20% via the Teesworks quay / internal roads only.
- 1 rail delivery per day, totalling around 2,000t of scrap (which will replace the current 1 delivery per day of slab / bloom from Scunthorpe), with a further 39 scrap HGVs per day arriving by roads.

The ES concludes in relation to operational impacts:

It is identified that all links are forecast to experience changes in traffic flows below the screening threshold for further detailed assessment. Therefore, all of the links assessed are screened out of the assessment and are considered to experience environmental impacts that are 'Negligible' and 'Not Significant.'

Mitigation and Monitoring

During Construction

No further mitigation measures beyond those identified as embedded mitigation are proposed.

During Operation

No additional mitigation is proposed during the operational phase.

Residual Effects

During Construction

The impacts of traffic and transport during the construction phase of the proposed development have been assessed in Potential Effects section of this chapter. No additional mitigation has been identified and therefore, the significance of the residual effects of the construction phase of the proposed development remains as *negligible (not significant)*

During Operation

The impacts of traffic and transport during the operational phase of the proposed development have been assessed Potential Effects section of this chapter. No additional mitigation has been identified and therefore, the significance of the residual effects of the operation phase of the proposed development remains as *minor adverse (not significant)*.

Conclusions

The assessment of the environmental effects has been undertaken in accordance with the IEMA guidance and uses data and results contained within the Transport Assessment (Appendix D1) and calculated AADT flows. Embedded primary and tertiary mitigation has been identified for the construction phase and operational phase of the proposed development.

Table D8.1 has been provided within the ES that summarises the receptors, impact, potential effect (taking account of embedded mitigation), additional mitigation and monitoring, residual effect in relation to transport. This is considered to provide a detailed and robust overview of the impacts and mitigation.

The residual effects both during construction and during operation range between *negligible (not significant)* and *minor adverse (not significant)*.

Planning Assessment

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;

(d) 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.

Policy SD4 (General Development Principles) states that development will be permitted where:

b. will not have a significant adverse impact on the amenities of occupiers of existing or proposed nearby land and buildings;

g. will have access to adequate infrastructure, services and community facilities to serve the development; and

p. provide suitable and safe vehicular access and parking suitable for its use and location;

Policy LS4 (South Tees Spatial Strategy) states the Council and its partners will aim to:

o. improve and maintain access links between South Tees and the strategic road network;

t. support the extension of the road network to unlock the development potential of South Tees;

u. maintain and enhance walking and cycling routes from nearby towns to the South Tees employment areas;

Policy TA1 (Transport an New Development) states that proposals will be supported that:

a. improve transport choice and encourage travel to work and school by public transport, cycling and walking;

b. minimise the distance people need to travel;

c. where appropriate, contribute positively to wider demand management measures to address congestion, environmental and safety issues; and

d. have regard to the number of cycle and car parking spaces as set out within the Tees Valley Design Guide and Specification for Residential and Industrial Estates.

Policy TA2 (Improving Accessibility within and beyond the Borough) states that scheme should:

f. working with Highways England to improve capacity to the A66, A1053 and A174, particularly Greystones roundabout;

k. working with the Tees Valley Combined Authority and Highways England to deliver capacity improvements to the Strategic Road Network including across the sub-region including improvements to the A19, A1085 and A689 to improve access to key development sites, all providing indirect benefits to Redcar and Cleveland;

The ES provides an appropriate assessment of transport related matters resulting from the proposed development.

The submitted information has been considered by both National Highways and Redcar and Cleveland Council Highway Engineers. On-going discussions have taken place over a number of months between relevant parties.

National Highways

Due to the location of the proposed development and its proximity to the strategic road network, the application has been considered by National Highways (NH). Initially NH placed a holding direction on the application to allow further consideration of the impacts of the development on the strategic road network that falls under the NH authority.

Detailed discussions have taken place over a number of months between NH and the applicants highways consultants to ensure that the proposed development would not result in severe adverse conditions on the strategic network. NH following the detailed discussions agreed an approach with the applicant and the LPA to allow the application to be determined subject to a number of planning conditions relating to;

- a Construction Traffic Management Plan;
- an Operational Management Plan; and
- a monitoring scheme and consideration of trip levels in the morning and evening peak periods at the A1053 (Greystone Road) / A1085 (Truck Road) and A174/A174/A1053 (Greystone Road) / High Street.

The wording of these conditions has been agreed by all parties involved allowing NH to withdraw their holding direction allowing the application to be determined.

Local Highways

As has been the case with matters relating to the strategic network, similar detailed discussions have taken place over a number of months between the Local Highway Authority and the applicants highways consultants to ensure that the proposed development would not result in severe adverse conditions on the local highway network.

The highway engineers have confirmed that assuming the site generates 250 employees, over a 24-hour period 408 two way trips will be created. In terms of deliveries 110 HGV movements will be generated over the same period. The cumulative impact being 518 two-way movements. It is noted that the start and end time of the shifts are not during the peak periods.

Baseline data from 2019 submitted as part of the TA indicates average daily flows over a 24 hour period being approximately:

- 22,000 on the A66 West of Tees Dock Road
- 16,000 Trunk Road in vicinity of main site access
- 13,000 A1053 Greystones Road

Target interventions have been identified at the following locations:

- Greystones roundabout (A174 / A1053 Greystone Road);
- A1085 Trunk Road roundabout (A1053 Greystone Road / A1085 Trunk Road); and
- Tees Dock Road roundabout (A66 / Tees Dock Road)

These measures have been secured through the 5 outline applications across the Teesworks site, with trigger points based on vehicle movements for their installation. This application is not considered to trigger the need for these alterations, however, the vehicle movements resulting from the proposed development are required to be considered in the cumulative totals on the network. This matter has been addressed through the conditions agreed with National Highways as detailed above. The primary access to the proposed development is from the existing Lackenby Works roundabout on the Trunk Road. Engineers have stated that further analysis should be undertaken of the Lackenby Works entrance, along with the mitigation works associated with Tees Dock roundabout as part of wider modelling work going forward, as these highways assets form part of the local highway network. Discussions are taking place outside of the planning system with regard to future modelling and the appropriate funding of this, however this is not required prior to the determination of this application.

Confirmation has been provided by the highway engineers that conditions relating to operational management and construction traffic management plans will be required to be agreed with the Local Highway Authority as well as National Highways. This is considered acceptable and would form part of the condition discharge process.

Based on the fact the application is made both in detail and outline there are acknowledged to unknowns in relation to both location and layout of both vehicle and cycle parking. It is therefore recommended that the final details of these be secured by way of planning conditions that have been agreed with the applicant prior to the determination of the application.

A further condition is proposed by engineers relating to a method of works statement that will require details of traffic routing, site compound, measures relating to prevention of mud/debris on highway, program of works and any details of road/footpath closures during the construction process. While some of these matters may be picked up under the CEMP/CTMP condition, the proposed wording of the condition has been agreed with the applicant and the condition is considered appropriate.

The Local Highway Engineers have therefore advised that subject to the conditions detailed above, they would recommend approval of the application on highway grounds.

The LPA is satisfied that the development will have no impacts in terms of transport matters that cannot be mitigated to an appropriate level by planning conditions or other regulatory regimes. The development raises no issues in respect of National Policy within the NPPF and Policies SD4 TA1 and TA2 of the Redcar and Cleveland Local Plan.

Chapter E – Noise and Vibration

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of noise and vibration. The chapter has been prepared by a member of the Institute of Acoustics (IoA)

The Chapter is supported by the following technical appendices:

- Appendix E1: Record of Correspondence;
- Appendix E2: Record of Baseline Survey;
- Appendix E3: Results of Baseline Survey; and

• Appendix E4: Figures.

The Chapter is also supported by the following technical figures provided in Appendix E4:

- Figure E1: Study Area, NSRs and NMPs; and
- Figure E2: Modelled Noise Sources.

Baseline

The noise environment in the vicinity of the proposed development and at the closest Noise Sensitive Receptor (NSR) is dominated by road traffic movements on the local road network, specifically Trunk Road and the A66 and A1053. The traffic flow was noted by the survey to comprise a high proportion of heavy goods vehicles and to be relatively constant.

The measured baseline noise levels are shown in charts in Appendix E3 of the ES. Periods when weather conditions varied from those required by BS4142 for representative noise monitoring have been excluded from the charts. A summary of the measured levels at Noise Measurement Position (NMP)1 is provided in Table E4.1 of the ES as set out below.

Date	Period /	Measured level, dB(d noise (A)	Commentary				
Date	Duration, T	LAeq,T	LA90, T	commentary				
	Daytime 9hr	54	50					
27/11/2023	Night-time 8hr	46	44	British Steel wider site non-operational				
	Daytime 16hr	55	52					
28/11/2023	Night-time 8hr	46	42	British Steel wider site non-operational				
	Daytime 16hr	56	51					
29/11/2023	Night-time 8hr	51	44	British Steel wider site non-operational				
	Daytime 16hr	55	52	Pritish Steel wider site non-operational				
30/11/2023	Night-time 8hr	51	47	Data screened due to rain/wind				
	Daytime 16hr	54	51	British Steel wider site operating				
01/12/2023	Night-time 8hr	50	43	Data screened due to rain/wind				
	Daytime 16hr	55	52					
02/12/2023	Night-time 8hr	51	43	British Steel wider site operating				
	Daytime 16hr	50	44					
03/12/2023	Night-time 8hr	49	43	British Steel wider site operating				
	Daytime 16hr	58	55	British Steel wider site operating				
04/12/2023	Night-time 8hr	50	43	Most data screened out due to rain/wind across 24hr period				
Typical	Daytime	55	51	Daytime				

Date	Period /	Measured level, dB(l noise A)	Commentary
Date	Duration, T	LAeq,T	LA90, T	commentary
	Night-time	50 46	43 43	During British Steel operation British Steel not operating

The data shows that baseline ambient and background levels remained consistent regardless of whether British Steel's sites were operational; this is a positive indication that other sources were the primary contributor to the noise environment, with road traffic identified as the likely primary noise source.

While the short duration of the measurement limits its reliability in drawing conclusions, it is a positive indication that noise levels at NSR1 are similar to/higher than those recorded at NMP1, and therefore that characterising the baseline using NSR1 data is a robust approach.

Potential Effects of Development

Embedded Mitigation

A Construction Environment Management Plan (CEMP) will be produced, which will set out methods by which noise will be controlled during the construction phase of the development.

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.

During operation, appropriate methods and good housekeeping will be used to minimise unnecessary noise from external operations, specifically; handling of scrap. As with the construction phase, a robust approach to investigating and responding to noise complains will be followed.

During Construction

In assessing noise related to construction activities an assessment has been made against baseline data in accordance with the 'ABC method' as provided within BS5228.

As part of construction activities a CEMP is to be produced that will detail methods to be selected to restrict construction noise to ensure that noise impacts do not exceed the levels identified in Table E5.1 of the ES as detailed below;

Measured baseline level, dBLAeq,T	Baseline rounded to nearest 5 dB	BS5228 ABC threshold category	BS5228 ABC threshold value
Weekday daytime	55	A	65
Weekends and evenings	50	А	55
Night-time	45	В	50

Based on the measures that will be implemented through the CEMP, the assessment concludes that the highest level of noise impact resulting from construction activities will be *minor adverse* and therefore be *not significant*.

During Operation

Predicted levels of noise during operation have been used in assessing impacts on the closest noise sensitive receptors, these being NSR1 and NSR2 as identified on Figure E.1 of Appendix E4 of the ES, included below;



The ES in assessing impacts on NSR1 has considered both day-time and night-time periods of operation. In making the assessment, consideration has been given to existing baseline levels of noise, predicted levels of noise from the development and consideration of any uncertainties relating to the assessment.

With regard to uncertainties that currently exist, the baseline data is considered robust with a high level of confidence in the information held. It is noted that the detailed design of the project is at a relatively early stage, and therefore actual source levels of plant and processes are currently unknown. However, robust assumptions have been made in the prediction of operational noise and therefore the level of uncertainty is not expected to change the outcome of the assessment during either day-time operation or night-time operation.

Based on the information currently available, the ES concludes in relation to the NSR1 that Operation of the Proposed Development has been determined to meet the BS4142 criterion for a low impact during the daytime period and a low adverse impact during the night-time period. Noise impacts associated with operation of the Proposed Development during the daytime period have therefore been evaluated as Negligible. Noise impacts at NSR1 during the night-time period have been evaluated as Minor Adverse. Noise impacts at NSR1 from the operational phase have therefore been determined to be Not Significant.

Consideration has also been given to impacts from the development on NSR2. The ES concludes with regard to NSR2 that *The predicted noise level at NSR2 during the operational phase is 50 dBLAeq,T. This is within the range of baseline ambient noise levels recorded at NMP1; it is therefore likely that the design of the hotel will account for elevated levels of noise and include appropriate mitigation accordingly (if the application is consented). On this basis, noise impacts at NSR2 have been determined to be Negligible and are therefore Not Significant.*

Mitigation and Monitoring

During Construction

The ES does not propose any additional mitigation beyond the production and implementation of the proposed CEMP. As part of the CEMP there will be monitoring requirements.

During Operation

The ES states that at detailed design stage the primary noise sources associated with the operational phase of the development will be reviewed and where practicable appropriate noise controls will be added. This may include substitution of noisy plant or processes for quieter ones, or the introduction of screening (acoustic barriers) around noisy plant and activities.

Residual Effects

During Construction

The ES concludes that *residual effects during the construction phase remain unchanged and are as set out in Section E5.0 (Potential Effects) of the ES and are minor adverse and not significant.*

During Operation

The ES concludes that following the implementation of mitigation, residual effects during the operational phase remain as set out Section E5.0 and are negligible to minor adverse and not significant.

Conclusions

The assessment has involved consultation with Redcar and Cleveland Borough Council, characterisation of the baseline noise environment by survey, modelling worst-case likely operational noise levels at the closest NSR and evaluation against appropriate criteria.

The predicted operational noise level meets the adopted criteria, both during the daytime and the night-time periods. The resultant noise impacts at NSRs have been determined to be *not significant*.

Noise impacts during the construction phase have been determined to be *not significant*, on the assumption that appropriate noise control measures provided in the CEMP are implemented. The resultant construction phase noise impacts have been determined to be *not significant*.

Table E8.1 has been provided within the ES that summarises the receptors, impact, potential effect (taking account of embedded mitigation), additional mitigation and monitoring, residual effect in relation to noise and vibration. This is considered to provide a detailed and robust overview of the impacts and mitigation.

The residual effects both during construction and during operation range between *negligible (not significant)* and *minor adverse (not significant)*.

Planning Assessment

The NPPF at Paragraph 191 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.

Policy SD4 (General Development Principles) states that development will be permitted where:

b. will not have a significant adverse impact on the amenities of occupiers of existing or proposed nearby land and buildings

e. avoids locations that would put the environment, or human health or safety, at unacceptable risk

m. create a healthy, active, safe and secure environment

n. minimise pollution including light and noise and vibration levels to meet or exceed acceptable limits

The ES has been the subject of consideration by the Council's environmental protection section who have offered the following advice; From the baseline noise survey, the prediction of operational noise has been undertaken using noise modelling software with Information provided by British Steel. The resultant noise impacts at Noise Sensitive Receptors have been determined to be not significant.

However, as this is a calculated prediction and as the EAF plant design is not finalised I would recommend that noise monitoring is carried once the EAF is in production to verify the calculated results.

The assessment also states that a CEMP will be produced which will detail methods to be used to restrict construction noise such that it does not exceed the criteria at Noise Sensitive Receptor 1.

In order to minimise the environmental impact I would recommend the inclusion of the following conditions onto any planning permission which may be granted:

• Prior to the development being brought into permitted end use a validation report must be prepared, which is subject to the approval in writing of the Local Planning Authority verifying that the model calculated noise levels confirm with the levels modelled in Environmental Statement Chapter and Appendix E

REASON: To ensure the creation/retention of an environment free from intrusive levels of noise and activity and in the interests of the amenity of the area.

• Prior to commencement of construction, a CEMP shall be submitted to and approved in writing by the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide the development.

i) Methods of demolition; ii) Measures to control the emission of noise dust and vibration during the construction period.

REASON: To protect the amenity of nearby residents and in the interests of highway safety.

Based on the assessment of the ES by the Council's Environmental Protection Officers (EPO) have raised no objection in principle to the proposed development. The EPO has noted that the prediction of operational noise has been undertaken using noise modelling software with information provided by British Steel. It is considered that as this is a calculated prediction, as the EAF plant design is not finalised, a condition is necessary that requires the submission of a detailed noise assessment prior to the occupation of any building. This noise assessment would enable the requirements set out above from the EPO to be achieved through final design details and the requirement for a validation report confirming the noise assumptions made. This condition has been agreed to by the applicants. A further condition has been suggested with regard to the submission of a CEMP. The provision of a CEMP has and continues to be proposed by the applicant as a means of addressing a number of mitigation scenarios. A condition for the provision of a CEMP is therefore proposed and has been agreed with the applicant.

It is proposed to add a condition allowing 24 hour activities 7 days a week at the site. While the condition for activities does not preclude any time when works/development cannot take place and therefore may be questioned to as whether it is necessary, it is considered that the imposition of the condition adds clarity to operations at the site as to working hours permitted on the site.

The LPA is satisfied that the development will have no impacts in terms of noise and vibration that cannot be mitigated to an appropriate level by planning conditions or other regulatory regimes. The development raises no issues in respect of National Policy within the NPPF and Policy SD4(b)(e)(m)(n) of the Redcar and Cleveland Local Plan.

Chapter F – Air Quality

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of air quality. The chapter has been prepared by ITPEnergised.

The Chapter is supported by the following technical appendices:

- Appendix F1: Air Quality Impact Assessment ; and
- Appendix F2: Figures.

This Chapter is supported by the following technical figures provided at Appendix F2 Volume 2 to this ES:

- Figure F1: Site Location;
- Figure F2A: Modelled Roads, Receptors and Monitoring Sites;
- Figure F2B: Ecological Receptors within 10km;
- Figure F3: Modelled Buildings and Stack Locations;

- Figure F4: 3D Image of Modelled Buildings and Stacks;
- Figure F5: Construction Dust Risk Assessment Area ; and
- Figure F6: Durham Tees Valley Airport Hourly Meteorological Data 2018-2022.

The ESA has been supported by the following appendices:

- Appendix 7.1 Air Quality Impact Assessment Update (AQIA Update)
- Appendix 7.2 Air Quality Figures Update

Baseline

The ES acknowledges that a background level of dust exists in all urban and rural locations. Dust can be generated from both local and longer range sources including but not limited to; vehicle movement, wind on exposed soils, exhaust emissions from energy plants and industry.

The ES details that there are no significant sources of dust in the proximity of the proposed development site.

In relatively close proximity to the proposed development site, there is a RCBC background/suburban monitoring station at Dormanstown. The measured 2021 concentration reported in the RCBC Annual Status Report (RCBC 2022) can be summarised as follows:

- Nitrogen Dioxide NO₂: 11 µg/m³;
- Particles less than 10 μ m (micrograms) PM₁₀: 14 μ g/m³; and
- Particles less than 2.5 μm (micrograms) PM_{2.5}: 7 μg/m³.

Annual mean NO₂ concentrations from a number of roadside passive diffusion sites were in the range 10.6 - $30.5 \ \mu g/m^3$. The available measured pollutant across the study area is therefore below the Air Quality Standards (AQSs).

Potential Effects of Development

Embedded Mitigation

During construction the ES details that tertiary mitigation will be provided in the form of a Construction Environmental Management Plan (CEMP). A number of measures that should be included in the CEMP are set out within Appendix F1 at Annex 6 of the ES.

No embedded mitigation measures are included for the operational phase of the development as the detailed design of plant is not yet finalised.

During Construction

There is only one potential human receptor within 350m of the proposed development, this being a proposed hotel located south of the site, that is currently under consideration through the planning system under reference

R/2023/0482/OOM. The ES notes that if the hotel was to be constructed before the proposed development, it would be considered a *high sensitivity* receptor.

The ES details that given the scale and nature of works, a large dust emission magnitude is estimated. There are however a low number of highly sensitive receptors in close proximity of the proposed development. The overall sensitivity of the area to dust soiling is *low*, with the significance of effect without mitigation being *minor adverse* (*not significant*). The ES concludes that with the embedded mitigation, the significance of effect will be *negligible* (*not significant*).

During Operation

With regard to potential effects during operation consideration has been given to concentrations of Nitrogen Dioxide (NO₂), Particles less than 10 μ m (micrograms) (PM₁₀), Particles less than 2.5 μ m (micrograms) (PM_{2.5}), Nitrogen Oxide (NO_x), Sulphur Dioxide (SO₂), Heavy Metals, Mercury and Dioxins.

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

The total predicted concentrations and impact descriptors at all sensitive human receptors have been considered. Predicted impact descriptors are all Negligible or Minor Adverse (Not Significant) at individual receptors, except for the maximum predicted 1-hour PC concentration of NOx which is between 20% and 50% of the 1-hour AQS at one receptor resulting in an impact descriptor of Moderate Adverse. A Moderate Adverse impact would normally be considered to be Significant, however there are no predicted exceedances of the hourly mean NO2 standard (200 µg/m3 not to be exceeded more than 18 times per year) when the combined contributions from road traffic and EAF emissions are considered at any receptor. The maximum predicted 99.79th percentile of 1-hour concentration of NO2 at all receptors is 31.5% of the 1-hour AQS. The one Moderate Adverse impact at a receptor is therefore considered to be Not Significant.

In addition, the EAF De-dusting stacks have been modelled with NOx at an emission limit value (ELV) of 100 mg/Nm3 which is taken from the Medium Combustion Plant Directive (MCPD) ELV for new gas combustion plant. This is a conservative worst-case assumption. The only existing UK EAF with a NOx emission limit imposed is the CELSA Manufacturing (UK) Limited plant in Cardiff which is regulated by Natural Resources Wales under the Environmental Permitting (England & Wales) Regulations 2010 under permit number EPR/TP3639BH. It has an ELV of 25mg/Nm3. If the Proposed Development plant was modelled with this limit, all predicted process contributions would have an impact descriptor of Negligible and therefore would be considered Not Significant.

The predicted impacts at designated ecological sites are concluded to be Negligible and Not Significant.

Mitigation and Monitoring

During Construction

The ES does not propose any mitigation during the construction phase of the development beyond those set out in the embedded mitigation measures above.

During Operation

The ES details that the EAF facility will be designed to meet the requirements of Best Available Technology (BAT) as stipulated in guidance and required by the industry regulator, the Environment Agency.

It is considered that all newly designed de-dusting units should be able to achieve the lowest practicable emissions of all of the pollutants listed in the emissions inventory in Appendix F1, Annex 1 of the ES, meaning that predicted impacts are likely to be an overestimate.

Residual Effects

During Construction

As no additional mitigation is proposed, the residual effects of dust on human receptors will be the same as set in the potential effects section above.

During Operation

As set out in above the EAF facility will be designed to meet the requirements of BAT as stipulated in guidance. With this additional mitigation in place the residual air quality effects of the proposed development on humans and ecological receptors, are considered to be *negligible (not significant)*.

Conclusions

A table (F8.1) has been provided within the ES that summarises the receptors, impact, potential effect (taking account of embedded mitigation), additional mitigation and monitoring, residual effect in relation to air quality. This is considered to provide a detailed and robust overview of the impacts and mitigation.

The residual effects both during construction and during operation are *negligible (not significant)*

Planning Assessment

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 also states that:

Planning policies and decisions should 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. So far as possible these opportunities should be considered at the plan- making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality management Areas or Clean Air Zones is consistent with the local air quality action plan.

The LPA must also be mindful of the advice set out in the NPPF (para194)

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. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.

Policy SD4 (General Development Principles) states that developments will be permitted where:

(b) will not have a significant adverse impact on the amenities of occupiers of existing or proposed nearby land and buildings;

(e) avoids locations that would put the environment, or human health or safety, at unacceptable risk;

(m) create a healthy, active, safe and secure environment;

Policy LS4 (South Tees Spatial Strategy) states that the Council and its partners will aim to:

(x) secure decontamination and redevelopment of potentially contaminated land;

The ES provides an appropriate assessment of air quality related matters.

The information relating to air quality has been considered by the Council's Environmental Protection team who have provided the following comments based on the information provided:

A detailed dispersion modelling using the Atmospheric Dispersion Modelling System (ADMS) suite of modelling software has been undertaken to predict the concentrations of NO2, PM10,PM2.5, SO2, heavy metals, mercury and dioxins at existing sensitive human receptors and concentrations of NOx and SO2 at designated ecological receptor locations within the study area, due to emissions from road traffic and the EAF process emissions, in conjunction with predicted future background concentrations.

No exceedances of the AQSs Environmental Assessment Levels (EALs) are predicted for any pollutant at any of the sensitive human receptors. There is no risk of exceedance of the relevant annual mean critical level for NOx or SO2 at any of the designated ecological sites within the study area.

As stated before the facility will be operated in accordance with statutory guidance and regulated by the Environment Agency I have no objections.

A number of conditions are proposed to deal with air quality matters both during construction and during operation.

With regard to construction activities, it is proposed that a CEMP will be implemented that would include as part of the overall plan a Construction Dust Management Plan. The proposed condition relating to the provision of the CEMP has been agreed with the applicant in advance of the determination of the application.

With regard to the operational phase of the proposed development, a condition is proposed that requires the submission of an air quality assessment relating to any building prior to it becoming occupied. The condition requires that the submitted report shall demonstrate how the EAF facility will be designed to meet the requirements of Best Available Techniques (BAT). Any measures and recommendations within the report shall be complied with thereafter.

The LPA is satisfied that the development will have no impacts in terms of emissions and impact on human health that cannot be mitigated by planning conditions or other regulatory regimes. The development raises no issues in respect of National Policy in the NPPF and Policy SD4(b)(e)(m) and LS4 (x) of the Redcar and Cleveland Local Plan.

Chapter G – Hydrology and Hydrogeology

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of hydrology and hydrogeology. The chapter has been prepared by SYSTRA Ltd. The Chapter is supported by the following technical appendices:

- Appendix G1: Flood Risk Assessment and Drainage Strategy
- Appendix G2: Water Framework Assessment

The ESA has been supported by the following appendices:

- Appendix 4.1: Flood Risk Assessment & Drainage Strategy Update
- Appendix 4.2: Water Framework Assessment
- Appendix 4.3: ES Appendix H1 Appendix 1 Site Plan Updated

Baseline

The ES describes the location of the site, surface water bodies across the local watercourse network (Figure G4.1), flood risk at the site including (fluvial, tidal, surface water, groundwater and drainage).

In relation to the development site, Kinkerdale Beck crosses the site via an underground culvert. This crosses the area where the EAF building is planned and turns northwards under the northern part of the site. The culvert continues north and westward across the wider British Steel complex, passing beneath railway lines after the confluence of Kinkerdale and Boundary Becks and discharging into the Lackenby open channel to the west of Tees Dock. This runs for about 1km before it is culverted beneath port facilities and outfalls to the Tees Estuary at the Main Lackenby Outfall.



Due to the location of the EAF building, the Kinkerdale Culvert may require to be rerouted around its footprint with a minimum stand-off of 5m from the culvert centreline to the building face.

The EA flood maps illustrate that the proposed development site is within Flood Zone 1. The current site levels are at 8mOD which is considered to be sufficiently high to remain unaffected by tidal flooding.

There are no recorded flood events that relate to Kinkerdale Beck culvert that runs through the proposed development site. EA mapping does not extend to the degree of this culvert; however, the culvert is considered to pose no more than a low risk of flooding to the existing site.

Indicative mapping for surface water flood risk on and around the proposed development site illustrate isolated patches of surface flood risk across the wider British Steel complex, and these are recorded within the submitted Flood Risk Assessment (FRA) and Drainage Strategy (DS).

Based on the information available on ground condition it is considered that groundwater does not pose a material risk of flooding to the proposed development. The assessment has been based on the information on the DEFRA MAGiC Map which designates the majority of the site an area of Low Risk. Based on the low ground permeability associated with the ground conditions the risk of flood to the site from groundwater is considered to be *negligible*.

There are no records of historic surface water flooding incidents within the proposed development site listed in the RCBC Level 1 Strategic Flood Risk Assessment or advised by British Steel.

Potential Effects of Development

Embedded Mitigation

Those embedded mitigation measures that are considered relevant to the water environment are considered to be:

- Construction Environmental Management Plan the details of which will be secured by way of a planning condition in line with the measures set out within the ES
- Finished Floor levels at a minimum of 10m AOD
- A new surface water drainage system the details of which will be secured by way of condition

During Construction

Consideration has been given to the impacts that are anticipated to occur during the construction phase of development. Consideration has been given to the following potential impacts at the site; Surface Watercourses, Groundwater, Surface Water quality, Groundwater quality, Drainage flooding and Water resource. The effect on surface water flows during the construction phase is considered to be *minor adverse (not significant)*. The existing site is extensively paved or built and the reaction of site run-off to a rainfall event would be similar to the existing condition once existing pavements or buildings had been demolished. There are no known measures to attenuate run-off and the surface drainage discharges are believed to be uncontrolled, given that these eventually outfall to the Tees Estuary. The effect therefore is considered to be *negligible (not significant)*.

The construction activities will not materially alter the low permeability of the proposed development site. Construction activities are not considered to change the risk of groundwater flooding or to materially change groundwater quantities. The level of effect upon groundwater is considered to be *neutral* (not significant).

The construction process has the potential to generate considerable quantities of silt from run-off eroding bare soil together with the risk of contamination from fuel or other liquids leaking from machinery or spilt. These would affect surface waters (Kinkerdale Beck and downstream) if washed off site into receiving watercourses. Mitigation would be set out within the CEMP to deal with these issues. The overall effect is rated as *minor adverse (not significant)* upon the Beck and downstream channels and conduits and as *negligible (not significant)* upon the Tees Estuary due to the dilution effect in the larger water body.

Impacts on groundwater quality will be limited due to the low permeability of the ground, comprising clays and silts. Areas with existing contamination that were formerly surfaced will be at risk of remobilisation of such materials as recharge of the water table commences in those areas but only for a limited period until the new construction is in place. Similarly, spillages of fuel, lubricants or construction chemicals would have localised effects but affect only small areas. These matters would largely be picked up through the embedded mitigation in the CEMP. The potential effect upon groundwater quality is considered to be *minor adverse (not significant*).

The main risk to existing drainage during construction phase of development arises from potential disruption to existing systems that are needed to serve neighbouring facilities that are not otherwise affected, leading to flooding of areas where drainage performance has been compromised. The effect is considered as *minor adverse (not significant)*.

With regard to water resource, the construction phase of the development is not considered likely to require significant quantities of water until the commissioning phase. The quantities of water required during the construction phase are therefore expected to be within the capacities of local water supplies and therefore the effect is considered to be *negligible (not significant)*.

During Operation

Consideration has been given to the impacts that are anticipated to occur during the operational phase of development. Consideration has been given to the following potential impacts at the site; Surface Watercourses, Groundwater, Surface Water quality, Groundwater quality, Drainage flooding and Water resource.

With regard to surface watercourses a new surface drainage system is to be provided and designed to deliver appropriate standards. The receptor sensitivity of the Lackenby Channels, Kinkerdale Beck Culvert and Boundary Beck Culvert is *low* and so the effect is considered to be *neutral*. The Tees estuary has a *very high* sensitivity, but it is considered that there would be *no/negligible* magnitude of change as a result of the embedded mitigation and so there would be *neutral* (*not significant*) effect.

The aquifer is not used locally as a resource for abstraction. The proposed development will reduce slightly the volume of direct recharge, but this is limited. The potential magnitude of change for groundwater flows during operation is *negligible (not significant)*.

The proposed drainage design would include measures to capture and retain certain key pollutants including hydrocarbons and silt, therefore preventing these being flushed into the wider environment. The receptor sensitivity of the Lackenby Channels, Kinkerdale Beck Culvert and Boundary Beck Culvert is *low* and so the effect would be *negligible (not significant)*. The Tees estuary has a *very high* sensitivity in relation to water quality, but there would be no/negligible magnitude of change as a result of the pollution control measures in the surface drainage design and so there would be a *negligible (not significant)* effect.

The proposed development will result in large areas of paving and built areas which due to their nature have low permeability. This would therefore constrain to a high level the extent to which any water borne contamination enters the ground once the developments operational. The effect on ground water quality is therefore considered to be *neutral (not significant)*.

Surface water drainage at the site will be designed to meet current standards in line with those required by the LLFA. As detailed this will be secured by way of a planning condition. The impact given the planned provision of the new infrastructure is considered to be *negligible (not significant)*.

With regard to water resources as a result of the proposed development, there will be an increase in demand upon those resources as past uses at the site ceased too long ago for this scheme to be considered as a direct replacement. The main water demand is associated with the EAF process and its ancillary workings. The British Steel systems are understood to be broadly capable of meeting the supply requirements, however, any improvement to local supply networks would be designed as part of the embedded mitigation work. The overall impact upon water resource during the operational phase is therefore considered to be no more than *minor adverse (not significant)*.

Mitigation and Monitoring

During Construction

The ES states that no additional mitigation measures are considered to be necessary.

During Operation

The ES states that no additional mitigation measures are considered to be necessary.

Monitoring

The ES has assumed that future monitoring of water quality in the site drainage and possibly in Kinkerdale Beck will be required at suitable intervals to demonstrate that pollution control measures are performing to their required standards.

It is suggested that this would be undertaken by the British Steel as the site operator as part of an Operational Management and Monitoring Plan (OMMP).

No monitoring is anticipated for flow rates from the site's surface drainage or in the Beck above and beyond any such practice that British Steel may operate at present.

Residual Effects

The ES details that no additional mitigation is proposed beyond the embedded mitigation.

During Construction

The ES concludes that overall these are considered to be *negligible (not significant)* in most areas and *minor adverse (not significant)* at worst, which are insignificant in ES terms.

During Operation

The ES concludes that overall these are considered to be *negligible* in most areas and *minor adverse* at worst, which is *not significant* in ES terms.

Conclusions

A table (G8.1) has been provided within the ES that summarises the receptors, impact, potential effect (taking account of embedded mitigation), additional mitigation and monitoring, residual effect in relation to water

management and flooding. This is considered to provide a detailed and robust overview of the impacts and mitigation.

The residual effects both during construction and during operation range between *negligible (not significant)* and *minor adverse (not significant).*

Planning Assessment

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.

Policy SD4 (General Development Principles) states that developments will be permitted where:

(f) will not increase flood risk either on site or downstream of the development

Policy SD7 (Flood and Water Management) of the RCLP requires flood risk to be assessed at all stages of the planning process. The site lies outside areas at risk of flood risk as indicated-on EA mapping. The ES demonstrates that the development has taken account of flood risk and appropriate mitigation.

The ES provides an appropriate assessment of flood risk and related matters. The application has also been supported by a Flood Risk Assessment and Drainage Strategy which addresses both surface water, foul water and maintenance. The submitted information has been considered by Northumbrian Water and the LLFA.

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 nor Northumbrian Water 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, including any alterations or changes that are required to the existing culvert that runs through the development site. Conditions relating to drainage have been agreed with the applicant in order to facilitate the granting of planning permission. Northumbrian Water have commented on the application with regard to the impact of the development on their infrastructure. Based on the information within the FRA and the DS that all

drainage will be managed privately on site by the operators, NWL have no comment to make on the application.

As part of the embedded mitigation measures set out in the ES, reference is made to the provision of a CEMP and finished floor levels at a minimum of 10m AOD. Both these matters have been addressed through conditions that have been agreed with the applicant in advance of the determination of the application.

The ES has assumed that future monitoring of water quality in the site drainage and possibly in Kinkerdale Beck will be required at suitable intervals to demonstrate that pollution control measures are performing to their required standards. A condition has therefore been proposed that would provide for this to be undertaken by the British Steel. It is considered that this could be secured through an Operational Management and Monitoring Plan (OMMP). The wording of an OMMP condition has been agreed with the applicant in advance of the determination of the application.

Consideration of matters relating to the nitrogen discharge in processed waters is considered in greater details later in the report through the Habitat Regulation Assessment that has supported the application.

In view of the above the development complies with policy in the NPPF, policies SD7 and SD4(f) of the Redcar and Cleveland Local Plan.

Chapter H – Ground Conditions

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of Ground Conditions. The chapter has been prepared by ITPEnergised.

The Chapter is supported by the following technical appendices:

- Appendix H1: Geo-Environmental Phase I Assessment Report, dated December 2023, prepared by ITPEnergised.
- Appendix H2: Envirocheck report from Landmark Information Group, dated October 2023.

Baseline

In establishing baseline data in relation to ground conditions the ES has considered; the current use of the site, Geology, Hydrogeology and Hydrology, Mining, geotechnical and geological hazards, Contaminated land, Unexploded Ordnance (UXO), Services and the Proposed End Use.

The ES acknowledges that the site is in industrial use and forms part of a steel works. There are current areas of fuel, oil, chemical and waste storage across the site as well as associated equipment and machinery relating to existing activities.

According to British Geological Survey (BGS) mapping the northern site area comprises Made Ground (artificial deposits). Superficial Deposits are recoded as Glaciolacustrine Deposits, Devensian - Clay and Silt. Bedrock is recorded as Redcar Mudstone Formation. The Superficial deposits have been identified by the Environment Agency (EA) as Unproductive Strata, the Bedrock has been classified as a Secondary Undifferentiated Aquifer. The site is not located within an EA designated Groundwater Source Protection Zone. The site has a Groundwater Vulnerability Classification of low to medium depending on the geological strata.

The site is at low risk in terms of stability hazards with a moderate risk from compressible ground hazards. The site is located within an area where the estimated percentage of homes above the radon Action level is between 1% and 3%, while the site is not in a Coal Mining Reporting Area. There are likely to be areas of made ground deposits across the site as a result of the previous and current uses.

The historical industrial use of the site since the late 1950s and the current use of the site which includes significant storage of fuel, chemicals and oils represents potential sources of contamination. A Geo-Environmental Phase I Assessment Report has been included as Appendix H1 of the ES.

According to Risk Mapping information provided by Zetica UXO, the site is located within an area where there is a risk of UXO and is identified as being in a moderate risk area with a bombing density of 15 to 49 bombs per 1000 acres.

The proposed development comprises the erection of a steel manufacturing facility and therefore the proposed end use is considered to be low sensitivity with respect to potential impact from contamination derived from the site and surrounding area. This is due to the limited potential for direct contact by end users with any potential contamination, given the proposed building and hardstanding cover and absence of gardens or similar routes of exposure.

Potential Effects of Development

Embedded Mitigation

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

- 1. A pre-construction site investigation will be undertaken prior to the redevelopment of the Site, to aid foundation and services design, assess contamination risk, and to provide ground gas monitoring data in order to confirm the requirement or otherwise for any gas protection measures.
- 2. A UXO risk assessment survey of the Site will be undertaken prior to the commencement of any site development.

- 3. The final design of the foundations and piling locations are not yet determined and, therefore, it is not certain that Kinkerdale beck (as culverted) would not be impacted and require re-routing. If it is required, a separate planning permission would be sought for the engineering works associated with such re-routing. Kingfisher Pond (which comprises a concrete lined basin) will be removed as part of the Proposed Development works.
- 4. Construction workers will implement safe working practices and use appropriate personal protective equipment (PPE) to mitigate the potential risk from any unidentified/unexpected contamination (this will be confirmed within a Construction Environmental Management Plan ('CEMP')).
- 5. All earthmoving works or similar operations will be carried out in accordance with BSI Code of Practice for Earth Works BS6031:2009.
- 6. A CEMP will be in place to control potentially polluting activities to prevent adverse impact to downstream persons, properties and environment during the construction phase. It will include, but not be limited to, the following outline provisions:

a A pollution risk assessment of the Site and the proposed activities; b Implementation of a pollution control system during earthworks and construction; c Monitoring of construction procedures to ensure management of risk

7. A Materials Management Plan (MMP) will be developed and agreed with the Local Planning Authority (in consultation with the EA) and will be implemented during the construction phase.

is maintained.

8. The MMP will draw on site investigation data, to identify suitability of materials for re-use on-site, any treatment requirements, and materials balance. It will include information on:

a Site development proposals, including plans, showing where materials are to be excavated from, stockpile locations (if applicable), where materials are to be treated (if applicable), and where materials are to be re-used;

b How excavated materials are to be re-used on site or, if required, transferred to other development site(s);

c How materials will be moved, including tracking procedures for contaminated materials (if applicable);

d Relevant parties including earthworks contractor(s) and (if applicable) treatment contractor(s);

e Transport contractor(s) if materials are to be moved between sites; f Data from desk study and site investigation works to characterise materials as clean/uncontaminated and/or treatment/remediation strategies to demonstrate suitability for use of materials; g Summary of mass balance calculations, including consideration of consolidation/compaction and any loss due to treatment (if applicable); h Evidence of regulatory agreement on suitability of use of the materials; and

i Contingency arrangements for example to deal with excess materials, programme slippage or other risks relating to excavated materials.

During Construction

Consideration has been given to the impacts on human health receptors, environmental receptors and the built environment.

With regard to the impacts on human health receptors the main effects for construction workers would result from exposure to residually contaminated soils and groundwater and ground gas. The site conceptual model supporting the ES details the likelihood of such pathways as moderate. It is considered that the embedded mitigation as detailed above including safe working practices, use of appropriate PPE, and implementation of a CEMP, the magnitude of the impact is *low*. There is potential for a direct, temporary, short-term effect of *minor adverse* significance (*not significant*) prior to the implementation of any additional mitigation measures.

With regard to the impacts on environmental receptors the ES considers that the sensitivity of the controlled water receptors (surface waters and groundwater) is considered to be medium (reflecting a water receptor deemed to be of low value) and that given the low magnitude of likely impact from construction when embedded mitigation is considered, the significance is considered negligible and therefore (not significant).

With regard to the impacts on the built environment the ES considers that the sensitivity of the built environment is low and the magnitude of impact prior to mitigation is medium. This is due to the potential for damage to buildings, structures or services, after embedded mitigation this is considered to be of negligible significance which is considered (not significant) in terms of this EIA assessment.

Mitigation and Monitoring

During Construction

With regard to mitigation there are a number of embedded mitigation measures as detailed above; including but not limited to further investigation and risk assessment as well as best practice detailed within the CEMP.

The ES acknowledges a risk of UXO to be present at the site. Further mitigation activities such as site-specific survey and risk assessments are considered necessary to reduce the UXO risk on the Site to As Low As is Reasonably Practicable (ALARP). These are considered to be secured by way of a planning condition.

In the event that suspected asbestos materials are observed associated with building demolition and excavation, sampling will be undertaken to confirm the asbestos type and quantification, with additional control measures implemented based on the sampling results. This matter will be secured by way of a planning condition.

Residual Effects

During Construction

The ES has considered the impacts on Human Health Receptors, Environmental Receptors and the Built Environment. Following the implementation of both the embedded mitigation measures and those set out above the ES has reached the following conclusions with regard to residual effects:

Impacts on Human Health Receptors

The sensitivity of human receptors (construction workers) is medium and the magnitude of impact following mitigation, outlined in Section H6.0 above, is negligible. Following the implementation of the additional mitigation measures outlined in Section H6.0, there are likely to be impacts on construction workers of Minor Adverse significance. These effects are considered not significant in EIA terms.

Impact on Environmental Receptors (Surface Waters and Groundwater) The sensitivity of the surface water and/or groundwater is medium and the magnitude of impact following additional mitigation, e.g. soil remediation, will be negligible. Therefore, the impacts after the implementation of mitigation measures are considered to be of Negligible significance. This is considered Not Significant in EIA terms.

Impacts on Built Environment.

The sensitivity of the Proposed Development is medium and the magnitude of impact following mitigation identified in Section H6.0 is Low and thus the impact on the Proposed Development during the construction phase is considered to be of Negligible significance. This is considered Not Significant in EIA terms.

Conclusions

A table (H8.1) has been provided within the ES that summarises the receptors, potential effect (including significance), mitigation measure, residual effect (including significance) in relation to ground conditions and contamination. This is considered to provide a detailed and robust overview of the impacts and mitigation.

The residual effects both during construction range between *negligible (not significant)* and *minor adverse.*

Planning Assessment

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. Some key paragraphs within the NPPF relating to this matter include:

Paragraph 180 (e) states:

prevent 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 180 (f) states: remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate

Paragraph 189 (b) states:

ensure that 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

Paragraph 189 (c) states:

ensure that adequate site investigation information, prepared by a competent person, is available to inform these assessments

Paragraph 190 states:

where a site is affected by contamination or land stability issues, responsibility for securing a safe development, rests with the developer and/or landowner

The site forms part of the wider South Tees Spatial Area and therefore Policy LS4 (South Tees Spatial Strategy) of the Redcar and Cleveland Local Plan is relevant. Within Policy LS4 the following aims are relevant to the environment:

w. enhance the environmental quality of employment through well planned boundary treatments;

x. secure decontamination and redevelopment of potentially contaminated land;

y. protect European sites, and safeguard and improve sites of biodiversity interest particularly along the River Tees and the estuary and encourage integrated habitat creation and management;

z. enhance the environmental quality of the River Tees and coastline; and

ab. encourage improvements to access, interpretation and wildlife conservation and biodiversity across the area.

Policy SD4 (General Development Principles) deals with suitability of sites and considerations as to the acceptability of development. Within Policy SD4 the following aim is relevant:

e. avoids locations that would put the environment, or human health or safety, at unacceptable risk;

The ES provides an appropriate assessment of ground conditions and remediation related matters.

The application has been considered by the Council's Environmental Protection Officer who has offered the following comments on the submitted information;

I note that an environmental statement has been submitted in support of this application. Chapter H covers ground conditions and appendix H provides a desk top survey for the site.

The conclusions and recommendations from the Geo-Environmental Phase I Assessment Report states that the current and historical use of the development Site is considered to represent a significant potential source of contamination. The assessment recommends that intrusive investigations will be required to inform the design of foundations, services and pavements for the new development and provided samples for environmental testing to confirm ground conditions. The result of the investigation would allow detailed design of any remediation works, and/or gas protection measures (if required).

In order to minimise the environmental impact I would recommend the inclusion of the full contaminated land condition onto any planning permission which may be granted.

Reason : To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

Based on the comments above, the survey work carried out as part of the ES and the conclusions that have been reached within the ES, it is considered that a number of conditions are required. These include the provision of an additional Ground Investigation Report and Remediation Strategy/Verification Report. These are to be secured by way of planning conditions that have been agreed with the applicant in advance of the determination of the application.

A condition has been agreed requiring that a Gas Risk Assessment be submitted prior to the occupation of each building. The wording of the condition has been agreed with the applicant in advance of the determination of the application.

As part of the embedded mitigation measures set out in the ES, reference is made to the provision of a CEMP, an Unexploded Ordnance (UXO) Risk Assessment and a Materials Management Plan (MMP). These matters have been addressed through conditions that have been agreed with the applicant in advance of the determination of the application.

Given the provisions within these conditions any future development is considered to be suitably controlled and potentially mitigated against any adverse impacts.

In view of the above the development complies with policy in the NPPF, policy LS4 (w, x, y and z) and SD4 (e) of the Redcar and Cleveland Local Plan.

Chapter I – Socio Economics

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of socio economic matters. The chapter has been prepared by Lichfields.

The Chapter is not supported by any technical appendices.

Baseline

The ES has established the Area of Impact (AOI) to mainly be that of the area within which the site is located, this being Redcar and Cleveland, this is referred in the ES as the 'local AOI'. Further consideration has been given to a wider AOI mainly due to travel to work data which has been derived from the 2011 Census in relation to commuting patterns. This has established a wider AOI as Redcar and Cleveland, Middlesbrough and Stockton-on-Tees local authorities.

The population of the local AOI in 2021 was 136,615, which has seen an increase of 1.2% over the period 2012-2021. The wider AOI has a population of 477,380 with a higher growth rate of 2.4%. The rate of growth for the local AOI is also lower than the regional average (1.7%), and the national average (5.2%) over the same period.

The proportion of working age (16-64) residents in the local AOI was 58.9% in 2021 which is equivalent to 80,500 people. This proportion is lower than the corresponding figures across the wider AOI (61.0%), the North East (61.8%) and Great Britain (62.9%).

Between 2012-2021, the working age population in Redcar & Cleveland decreased by 3.6%, which is a greater contraction than observed across the wider AOI (1.9%) and Great Britain (2.2%). In contrast, the North East experienced an increase of 3.2%.

An assessment has been made of local economic conditions including an assessment of deprivation, business growth and economic output.

The latest English Indices of Deprivation (2019) show that Redcar and Cleveland, the local AOI, is ranked 40th out of the 317 local authorities in England. This places Redcar and Cleveland in amongst the most deprived 15% of areas nationally. Other local authorities in the wider AOI are Middlesbrough 5th and Stockton at 73rd.

ONS UK Business Count data shows that the number of active enterprises in the local AOI increased from 2,715 to 3,095 between 2014 and 2023. This represents a growth rate of 14.0%. This is lower than the percentage increase in businesses observed across the wider AOI (20.2%), the North East (22.3%) and Great Britain (20.6%) over the same period.

Table I4.1 of the ES provides a breakdown of business growth by size band. The table illustrates that in Redcar & Cleveland's business increases have mainly been focussed in the number of micro and large enterprises. The growth rate for large enterprises at 50.0% can be seen to be more than double the level observed across the wider AOI, regional and national levels. This however should be noted to be a relatively small number as it relates to five additional business.

An assessment has been made of local labour market conditions for the AOI. This has included consideration of employment, unemployment, employment structure and earnings.

ONS data indicates that the total number of jobs in 2021 within the local AOI was 45,000, which is a 7.1% increase compared to 2011. This rate of growth is lower than that that across the wider AOI (7.77%), North East (8.9%) and Great Britain (13.1%) over the same period. The latest available data (2021) shows that the local AOI had a job density of 0.56, indicating that for every 100 working age residents there were 56 jobs. This is lower than the corresponding figure across the wider AOI (0.73) and at the regional (0.74) and national (0.86) level.

The latest data collected from the Annual Population Survey (June 2023) outlines that the economic activity rate (i.e. the share of working age residents (16-64) either in or seeking employment) stood at 76.1% in the local AOI. This is higher than the figures across the wider AOI (74.8%) and the North East (74.4%), but lower than the national average (78.6%). The same dataset shows that model-based unemployment in the local AOI (2.5%) is lower than the wider AOI (3.9%), the North East (4.2%), and Great Britain (3.8%). In contrast, the most recent claimant count data (October 2023) shows that there were 3,175 people in Redcar & Cleveland claiming out-of-work benefits, translating to 3.9% of the working age population. This is in line with the regional average, but higher than the national figure of 3.7%.

With regard to sectoral structure within the AOI it has been established that the largest employing sectors are as follows; *Retail (12.4%) Health (12.4%)*,
Manufacturing (11.2%) and Education (10.0%). Collectively, these sectors constituted 46.0% of total employment. The full sectoral split across the AOI and the wider AOI and North Esat are set out in Table I4.3 of the ES.

The median gross weekly resident wages in the local AOI in 2022 (\pounds 568.40) are noted to be lower than the averages recorded across the wider AOI (\pounds 577.60), the North East (\pounds 580.30), and Great Britain (\pounds 642.20)ix.

Those who work in the local AOI (*workplace*-based earnings) earn on average £572.90 per week. This is also lower than the wider AOI (£578.50), the North East (£575.20), and Great Britain (£642.00). The difference between resident and workplace earnings in Redcar & Cleveland indicates that a proportion of higher paid workers in the Borough live beyond the authority's administrative boundaries and commute into the area.

Potential Effects of Development

Embedded Mitigation

The primary and tertiary mitigation measures identified within Chapter C of the ES are not considered relevant to the assessment of the socio-economic effects associated with the proposed development.

During Construction

In assessing the effects of the development consideration has been given to both employment and economic output.

The applicant has advised that the proposed development is expected to support between 200 and 300 direct construction jobs over the anticipated 18 month build period. This is based upon a £100 million investment in the construction of the new buildings on the site. These figures have been provided by the applicant in support of the assessment, however a 'reality' check has been carried out to ensure that the figures are comparable with other development in the locality.

In order to check the figures, the agents acting on behalf of the applicant have approached K2 who are delivering the 105,000 sqm SeAH wind development at Teesworks. Based on the details of that scheme, it is demonstrated that between 3.125 and 3.75 person years of employment are generated for every £1.0 million construction cost. Based on these figures, the resulting development at British Steel would be expected to generate between 210 and 250 direct jobs. It is considered that this assessment provides further confidence to the numbers proposed by the applicant for the British Steel development.

With regard to economic output Experian data from March 2020 indicates that the construction sector in the North East region is estimated to generate an average GVA per FTE worker of £66,585 per annum. Using this analysis it is estimated that the proposed development has the potential to generate

between £13.0 million and £19.4 million of direct GVA for each year of the construction phase.

Applying an indirect GVA multiplier for the construction sector to the direct GVA set out above, it is estimated that it could generate a total of between £28.5 million and £42.4 million of direct and indirect GVA for each year of the construction phase.

The ES identifies that national data indicates that the construction industry within Redcar & Cleveland generates £64.0 million of GVA per annum, rising to £643.0 million across the wider AOI. The combined total GVA to be supported during construction of the proposed development (up to £42.4 million) would therefore represent a 66% uplift within the local AOI. The level of additional economic output to be supported is therefore considered to correspond to a *high magnitude* of change. The receptor is also considered to be of *high sensitivity* by virtue of the fact that productivity in the local AOI is lower than the corresponding figures for all comparator areas.

The direct, indirect and induced economic output effects of the proposed development during the construction phase are therefore considered to be *temporary (short term)*, *major beneficial (significant)* within the local AOI. This effect is considered *significant* in EIA terms.

During Operation

In assessing the effects of the development consideration has been given to both employment and economic output.

In assessing employment effects, both direct and indirect employment has been considered within the ES.

With regard to direct employment, the effects are often estimated by applying industry recognised employment density figures in relation to the anticipated floorspace to be delivered through a development. The ES has considered that the estimate of employment numbers using this methodology is unlikely to be appropriate with regard to the provision of an EAF. In considering the likely effect from the development, the ES has been prepared based on the operational requirements of the applicant. These assumptions are based on the business model of the applicant, who consider that once fully operational the development has the potential to create 250 jobs. Based on ONS data, within Redcar and Cleveland, 98% of jobs in the relevant industry relating to the proposed development would be FTE. The ES therefore concludes that 248 FTE jobs could result from the proposed development.

As stated, it is anticipated that the development would result in 248 FTE jobs. Consideration has been given to displacement of existing jobs as a result of the proposed development. The ES however acknowledges that there are no operational steel making facilities (including blast furnaces and Electric Arc Furnaces (EAF)) in Redcar & Cleveland or the wider AOI, therefore, the proposed development will not draw trade from existing businesses in the area. Given the STDC principles within the Masterplan relating to such matters and the potential for job specific roles on the site that may not exist within the AOI, an allowance of 25% has been considered appropriate. As a result, it is estimated that the net additional on-site employment generated by the proposed development is likely to be in the order of 185 direct FTE jobs.

The proposed development has the potential to generate 55 (indirect and induced) FTE jobs within the local economy, rising to 80 FTE jobs at the regional level. When these indirect and induced jobs are considered along with the185 net direct jobs resulting from the development this result in 240 (direct, indirect and induced) FTE jobs within the local economy, rising to 265 FTE jobs at the regional level. The ES concludes that this is considered to represent a permanent and *moderate beneficial* effect. This is considered *significant* in EIA terms.

With regard to economic output the proposed development is anticipated to contribute to the creation of additional economic output which is measured as GVA. The ES states that this is estimated to be £12.5 million per annum. The calculation of the £12.5 million sum is derived from:

- The level of (net) direct FTE employment to be generated by the proposed development
- The average GVA per FTE worker for the manufacture of metal products at the northeast level

Based on the data available when preparing the ES, it is considered that this would represent an 8.3% uplift in total GVA of the manufacture of metals, electrical products and machinery across the local AOI. This is considered to result in *medium magnitude* of change, while the receptor is assessed as having a *high sensitivity* to change. The ES concludes that this represents a permanent and *moderate beneficial* effect this is considered *significant* in EIA terms.

Mitigation and Monitoring

During Construction

The proposed development is anticipated to generate temporary (short-term) effects with regard to construction employment and economic output. It is therefore not proposed that any mitigation is required during the construction phase of the development. The applicant has indicated that they are committed to working with Redcar and Cleveland Council where possible to deliver suitable training and apprenticeship schemes during the construction phase.

During Operation

The proposed development is anticipated to generate permanent beneficial effects in relation to employment and economic output. It is therefore not proposed that any mitigation is required during the operational phase of the development. The applicant has indicated that they are committed to working

with Redcar and Cleveland Council to maximise opportunities for local residents to obtain jobs created at the site.

Residual Effects

As no mitigation measures are proposed, the residual effects are considered to be the same as those set out in the potential effects section above. The ES has provided a summary of the residual effects at Table I7.1. The table illustrates that during construction the residual effects range from Temporary (short-term) *moderate beneficial (significant)* and Temporary (short-term) *major beneficial (significant)*. During operation the residual effects are considered to be Permanent *moderate beneficial (significant)*.

Conclusions

The proposed development is considered to have a beneficial effect on the local economy both during and post construction. The development will result in direct construction jobs resulting in an increase in economic output. Once constructed the resulting development will provide jobs within an area that can be characterised with low job densities and low levels of employment growth. The resulting jobs will contribute to addressing these local issues.

A summary of the effects is provided within Table I8.1 of the ES that summarises the receptors, potential effect (including significance), mitigation measure, residual effect (including significance) in relation to socio economic matters. This is considered to provide a detailed and robust overview of the impacts and mitigation. The potential effects of the development both during and post construction range from *moderate beneficial (significant)* to *major beneficial (significant)*.

Planning Assessment

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.*

The site forms part of the wider South Tees area and therefore Policy LS4 (South Tees Spatial Strategy) of the Redcar and Cleveland Local Plan is relevant.

In relation to the economy, Policy LS4 states that the Council and its partners will aim to deliver the following objectives;

a Deliver significant economic growth and job opportunities through the South Tees Development Corporation and Tees Valley Enterprise Zone at Wilton International and South Bank Wharf;

e Improve existing employment areas and provide a range of modern commercial premises that meet contemporary business requirements including the target sectors of the South Tees Area Supplementary Planning Document;

f Give the area an identity and make it attractive to inward investment; and *I.* encourage clean and more efficient industry in the South Tees area to help reduce carbon dioxide emissions and risk of environmental pollution;

The ES provides an appropriate assessment of socio-economic related matters. The submitted information has been considered by the Council's Business Growth Team.

It is considered that the proposed development responds to the policy requirements of LS4 and the South Tees SPD to deliver economic growth and the regeneration of the South Tees area.

The applicant within the ES sets out an undertaking to work with the Council in seeking where appropriate to deliver training, apprenticeships and long term jobs to residents within Redcar and Cleveland. This undertaking is one that is recognised and welcomed by the Council's Business Growth team. In response to the consultation process the Business Growth team highlight the potential for between 200 and 300 construction jobs over an 18 month period as well as the creation of 185 green energy jobs once the development is fully operational.

The Business Growth team recognise the commitment from the applicant to deliver training and apprenticeships during the construction phase. It is considered that introductions to the Grangetown Training and Employment hub could be facilitated and beneficial to the applicant and the local residents in the borough. The Business Growth team would also be willing to explore opportunities to support the applicant with regard to the supply chain opportunities.

It is considered that the opportunities detailed above can be secured by way of planning condition that has been agreed with the applicant. In view of the above the development complies with policy in the NPPF, policy LS4 (a)(e)(f)(I) of the Redcar and Cleveland Local Plan.

Chapter J – Waste and Materials Management

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of waste and materials management. The chapter has been prepared by ITPEnergised.

The Chapter is not supported by any technical appendices.

Baseline

The ES in the establishment of the baseline for the site has considered the remaining capacity of landfill within the north-east region and the availability of materials within the North East region.

The total remaining landfill capacity for the north-east of England region is estimated to be 19,139,510 m³ (based on data from 2022 from the EA). The north-east is therefore considered to have sufficient capacity when compared to the typical quantities of waste arising from construction projects. Consideration is also required to be given to the high rates of materials reuse/recycling within construction projects as supported by national targets, resulting in the risk to the remaining landfill capacity being low. The landfill capacity remining the region is therefore considered to be of *low* sensitivity.

Material availability within the north-east based on data from UK Mineral Products Industry shows that primary aggregate estimated totals (both crushed rock and sand and gravel) in the northeast region is estimated at 6.72 million tonnes with the availability of ready-mixed concrete predicted to be at 0.6 million cubic metres and the availability of asphalt predicted to be at 0.9 million tonnes. Materials availability within the region is considered to be sufficient compared with the typical volumes of material used within construction projects in the UK. There will also be an onus on ensuring the use of recycled aggregates and secondary materials over primary materials which further reduces the pressure on natural resources. This together with the ongoing mineral extraction of sands, gravels, and crushed aggregate in the North East region has resulted in the conclusion that the material availability within the region is considered to be a *low* sensitivity receptor.

Potential Effects of Development

This section has been prepared based on the forecast volume of waste generated and material used during the construction and operational phases of the proposed development.

Embedded Mitigation

The following embedded mitigation measures are proposed:

- The Proposed Development will aim to be cut and fill neutral. This will ensure that the reuse of suitable excavated material generated in Site is maximised;
- Waste will be designed out in the early design phases with an aim to ensure the volume of waste produced is minimised;
- During the early stages of design phases actions will be taken to ensure that the use of recycled/ reclaimed materials is maximised in accordance with the Waste Hierarchy; and
- Using existing waste management facilities be a priority. This will be in accordance with the proximity principle where waste should be treated and/or disposed odd as close to the point of generation as possible.

During Construction

The construction phase of the development will generate predominantly inert and non-hazardous type wastes with the potential for limited hazardous waste to arise. For the purposes of this assessment, the construction phase is considered to include excavation and construction activities.

Excavation material would comprise inert soils, stones and made ground. In line with the assumption that the site will be cut and fill neutral, this material will be re-used on site, subject to geotechnical and chemical testing requirements.

With regard to excavation the ES assumes a position that the site will be cut and fill neural and therefore there will be no surplus material requiring off-site disposal and no void space requiring the import of soils. It is however acknowledged in the ES that any material that is classified as hazardous waste following testing will need to be disposed of at a licenced hazardous waste facility

The ES details that at this stage there is no information on the quantities of primary aggregates for earthworks. In addition to the maximisation of the reuse of site-won materials, the production and procurement of alternative/ recycled aggregates to reduce the need for raw primary aggregates will also be sought out where possible.

Within the ES estimates of construction waste arisings based on the end use of the buildings and the final finish of hardstanding areas. Table 8.5 from the ESA (below) summaries the overall construction waste quantiles relating to the proposed development.

Activity	total (tonnes)
Excavation	0
Construction (Industrial Building and Commercial Offices)	8,845
Construction (Hardstanding)	3,332
Total	12,176

Based on the assumptions made within the table the quantity of all construction and excavation materials when compared to the total reginal landfill capacity equates to a reduction in capacity of <0.2% and therefore the magnitude of change is considered to be *negligible (not significant)*

During Operation

The ES details that the waste hierarchy will be adhered to as strictly as possible during the operational phase of the development. The quantity of operational waste that would be sent to landfill (worst case) during the operation of the proposed development is 22,786 tonnes. This figure is without any mitigation measures being operated.

The ES therefore estimates that the total annual operational waste arising from the proposed development will occupy <0.2% of remaining landfill capacity for the Northeast of England.

The magnitude of the waste generation impact in the operational phase of the proposed development is considered to be *negligible*. Due to the low sensitivity of the regional landfill capacity as a receptor, the overall significance of the effect is considered to be *negligible (not significant)*.

Mitigation and Monitoring

During Construction

With regard to waste it is acknowledged that the proposed development is expected to be cut and fill neutral with this being embedded into the design of the scheme. If however at the detailed design stage of development it becomes clear that this cannot be achieved, further assessment of environmental effects will be required. While there are a number of embedded mitigation measures as set out above and within the ES, the ES also details principles that should be adhered to when managing construction waste resulting from the development. These are considered to be as follows:

 Develop mechanisms to re-use site won materials through the use of the CL:AIRE DoW CoP;

a Utilising site-won materials generated during the development from earthworks;

b Reviewing opportunities to utilise excavated materials from other developments in proximity, using a Materials Management Plan under DoW CoP;

• Production of a Construction Waste Management Plan (CWMP);

The CWMP should include the following measures:

1 Targets will be set for waste recovery and recycling to allow those working on the project to have a clear understanding of what is expected. Additional details are provided below; 2 The existing transport infrastructure should be utilised where possible when moving site-won and imported primary/ secondary materials and wastes;

3 Integrating source segregation of waste and providing enough space to do so at all stages of the Proposed Development;

4 Using and the specification of industry standard sizes for materials and products, wherever possible (e.g. standard height plasterboard sheets);

5 Using precast concrete and other materials that can be prepared off site in order to minimise waste generation at the Site;

6 Not over ordering materials and using materials brought to the Site as efficiently as possible;

7 Arranging the delivery of materials so that they arrive at the Site when they are needed to reduce potential damage and waste occurring;

8 Clearly defined and separated skips provided on Site and a clearly demarked waste area;

9 The contractors will work to ensure that sustainable procurement of construction materials and minimise waste to landfill. In addition, during construction, the Site should be managed so as to avoid unnecessary waste such as excess material brought to the Site without need and left to be damaged or wasted;

10 Site rules implemented for good practice for procurement, on-site handling and storage of materials to prevent wastage; and

11 Staff to be trained to understand how waste should be sorted and having regular reminders and updates.

Table J6.1 of the ES sets targets that should be achieved through the CWMP, and it is proposed that these should be included in the CWMP that will be secured by way of a planning condition within the CEMP.

With regard to materials, it is proposed that secondary aggregates and recycled materials will be sought where possible with a target of 30% of construction materials required for the development being recycled or secondary unless otherwise agreed.

During Operation

It is considered that during the operational phase of development the occupiers of the site should aim to reduce, re-use, recycle and recover waste as much as practicable prior to disposal of any waste. Waste management will therefore be a key consideration for any future occupants of the site. It is considered that this will be managed by way of an Operational Waste Management Plan (OWMP) that will be achieved by way of a planning condition.

The OWMP should consider the process of waste management and should include the following mitigation measures:

- Provision of adequate internal storage space and containers for office units;
- Residual and recyclable office wastes to be stored and collected separately via provision of clearly marked and/or colour-coded bins aligned with the local authority's guidance and infrastructure;
- Provision of recycling facilities within the Proposed Development (i.e. card compactors, woodchippers/ pelletizers, etc.); and
- Provision of education and awareness to end-users on recycling and waste reduction.

It is also considered that the OWMP should include recycling targets in line with The Tees Valley Joint Waste Management Strategy 2020-2035 which states that the region has in place a 60% recycling target for Municipal Solid Waste (MSW) and Commercial and Industrial (C&I) wastes by 2030.

Industrial waste management will be subject to Best Available Techniques under the Environmental Permitting Regulations and BAT Reference note for steelmaking. Measures include:

- Appropriate collection and storage of waste streams;
- Recovery and on-site recycling of refractories;
- Metal recovery (off-site) from filter dusts; and
- Processing and onward use or sale of scale and treated slag.

Residual Effects

During Construction

The recovery target for construction and excavation waste for the Tees Valley is 80% as set out in the Tees Valley Joint Minerals and Waste Core Strategy Development Plan Documents, 2011. If this recovery/ recycling rate was achieved in the construction phase of the proposed development, the total construction waste to landfill (12,176 tonnes) for the entire construction period would reduce to 2,435 tonnes.

Excavation material is expected to have no impact on landfill capacity as the proposed development will aim to be cut and fill neutral, as intended to be included within the early stages of design.

Therefore, residual effects of the construction phase of the proposed development would be *negligible (not significant)*. The implementation of mitigation is considered to reduce any effects however the overall significance of these effects would not change.

The ES states with regard to materials, the Profile of the UK Mineral Products Industry (2018) (Ref 24) by the Mineral Products Association indicates that in 2018, recycled and secondary materials formed 30% of the total material consumption in the UK for that year. Using this as a target, and assuming 30% of construction materials required for the proposed development are recycled/ secondary, the quantity of primary material required would reduce to 16,345 tonnes per year of construction. Residual effects would remain as negligible (not significant).

During Operation

The Tees Valley Joint Waste Management Strategy states that the region has in place a 60% recycling target for MSW and C&I wastes by 2030. Making the assumption that this recycling rate is achieved in the operational phase of the proposed development, the total waste to landfill (22,786 tonnes) would reduce to a total of 9,114 tonnes per year, The impact on landfill capacity would reduce to <0.1%.

Therefore, residual effects of operational waste arising from the proposed development would be *negligible (not significant)*.

Conclusions

The ES chapter has considered the potential waste impacts both during and post construction. The summary of effects has been appropriately summarised and set out in Table 8.6 of the ESA that summarises the receptors, potential effect (including significance), mitigation measure, residual effect (including significance) in relation to waste and materials management. This is considered to provide a detailed and robust overview of the impacts and mitigation.

Subject to the imposition of planning conditions and appropriate working practices on site as set within the ES, the impacts from the development would be *negligible (not significant)* to *minor adverse (not significant)*.

Planning Assessment

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 ES details the intention to use natural resources prudently, while also minimising waste through suitable use of recycled materials.

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 Policy SD4 (General Development Principles) states development will be permitted where:

(*I*) be sustainable in design and construction, incorporating best practice in resource management....

The ES provides an appropriate assessment of waste and materials management.

With regard to construction activities, this it to include the preparation of a Construction Waste Management Plan (CWMP) 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 applicant has agreed to conditions relating to production of waste resulting from both the construction activities and operational activities. These matters have been addressed through conditions that have been agreed with the applicant in advance of the determination of the application.

Based on the assessment set out in the ES the development raises no issues in terms of waste and materials management that would not be dealt with through the implementation of suitable mitigation measures as set out above.

In view of the above the development complies with National Policy in the NPPF, Policy SD4(I) of the Redcar and Cleveland Local Plan and the Tees Valley Joint Minerals and Waste Core Strategy Development Plan Documents (2011) and The Tees Valley Joint Waste Management Strategy (2020-2035).

Chapter K – Climate Change and Resilience

The ES chapter begins by setting out policy context in respect of climate change and resilience. The chapter has been prepared by ITPEnergised.

The Chapter is not supported by any technical appendices.

Baseline

Current climate conditions have been considered in consideration of baseline conditions. These have been considered based on the closest climate station at Loftus (SAMOS), which is situated on the east coast and best represents the conditions at the application site. Table K4.1 of the ES details the climate averages between 1981 and 2010 at the Loftus station.

Consideration of Green House Gas (GHG) emissions has been considered in the baseline assessment. Local and Regional CO_2 emissions data tables published by the UK Government contain historic emissions data for 2005 - 2021 for all UK local authorities and councils. In that time, total annual

emissions and emissions per capita from within Redcar and Cleveland Borough Council local authority area have fallen by approximately 90% from 11,783,000 tonnes of CO₂ equivalent (tCO_2e) at 85.3 tCO_2e per capita in 2005, to 1,214,700 tCO_2e at 8.9 tCO_2e per capita in 2021.

As has been detailed in the report the site currently serves as an ancillary role to the adjacent British Steel operations as the Teesside Beam Mill. The existing ancillary operations are considered to produce an estimated 385tCO₂e per annum.

Future baseline consideration has been given in relation to Climate Change and specifically to mean air temperature, maximum air temperature, wind speed, precipitation and sea level rise due to the longevity of the proposed project. These projections have been carried out for the period between 2050 and 2078.

With regard to GHG emissions, the current level of emissions is considered to prevail as long as the site remains undeveloped from its current state. It is considered that any alternative development would give rise to GHG emissions from the materials used and potentially from operation depending on energy source selected.

The GHG Protocol classifies GHG emissions into Scopes. Emission sources considered in the assessment within the context of Scope are discussed in the following section:

Scope 1 emissions are direct emissions of GHGs from the project, i.e., from combustion of fossil fuels such as natural gas and diesel;

Scope 2 emissions are indirect emissions of GHG caused by the use of grid electricity by the project and hence necessitating combustion of fossil fuels by gas and coal-fired electricity generating installations outside the project's physical boundary;

Scope 3 emissions are from the supply chain; in this case the embodied emissions of GHG's from the production of bulk building materials, particularly concrete and steel.

Potential Effects of Development

Embedded Mitigation

The ES has considered the potential embedded mitigation measures for the proposed development. The proposed embedded mitigation measures are detailed as follows:

• Materials procurement – the applicant will seek to substitute alternative materials of lower carbon intensity as applicable and implement low carbon and energy efficient technologies into the built structure

- Design measures will ensure climate resilience particularly with regard to overheating and flooding. Minimum finished floor levels of 10m AOD are specified on the parameters plan
- Delivery vehicles that utilise low/no emissions will become available due to the lifespan of the development once operational.
- Electricity consumption for the development is to come from Teesworks Private Wire Network (TPWN). This currently draws electricity from the UK Grid, however there are plans for on-site and near-site renewable energy generation which will connect into the TPWN and therefore provide traceable renewable energy. Over the projected lifespan of the project, should the renewable energy generation come to fruition this would significantly reduce operational emissions.

During Construction

In considering the impacts during construction the ES has considered both construction activity and constriction materials.

The ES acknowledges that there will be GHG emissions during the construction phase from site vehicles, heavy plant and diesel generators. The impacts of these have not been fully evaluated at this time due to uncertainties with assumptions on plant numbers, type and usage patterns, while it is also acknowledged that there is no practicable options for mitigation.

The use of alternatively fuelled plant and vehicles has not been included as a firm commitment due to lack of suitable supply in the local market, while the installation of a substation for electricity supply has been ruled out as it not considered practical, logistical and on cost grounds.

In assessing the potential emissions a factor of 400kgCO₂e per hectare per working day has been assumed as appropriate in relation to the proposed development. When based against the details within the parameter plan for 17,000m² of developable space over an 18moth build period, the overall emissions have been estimated to be 372 tCO₂e.

Table 9.1 of the ESA provides a summary estimate of bulk material quantities for the EAF development before any mitigation through substitution of lower-GHG alternatives. Structural steel and cladding has been estimated from building dimensions, and concrete is based on a ten-inch slab poured as the base for the main building. The emissions from construction materials is set out below.

Concrete		Structural Stee	1	Cladding	
tonnes tCO2e tonnes t		tCO2e	tonnes tCO2e		
25,277	3,488	2,198	5,401	146	959

Consideration has also been given to emissions from the delivery of construction materials by HGVs. The projected HGV deliveries over the duration of the construction period have totalled and emissions calculated for

both unladen and laden vehicles to provide an upper and lower bound for the estimate. An average distance of 25km has been assumed per trip. The resulting emissions are estimated to be between 274 tCO2e and 421 tCO2e.

The above figures have been considered against RCBC baseline annual emissions, with construction phase emissions likely to be an increase in the areas emissions of less than 1% of the full year figures for 2021.

The construction emissions are therefore expected to have a *minor adverse* effect of *low significance*.

During Operation

Table 9.2 of the ESA provides a summary of estimates of lifetime building energy demand and associated GHG emissions within both the EAF building and outline auxiliary buildings. The anticipated emissions for the operational phase is as follows

Building	Scope 1		Scope 2		Total	
	kWh	tCO2e	kWh tCO2e		kWh	tCO2e
EAF	N/A	8,240,206	19,163,268,924	2,427,122	19,163,268,924+	10,667,327
Others	484,701,294	88,666	166,952,668	21,145	651,653,962	109,811

The ES acknowledges that once operational, the proposed development is expected to see daily deliveries of scrap metal via road and rail. It is predicted there will be an average of 1 rail delivery of around 2,000t of scrap, and an average of 34 UK road deliveries each of around 20t of scrap per day. Current rail deliveries arrive from Scunthorpe, approximately 160km from the site and the same distance has been assumed for the assessment. Distances involved in the road deliveries are not available however it has been assumed an average of 80km for these. Daily deliveries are assumed 365 days per year over the projected lifetime of the proposed development.

Emissions have been calculated using tonne.km emission factors taken from the latest figures provided by Department for Energy Security and Net Zero (DESNZ) and are presented below.

Mode of Transport	Emissions (tCO2e)			
	Per day	Lifetime		
Rail	10.4	113,322		
UK Road	6.1	65,342		

The figures presented in the tables above do not include any quantitative assessment of the effects of assumed embedded mitigation detailed above and therefore they must be viewed as conservative estimates. If the assumed embedded mitigation measures are enacted, then estimated GHG emissions during operation are considered likely to have a *moderate adverse* effect of *medium significance*.

Mitigation and Monitoring

During Construction

The ES concludes that currently without detailed design information being available it is difficult to quantify the opportunities for mitigation through the use of alternative materials. It is assumed that the applicant will make all reasonable efforts to ensure this is addressed through embedded mitigation measures.

During Operation

The ES concludes that no additional mitigation for climate resilience effects are considered necessary. It is considered that the most material risk from sea level rise will be kept under review and additional mitigation considered later in the life of the proposed development should the design parameters and the actual risks presented by sea level rise be demonstrable.

The ES proposes that no additional mitigation for GHG emissions are identified at this time due to the uncertainty around timescales for the embedded mitigation measures detailed above to be provided. The ES confirms that if the assumptions are incorrect then additional mitigation measures around decarbonisation of operational delivery vehicles and operational electricity supply will have to be considered in order to limit the effects of operational phase GHG emissions.

Residual Effects

During Construction

No additional mitigation has been quantified and therefore the residual effects remain the same as those in the effects section set out above.

During Operation

No additional mitigation has been quantified and therefore the residual effects remain the same as those in the effects section set out above.

Conclusions

The ES acknowledges that the construction and operation of the proposed EAF will generate direct and indirect emissions of GHG's. This would however be the case for any built development.

The ES concludes on this matter that:

The impact of GHG emissions associated with the Proposed Development can be considered adverse as they represent an increase above overall GHG emissions were the Proposed Development not to proceed. IEMA guidance suggests that any increase in GHG emissions above baseline be considered Significant, which implies a Moderate Adverse (Significant) overall effect from the Proposed Development. The same would be true of any development, however; hence the key consideration is mitigation.

GHG emissions embodied in construction materials and produced from operational energy requirements have been compared for baseline and mitigated scenarios.

Substitution of construction materials by equivalents with lower embodied GHGs will significantly mitigate the effects of the construction phase.

Decarbonisation of the electricity supply to the Proposed Development and anticipated decarbonisation of freight vehicles for scrap deliveries will significantly mitigate GHG emissions during the operational phase.

A summary of the effects is provided within Table K8.1 of the ES that summarises the receptors, potential effect (including significance), mitigation measure, residual effect (including significance) in relation to climate change and resilience. This is considered to provide a detailed and robust overview of the impacts and mitigation. The potential effects of the development both during and post construction range from *minor adverse (not significant)* to *moderate adverse (significant)*.

Planning Assessment

Paragraph 158 of the NPPF states

plans should take a proactive approach to mitigating and adapting to climate change

Paragraph 159 states:

New development should be planned for in ways that:

a) avoid increased vulnerability to the range of impacts arising from climate change.

b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design.

Policy SD 6 (Renewable and Low Carbon Energy) encourages the incorporation of low carbon energy initiatives into developments, particularly as part of major schemes. The policy states that the Council will "actively support community-led renewable energy schemes which are led by, or meet the needs of, local communities. Development of district heating schemes will also be supported."

Policy LS 4 (South Tees Spatial Strategy) states that the Council will "encourage clean and more efficient industry in the South Tees area to help reduce carbon dioxide emissions and risk of environmental pollution; support the development Carbon Capture and Storage to de-carbonise the local economy" and "promote the reduction of transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change".

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

RCBC declared a climate emergency in 2019 and have committed to the Borough of Redcar and Cleveland becoming carbon neutral by 2030, taking into account both production and consumption emissions. RCBC through the Climate Change Strategy sets out commitments, as well as wider environmental priorities for the Borough. These commitments as well as the policy drivers within the Local Plan are considered to align to the aspirations of the applicant, British Steel.

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.

Consideration within the chapter of the ES has been given to the impact of the development with regard to GHG emissions resulting from the development and the way in which these can be mitigated against.

Given the current unknowns in relation to final design and operational details it is considered that matters relating to emissions of GHG and general sustainability of the proposed development can be appropriately addressed by way of planning condition.

As detailed above there are unknowns in relation to final GHG emissions in advance of the final design details and technology choices. It is therefore proposed that a Greenhouse Gas Assessment be carried out prior to the development becoming operational. A condition relating to this matter has been agreed with the applicant in advance of the determination of the application.

The impacts from the proposed development on climate change are not considered to be so great as to prevent the UK achieving its national carbon targets or so great as to materially affect the overall GHG emissions within Redcar and Cleveland.

As part of the embedded mitigation measures set out in the ES, reference is made to finished floor levels at a minimum of 10m AOD to provide resilience to climate change. This matter has been addressed through a condition that have been agreed with the applicant in advance of the determination of the application.

Based on the assessment set out in the ES the development raises no issues in terms of climate change that would not be dealt with through the implementation of suitable mitigation measures as set out above. In view of the above the development complies with National Policy in the NPPF and Policies SD6 and LS4 of the Redcar and Cleveland Local Plan.

Chapter L – Landscape and Visual Impact

The ES chapter begins by setting out NPPF policy, legislation, regional policy and local planning policy in respect of landscape and visual impacts resulting from the development. The chapter has been prepared by DraW (UK) Limited.

The Chapter is supported by the following technical appendices:

Appendix L1: Drawings:

- L01 LVIA Study Area;
- L02 Landscape Planning Context;
- L03 Topography;
- L04 Landscape Character Areas;
- L05 Zone of Theoretical Visibility Arc Furnace; and
- L06 Zone of Theoretical Visibility Ancillary Buildings, Air Separation Column and Stacks.

Appendix L2: Viewpoint Impact Assessment Tables.

Appendix L3: Representative Viewpoint Photographs:

- Viewpoint VP1 Representative Photograph: Errington Wood, Picnic Area, New Marske;
- Viewpoint VP2 Representative Photograph: Eston Nab;
- Viewpoint VP3 Representative Photograph: Bridleway /Mill Race east of Wilton International;
- Viewpoint VP4 Representative Photograph: Lord McGowan Bridge at intersection of King Charles III Costal Path;
- Viewpoint VP5 Representative Photograph: A1085 (Trunk Road) North of the Site Entrance;
- Viewpoint VP6 Representative Photograph: A1085 (Trunk Road) South of the Site Entrance;
- Viewpoint VP7 Representative Photograph: Houses on Creswell Road, Grangetown;
- Viewpoint VP8 Representative Photograph: A1053, south of Lackenby Steel Works;
- Viewpoint VP9 Representative Photograph: Junction of Eston Road and Middlesbrough Road East;
- Viewpoint VP10 Representative Photograph: Tees Dock Road/ Rial line west of the Site;
- Viewpoint VP11 Representative Photograph: South Bank Railway Station; and
- Viewpoint VP12 Representative Photograph: River Tees Viewing Point B1513 Dockside Road.

Appendix L4: Visualisations of the Proposed Development:

- Visualisation VP4 Representative Photograph: Lord McGowan Bridge at intersection of King Charles III Costal Path;
- Visualisation VP5 Representative Photograph: A1085 (Trunk Road) North of the Site Entrance;
- Visualisation VP6 Representative Photograph: A1085 (Trunk Road) South of the Site Entrance;
- Visualisation VP7 Representative Photograph: Houses on Creswell Road, Grangetown;
- Visualisation VP9 Representative Photograph: Junction of Eston Road and Middlesbrough Road East; and
- Visualisation VP10 Representative Photograph: Tees Dock Road/ Rial line west of the Site.

The ESA has been supported by the following appendices:

- ES Appendix L1: Drawings is replaced by ESA Appendix 10.1: Drawings Updated;
- ES Appendix L3: Representative Viewpoint Photographs is replaced by ESA Appendix10.2: Representative Viewpoint Photographs Updated
- ES Appendix L4: Visualisations of the Proposed Development is replaced by ESA Appendix 10.3: Visualisations of the Proposed Development Updated

Baseline

To establish the baseline for the Landscape and Visual Impact Assessment (LVIA) an assessment has been made of the local landscape character through consideration of Landscape Character Assessments (LCA).

The relevant assessments to the proposed development site are:

- National Character Area Profile: 23 Tees Lowlands (Natural England, 2014);
- National character Area Profile: 25 North York Moors and Cleveland Hills (Natural England, 2014);
- Redcar & Cleveland Landscape Character Assessment, (2006)/ Redcar & Cleveland Local Development Framework Landscape Character SPD (2010); and
- Stockton-on-Tees Landscape Character Assessment (Stockton-on-Tees Borough Council, 2011).

The relevant boundaries of these LCAs are detailed on Drawing L04 of Appendix L1 of the ES.

Consideration has been given to the site and its surroundings. The consideration of the site is comparable to other detailing and descriptions of

the site throughout the ES in that the site is situated in an environment containing buildings, structures and infrastructure of scale.

A Zones of Theoretical Visibility (ZTV) has been prepared in relation to the main EAF building that is applied for in full as part of the application. Drawing L05 (ESA Appendix 10.1) illustrates the theoretical visibility of the building. In relation to the ancillary buildings and structures within the outline element of the application, the theoretical views of these are illustrated on drawing L06 (ESA Appendix 10.1) based on the submitted parameters plan.

It should be noted that the ZTVs represents the 'worst case'. They do not indicate the degree of impact or consider seasonal variations in vegetation cover. They also only consider screening afforded by large structure and substantial blocks of woodland. Considerable screening will be provided by a myriad of small intervening features which are not included in the model.

An assessment has also been made with regard to variety of visual receptors. These include:

- Footpath Users
- Road Users;
- Rail Users;
- Visitors and Users of Recreational Facilities; and
- Local Residents;

In assessing the above receptors, 12 representative viewpoints have been considered. The locations of these viewpoints are detailed on drawings L05 and L06 of (ESA Appendix 10.1) and are set out in Table L4.1 of the ES, and included below. The photographs from the individual viewpoints are provided within Appendix L3.

Viewpoint	Location	Receptor Type/ Reason for inclusion	Coordinates	Distance from the Site
VP1	Errington Wood, Picnic Area, New Marske	Recreational Route and visitor destination Route with panoramic views across Teesside	E461929 N520325	5,870 m
VP2	Eston Nab	Vantage point and recreational area on the edge of Eston Moor	E456835 N518342	3,056 m
VP3	Bridleway /Mill Race east of Wilton International	Recreational Route with views towards the Site.	E458329 N522580	2,378 m
VP4	Lord McGowan Bridge at intersection of King Charles III Costal Path	Road Users: A1085 (Trunk Road). Long distance Recreational Route	E457336 N523572	2,072 m
VP5	A1085 (Trunk Road) North of the Site Entrance	Road users, one of the closest publicly accessible locations	E456297 N521925	262 m
VP6	A1085 (Trunk Road) South of the Site Entrance	Road users, one of the closest publicly accessible locations	E455993 N521412	15 m
Viewpoint	Location	Receptor Type/ Reason for inclusion	Coordinates	Distance from the Site
VP7	Houses on Creswell Road, Grangetown	Residential properties orientated towards the Site	E455446 N520 710	625 m
VP8	A1053, Tees Dock Road south of Lackenby Steel Works	Transport Route Road users and public open space south of road	E455548 N520933	321 m
VP9	Junction of Eston Road and Middlesbrough Road East	Transport Route and proposed employment site (Under Construction)	E454378 N520947	1456 m
VP10	Tees Dock Road/ Rial line west of the Site	Transport Routes and Recreational path: King Charles III Costal Path	E455524 N522372	298 m
VP11	South Bank Railway Station	Train passengers. Elevated view from Footbridge. Recreational Routes Teesdale Way and King Charles III Costal Path	E453330 N521310	2,406 m
VP12	Tees Viewing Point B1513 Dockside Road	Purpose built viewing point Visitor destination		3,616 m

Potential Effects of Development

Embedded Mitigation

The ES sets out the following measures as embedded mitigation in relation to landscape and visual effects:

- The semi-mature trees and shrubs along the southeast edge of the Site, which provide substantial screening from the Trunk Road, will be retained.
- To maintain the integrity and longevity of the tree belt it is proposed that it will be subject to regular inspection and maintenance throughout the operational phase. Works are likely to include selective pruning, coppicing, thinning, and replacement planting as necessary to ensure the health and vigour of the trees within the applicant's ownership and to maintain an effective visual barrier
- The EAF building would be finished in in 'white grey' (RAL 9002) cladding with 'goosewing grey' doors, similar in appearance to the adjacent TBM buildings and the former steel making plant. This would aid assimilation with its surroundings.
- Lighting required during the construction and operation stages of the development will be designed to reduce unnecessary light spill outside of the Site boundary. The assessment assumes the level of external illumination would be no greater than the existing situation and will not exceed to the luminance of other manufacturing facilities within the surrounding area. (The Site is currently lit by floodlights mounted on 20m high lighting masts at key locations).
- A Construction Environmental Management Plan CEMP would specify protection measures for the retained vegetation and would ensure the Site is maintained in a neat and tidy condition, minimising adverse visual impacts.

During Construction

In assessing the impacts from the proposed development consideration has been given to the impacts on the LCA, the site and its immediate surroundings, visual receptors through the selected viewpoints. Consideration has also been given to road/rail users, recreational facilities and local residents. The following is a summary of those impacts from within the ES.

In assessing the impacts on LCAs the ES notes that the proposed development is located in an area characterised by large-scale industrial development, and therefore there is a low potential for the character of the area to be affected.

Tables L5.1 to L5.11 consider the landscape sensitivity, magnitude of effect and significance of effect on the individual LCAs. The significance of change ranges from *negligible* (*not significant*) for LCAs (North York Moors and Cleveland Hills, Eston Hills, Redcar Flats and East Billingham to Teesmouth)

to *minor adverse (not significant)* for (Tees Lowlands) and *moderate adverse (not significant)* for (Site and Immediate Surroundings)

Viewpoint	Location	Visual Receptor	Sensitivity	Magnitude of	Effect	Level of Significance	Significant or Not Significant	
VP1	Errington Wood, Bignic Area, New	Visitors to recreational	High	Construction:	Negligible	Minor Adverse	Not Significant	
	Marske	views across Teesside		Operation:	Negligible	Minor Adverse	Not Significant	
VP2	Eston Nab	Vantage point and	High	Construction:	Low	Moderate Adverse	Not Significant	
		edge of Eston Moor		Operation:	Low	Moderate Adverse	Not Significant	
VP3	Bridleway / Mill Race	Recreational Route with	Medium	Construction:	Negligible	Negligible	Not Significant	
	International	views towards the Site.		Operation:	Negligible	Negligible	Not Significant	
VP4	Lord McGowan Bridge	Road Users: A1085	Low	Construction:	Low	Minor Adverse	Not Significant	
	Charles III Costal Path	(Irunk Road).		Operation:	Low	Minor Adverse	Not Significant	
	/Teesdale Way	Walkers on Long	Medium	Construction:	Low	Minor Adverse	Not Significant	
		Route		Operation:	Low	Minor Adverse	Not Significant	
VP5	A1085 (Trunk Road) North of the Site	Road users, one of the	Low	Construction:	Medium	Moderate Adverse	Not Significant	
	Entrance	accessible locations		Operation:	Medium	Moderate Adverse	Not Significant	
VP6	A1085 (Trunk Road)	Road users, one of the	Low	Construction:	Medium	Moderate Adverse	Not Significant	
	Entrance	accessible locations		Operation:	Medium	Moderate Adverse	Not Significant	
VP7	Houses on Creswell	Residential properties	Medium	Construction:	Medium	Moderate Adverse	Not Significant	
	Koad, Grangetown	orientated towards the Site	Site		Operation:	Medium	Moderate Adverse	Not Significant
Viewpoint	Location	Visual Receptor	Sensitivity	Magnitude of	Effect	Level of Significance	Significant or Not Significant	
Viewpoint 84A	Location A1053, Tees Dock Page south of	Visual Receptor	Sensitivity	Magnitude of Construction:	Effect Medium	Level of Significance	Significant or Not Significant Not Significant	
Viewpoint	Location A1053, Tees Dock Road south of Lackenby Steel Works	Visual Receptor Road users and public open space south of road	Sensitivity	Magnitude of Construction:	Effect Medium Medium	Level of Significance Moderate Adverse Moderate Adverse	Significant or Not Significant Not Significant Not Significant	
Viewboint VP8	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Paod and	Visual Receptor Road users and public open space south of road Road Users and	Sensitivity Medium Low	Magnitude of a Construction: Operation: Construction:	Effect Medium Medium Medium	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse	Significant or Not Significant Not Significant Not Significant Not Significant	
VP8 VP9	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction)	Arith Stranger	Magnitude of 2 Construction: Operation: Operation: Operation:	Effect Medium Medium Medium Medium	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse	Significant or Not Significant Not Significant Not Significant Not Significant	
VP8 VP9 VP10	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East Tees Dock Road west of the Site	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction) Road users and train nassengers on the	Medium Low	Magnitude of 2 Construction: Operation: Operation: Operation: Construction:	Effect Medium Medium Medium Medium Low	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse Minor Adverse	Significant or Not Significant Not Significant Not Significant Not Significant Not Significant	
VP8 VP9 VP10	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East Tees Dock Road west of the Site	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction) Road users and train passengers on the Saltburn to Darlington Railway	Medium Low	Magnitude of 3 Construction: Operation: Construction: Operation: Construction: Operation:	Effect Medium Medium Medium Medium Low Low	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse Minor Adverse Minor Adverse	Significant or Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant	
VP8 VP9	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East Tees Dock Road west of the Site	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction) Road users and train passengers on the Saltburn to Darlington Railway Walkers on the KC III Constal Rath and Taeadala	Medium Low Medium	Magnitude of 2 Construction: Operation: Construction: Operation: Construction: Operation: Construction:	Effect Medium Medium Medium Low Low	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse Minor Adverse Minor Adverse Minor Adverse Moderate Adverse	Significant or Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant	
VP8 VP9	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East Tees Dock Road west of the Site	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction) Road users and train passengers on the Saltburn to Darlington Railway Walkers on the KC III Costal Path and Teesdale Way	Low Medium Low	Magnitude of a Construction: Operation: Operation: Operation: Operation: Operation: Operation: Operation:	Effect Medium Medium Medium Low Low Low	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse Minor Adverse Minor Adverse Moderate Adverse Moderate Adverse	Significant or Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant	
VP8 VP9 VP10	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East Tees Dock Road west of the Site South Bank Railway Station	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction) Road users and train passengers on the Saltburn to Darlington Railway Walkers on the KC III Costal Path and Teesdale Way Train passengers and table	Medium Low Low	Magnitude of a Construction: Operation: Construction: Operation: Construction: Operation: Construction: Operation: Construction:	Effect Medium Medium Medium Low Low Low Low Low Negligible	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse Minor Adverse Minor Adverse Moderate Adverse Moderate Adverse Negligible	Significant or Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant Not Significant	
VP8 VP9 VP10	Location A1053, Tees Dock Road south of Lackenby Steel Works Junction of Eston Road and Middlesbrough Road East Tees Dock Road west of the Site South Bank Railway Station	Visual Receptor Road users and public open space south of road Road Users and proposed employment site (Under Construction) Road users and train passengers on the Saltburn to Darlington Railway Walkers on the KC III Costal Path and Teesdale Way Train passengers and station users	Medium Low Low	Magnitude of 3 Construction: Operation: Construction: Operation: Construction: Operation: Construction: Operation: Construction: Operation:	Effect Medium Medium Medium Low Low Low Low Negligible Negligible	Level of Significance Moderate Adverse Moderate Adverse Minor Adverse Minor Adverse Minor Adverse Minor Adverse Moderate Adverse Noderate Adverse Negligible Negligible	Significant or Not Significant Not Significant	
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A summary of the viewpoints assessment set out in Appendix L2 of the ES is contained within Table L5.13 of the ES. This is set out below:

As can be seen from the above the level of significance at the viewpoints ranges from *negligible* to *moderate adverse*. However in terms of whether this is significant or not, all impacts are considered to be *not significant*.

In terms of public roads the only notable views of the development would be from the A1085 Trunk Road east of the site and the A1053 to the south. Views into the site from the A1085 Trunk Road are substantially screened by existing roadside vegetation. The EAF building would be larger and closer to the road than the existing buildings. Due to the transient nature of the receptors, travelling at speed, the effects would not be significant. The proposed development would be prominent from a short section of the A1053, south of the Site. Any adverse effects would be reduced by the low aesthetic quality of the baseline view and would not be significant. No significant effects on views experienced by road users are predicted during the Construction or Operational Phases.

Passengers on the Saltburn to Darlington railway would have transient close proximity views of the proposed air separation column at the northern end of the site, with distant views from South Bank Station. No significant visual effects are predicted in relation to rail passengers during the construction or operational phases.

With regard to recreational facilities/destinations consideration has been given to the potential views of the development from Kirkleatham Hall, Kirkleatham Museum, or Kirkleatham Walled Gardens which are enclosed by vegetation. The views of the proposed development from the River Tees viewpoint would be substantially screened by trees adjacent to the viewpoint. Visitors to Eston Nab would have unrestricted views of the proposed development, which would be taller and therefore more prominent than the existing buildings within the site. However due to the distance and its industrial surroundings the effects on views experienced by visitors to Eston Nab would not be significant. No significant effects are predicted in relation to the key visitor destinations, within the study area during the construction or operational Phases.

There are very few residential properties near to the proposed development site. The closest are located at Grangetown, approximately 600m southwest with some of the houses on Cresswell Road being orientated towards the site. The upperpart of the proposed EAF building, air separation column and stacks would be prominent from these properties, however, the impact of the proposed development would not be significant and would not affect residential visual amenity. No significant effects are therefore predicted in relation to views from residential properties, during the construction or operational phases.

During Operation

The ES concludes that the effects of the proposed development during the operational phase are considered to be the same as during construction

Mitigation and Monitoring

During Construction

The ES sates that other than the embedded mitigation measures set out above, no additional measures are proposed to mitigate potential effects on landscape and visual amenity during the construction phase.

During Operation

The ES states that other than the embedded mitigation measures set out above the only additional measure proposed to mitigate potential effects on the landscape or visual amenity during the operational phase would be a Landscape and Ecological Management Plan (LEMP), setting out appropriate maintenance and management operations to be undertaken each year to ensure the ensure the woodland alongside the A1085 is maintained as an effective visual barrier throughout the operational phase.

Residual Effects

During Construction

The ES identifies that the adverse effects resulting from the construction works would be *temporary* and *short-term*. Given no specific additional mitigation measures are proposed to minimise construction impacts the residual effects will be the same as those identified in the effects section above.

No significant landscape or visual effects have been identified as a result of the construction phase operations.

During Operation

The ES identifies that the development would result in a *permanent*, or *long-term* modification of the landscape and the obstruction of long-distance views from roads and footpaths within the immediate vicinity of the proposed development. However, in relation to the baseline conditions the changes to the character of the landscape and the composition of the views would be relatively small.

It is proposed that apart from the LEMP which will not reduce the predicted impacts, no further mitigation nis proposed. While the landscape proposals would provide some screening of the site, due to the height of the proposed buildings it is unlikely that planting would ever screening the development.

The ES concludes that no significant landscape or visual effects have been identified as a result of the operational phase of the development.

Conclusions

The ES chapter has considered the impacts on the landscape and visual impact from the project both in construction and in operation. Table L8.1 of the ES summarises the receptors, potential effect (including significance), mitigation measure, residual effect (including significance) in relation to landscape and visual impacts. This is considered to provide a detailed and robust overview of the impacts and mitigation. The table summarises the impacts on both LCA's and the identified viewpoints.

During construction the residual effects range from *negligible (not significant)* to *moderate adverse (not significant).*

During operation the residual effects range from *negligible (not significant)* to *moderate adverse (not significant).*

The ES notes that there will be no notable difference between Construction or Operational effects. This is mainly due to the following considerations:

- As a worst case, construction works are likely to be most intrusive as the development is nearing completion i.e. the structures have reached maximum size and will be most prominent. At the same time construction activity, mobile plant, and large cranes, will still present on site. However, this scenario would the relatively short lived and consequently the adverse effects would be temporary and of short duration.
- The completed development during the operational phase would be less intrusive, although the duration of effect would be long-term (i.e. for the entire operational period). Consequently, in relation to the assessment methodology the predicted level of impact for the Construction Phase and Operational Phase would be the same.

The most sensitive part of the study area is recognised as the high ground towards the Eston Hills and Eston Nab. It is acknowledged that the development will be visible from Eston Nab, however this would have *negligible* effect on its setting or amenity value. This is mainly due to the land towards the site being highly industrialised with frequent detracting features. The area therefore has the capacity to accommodate the large scale development without harm to the character and quality of the exiting landscape.

The receptors that are acknowledged as being most affected by the proposed development are:

- road users closest to the Site, on the A1085 Trunk Road and the A1053;
- residents on the edge of Grangetown south of the Site; and
- walkers on the KCIII England Coastal Path and Teesdale Way, north and west of the Site.

From these receptors the proposed development would be prominent in view, however, the development will not introduce a new or uncharacteristic feature in the landscape nor would it affect visual residential amenity.

Overall no significant landscape or visual effects have been identified during the construction or operation of the proposed development.

Planning Assessment

NPPF Paragraph 135 (Section 12, Achieving well-designed places) 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)

Paragraph 136 recognises that;

Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change' and that 'existing trees are retained wherever possible.

Paragraph 180 (Section 15, Conserving and enhancing the natural environment) states that:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

(a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

(b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services - including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;...

(f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate'.

Policy N1 (Landscape) aims to protect and enhance Redland and Cleveland Borough Council's landscape. The policy states developments *will not be permitted where they would lead to the loss of features important to the character of the landscape, its quality and distinctiveness, unless the benefits of development clearly outweigh landscape considerations.*

Policy N2 (Green Infrastructure) aims to protect and enhance the green infrastructure network, which should help to integrate development with surrounding townscape and landscape, and with adjoining communities.

Policy LS1 (Urban Area Spatial Strategy) aims to protect and enhance the character and special qualities of the Eston Hills.

Policy SD4 (General Development Principles) assesses the suitability of a site or location. The policy states that when locating new development, important environmental, built and historic assets will be protected.

(b) will not have a significant adverse impact on the amenities of occupiers of existing or proposed nearby land and buildings;

(i) where necessary make the most effective and efficient use of available land, create and sustain an appropriate mix of uses, including (where appropriate) incorporation of green space and landscaping as part of development, and support local facilities and transport networks;

(j) respect or enhance the character of the site and its surroundings in terms of its proportion, form, massing, density, height, size, scale, materials and detailed design features;

(*k*) take opportunities available to improve the character and quality of the surrounding area and the way it functions by establishing a strong sense of place, responding to local character and history and using streetscapes and buildings to create attractive places to live, work and visit;

The ES provides an appropriate assessment of landscape and visual impacts resulting from the proposed development.

The Landscape and Visual Impact analysis provides a robust assessment of the impact of the development. Although part of the application is in outline, the applicant has set out in the parameters plan the maximum criteria for the development including maximum heights of buildings and ground levels for this element of the scheme. The ES is therefore considered to have assessed a worst-case scenario based on the parameters plan and supporting information relating to the detailed element of the scheme.

The overall conclusion of the ES in terms of landscape and visual impact are accepted.

The application site is in an area allocated for employment related development under Policy ED6 (Promoting Economic Growth) in the Redcar and Cleveland Local Plan. The principle of the proposed development is therefore one that is accepted for the application site.

The location of the site and the prevailing built form is industrial with a number of buildings and structures of significant scale in the surrounding area.

The ES does conclude that the worst-case impacts resulting will be *moderate adverse* (*not significant*) visual impacts during the construction phase at Viewpoint/Receptors 5 (A1085 (Trunk Road) North of the Site Entrance), 6 (A1085 (Trunk Road) South of the Site Entrance), 7 (Houses on Creswell Road, Grangetown), 8 (A1053, Tees Dock Road south of Lackenby Steel Works) and 10 (Tees Dock Road/ Rial line west of the Site). This is accepted and would form part of any redevelopment of such a site. Given the site is allocated for employment uses is considered reasonable that such impacts occur in the short term.

The ES does conclude that the worst-case impacts resulting will be *moderate adverse* (*not significant*) visual impacts during the operation phase at Viewpoint/Receptors 5 (A1085 (Trunk Road) North of the Site Entrance), 6 (A1085 (Trunk Road) South of the Site Entrance), 7 (Houses on Creswell Road, Grangetown), 8 (A1053, Tees Dock Road south of Lackenby Steel Works) and 10 (Tees Dock Road/ Rial line west of the Site).

With regard to the LCA's it is accepted that the majority of them will have *negligible (not significant)* impacts during construction with the worst being *minor adverse (not significant)* within NCA 23 Tees Lowlands. As stated above the site is allocated for employment uses and therefore any form of development has the potential to impact on these LCA's. The benefits from the investment and resulting jobs therefore needs to be weighed against the impacts.

Elevation and floor plans of the proposed EAF building have been submitted in support of the application. The proposed building is to have a maximum height of 53.04m with a gross external area of 37,526sqm. It is acknowledged that the proposed development is of significant scale, however, given the location of the development site, the surrounding land uses and existing buildings and a lack of residential dwellings in close proximity of the proposed development site, the proposal is not considered to result in conditions that would be prejudicial to the amenity of occupiers of neighbouring buildings with regard to the creation of an overbearing or dominating form of development in accordance with Policy SD4 (General Development Principles) parts (b) and (j). The development will be required to be built in accordance with the submitted detailed plans that will be secured by way of a planning condition.

Final details of the materials to be used to carry out the development will be agreed by way of a planning condition. These details will include those of the individual buildings as well as any hard surfaces throughout the site. These conditions have been agreed with the applicant in advance of the determination of the application.

The ES notes that other than the embedded mitigation measures detailed in the application, the only additional measure proposed to mitigate potential effects on the landscape or visual amenity during the operational phase would be a LEMP. The LEMP would set out appropriate maintenance and management operations to be undertaken each year to ensure the woodland alongside the A1085 is maintained as an effective visual barrier throughout the operational phase of the development. The provision of the LEMP is secured by way of a planning condition that has been agreed with the applicant in advance of the determination of the application. In relation to those areas of the site covered by the outline permission, final details of the development to be constructed on site will be required to be agreed at the Reserved Matters stage. These details will be secured by way of a planning condition as is the case with all outline applications. The details submitted for the Reserved Matters approval will also be required to be consistent with the Parameters Plan (Drawing No. D-10.01 Rev. A) submitted in support of the application. The Parameters Plan is secured by way of a planning condition that has been agreed with the applicant in advance of the determination of the application.

Based on the assessment set out in the ES the development raises no issues in terms of landscape and visual impact that would not be dealt with through the implementation of suitable mitigation measures as set out above.

In view of the above the development complies with National Policy in the NPPF and policy SD4 (b)(i)(j) and (k) and N1 of the Redcar and Cleveland Local Plan.

Chapter M – Accidents and Disasters

The ES chapter begins by setting out legislation in respect of major accidents and disasters. The chapter has been prepared by ITPEnergised.

The Chapter is not supported by any technical appendices.

Baseline

The development site as detailed throughout the ES is currently undeveloped and therefore there is not considered to be any activities relevant to accidents and disasters.

With regard to future baseline conditions at the site, the ES assumes that steel making operations will continue at the wider British Steel site, with no physical changes proposed.

Potential Effects of Development

Embedded Mitigation

The ES states that water cooling is not to be employed at the proposed development which is considered to represent mitigation by design. The EAF is to be of modern design and will be engineered to withstand pressures generated by accidental water ingress. The design will be to kilogram quantities of water and not tonne. Physical measures to mitigate against loss of containment of molten metal will focus on the design and thermal properties of refractory materials and any substances which will come into contact with the molten metal. The EAF roof has been designed to facilitate against snow drifts and does not feature parapets or other obstructions which could accumulate snow and increase loading.

During Construction

The ES has identified that no major accidents or disaster events are reasonably within the scope of the construction phase of the proposed development.

During Operation

As part of the EIA process a number of major accident and disaster events were screened out of assessment. These events are shown in Table M5.1 of the ES along with reasons for no further consideration. The events are generally natural disasters and extreme weather events with no serious risk of occurrence and include; tectonic activity, landslip, extreme temperature, extreme storm and storm surge.

Two event scenarios have been considered within the ES and these relate to; loss of containment (molten steel) and steam explosion.

With regard to loss of containment;

it is assumed for the assessment that loss of containment of an entire batch of molten metal, if uncontrolled, would be contained within the EAF building itself and cool through removal from the heat source and contact with surfaces at ambient temperatures before quantities escaped sufficient to cause damage to occur to any off-site receptors. The clean-up would not be expected to cause long term soil contamination as the spillage will substantially be on made ground and will rapidly cool and solidify. The clean-up operation itself will be resource-intensive in terms of personnel hours, fuel consumption and resource depletion, all of which would directly or indirectly release greenhouse gases and other air pollutants, among other supply chain effects. These effects would not be expected to materially affect any off-site receptors hence the significance is assessed as Minor Adverse.

With regard to steam explosion;

The Association for Iron and Steel Technology (AIST) website hosts a useful paper (8) with a partial summary of serious incidents at EAF plant worldwide. The recurring theme is overwhelmingly steam explosion, whereby water has somehow entered the sealed and operational furnace and become engulfed by molten metal.

Water which is completely engulfed by molten iron can cause explosive formation of steam and metal spray droplets - liquid water rapidly vaporises into a far greater volume of steam which is explosively released from the metal matrix, spraying molten metal. At a sufficient scale this phenomenon can cause significant damage to plant and building fabric and potential injury and loss of life.

Water in contact with molten metal but not engulfed as described (e.g. water leak into the EAF building) will either evaporate or be reduced to hydrogen

and oxygen. The quantities of engulfed water likely to be introduced precludes hydrogen build-up as a material issue.

Historic incidents of this kind have reportedly been caused through the introduction of wet scrap into furnaces and the failure of water-cooling systems.

All but the most catastrophic incident of this nature would be largely contained within the building envelope. The possibility of effects on habitat and wildlife within the wider Site boundary appears remote. The introduction of such a large quantity of water into the furnace would follow an event such as structural failure of the roof due to snow loading beyond engineering tolerance or deliberate (and likely suicidal) interference.

The clean-up operation would be largely focussed on repairs to the building envelope with lower general inputs of personnel hours and materials than a complete loss of containment. The significance of this event is assessed as Minor Adverse. This is not to understate the serious consequences and potential loss of life and serious injury which would follow a steam explosion but the environmental impact will generally be contained within the building envelope.

Mitigation and Monitoring

Mitigation and monitoring of major accidents and disasters related to major industrial developments are required to form part of the plant design and the operational procedures of the plant.

During Construction

There is no mitigation proposed during the construction phase of development beyond the proposed CEMP that forms part of the embedded mitigation as set out in Chapter C (Para C4.28).

During Operation

The operational phase of development will be managed by furnace telemetry which will feed into the EAF plant supervisory control and data acquisition (SCADA) system with a tiered alarm system corresponding to abnormal conditions in the furnace.

Procedures for identification and monitoring of water ingress and pretreatment of scrap charges will be developed and integrated into the operational site management system.

The plant will also require regular maintenance to be programmed in to ensure it continues to operate within the design parameters.

Residual Effects

During Construction

The ES concludes that no major accidents or disaster events are reasonably predicted within the scope of the construction phase of the development.

During Operation

The ES concludes that residual effects are difficult to assess with regard to major accidents and disasters. The mitigation set out above during the operational phase of the development cannot be guaranteed, however, any such incidents are low frequency random events, that the mitigation measures would reasonably be expected to prevent harm to human and other receptors.

Conclusions

The environmental impacts of the reasonably identifiable major accident and disaster scenarios are summarised in Table M8.1 of the ES.

Planning Assessment

The ES recognises that there are no planning polices at a Natioal or Local level relating to this matter. There are other areas of relevant legislation that will apply to the proposed development/operation of the site and these are set out in the ES as follows:

The Proposed Development will be a workplace and The Health and Safety at Work Act (1974) (2) and Management of Health and Safety at Work Regulations (1999) (3) will apply. The Act's position on controlling risks, as interpreted by the Health and Safety Executive, to a level "As Low as Reasonably Practical" (ALARP) informs the approach to mitigation in the EIA Report context.

The Control of Major Accident Hazards Regulations (2015) (COMAH)(4) and the Planning (Hazardous Substances) Regulations 2015 (UK Government, 2015) apply to the Site.

The operator of the site will be required to adhere to the relevant legislation, however this falls outside of the planning act therefore would not form part of any planning condition.

Chapter N – Cumulative Effects

The ES chapter seeks to draw together the other chapters within the ES and establish the interrelationship between them. The chapter has been prepared by Lichfields.

This Chapter is supported by the following Appendix:

• Appendix N1: Cumulative Schemes

The ES chapter addresses two types of cumulative effects, these being;

- Synergistic the combined effect of different type of impacts attributable to the proposed development ('direct impacts') in respect of a particular receptor. An example of this could include the combined impact of ecology and water management on designated sites. This includes consideration of the impacts during the construction and operational phases; and
- Cumulative these arise from the combined effect of the proposed development with committed development schemes that, individually, may be insignificant, but when combined with other impacts, may be significant.

The ES has identified 22 developments requiring consideration in relation to those other indirect or cumulative effects. The developments are listed in Table N4.1 and illustrated on Figure N4.1 of the ES and set out below.

Address	Type of application	Planning Ref. Number	Description of Development	Current Known Status	Distance from Site
Lackenby	Outline	R/2020/0820/ESM	Outline planning application for the development of up to 92,903sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	Granted 08.08.2022	Adjacent
Dorman Point	Outline	R/2020/0819/ESM	Outline planning application for the development of up to 139,353 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.	Granted 13.05.2022	600m
	Reserved Matters	R/2023/0080/ESM	Reserved Matters application (Access, Appearance, Landscaping, Layout and Scale) following outline planning permission R/2020/0819/OOM for 5.56ha renewable gas production facility and associated infrastructure (Use Class B2)	Granted 02.06.2023	
	Reserved Matters	R/2023/0646/ESM	Reserved Matters Application (Access, Appearance, Layout, Landscaping and Scale) following outline approval R/2020/0819/ESM for construction of a sustainable aviation fuel facility along with access and landscaping.	Pending	
The Foundry	Outline	R/2020/0821/ESM	Outline planning application for the development of up to 464,515qm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking and associated infrastructure works. All matters reserved.	Granted 02.03.2022	3km
Long Acres	Outline	R/2020/0822/ESM	Outline planning application for the development of up to 185,806 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class E), HGV and car parking, works to watercourses including realignment and associated infrastructure works. All matters reserved.	Granted 02.03.2022	3km

Steel House	Outline	R/2020/0823/ESM	Outline planning application for the development of up to 15,794sqm (gross) of office accommodation (Use Class E) and car parking and associated infrastructure works. All matters reserved.	Pending	2.7km
South Bank	Outline Reserved	R/2020/0357/OOM	Outline planning application for demolition of existing structures on site and the development of up to 418,000 sqm (gross) of general industry (Use Class B2) and storage or distribution facilities (Use Class B8) with office accommodation (Use Class B1), HGV and car parking and associated infrastructure works. All matters reserved other than access. Application for the approval of Reserved Matters, namely	Granted 03.12.2020 Granted	1km
	Matters (SeAH Wind)		appearance, landscaping, layout and scale in respect of a Class B2 manufacturing unit with ancillary offices, parking, servicing, and landscaping following approval of outline planning permission (R/2020/0357/OOM.	16.06.2022 Under Construction	
South Bank	Full	R/2022/0355/FFM	Erection of industrial facility (Use Class B2/B8), associated structures, hardstanding and landscaping works.	Granted 16.06.2022 Under Construction	1.5km
Land bounded by A1085 Trunk Road to south east and roundabout providing access to local road network; private access track to east; internal roads to the west and Darlington to Saltburn railway to north west, Redcar	Full	R/2022/0050/FFM	Alterations to existing office building, car parking and landscaping.	Granted 22.06.2022	2.5km
Land to east of former Steel House	Full	R/2022/0816/FFM	Formation of hardstanding, buildings, access roads from A1085 Trunk Road, associated facilities and landscaping	Granted 02.03.2023	3km
and North of A1085 Trunk Road, Recar			works in association with the creation of a park and ride facility.		
Land at South Bank Wharf Grangetown Lackenby	Full	R/2020/0684/ESM	Demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (Phase 1)	Approved - 19.03.2021	2.3km
Land at South Bank Wharf Grangetown Lackenby	Full	R/2020/0685/ESM	Demolition of existing redundant quay structures, capital dredging and development of new quay and associated works (Phase 2)	Approved - 19.03.2021	2.5km
Land north of A1053 / Trunk Road roundabout and south of Former Lackenby Steelworks	Outline	R/2023/0482/OOM	Outline planning permission, with all matters reserved, for development comprising commercial, business and service, drive through restaurant, hotel, public house and a petrol filling station and associated retail, with associated access, parking, servicing areas and landscaping.	Pending	Adjacent
Plots 1A and 1B, Wilton International, Middlesbrough, Redar	Full	R/2022/0773	Construction of a Lithium Hydroxide Monohydrate Manufacturing Plant and Ancillary Development	Granted 24.11.2022	1.5km
Land off Kinkerdale Road, Teesport, Grangetown, TS6 6UE	Outline	R/2023/0291/ESM	Outline application (all matters reserved) for the development of a 3 line low-carbon lithium refinery and associated dock-side reception, handling, storage, and manufacturing, facilities for the production of high-quality, battery-grade lithium hydroxide monohydrate, to include the construction of up to three production lines with the production capacity of up to 75,00 tonnes per annum, the proposed development will include an office and warehouse buildings, together with associated site infrastructure and utility supplies.	Granted 25.07.2023	1km
Land at and in the vicinity of Teesworks, Redcar, TS10 5QW	DCO	EN010103	A full chain carbon capture, utilisation and storage ('CCUS') project, comprising a CO2 gathering network, including CO2 pipeline connections from industrial facilities on Teesside to transport the captured CO2 (including the connections under the tidal River Tees); a combined cycle gas turbine ('CCGT') electricity generating station with an abated canacity circa 850 gigawatts output (gross), cooling	Order Made, but amendment ongoing (statutory deadline 16	3.7km
			water, gas and electricity grid connections and CO2 capture; a CO2 gathering/booster station to receive the captured CO2 from the gathering network and CCGT generating station; and the onshore section of a CO2 transport pipeline for the onward transport of the captured CO2 to a suitable offshore geological storage site in the North Sea.	February 2024)	
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Grangetown Prairie. Land east of John Boyle Road and west of Tees Dock Road, Grangetown, Redcar	Outline	R/2023/0247/OOM	Outline application (with all matters reserved) for the construction of a bottom ash facility and associated development.	Granted 20.07.2023	1km
Grangetown Prairie. Land east of John Boyle Road and west of Tees Dock Road, Grangetown, Redcar	Outline	R/2019/0767/OOM	Outline application for the construction of an Energy Recovery Facility (ERF) and associated development.	Granted 24.07.2023	1km
	Reserved Matters	R/2023/0246/RMM	Reserved Matters application (Access, Appearance, Landscaping, Layout and Scale) following outline planning permission R/2019/0767/OOM for outline application for the construction of an Energy Recovery Facility (ERF) and associated development.	Granted 20.07.2023	
	Reserved Matters	R/2023/0253/RMM	Reserved Matters application (Access, Appearance, Landscaping, Layout and Scale) following outline planning permission $R/2019/0767/OOM$ for outline application for the construction of an Energy Recovery Facility (ERF) and associated development.	Granted 20.07.2023	
Land at Redcar Bulk Terminal Redcar TS10 5QW	Full	R/2020/0411/FFM	Construction of the Redcar Energy Centre ('REC') consisting of a material recovery facility incorporating a bulk storage facility; an energy recovery facility; and an incinerator bottom ash recycling facility along with ancillary infrastructure and landscaping	Granted 27.01.2021	4km
Land at Low Grange Farm South Bank	Outline	R/2014/0372/OOM	Outline application for residential development (up to 1250 dwellings) (all matters reserved)	Granted, 31.03.16	1.5km
	Reserved Matters	R/2021/0387/RMM	Reserved Matters application following outline planning permission R/2014/0372/OOM for 300 dwellings and garages with associated landscaping and ancillary works.	Granted 26.07.2021	
Land North of Kirkleatham Business Park and West of Kirkleatham Lane Redcar	Outline	R/2016/0663/OOM	Outline planning application for up to 550 residential units with associated access, landscaping and open space	Granted 26.07.2017	3km
	Reserved Matters	R/2019/0485/RMM	Reserved matters application (appearance, landscaping, layout and scale) following approval of outline planning permission r/2016/0663/oom for up to 550 residential units with associated access, landscaping and open space	Granted, 31.10.19	
Teesside Combined Cycle Power Plant (CCPP)	Development Consent Order	DCO Reference 2019	Construction of a 1,700mwe combined-cycle gas turbine power station at Wilton International was granted permission.	Order made 05.04.19	1km
York Potash Port and Materials Handling Facilities	Development Consent Order	The York Potash Harbour Facilities DCO Order 2016 (No. <u>772</u>)	Harbour facilities associated with Bran Sands	Order made, 20.07.2016	2km

Consideration has been given to the residual effects (following incorporation of the mitigation measures described in Chapter O) as identified in Chapters D to M of the ES that could be expected to arise during the construction and operational phases of the proposed development. The summary of the residual effects is set out in Table N2.1 of the ES.

The receptors potentially sensitive to the effects identified in Table N2.1 of the ES that are classified as being subject to *minor* effects or above, are set out below:

- Users of the local highway network;
- Residential properties, represented by those at Cresswell Road and Eastcroft Road;
- Construction workers;
- Surface watercourses Kinkerdale Beck Culvert, Lackenby Channel, Boundary Beck Culvert and Tees Estuary;

- Ground water;
- Existing drainage systems;
- Local water supply;
- Local economy in terms of employment and economic output;
- Global Atmosphere;
- Non occupational groups
- Onsite habitats
- The Proposed Development; and
- Walkers on Public Rights of Way including the KCIII England Coastal Path and Teesdale Way.

Cumulative effects have been considered against the following topics within the ES:

- Noise and Vibration
- Air Quality
- Hydrology and Hydrogeology
- Socio Economics
- Waste and Materials Management
- Landscape and Visual Impact
- Accidents and Disasters

Overall the ES concludes the following with regard to cumulative impacts:

A range of mitigation measures have been identified throughout the ES which are largely capable of being enforced through the planning process in relation to the Proposed Development.

The assessment has identified the potential for synergistic effects on four receptors: surface watercourses, ground water, users of the local highway network and residential properties closest to the Site. However, it is considered that the combined effects do not give rise to any new significant impacts that require mitigation.

In terms of the residual effects of the Proposed Development in isolation, presented in section N2.0, it can be seen that during both the construction and operational phases there are Significant Beneficial Socio- Economic effects. All other environmental effects assessed in Chapters D to M are considered to be Not Significant.

Chapter O – Mitigation and Monitoring

This chapter presents the mitigation, monitoring and compensation measures proposed throughout the ES, and the mechanism for securing these. This is identified to assist in the ongoing consideration of the ES.

The ES has identified a series of mitigation and ongoing monitoring and / or management measures which are designed to limit or remove any significant

adverse environmental effects of the proposed development. The ES has provided a definition of the various mitigation measures.

- Primary (inherent) mitigation otherwise known as embedded or inbuilt mitigation, these comprise modifications or measures built into the location or design of a development during the pre-application stage. These measures are already inherent to a proposed development and no additional action such as through the imposition of a planning condition, needs to occur;
- Secondary (foreseeable) mitigation this will require further activity in order to achieve the anticipated outcome identified in an ES such as through the imposition of a planning condition; and
- Tertiary (inexorable) mitigation these are measures that would occur with or without input from the EIA and could, for example, include actions that would be undertaken to meet other existing legislative requirements, or actions considered to be standard or best practice to manage commonly occurring environmental effects.

Tables O3.1 of the ES set out the primary, secondary and tertiary mitigation and monitoring measures that have been proposed throughout the technical chapters of the ES and report in the consideration of the chapters set out above. The table sets out the identified mitigation, the relevant environmental topic and the means by which the mitigation can be secured.

Table O3.1 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.

Other Matters

The application has been considered by Cleveland Fire Brigade 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:

Access and Water Supplies should meet the requirements as set out in: Approved Document B Volume 2 :2019, Section B5 for buildings other than Dwellings

It should be noted that Cleveland Fire Brigade now utilise a Magirus Multistar Combined Aerial Rescue Pump (CARP) which has a vehicle weight of 18 tonnes. This is greater than the specified weight in AD B Vol 2 Section B5 Table 15.2.

Cleveland Fire Brigade also utilise Emergency Fire Appliances measuring 3.5m from wing mirror to wing mirror. This is greater than the minimum width of gateways specified in B Vol 2 Section B5 Table 15.2.

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 Cleveland Police who have raised no objection to the proposed development. Cleveland Police operate the "Secured By Design" initiative. This is a scheme which promotes the inclusion of architectural crime prevention measures into new projects and refurbishments. Cleveland Police therefore advise that the applicant should liaise with Cleveland Police at the earliest opportunity on this matter. Comments have also been made in relation to choice of final materials to reduce the threat of theft during the construction phase of development, while on-site security is also recommended through out the lifespan of the development. These points have been shared with the applicant and it should be noted that the British Steel site does have a security gate at the Lackenby entrance, therefore providing a level of controlled access to the site.

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.

As has been noted earlier in the report, matters relating to archaeology have been scoped out of the EIA. The justification for this is set out in Table B2.1 of the ES which states:

The site is previously developed and therefore it is considered that there is limited potential for any archaeological remains. As such no significant adverse effects are anticipated on archaeological remains and the topic will be scoped out of the ES.

Notwithstanding this, the application has been considered by the Council's consultant archaeologist and they have provided the following comments:

The current ES, Chapter C (Site and Scheme Description) notes as follows. C2.13 There are no designated or undesignated heritage assets within the Site or within the immediate vicinity. [our italics]. There are no Public Rights of Way ('PROW') within the Site. The Site is not within an Air Quality Management Area ('AQMA'). There are no designated ecological sites within Site. We agree with sentence underlined above but make the following observations.

Historic mapping shows the current application site to be relatively undeveloped in the nineteenth century, after which (the mid twentieth century) it then became almost entirely built over for heavy industrial use. Prior to the great development of the 1950s, the site contained buildings known as 'Low farm', visible as early as 1857 on the first edition (1:10,560 scale) of OS mapping of the area. However, the buildings were at the southern end of the Lackenby Beam Mill, whose construction will have removed all traces of the previous construction.

Non-designated assets (HER 5658 (Ironworks reservoir) and HER 5659 (Lackenby Iron works, both of nineteenth century date)) are recorded by the HER immediately to the north of the development site, but any remains of structures constituting these sites (if they subsist) are outside and therefore will not be directly affected by the development.

Recommendation: In view of the above observations, no archaeological mitigation is recommended in this instance.

Based on the assessment from the Council's consultant archaeologist, it is considered that no further archaeology works are required prior to any development at the site. No condition relating to archaeology matters is therefore proposed as part of the suite of planning conditions.

Ecological Impact Assessment

The application has been supported by an Ecological Impact Assessment that has been prepared by INCA.

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.

Table 1 of the ecological impact assessment details the internationally designated sites within 10km of the site. This table is set out below:

Site	Approx. Distance (km)	Map Ref	Main Ecological Interest	Area (ha)
Teesmouth and Cleveland Coast SPA	0.8 NW	various	Wintering and passage waterbirds, breeding populations of Avocet, Common Tern, Little Tern	12226.28
Teesmouth and Cleveland Coast Ramsar	2.8 NW	various	Waterbirds, breeding populations of Avocet, Common Tern, Little Tern	2094.02
North York Moors SPA	8.9 SE	NZ591126	Breeding Golden Plover and Merlin	44094.98
North York Moors SAC	8.9 SE	NZ591126	Wet Heath; Dry Heath; Blanket Bog	44053.29

Table 2 of the ecological impact assessment details the nationally designated sites within 5km of the site. This table is set out below:

Site	Approx. Distance km	Map Ref	Main Ecological Interest	Size (ha)
Lovell Hill Pools	4.5 SE	NZ596188	Dragonfly assemblage Great Crested Newt and amphibian assemblage	10
Teesmouth and Cleveland Coast	0.8 NW	Various	Several features – see Appendix 1, with the River Tees being the closest SSSI unit to the site	2977.03

There is only one locally designated site within a 2km radius of the site. This is Eston Pumping Station LWS, located 1.5km NE of the site. It is designated for a mosaic of habitats including an area of reedbed and urban grassland.

An assessment has been made within the ecological impact assessment of the designated sites and notable species within 2km of the site. The ecological assessment concludes the following:

Internationally designated sites

The accompanying Habitats Regulations Assessment (INCA Report 2023-58) concluded that the proposed development would not have an adverse impact on the integrity of any European Sites. Further details are given in the Habitats Regulations Assessment.

Nationally Designated Sites

The interest features which the SSSI shares with the SPA have been addressed through the HRA.

Of the additional interest features of the SSSI which are not shared with the SPA, only sand dunes and their associated invertebrate assemblage and breeding birds associated with wetlands are within a 5km radius, though each is still in excess of 3km from the Site. There is no hydrological connectivity between the Site and any of those interest features. The application is for an electric arc furnace, which will generate significantly fewer emissions to air than the traditional steel making processes that have operated in the Lackenby area. Therefore, an increase in emissions to air is not anticipated to have adverse impact on the SSSI interest features. Considering the distances from the Site and that no likely significant effects have been identified, it is concluded that there would be no impact on the SSSI.

Locally Designated Sites

There are no pathways connecting the Site to Eston Pumping Station LWS, therefore impacts on Locally Designated Sites can be ruled out.

Great Crested Newt Triturus cristatus (GCN)

There is no suitable breeding habitat for Great Crested Newt (GCN) on the Site and no ponds within approximately 500m. There are no records of GCN within 2km of the Site. GCN is screened out.

Bats

There is negligible roosting and feeding opportunities for bats on the parts of the Site to be affected by the development. Bats are screened out.

Birds

There is some potential for nesting birds in or in the buildings and structures and in the vegetation, particularly the scrub in Habitat Block 4. Mitigation will be required to avoid harm to nesting birds. Nesting birds are screened in. There is no suitable habitat for birds associated with the SPA. SPA birds are screened out.

Reptiles

There was no suitable habitat for reptiles on the Site except for a strip of land of approximately 2m in width along the disused railway line between Habitat Blocks 8 and 9. Although suitable for reptiles in terms of habitat structure this strip of land was small, over 2km from the closest record of reptiles and isolated by bare ground or other habitats that were not suitable for reptiles. Therefore, it is considered unlikely to support a population of reptiles. Reptiles are screened out.

European Hedgehog Erinaceus europaeus

There is potential habitat for Hedgehogs in the woodland strip along the road verge but this area will not be affected by the development. Hedgehogs are screened out.

Brown Hare Lepus europaeus

There is insufficient habitat on the Site to support Brown Hare. Brown Hare is screened out.

Harvest Mouse Micromys minutus

There is no suitable habitat for Harvest Mouse on the Site. Harvest Mouse is screened out.

Common Toad Bufo bufo

There are no ponds on the Site, with the nearest pond being approximately 400m away. There is very little terrestrial habitat for toads on the Site, other than the woodland strip, which will not be affected by the development. Common Toad is screened out.

Priority invertebrate species

There are patches of habitat that would be suitable for Dingy Skipper and Grayling butterflies and the species are expected to be present. The development is anticipated to result in the loss of a small populations of each. Dingy Skipper and Grayling butterfly are screened in.

Invasive Non-Native Species (INNS)

Some examples of Cotoneaster are present on the Site. Mitigation will be required to deal with those during construction. INNS are screened in.

Mitigation is proposed through the implementation of a CEMP which forms part of the embedded mitigation for the proposed development during the construction phase. The ecological impact assessment sets out the following potential compensatory measures that would be delivered:

- The Environment Act (2021) requires that development achieves a Biodiversity Net Gain of a minimum of 10 per cent. However, the net gain requirement is not yet mandatory. Therefore, compensation of at least 10.40 BDUs will be required. BM4.0 requires that this compensation should be of the same broad habitat type, or else of a higher distinctiveness habitat.
- Some of the replacement habitat will be designed so that it is capable of supporting Dingy Skipper and Grayling butterflies.

The ecological impact assessment concludes that:

The Site is of low biodiversity value overall.

In total, across all habitats on the site, the number of BDUs has been calculated as 23.50 of which 10.40 BDUs will be lost to the development. Other than habitats, the only Valued Ecological Receptors which require specific compensatory measures are predicted small populations of Dingy Skipper and Grayling butterfly.

Mitigation measures will be put in place to deal with any issues arising with nesting birds and INNS.

Based on the conclusions detailed above and the proposed compensation and mitigation that will be secured by way of planning conditions, the proposed development is not considered to have an adverse impact of designated sites or notable species. The proposed development is therefore considered to comply with National Policy in the NPPF and policies SD4 (c, e, o) and N4 of the Redcar and Clevland Local Plan.

Habitats Regulation Assessment (HRA)

The application has been supported by a Habitat Regulations Assessment (HRA) that has been prepared by INCA.

The application site is close to a number of ecologically sensitive areas including the Special Protection Area (SPA) Ramsar site. The submitted HRA report assesses the potential impacts of the development on the designated sites under Regulation 63 of the Habitats Regulations.

The report assesses the likely significant effects of the development proposals alone and in combination with other plans / projects. It then goes on to consider whether the development proposals will give rise to adverse effects on the integrity of the relevant designated sites. The report has been revised and updated during the consideration of the application and has been subject to consultation with Natural England.

The HRA report sets out the legislative background of the Conservation of Species and Habitats Regulations 2017, commonly referred to as the Habitats Regulations. The Habitats Regulations aim to protect a network of sites in the UK that have rare or important habitats and species in order to safeguard biodiversity. Under the Habitats Regulations, Competent Authorities have a duty to ensure that all the activities they regulate have no adverse effect on the integrity of any of such sites.

Regulation 63 of the Habitats Regulations therefore 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. Case law has established the approach to be taken in respect of the Regulations and the application of the Directives and assessment of project impacts at *screening* and *appropriate assessment* stage.

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

The submitted HRA details the closest European sites to the proposed development as:

Four European sites are within 10km of at least part of the application site ; Teesmouth and Cleveland Coast SPA; Teesmouth and Cleveland Coast Ramsar; North York Moors SPA; North York Moors SAC.

The closest parts of the Teesmouth and Cleveland Coast SPA and the Teesmouth and Cleveland Coast Ramsar are 0.8km and 2.8km from the Site. These European Sites are considered in this report for a range of potential effects.

The westernmost units of the North York Moors SPA and North York Moors SAC are approximately 9km away from their closest point to the closest part of the Site. Given the distances involved and the nature of the proposals, The North York Moors SPA has been screened out of further assessment and the North York Moors SAC is considered in terms of potential effects from air quality.

Table 1 of the HRA details the qualifying features of the Teesmouth and Cleveland Coast SPA/Ramsar sites. This is included below

Feature	Count (period)	% of Population	Interest type	Selection Criteria	New feature (Y/N)	
Sandwich Tern Thalasseus sandvicensis	1,900 individuals (1988-1992	4.3% GB, 1.3% Western Europe/Western Africa	Annex 1 (non- breeding)	Stage 1.1 (SPA), Criterion 6 (Ramsar)	N	
Little Tern Sternula albifrons	81 pairs (2010-2014)	4.3% GB	Annex 1 (breeding)	Stage 1.1	N	
Common Tern Sterna hirundo	399 pairs ((2010-2014)	4.0% GB	Annex 1 (breeding)	Stage 1.1	Y	
Pied Avocet Recurvirostra avosetta	18 pairs (2010-2014)	1.2% GB	Annex 1 (breeding)	Stage 1.1	Y	
Ruff Calidris pugnax	19 individuals (2011/12-2015/16)	2.4% GB	Annex 1 (non- breeding)	Stage 1.1	Y	
Red Knot Calidris canutus	5,509 individuals (1991/92-1995/96)	1.6% NE Canada/Greenland/ Iceland/UK population	Migratory (winter)	Stage 1.2 (SPA), Criterion 6 (Ramsar)	N	
Common Redshank Tringa totanus	1,648 individuals (1987-1991)	1.1% East Atlantic population	Migratory (passage)	Stage 1.2 (SPA), Criterion 6 (Ramsar)	N	
Feature	Count (period)	Average number of individuals		Seleo	Selection Criteria	
Waterbird assemblage 2011/12-2015/16 26,014 individuals (SPA assemblage) 26,786 individuals (Ramsar assembla		assemblage), nsar assemblage)	Stage1.3 (SPA), Criterion 5 (Ramsar)			

The conservation objectives for the SPA and the individual species and assemblage of species for which the site is classified are:

Subject to natural change, ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

The HRA also details that European sites are underpinned by Sites of Special Scientific Interest (SSSI) with SSSIs being divided into management units. In relation to this proposed development the relevant SSSI is Teesmouth and Cleveland Coast. The closest management unit to the application site is Unit 7 River Tees for which there is currently "*no identified condition threat*" according to Natural England. Common Terns use these reaches of the tidal River Tees for foraging in the summer months, while Redshank and Curlew Numenius arquata feed and roost on the intertidal margins during the non-breeding season.

The HRA at Stage 1 has identified the following potential likely significant effects resulting from the proposed development that require further consideration at Stage 2:

• Loss of supporting habitats caused by the development.

- Changes to flight lines or sight lines for waterbirds occasioned by the development.
- Disturbance to waterbirds caused by the development.
- Discharges to water caused by the development.
- Emissions to air caused by the development.

The HRA at Stage 2 has considered the above likely effects. As part of the assessment consideration has been given to both the likelihood of the effect impacting on the conservation objectives of the European sites and the significance of any such effects. In assessing both the likelihood and significance, consideration has been given to any potential mitigation measures that would form part of the development process. The HRA has made the following assessment/conclusions:

Loss of supporting habitats caused by the development

No supporting habitat for SPA birds will be lost as a result of the development, so no adverse effect on SPA integrity can be assumed.

<u>Changes to flight lines or sightlines for waterbirds occasioned by the development.</u>

Given the distance of the development site from the SPA (approximately 1km at the closest point) it is considered that sightlines for waterbirds utilising the SPA will be unaffected. Furthermore, since no supporting habitat known to harbour SPA waterbirds exists in the hinterland of the development site, it follows that there will be no impact upon established flight lines. There is therefore no potential for these factors to have an adverse effect on the integrity of the SPA.

Disturbance to waterbirds caused by the development.

It is considered that the distance between the development site and the SPA effectively rules out noise and visual disturbance from impacting upon waterbirds within the SPA boundaries. Furthermore, there is no suitable habitat for SPA birds on the Site itself. It is therefore safe to conclude that there is no possibility of disturbance to waterbirds caused by the development leading to adverse effect on the integrity of the SPA.

Discharges to water caused by the development.

Construction activities may have the potential to result in accidental discharges to water, via the Kinkerdale Beck, which ultimately discharges to the tidal River Tees which forms part of the SPA. The Kinkerdale Beck is culverted at depth below the Site but there currently appears to be some connection to it via a settlement pond. To mitigate against any potential accidental discharges, a Construction Environment Management Plan (CEMP) will be in place during the construction phase. Among other measures the CEMP will implement measures, "to prevent sediment, dust, surface water run-off and other substances from entering watercourses". Given this embedded mitigation it is considered that significant pollution at a scale likely to affect the SPA is highly unlikely to occur during the construction phase, so adverse effect on SPA integrity from this source can be ruled out.

Regarding the operational phase, a detailed drainage strategy will be provided to set out how any impacts on water will be managed during all phases of the development once operational. The drainage strategy will be designed among other objectives, to ensure that no adverse effect on SPA integrity is likely to result from discharges to water on the development site in the operational phase.

Emissions to air caused by the development

During construction work there is the potential for dust and particulates to be created without suitable mitigation measures. Mitigation will again be provided by the CEMP, which will ensure that any emissions of dust and particulates will be minimised and controlled thereby negating any potential for an adverse effect on the integrity of any of the designated sites.

Of the interest features of the Teesmouth and Cleveland Coast SPA being assessed only breeding Little Tern is considered likely to be impacted by air quality. Little Terns breed on sand/ shingle habitats where the vegetation is sparse. An increase in Nitrogen oxides (NOx) could result in an increase in vegetation growth which would render the Little Terns breeding habitat unsuitable. Little Terns currently breed at Seaton Carew which is approximately 8km north west of the closest point of the Site. They have historically bred at South Gare and Seaton Snook, which are respectively 5.5km north and 5km north west of the closest point of the Site. However, both of these historical breeding locations no longer have any suitable habitat for breeding Little Terns.

The North York Moors SAC could be affected by air quality through an increase in NOx favouring plant species which would outcompete the vegetation types for which the SAC is designated. Also increases in Sulphur Dioxides (SO2) could result in phytotoxic effects.

An air quality assessment (AQA) of the proposal has been carried out. The AQA has compared the predicted maximum ground level concentrations of NOx and SO2 with the relevant critical levels for both the Little Tern breeding site and the sector of the North York Moors SAC that is within a 10km radius of the Site. Both NOx and SO2 at each of those locations are below 1% of the critical level. Environment Agency guidelines state that levels that are < 1% of long-term levels are classed as insignificant.

It should also be noted that the Little Tern breeding site is located on a public recreational beach which is subject to annual beach cleaning outside of the breeding season. This effectively removes all vegetation, which means that it cannot build up to the point where it adversely affects the breeding habitat, regardless of air quality. In-combination effects have also been considered within Stage 2 of the HRA. In assessing these, other planned development projects in the vicinity of the site have been considered. Those schemes that have been considered are:

- R/2022/0773/ESM Tees Valley Lithium Limited (Approved 24/11/22)
- R/2023/0291/ESM Green Lithium Refining Limited (Approved 25/07/23)
- R/2019/0767/OOM Outline application for the construction of an energy recovery facility (ERF) and associated development (Approved 24/07/2020)

The HRA considers that due to reasons including proximity of the development site and the interactions between them, there is not considered to be any in-combination effects on the designated sites.

The HRA therefore concludes that the proposed development will not cause adverse effects on the integrity of the Teesmouth Coast SPA and Ramsar site either alone or in-combination. This is provided that suitable mitigation is provided and delivered.

In considering the HRA provided by the applicant in support of the application, consultation responses have been provided by Natural England. In their most recent response on the 19th February 2024, Natural England state:

Natural England does not currently have sufficient information on the proposal's anticipated emissions to air and water to provide substantive advice on the potential impacts on nearby designated sites...

..... the applicant has proposed to secure the provision and assessment of this further information by way of planning condition...

... Ultimately, any decision on the appropriateness of conditions is for your LPA to make, taking into account the relevant tests for planning conditions.

The applicant's agent has sought to provide clarity to the proposed approach, and appropriateness for using a planning condition. In a letter to the LPA dated 1st March 2024 the agent states:

The planning application seeks permission for the detailed design of the main Electric Arc Furnace building and outline permission for all other elements including the stacks and apparatus that will control and manage emissions and effluent. As you will appreciate, outline application/permission is the approach that enables the grant of planning permission for the principle of development, ahead of a point in time when the final design and specification of the development is known and finalised.

There are elements of the Electric Arc Furnace project that are not at detailed design stage at the current time. British Steel will continue to work towards final design solutions and the selection of the specification of apparatus following the grant of planning permission. This is not an unusual approach and is what outline planning permission allows for: essentially to enable a multi-phased consenting process. The next phase would be the submission of reserved matters once the final design and specifications are known, alongside the discharge of conditions attached to the permission. A Habitat Regulations Assessment (HRA) was submitted with the application that assesses the scheme in so far as what is known in respect of the design and specification of the project at this outline stage. The conclusions of the HRA are that there would be no likely significant effects on protected habitat sites, based upon the information, design and specification of the project that is known at this time.

Because the final specification of apparatus, including that which will control and manage air emissions, has not yet been selected by British Steel, then Natural England, quite correctly, have stated they do not have sufficient information to provide substantive advice at this stage. This has led Natural England to advise Redcar Council that it may wish to impose a condition to require further consideration of impacts at a post-permission stage.

Habitat Regulations Assessment (HRA) is the process through which impacts on protected habitats from proposed development are assessed. National Practice Guidance1 supports the use of HRA in multi-stage consenting, including planning applications and subsequent environmental permitting stage. This position is further clarified in the Government Ministerial Statement of 20 July 2022 ("Statement on improving water quality and tackling nutrient pollution") where it sets out that:

"The Habitats Regulations Assessment provisions apply to any consent, permission, or other authorisation, this may include post-permission approvals; reserved matters or discharges of conditions."

The Natural England response was issued on the 19th February and discussions have since been had between British Steel's advisors and Lichfields. This led to us discussing and agreeing the wording of a suitable condition that enables further review and assessment of habitat impacts, following the grant of the hybrid planning application, in accordance with the accepted approach summarised above.

As a result of the response from Natural England and the position outlined by the applicant above, the Council has sought further advice from the retained ecological consultant with regard to the appropriateness of the use of a planning condition. The advice from the consultant is as follows:

As discussed, our opinion is that it would be preferable to have a completed HRA submitted with the application, which would be prepared on a precautionary basis making use of such parameters as are available and the commitment to a condition that sets out the envelope of parameters for the equipment required to scrub the emissions; the specification of the equipment would then be conditioned. However, it is understood that the applicant is not comfortable with that position, not having specifications for the equipment at this stage, and is willing to accept the onus of risk with regards to any objection post-determination as a result of completing the HRA as a condition. While this is not a standard approach, as has been demonstrated, there is precedent and Natural England, although reluctant, have given leeway to apply this option. Therefore, we do not see any barriers with regard to Natural England's position or the Habitat Regulations to the Authority accepting this approach and agree that the condition, as proposed, is appropriate.

It should be noted that the Redcar & Cleveland adopted local plan (2018) Policy N4 states that: Development requiring Appropriate Assessment will only be allowed where: a. it can be determined through Appropriate Assessment at the design stage that, taking into account mitigation, the proposal would not result in adverse effects on the site's integrity, either alone or in combination with other plans or projects. 'At design stage' would normally be taken to mean that this is included at application, but may be construed to extend to detailed design, as would be the case in this situation.

The consultant acknowledges that the while preferable to have a completed HRA at the time the application is determined, given the lack of a final design/specification of the relevant equipment, a condition is appropriate. It is noted that this places the onus on the applicant to discharge the condition prior to the commencement of development at the site to the satisfaction of the Local Planning Authority and Natural England. The final wording of the condition is considered to meet the requirements set out in the consultation response received from Natural England on 19th February 2024 and will ensure that any necessary protection is provided to protected sites through the final design solution.

In view of the above assessment and subject to appropriate discharge of the proposed condition, the development raises no issues in respect of Policy SD4 (General Development Principles) (e)(h) and (n) of the Local Plan and the development meets the requirements of Policy LS4 (South Tees Spatial Strategy) (y) in that proposals will protect European sites and safeguard the sites of biodiversity interest along the River Tees and the estuary.

In terms of policy N4 (Biodiversity and Geological Conservation) the development raise no issues. Policy N4 seeks to prioritise the protection of internationally important sites, including the coastal SPA/Ramsar area and, in specific circumstances, development is required to be subject to Appropriate Assessment. The policy requires that development requiring Appropriate Assessment will only be permitted where;

...it can be determined through Appropriate Assessment at the design stage that, taking into account mitigation, the proposal would not result in adverse effects on the site's integrity, either alone or in combination with other plans or projects...

The submitted HRA has confirmed that the above policy test is met based on the information available at this time, and that the development will not give rise to adverse impacts on the designated sites, however it is recognised that this will be revisited at the time the proposed condition is discharged. Based on the submitted HRA and the imposition of the proposed condition, officers are satisfied there will be no such adverse impacts and in view of the above assessment, the development raises no policy conflict in respect of policy N4 of the Local Plan.

Conclusion

The application has been supported by an EIA as Schedule 2 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. 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.

The proposed development site is situated within the defined development limits as identified on the Redcar and Cleveland Local Plan Polices Map, the application is therefore considered to accord with Policy SD3 (Development Limits) of the Redcar and Cleveland Local Plan. The site also sits within the South Tees area which is covered by Policy LS4 (South Tees Spatial Strategy) of the Local Plan. Policy LS4 seeks to deliver a number of aspirations including the delivery of inward investment and encourage clean and more efficient industry to help reduce carbon dioxide emissions and risk of environmental pollution. The proposed development is considered to be in accordance with Policy LS4 of the Recar and Clevland Local Plan. The site is also safeguarded for employment related uses under Policy ED6 (Promoting Economic Growth) of the Local Plan. The proposed development is for an EAF which falls under use class B2 which is one of the use classes supported by Policy ED6.

The proposed development as has been detailed in the report is of a sizeable scale. Consideration has been given to the impact of the proposed development both with regard to the landscape within which the development is proposed as well as occupiers within buildings/dwellings in close proximity to the proposed development site. It is considered that the proposed development is acceptable for its location and therefore complies with Policies SD4 and N1 of the Redcar and Cleveland Local Plan.

The application has been considered by National Highways and Recar and Cleveland Highway Engineers with regard to the impacts on the highway network. The proposed development site is to be served via the existing highway network from the roundabout on the Trunk Road. Having considered the submitted information, there is no objection to the proposed development with regard to highway safety subject to the imposition of a number of conditions that relate to both the construction and operational phase of the development. It is considered that the proposed development is acceptable with regard to highway matters and therefore complies with Policy SD4 (General Development Principles), TA1 (Transport and New Development) and TA2 (Improving Accessibility Within the Borough and Beyond) of the Redcar and Cleveland Local Plan.

Matters relating to flooding/drainage, ecology, air quality, ground conditions, climate change and waste management have been considered through the relevant chapters of the ES. Consultation responses have been received from the relevant internal and external consultees, and where required conditions have been drafted to provide suitable mitigation measures as requested.

The proposed development is considered to result in positive benefits to the local area, including; the development of the site, further inward investment to the area, job creation and other associated economic benefits.

Taking all of the above into consideration the proposed development is considered to comply with policies SD1 (Sustainable Development), SD2 (Locational Policy), SD3 (Development Limits), SD4 (General Development Principles), SD5 (Developer Contributions), SD6 (Renewable and Low Carbon Energy), SD7 (Flood and Water Management), LS4 (South Tees Spatial Strategy), ED6 (Promoting Economic Growth), N1 (Landscape), N2 (Green Infrastructure), N4 (Biodiversity and Geological Conservation), TA1 (Transport and New Development), TA2 (Improving Accessibility Within the Borough and Beyond) and the Tees Valley Joint Minerals and Waste Core Strategy Development Plan Document (September 2011). The application is therefore recommended for approval subject to the following conditions.

RECOMMENDATION

Taking into account the content of the report the recommendation is to:

GRANT PLANNING PERMISSION for the development described as:

DETAILED PLANNING PERMISSION FOR THE ERECTION OF STEEL MANUFACTURING FACILITY (ELECTRIC ARC FURNACE) AND OUTLINE PERMISSION FOR ASSOCIATED BUILDINGS, APPARATUS AND INFRASTRUCTURE (ALL MATTERS RESERVED)

subject to the following conditions:

CONDITIONS RELATING TO THE FULL APPLICATION

1. The development shall not be begun later than the expiration of THREE YEARS from the date of this permission.

REASON: Required to be imposed pursuant to 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 plans:

Proposed Site Plan - 1852-TEE-P-10.02 Rev A received by the Local Planning Authority on 26/01/24 Proposed Floor Plans - 1852-TEE-P-20.01 Rev A received by the Local Planning Authority on 24/01/24 Proposed Roof Plans - 1852-TEE-P-20.02 Rev B received by the Local Planning Authority on 26/01/24 Proposed Elevations - 1852-TEE-P-30.01 Rev Breceived by the Local Planning Authority on 24/01/24

REASON: To accord with the terms of the planning application.

3. Prior to any development above damp proof course details of the external materials to be used in the carrying out of this permission (including samples) shall have first been submitted to, and approved in writing by the Local Planning Authority. The development shall be completed in accordance with the approved details.

REASON: To ensure that the appearance of the development would respect the site and the surroundings in accordance with policy SD4 of the Local Plan.

4. Prior to the construction of the final surface treatment, for any hard surfaced areas, details of the materials to be used shall have first been submitted to, and approved in writing by the Local Planning Authority. The development shall be completed in accordance with the approved details.

REASON: To ensure that the appearance of the development would respect the site and the surroundings in accordance with policy SD4 of the Local Plan.

CONDITIONS RELATING TO THE OUTLINE APPLICATION

- 5. In accordance with the phasing plan agreed through the discharge of condition 9, details of the:
 - Appearance;
 - Landscaping;
 - Layout;
 - Access; and
 - Scale

(hereafter called "the reserved matters) shall be submitted to and approved in writing by the Local Planning Authority before that phase of the development shall take place. The development shall be carried out as approved, unless otherwise agreed in writing. REASON: Required to be imposed pursuant to Section 92 of the Town and Country Planning Act 1990 as amended by the Planning and Compulsory Purchase Act 2004.

6. Details of the reserved matters shall be submitted to and approved in writing by the Local Planning Authority before the expiration of three years from the date of this permission. The development hereby permitted shall be begun not later than the expiration of two years from the final approval of the reserved matters or, in the case of approval on different dates, the final approval of the last of the reserved matters to be approved, whichever is later.

REASON: To reserve the rights of the Local Planning Authority with regard to these matters and required to be imposed pursuant to the Planning & Compulsory Purchase Act 2004.

7. The development hereby permitted shall be carried out in accordance with the following approved plan:

Proposed Parameters Plan – Project No. 1852-TEE Drawing No. D-10.01 Rev. A

REASON: To accord with the terms of the planning application.

8. No development shall be occupied until full details of proposed soft landscape management has been submitted to and approved in writing by the Local Planning Authority.

The soft landscape management plan shall include, long term design objectives, management responsibilities and maintenance schedules, replacement programme for all landscape areas including retained vegetation, maintenance access routes to demonstrate operations can be undertaken from publicly accessible land, special measures relating to the time of year such as protected species and their habitat, management of trees within close proximity of private properties etc. This information shall be submitted to and approved in writing by the Local Planning Authority.

Any vegetation within a period of 5 years from the date of from the date of completion of the total works that is dying, damaged, diseased or in the opinion of the LPA is failing to thrive shall be replaced by the same species of a size at least equal to that of the adjacent successful planting in the next planting season.

Landscape maintenance shall be detailed for the initial 5 year establishment from date of completion of the total scheme regardless of any phased development period followed by a long-term management plan for a period of 20 years. The landscape management plan shall be carried out as approved. REASON: To ensure satisfactory landscaping to improve the appearance of the site in the interests of visual amenity.

CONDITIONS RELATING TO BOTH THE FULL AND OUTLINE ELEMENTS OF THE APPLICATION

9. No development shall commence until a phasing plan for the application site has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved phasing plan unless otherwise approved in writing with the Local Planning Authority. The applicant reserves the right to amend the phasing plan.

REASON: To ensure that the development takes place in accordance with the principles, parameters and application submission.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required as the a Phasing Plan will establish the first phase of development to proceed.

- 10. Prior to the commencement of each phase of the development, a Construction Environmental Management Plan (CEMP) for that phase of the development shall be submitted to and approved in writing by the Local Planning Authority, or any other subsequent variation approved in writing. The CEMP will include measures relating to highways, ecology, materials and health and safety with particular reference to those matters below. The development shall thereafter take place in accordance with the approved details.
 - Construction Dust Management Plan;
 - Construction Vibration Management Plan;
 - Construction Noise Management Plan;
 - Construction Waste Management Plan ('CWMP');
 - Materials Management Plan ('MMP');
 - Health and Safety Plan for asbestos and watching brief where necessary;
 - Car Parking Management Plan and Servicing Management Plan; and
 - A Construction Stage Surface Water Management Plan
 - Invasive Non-Native Species ('INNS') Management Plan

REASON: To ensure the environmental effects of construction are appropriately managed.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required as the environmental impact of the development will occur on the commencement of development.

11. No development shall commence on each phase until a detailed Remediation Scheme to bring that phase to a condition suitable for the intended use (by removing unacceptable risks to human health, buildings and other property and the natural and historical environment including an Unexploded Ordnance Risk Assessment (UXO)) has been submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall include a timetable for the works to take place. The development shall be carried out in accordance with the approved scheme, unless otherwise approved.

REASON: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised.

REASON FOR PRE-COMMENCEMENT: The information is required prior to any works commencing on site it relates to land contamination details which are often the first works on site and relate to site preparation.

12. The Approved Remediation Scheme, for each phase, shall be implemented in accordance with the approved timetable of works. Prior to the occupation of any unit in that phase, a Verification Report (that demonstrates the effectiveness of the remediation carried out) must be produced and is subject to the approval in writing of the Local Planning Authority.

REASON: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised.

13. In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken and where remediation is necessary a remediation scheme must be prepared, which is subject to the approval in writing of the Local Planning Authority. Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority.

REASON : To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

14. No part of the development hereby permitted shall commence until a Construction Traffic Management Plan has been submitted and agreed in writing by the Local Planning Authority in consultation with National Highways. Construction of the development shall then be carried out in accordance with the agree Construction Traffic Management Plan.

REASON: To mitigate and adverse impact from the development on the A174 and A1053 in accordance with DfT Circular 01/2022.

REASON FOR PRE-COMMENCEMENT: The information is required prior to any works commencing on site as the information relates to construction activity and site preparation.

15. The predicted peak hour two-way movement trips associated with the approved development, in combination with development brought forward under permission refs. R/2020/0819/ESM, R/2020/0820/ESM, R/2020/0821/ESM, R/2020/0822/ESM and R/2020/0823/ESM (and reserved matters approvals granted pursuant to those outline permissions), shall be equal to, or less than:

Junction	AM peak hour two-way vehicle trips	PM peak hour two-way vehicle trips
A1053 (Greystone Road) / A1085 (Truck Road) [NZ556209]	983	858
A174/A174/A1053 (Greystone Road) / High Street [NZ568193]	462	397

For the purposes of interpreting the above: the 'AM Peak hour' is defined as the busiest hour between 07.00-10.00; the 'PM Peak hour' is defined as the busiest hour between 16.00-19.00.

REASON: In order to ensure the satisfactory operation of the highway.

16. No development pursuant to this permission shall be occupied until a scheme for monitoring traffic generated by the Electric Arc Furnace development (to identify any net additional trips above existing predevelopment traffic within the wider British Steel site) within the peak hours set out in condition no.14, has been submitted to and approved by the Local Planning Authority in consultation with National Highways. The monitoring scheme shall thereafter be implemented.

REASON: To inform the design of any necessary highway improvements.

17. Prior to the first occupation of the Electric Arc Furnace, a Travel Plan shall be submitted to and approved in writing by the Local Planning Authority. The Travel Plan shall include measures to encourage travel using sustainable transport means. Thereafter the development shall be implemented in accordance with the approved Travel Plan, unless otherwise is agreed in writing.

REASON: to ensure that the end users can make an informed choice as to the method of sustainable transport.

18. No part of the development hereby permitted shall be occupied until an Operational Management and Monitoring Plan has been submitted to and approved in writing by the Local Planning in consultation with National Highways and implemented. The development hereby permitted shall then be operated in accordance with the agreed plan.

REASON: To mitigate any severe or unacceptable impact from the development on the A174 and A1053 in accordance with DfT Circular 01/2022.

19. Prior to the commencement of any development, or as otherwise approved through a phasing plan approved through this planning permission, full details of the finished floor levels for that phase shall be submitted to the Local Planning Authority for its written approval. The proposed FFL shall be no lower than 10.0m AOD. The development shall be carried out in accordance with the approved details.

REASON: To confirm the finished floor level of the development in the light of any necessary groundworks to meet the requirement of other planning conditions and confirm the overall height of the final scheme in the context of the information provided in the Environmental Statement.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required so that the final agreed levels for the site are not compromised by the start of groundworks.

20. An Operational Waste Management Plan shall be submitted to and approved in writing by the Local Planning Authority prior to the occupation of each building on site. The management measures shall be complied with thereafter, unless otherwise agreed in writing.

REASON: To ensure the development is carried out in accordance with approved details.

21. Prior to the installation of any external lighting, full details of the lighting shall be submitted to the Local Planning Authority for its written approval. The development shall be carried out in accordance with the approved details, unless otherwise agreed in writing.

REASON: To ensure the satisfactory implementation of the approved scheme in the interests of the visual amenity of the locality and the appearance of the development.

22. Prior to the first occupation of any building, or as approved through the phasing plan, a Detailed Noise Assessment shall be submitted to and approved in writing by the Local Planning Authority for that building. Any measures and recommendations within the report will be complied with thereafter, unless otherwise agreed in writing.

REASON: In the interest of neighbour amenity and protect and to ensure that the development can be carried out safely without unacceptable risks to workers, or commercial neighbours.

23. Prior to the first occupation of any building, or as approved through the phasing plan, full details of an Operation Site Management System shall be submitted to and approved in writing by the Local Planning Authority. Any measures and recommendations within the report shall be complied with thereafter, unless otherwise agreed in writing.

REASON: In the interest of amenity and to ensure that the development can be carried out safely without unacceptable risks to workers, or commercial neighbours.

24. A Gas Risk Assessment shall be submitted to and approved in writing by the Local Planning Authority prior to the occupation of each building on site. Any protection measures or gas mitigation will be complied with thereafter, unless otherwise agreed in writing.

REASON: To ensure that risks from gas to the future users of the land and neighbouring land are minimised and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors

25. Prior to the first occupation of any building, or as approved through the phasing plan, full details of air quality assessment shall be submitted to and approved in writing by the Local Planning Authority; the report shall demonstrate how the EAF facility will be designed to meet the requirements of Best available techniques (BAT). Any measures and recommendations within the report shall be complied with thereafter, unless otherwise agreed in writing.

REASON: In the interest of amenity.

26. Prior to the commencement of any phase, a detailed scheme for the disposal of foul and surface water from that phase shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include the following:

(i) The timetable and phasing for construction of the drainage system(ii) Details of any control structure(s)

(iii) Details of surface water storage structures

Thereafter the development shall take place in accordance with the approved details.

REASON: To prevent the increased risk of flooding from any sources in accordance with the NPPF.

REASON FOR PRE-COMMENCEMENT: The information is required prior to any works commencing on site it relates to drainage details which are often the first works on site and relate to site preparation.

27. Prior to the commencement of any phase or as approved as part of the phasing plan, details shall be submitted to and approved in writing by the Local Planning Authority of the Surface Water Management and Maintenance Plan applicable to that phase, unless otherwise agreed in writing. Thereafter it shall be implemented in accordance with the approved details.

REASON: To ensure the development is supported by a suitably designed surface water disposal infrastructure scheme which is appropriately maintained and to minimise the risk flooding and contamination of the system during the construction process and in the locality minimise.

REASON FOR PRE-COMMENCEMENT: The information is required prior to any works commencing on site it relates to drainage details which are often the first works on site and relate to site preparation.

- 28. Unless an updated Habitat Regulations Assessment is prepared and its conclusions are agreed with Natural England that no likely significant effects are to arise on the Teesmouth and Cleveland Coast SPA, the development shall not commence until details of a scheme to avoid and/or mitigate any levels (that would result in likely significant effects) of nitrogen deposition, emissions and discharge from the approved Electric Arc Furnace facility to the River Tees Catchment has been submitted to and approved by the LPA in writing. Any such Habitats Regulations Assessment prepared in accordance with this condition shall ensure that the following potentially affected designated sites are assessed:
 - a) North York Moors Special Area of Conservation (SAC)
 - b) North York Moors Site of Special Scientific Interest (SSSI)
 - c) Teesmouth and Clevland Coast Special Protection Area (SPA)
 - d) Teesmouth and Clevland Coast Ramsar site
 - e) Teesmouth and Cleveland Coast SSSI

The development shall thereafter be constructed and operated in accordance with any necessary approved mitigation scheme, unless otherwise agreed in writing.

REASON: In order to ensure that any adverse effects from the approved development on the Tees Special Protection Area are appropriately avoided and/ or mitigated.

REASON FOR PRE-COMMENCEMENT: The information is required prior to any works commencing on site as the information relates to matters that are required to be addressed early within the design and construction phase of the development. 29. The development hereby approved shall not be brought into use until the areas for vehicle parking have been constructed and laid out in accordance with the approved drawing '1852-TEE-P-10.02A - Proposed Site Plan', or such plans which are subsequently submitted to and approved in writing by the Local Planning Authority. Such areas shall thereafter be retained in perpetuity for the sole purpose of parking vehicles.

REASON: To ensure a satisfactory form of development and in the interests of highway safety having regard for local plan policy and sections 9 and 12 of the NPPF.

30. The development hereby approved shall not be brought into use until covered and secure cycle parking facilities, have been provided in accordance with drawing(s) to be submitted to and approved in writing by the Local Planning Authority. Such drawings to show the position, design, materials and finishes thereof. Thereafter the cycle parking facilities shall be retained in perpetuity for the sole purpose of parking cycles.

REASON: To ensure a satisfactory form of development and in the interests of highway safety having regard for local plan policy and sections 9 and 12 of the NPPF.

31. The development hereby approved shall not be commenced until a detailed method of works statement has been submitted to and approved in writing by the Local Planning Authority. Such statement shall include at least the following details;

a)Routing of construction traffic, including signage where appropriate; b)Arrangements for site compound and contractor parking; c)Measures to prevent the egress of mud and other detritus onto the public highway; d)A jointly undertaken dilapidation survey of the adjacent highway:

d)A jointly undertaken dilapidation survey of the adjacent highway;e)Program of works; and,

f) Details of any road/footpath closures as may be required.

The development must be carried out in accordance with the approved details.

REASON: To ensure that the development can be carried out in a manner that will not be to the detriment of amenity of local residents, free flow of traffic or safety of highway users having regard for local plan policy.

32. Prior to the commencement of development a Local Employment Scheme for the construction of that building shall be submitted to, and approved in writing by, the Local Planning Authority. The development shall be implemented in accordance with the approved Scheme or any variations approved in writing by the Local Planning Authority. The submitted Local Employment Scheme should include the following:

1. Details of how the initial staff/employment opportunities at the Development will be advertised and how liaison with the Council and other bodies will take place in relation to maximising the access of the local workforce to information about employment opportunities; 2.Details of how sustainable training opportunities will be provided for those recruited to fulfil staff/employment requirements including the provision of apprenticeships;

3.A procedure setting out criteria for employment, and for matching of candidates to the vacancies;

4.Measures to be taken to offer and provide college and/or work placement opportunities at the Development to students within the locality;

5.Details of the promotion of the Local Employment Scheme and liaison with tenants contractors engaged in the construction of the Development to ensure that they also apply the Local Employment Scheme so far as practicable having due regard to the need and availability for specialist skills and trades and the programme for constructing the development; 6.A procedure for monitoring the Local Employment Scheme and reporting the results of such monitoring to the Council including details of the origins qualifications numbers and other details of candidates; and, 7.A timetable for the implementation of the Local Employment Scheme."

REASON: To ensure a suitable strategy for local employment opportunities is implemented.

REASON FOR PRE-COMMENCEMENT: The information is required prior to any works commencing on site as the information relates to construction activity and site preparation.

33. During construction and operation, works at the site can take place 24 hours a day and 7 days a week.

REASON: To ensure the development is carried out in accordance with the terms of the Environmental Statement.

34. Prior to occupation of the development a greenhouse gas assessment shall be undertaken in respect of the operation of the proposed buildings. It shall be submitted to and approved in writing by the Local Planning Authority. Measures set out within the assessment shall be complied with thereafter, unless otherwise agreed in writing.

REASON: To ensure the environmental effects of construction are appropriately managed.

35. There shall be no habitat or buildings that may support nesting birds removed between March to the end of August unless the project ecologist has first undertaken a checking survey immediately prior to the

clearance and confirms in writing to the Local Planning Authority that no active nests are present.

REASON: To conserve protected species and their habitat in accordance with policy N4 of the Local Plan.

36. Within 12 months of the grant of this planning permission, an Environment and Biodiversity Strategy shall be prepared and submitted to the local planning authority that confirms the feasibility of providing compensatory habitat equivalent to 10.4 Biodiversity Units, within the site and / or off-site, and the mechanisms for its provision and on-going management. That Strategy shall be approved by the local planning authority. Thereafter, and where compensatory provision is demonstrated within the Strategy to be feasible and deliverable, it shall be carried out in accordance with the Strategy prior to the development becoming operational.

REASON: In the interest of the ecological value and long-term maintenance of the site in accordance with policies SD4 and N4 of the Redcar and Cleveland Local Plan.

STATEMENT OF COOPERATIVE WORKING

Statement of Co-operative Working: The Local Planning Authority considers that the application as originally submitted is a satisfactory scheme and therefore no negotiations have been necessary.