Redcar and Cleveland Borough Council

Planning (Development Management)

APPLICATION NUMBER:	R/2019/0767/OOM
LOCATION:	GRANGETOWN PRAIRIE LAND EAST OF JOHN BOYLE ROAD AND WEST OF TEES DOCK ROAD GRANGETOWN
PROPOSAL:	OUTLINE APPLICATION FOR THE CONSTRUCTION OF AN ENERGY RECOVERY FACILITY (ERF) AND ASSOCIATED DEVELOPMENT

APPLICATION SITE AND DESCRIPTION

The application site is located within the boundary of the STDC and comprises approximately 10.1 hectares of land. The site form part of what has been termed the Prairie site and is located to the west of John Boyle Road and the east of Tees Dock Road and south of the local rail line.

The site is presently vacant land which is relatively flat and featureless having been vacant for several years.

The application made is for outline planning permission for an energy recovery facility and associated infrastructure. The development is one which it was agreed fell under Schedule 1 of the EIA Regulations and it is therefore supported by an Environmental Statement (ES) which covers a range of topic areas agreed as part of the Scoping procedure and a scoping request issued on 10th December 2019.

In addition to the main ES, several component reports support the application including;

- Ecology report
- Design and Access and Planning Statements
- Historic Environment Desk Based Assessment
- Habitat Regulations Assessment
- Water Framework Directive Assessment
- Flood Risk Assessment

The above reports provide the information set out in the full ES.

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)

REDCAR & CLEVELAND LOCAL PLAN (2018)

- SD1 Sustainable Development
- SD2 Locational Policy
- SD3 Development Limits
- SD4 General Development Principles
- LS4 South Tees Spatial Strategy
- ED6 Protecting Employment Areas
- N1 Landscape
- N4 Biodiversity and Geological Conservation
- HE2 Heritage Assets
- HE3 Archaeological Sites and Monuments
- T1 Transport and New Development

TEES VALLEY JOINT MINERALS AND WASTE DEVELOPMENT PLAN DOCUMENTS 2011

OTHER BACKGROUND DOCUMENTS

- South Tees Area SPD May 2018
- STDC Masterplan 2018

PLANNING HISTORY

None recent relevant to the site

RESULTS OF CONSULTATION AND PUBLICITY

The application has been advertised by means of a press notice, site notices and neighbour notification letters.

As a result of the consultation no representations have been received from the general public.

South Tees Development Corporation

No comments

Network Rail

With reference to the protection of the railway, Network Rail has no objection in principle to the development, but below are some requirements which must be met;

Asset Protection
We would advise that developer that if for any reason construction work is required to take place within 10m of the railway boundary, they should consult with our Asset Protection Team (details below) to ensure that there will be no impact on operational railway safety. This will include use of crane, plant and machinery and any excavation or construction work within that distance.

Drainage
All surface and foul water arising from the proposed works must be collected and diverted away from Network Rail property. All soakaways must be located so as to discharge away from the railway infrastructure. The following points need to be addressed:

1. *There should be no increase to average or peak flows of surface water run off leading towards Network Rail assets, including earthworks, bridges and culverts. There should be no ponding of water near the railway boundary caused by the development.*
2. *All surface water run-off and sewage effluent should be handled in accordance with Local Council and Water Company regulations.*

Fail Safe Use of Crane and Plant
All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a "fail safe" manner such that in the event of mishandling, collapse or failure, no materials or plant are capable of falling within 3.0m of the nearest rail of the adjacent railway line, or where the railway is electrified, within 3.0m of overhead electrical equipment or supports.

Excavations/Earthworks
All excavations/ earthworks carried out in the vicinity of Network Rail property/ structures must be designed and executed such that no interference with the integrity of that property/ structure can occur. If temporary works compounds are to be located adjacent to the operational railway, these should be included in a method statement for approval by Network Rail. Prior to commencement of works, full details of excavations and earthworks to be carried out near the railway undertaker's boundary fence should be submitted for the approval of the Local Planning Authority acting in consultation with the railway undertaker and the works shall only be carried out in accordance with the approved details. Where development may affect the railway, consultation with the Asset Protection Project Manager should be undertaken. Network Rail will not accept any liability for any settlement, disturbance or damage caused to any development by failure of the railway infrastructure nor for any noise or

vibration arising from the normal use and/or maintenance of the operational railway. No right of support is given or can be claimed from Network Rails infrastructure or railway land.

Cranes
With a development of a certain height that may/will require use of a crane, the developer must bear in mind the following. Crane usage adjacent to railway infrastructure is subject to stipulations on size, capacity etc. which needs to be agreed by the Asset Protection Project Manager prior to implementation.

Access to Railway
All roads, paths or ways providing access to any part of the railway undertaker's land shall be kept open at all times during and after the development. In particular access to adjacent railway structures should remain clear and unrestricted at all times to ensure that our ongoing programme of inspection and maintenance is not hindered.

For these matters we would be pleased if an informative could be attached to the decision notice.

I trust full cognisance will be taken in respect of these comments. If you have any further queries or require clarification of any aspects, please do not hesitate to contact myself I would also be grateful if you could inform me of the outcome of this application, forwarding a copy of the Decision Notice to me in due course.

Health and Safety Executive (HSE)

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

NATS (En Route)

The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

Teesside Airport

Having reviewed the above outline application, I can inform you that Teesside International Airport no longer has the concerns about the impact to Aircraft from possible emissions released from the chimney that is to be part of the proposed energy from waste plant that were submitted in response to R/2019/0587/SCP.

We therefore have no objection to the outline application in its current form. Should any change, amendment or further application for approval be

submitted, we require that we are further consulted so that we may review our position.

Cleveland Police (ALO)

In relation to this application, applicant is encouraged to contact me for any input/guidance I can offer in relation to designing out opportunities for crime and disorder to occur in the future.

Natural England

First response

As submitted, the application could have potential significant effects on the Teesmouth and Cleveland Coast Special Protection Area (SPA) proposed SPA 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;

An assessment of air pollution impacts on designated site habitats from operation, and indirect impacts on designated site species from increased nutrient loads.

Additional Information required

Impact on Internationally Designated Sites

Natural England notes that the application includes a Shadow Habitats Regulations Assessment which has screened the proposal for the likelihood of significant effects. The assessment concludes that it is possible to rule out the likelihood of significant effects arising from the proposal.

On the basis of the information provided, it is the advice of Natural England that it is not possible to conclude that the proposal is unlikely to result in significant effects on the European sites in question.

Natural England advises that the assessment currently does not provide enough information and / or certainty to justify the assessment conclusion and that your authority should not grant planning permission at this stage. Where there is a likelihood of significant effects (excluding any measures intended to avoid or reduce harmful effects on the European site) or there are uncertainties, a competent authority should undertake an appropriate assessment in order to fully assess the implications of the proposal in view of the conservation objectives for the European site(s) in question.

Natural England therefore advises that an appropriate assessment should now be undertaken, and the following information is provided to assist you with that assessment:

- *The Habitats Regulations Assessment concludes no likely significant effect from air pollution as a result of the proposals. This assessment focusses on pollution from vehicle movements and does not consider emissions from the facility itself during operation. Habitats within the SPA and pSPA, upon which the interest features rely could be affected by changes to nutrient levels from deposition, leading to an indirect impact on the interest features. This possibility does not appear to have been considered.*
- *This conclusion contradicts the text in the EIA…..where it states that all impacts from the proposal have the potential for likely significant effects.*
- *Further assessment of the potential impacts from emissions is required……*

The response goes on to set out additional advice in respect of landscapes, protected species, local sites and priority habitats and species; environmental enhancement; access and recreation; Rights of Way and biodiversity.

Second response

SUMMARY OF NATURAL ENGLAND'S ADVICE

NO OBJECTION

Based on the plans submitted, Natural England considers that the proposed development will not have significant adverse impacts on designated sites and has no objection.

Natural England's further advice on designated sites/landscapes and advice on other natural environment issues is set out below.

European sites – Teesmouth and Cleveland Coast Special Protection Area (SPA) and Ramsar site;

Based on the plans submitted, Natural England considers that the proposed development will not have likely significant effects on the Teesmouth and Cleveland Coast Special Protection Area (SPA) and Ramsar site and has no objection to the proposed development.

Natural England notes that the Habitats Regulations Assessment (HRA) has not been produced by your authority, but by the applicant. As competent authority, it is your responsibility to produce the HRA. We provide the advice enclosed on the assumption that your authority intends to adopt this HRA to fulfil your duty as competent authority. Natural England is a statutory consultee on the appropriate assessment stage of the Habitats Regulations Assessment process.

The appropriate assessment concludes that the proposal will not result in adverse effects on the integrity of any of the sites in question. Having considered the assessment, and the further justification for the conclusion

provided in Dorian Latham's email of 26th March 2020, Natural England advises that we concur with the assessment conclusions.

While the air quality assessment suggests that the process contribution deposition on designated sites from the proposal will exceed 1% of the recommended levels this should be taken in the context of reducing contributions elsewhere on the estuary, and available information on current deposition levels taken as an average across a 3 year period (2015-17) which will not fully account for falling contributions.

Teesmouth and Cleveland Coast SSSI

Based on the plans submitted, Natural England considers that the proposed development will not damage or destroy the interest features for which the site has been notified and has no objection.

It should be noted that the advice provided here is made with the caveat that a further assessment of designated site impacts, including an updated Habitats Regulations Assessment will be required when an application for full planning permission is submitted, and we reserve the right to modify our position at that point, when further detail is available.

Natural England has previously provided advice regarding the consideration of protected species and other natural environment issues in our previous letter of 20th January 2020, and while this advice is not repeated here for brevity it remains a material consideration when assessing this application.

Should the proposal change, please consult us again.

Northumbrian Water

The planning application does not provide sufficient detail with regards to the management of foul water from the development for Northumbrian Water to be able to assess our capacity to treat the flows from the development. We would therefore request the following condition:

CONDITION: Development shall not commence until a detailed scheme for the disposal of foul water from the development hereby approved has been submitted to and approved in writing by the Local Planning Authority in consultation with Northumbrian Water and the Lead Local Flood Authority. 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.

Environment Agency

Having reviewed the details of this outline application we are satisfied that the development is acceptable in principle, subject to the submission and review of reserved matters, and have NO OBJECTION.

Beyond this, I have the following advisory comments to make:

Requirement for an Environmental Permit – Advice to Applicant

The proposed incinerator will require a permit under Schedule 5.1 Part A(1) of the Environmental Permitting Regulations (England and Wales) 2016. We will consider the following areas of potential harm when assessing the permit:

- *Management - including accident management, energy efficiency, efficient use of raw materials and avoidance, recovery and disposal of wastes,*
- *Operations - including incoming waste and raw material management, waste charging, furnace types and requirements, validation of combustion conditions, combined incineration, flue gas recirculation, dump stacks and bypasses, cooling systems and boiler design,*
- *Emissions - to surface water, sewer and air, odour, noise and vibration, monitoring and reporting of emissions*

Receiving pre-application advice will help the Applicant submit a good quality application that can be processed (determined) smoothly and quickly. If the Applicant wishes to request either basic (free), or enhanced (chargeable) pre-application advice, they should complete the pre-application advice form.

Movement of Waste Offsite – Advice to Applicant

The application notes that there will be some waste that cannot be used after the energy recovery process. 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 and Wales. The law required 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.

In order to meet the objectives of the waste hierarchy and obligations under the duty of care, it is important that waste is properly classified. Some waste (e.g. wood and wood-based products) may with be hazardous or non-hazardous waste dependent upon whether or not they have had preservative treatments.

Proper classification of the waste both ensures compliance and enables the correct onward handling and treatment to be applied. In the case of treated wood, it may require high temperature incineration in a directive compliant facility.

If you require any local advice or guidance please contact your local Environment Agency office.

Best Available Techniques (BAT) – Advice to Applicant Whilst the Environment Agency has no objections to this application based on the information available, we would like to draw the Applicant's attention to the following informative comments:

- *The latest Waste Incineration Best Available Techniques Reference (BREF) document and inclusive BAT Conclusions (BATC's) will be published before the date of permit issue for the proposed development. Therefore, the permit for the proposed development will be written with the latest BATC's and revised emission limits, which the development will need to comply with from the date of permit issue.*
- *The Environment Agency require all new proposed incineration facilities to be built Combined Heat and Power (CHP)-ready by imposing specific permit conditions. Environmental permit applications for these types of plants will therefore need to include a Best Available Technique (BAT) assessment for CHP-readiness. Permits for these plants are also likely to contain conditions that state opportunities to realise CHP should be reviewed from time to time. These opportunities may be created by building new heat loads near the plant, or be due to changes in policy and financial incentives that make it more economically viable for the plant to be CHP.*

Water Abstraction – Advice to Applicant

The submitted Environment Statement notes that "There are no proposed water abstractions for the site" therefore no licence should be required. However, if the Applicant does plan on temporary abstractions or dewatering of over 20,000 litres per day to enable the works a licence may be required. If they plan to abstract over 20,000 litres of water per day from the attenuation pond for any intervening purpose they may require an abstraction or transfer licence.

Water Framework Directive (WFD) and Biodiversity Net Gain – Advice to Applicant

We agree with the conclusions of the WFD Assessment Report regarding the potential impacts and proposed mitigation of the proposed development relevant to adjacent waterbodies. The WFD should be updated upon submission of the reserved matters application having regard to the details of the proposal.

The proposed development site is located in an area of non-reportable waterbody under the Water Framework Directive (WFD). As such there is no specific monitoring that identifies the status of the water environment in this location or specific objectives that must be achieved. The general objectives of the WFD to prevent deterioration, protect and improve the ecological condition of waters does still apply to non-reportable waterbodies.
The site was formerly coastal grazing marsh associated with the Tees estuary. The development site has been heavily physically modified such that this original habitat has been lost in entirety and restoration is considered infeasible.

We encourage and support the proposal to provide on-site mitigation to improve the ecological condition. There are currently areas of open standing water within brownfield open mosaic habitat. We support the conclusions of the Ecology report dated 18 November 2019 which states:

- *Mitigation measure to include the safeguarding and enhancement of 5.73 Ha of Brownfield habitat, which is adequate to mitigate the loss of habitat, harm to priority species and to deliver a 10% biodiversity net*

We also support the notion that areas of open water habitat are preserved and incorporated into such mitigation.

Tees Estuary Habitat Vision – Advice to Applicant

Should the applicant or operator wish to contribute to wider restoration of the Tees estuary to achieve WFD objectives and a Tees Estuary Habitat Vision then projects are currently operational with others in development. The applicant should contact Tees Rivers Trust and/or INCA as coordinator of the Tees Estuary Partnership.

We would welcome the opportunity to work with the Applicant, particularly in respect to the area safeguard for biodiversity value to ensure the area receives utmost potential, and aid in finalising details.

Please consult us upon submission of the reserved matters.

Highways England

Highways England operate the Strategic Road Network (SRN). Near the above proposed development our network consists of the A1053 between Westgate and Greystones Roundabouts, and the A174 West of Greystones. Having looked at the potential traffic generation from a maximum of 25 employees on site, and mainly off-peak movements generated by the business, we do not see this development causing us any operational concerns due to the low number of additional trips created. I therefore attach a formal response of no objection.

Redcar and Cleveland Borough Council (Development Engineers)

I refer to the application and would offer no objections on highway grounds.

Redcar and Cleveland Borough Council (Local Lead Flood Authority)

The LLFA have reviewed the submitted Flood Risk Assessment dated December 2019 produced by JBA Consulting. The comments are given on the understanding that they relate only to development within site A only. The LLFA would offer no objection in principle to the proposed drainage scheme and agree to a discharge rate that must not exceed 44l/s. It is indicated that the discharge point will be to Holme Beck, this is an ordinary wtaercourse and any connection will require consent from the LLFA. There is insufficient detail submitted at this time to fully assess the drainage scheme and as such the LLFA would require standard LLFA conditions 1, 2 & 3 as detailed below;

Prior to the commencement of the development, or in such extended time as may be agreed in writing with the Local Planning Authority, details shall be submitted and approved of the surface water drainage scheme and the development shall be completed in accordance with the approved scheme. The design of the drainage scheme shall include;

- *(i) Restriction of surface water greenfield run-off rates (QBAR value) with sufficient storage within the system to accommodate a 1 in 30-year storm.*
- *(ii) The method used for calculation of the existing greenfield run-off rate shall be the ICP SUDS method. The design shall also ensure that storm water resulting from a 1 in 100-year event, plus climate change surcharging the system, can be stored on site with minimal risk to persons or property and without overflowing into drains, local highways or watercourses.*
- *(iii) Full Micro Drainage design files (mdx files) including a catchment plan*
- *(iv) The flow path of flood waters for the site as a result on a 1 in 100-year event plus climate change*

REASON: To ensure the development is supported by a suitably designed surface water disposal infrastructure
scheme and to minimise the risk flooding in the locality.

Prior to the commencement of the development, or in such extended time that may be agreed with the Local Planning Authority, details of a Surface Water Drainage Management Plan shall be submitted and approved by the Local Planning Authority. The Management Plan shall include;

(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

(iv) Measures to control silt levels entering the system and out falling into any watercourse during the construction process. The development shall, in all respects, be carried out in accordance with the approved Management Plan.

REASON: To ensure the development is supported by an appropriately designed surface water disposal infrastructure scheme and to minimise the risk of increased flooding and contamination of the system during the construction process.

The development shall not be occupied until a Management & Maintenance Plan for the surface water drainage scheme has been submitted to and approved by the Local Planning Authority; the plan shall include details of the following;

(i) A plan clearly identifying the sections of surface water system that are to be adopted
(ii) Arrangements for the short- and long-term maintenance of the SuDS elements of the surface water system

REASON: To ensure that the surface water drainage infrastructure is maintained to minimise the risk flooding in the locality.

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

With reference to the above planning application, I would confirm that I have assessed the following environmental impacts which are relevant to the development and would comment as follows:

I note this proposed development would be located on an area of potential contaminative use (Factory/Works), which may have led to localised ground contamination. In order to minimise the environmental impact, I would recommend the inclusion of the Standard 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)

With reference to the above planning application, I would confirm that I have assessed the following environmental impacts which are relevant to the development and would comment as follows:

NOISE
I note that an Acoustic Report Reference – J2895 has been undertaken for the above development. At this stage of the development detailed floor plans or layouts have not yet been produced, however noise measurements have been carried out to establish baseline noise levels outside the closest noise sensitive premises and recommend design noise limitations for both construction and operation of the future development.

LIGHT POLLUTION
I note that an Environmental statement has been submitted which considers limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

WASTE DELIVERIES
I note that the design and access statement states that the facility will receive waste during a daytime operation and waste deliveries for the facility will be restricted to specified delivery times i.e. 07:30 – 16:00 Weekdays and 07:30 – 13:00 Saturday.

Redcar and Cleveland Borough Council (Planning Strategy)

Planning Strategy Comments;

The following policies are relevant when considering the proposed development:

National Policy

Planning law requires that planning permission applications should be determined in accordance with the development plan, unless material considerations indicate otherwise. The revised National Planning Policy Framework (NPPF) was published by the government in July 2018, replacing the NPPF from March 2012, and is a material consideration.

It is confirmed in the revised NPPF that where a planning application conflicts with an up-to-date development plan, permission should not usually be granted (para. 7). It is also advised that in determining applications, due weight should be given to local planning policies in accordance with their consistency with the revised Framework, with greater weight given the closer policies are to those in the Framework (see paras. 212 and 213).

Local Plan

Policy SD1 Sustainable Development
Policy SD2 Locational Policy
Policy SD3 Development Limits
Policy SD4 General Development Principles
Policy LS4 South Tees Spatial Strategy
Policy ED6 Protecting Employment Areas

Policy N1 Landscape
Policy N4 Biodiversity and Geological Conservation
Policy HE2 Heritage Assets
Policy HE3 Archaeological Sites and Monuments
Policy TA1 Transport and New Development

Minerals and Waste Development Plan Documents

Policy MWC6 Waste Strategy
Policy MWC7 Waste Management Requirements
Policy MWC8 General Locations for Waste Management Sites
Policy MWP8 South Tees Eco Park

South Tees Area Supplementary Planning Document

Conclusion

The application seeks outline permission for the erection of an energy recovery facility and associated infrastructure on land between John Boyle Road and Tees Dock Road.

The application site is allocated for specialist employment uses under Policy ED6 of the Local Plan. The plan explains that specialist employment uses include heavy industry and logistics and industries such as steel, waste, chemical, refining, utilities, energy, manufacturing, engineering, process industries and port related development.

As the proposal is for a waste management facility, the policies of the Tees Valley Minerals and Waste Core Strategy and Policies and Sites DPDs will also apply. Policy MWC8 identifies the application site as lying within a general location for waste management sites and Policy MWCP8 allocates the site for the development of the South Tees Eco Park.

The South Tees Eco-Park is 27ha which are allocated for development which will recover value from 450,000 tonnes of municipal solid waste and commercial and industrial waste per annum. Appropriate developments for this site are listed within the policy and include large-scale waste management facilities.

In light of the above policies, the principal of the proposal is considered to be acceptable and in line with the development plan for the borough.

Proposals for development within the South Tees are also required, by Policy ED6, to have regard to the principals contained within the South Tees Area SPD, including those for the South Industrial Zone (STDC14) within which the application site is located. The detail of the proposal should also be in line with other policies within the Local Plan.

In particular, Policy N4 states that development which is likely to have a significant effect on any internationally designated site, irrespective of its

location and when considered both alone and in combination with other plans and projects, will be subject to Appropriate Assessment. Such development will then 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 and projects.*

As the application site is located in relatively close proximity to the Teesmouth and Cleveland Coast SPA and Ramsar site, it is considered that an appropriate assessment is likely to be required and it is noted that a HRA and Appropriate Assessment has been submitted with the application.

Redcar and Cleveland Borough Council (Conservation)

The proposals for retention of non-designated assets is considerate and reasonable, as backed up the Council's archaeology consultant (NEAR Ltd) whose expertise I defer to on this matter. There are otherwise no heritage concerns and I consider that the condition suggested by NEAR Ltd will suffice to ensure compliance with Policy HE3 of the local plan.

Redcar and Cleveland Borough Council (NEAR)

Background

1. The application relates to construction of an ERF facility proposed on the south bank of the River Tees, on a site of c. 10 hectares, centred on approximate grid reference NZ 544213. The site is bound to the north by the main Middlesbrough to Redcar railway line, to the east by the site of Lackenby steel works, to the south by industrial units and A66 road, and to the west by industrial units.

2. Application is made by Hartlepool Borough Council on behalf of the other Tees Valley Authorities and is an EA application (schedule 1) which has been the subject of a scoping reply by the LPA. The EA has a cultural heritage chapter (chapter 10), the main constituent of which is a desk-based archaeological assessment (DBA) produced in November 2019 by Tees Archaeology (the joint local authority archaeological service for Hartlepool and Stockton-on-Tees). The DBA methodology is sound, and the interpretation of the archaeological resource and likely effects of the development on that resource are persuasive.

3. As relevant professional guidance requires; the DBA also makes recommendations about the mitigation of the effects on the resource. These recommendations are considered below. Our advice to the LPA is that the proposal is likely to cause significant and, in some parts of the site, substantial harm to an important non-designated heritage asset, but that if (in accordance with national and local policy) the public benefit and other aspects of the proposal are considered to outweigh this harm the harm can be

successfully mitigated by a programme of archaeological work, including some in situ preservation of the asset.

Archaeological Resource

4.1 Within the 1.5 km study area are three listed buildings, but all are in adjacent settlements and are all sufficiently far from the development not to be affected by it: there are modern industrial concerns between the buildings and the proposed development which means that there is no issue of setting (DBA, Page 4).

4.2 There are no scheduled monuments, listed buildings, conservation areas or other designated assets within the study area.

4.3 In total there are 34 sites identified by the HER in the study area. Of these, the sites of significance within the site are of 19th-20th century date.

4.4 Within the application site the likelihood of the presence of remains of prehistoric, roman, early medieval, medieval or post-medieval remains is considered low. The potential of the site lies with possible remains of the Eston Iron Works (1850s) and proven remains of later steel works (1870s onwards). Remains of blast furnace bases of the latter phase were visible during the site visit carried out by the compiler of the DBA, together with physical evidence for the methods of charging and blowing the furnaces. On-site rail lines and concrete structures are also in evidence.

4.5 The DBA comments that "It is clear from the site visit that considerable evidence of the former use of the site survives. This takes the form of the concrete bases of the former installations. In a number of cases rail line was still clearly visible set into the concrete and brick foundations of buildings were also visible. …. In addition to the concrete features the bases of blast furnaces were visible as significant raised mounds c. 2m high with their adjoining raised working surfaces." The DBA assesses the significance of these remains as 'high', and relates that the site has been considered by Historic England to be of national importance.

4.6 The area occupied by the remains measures approximately 100m north-south and 50m east-west. The area is depicted on the site Location plan accompanying the application and is defined as the area of 'Archaeology Interest' in that Plan (and the 'Site Plan').

4.7 Archaeological remains (of the 19th century steel works) could be present on the application site outside the area marked as of 'Archaeology Interest'.

Preservation of remains and Potential Effects of Development

5.1 The DBA notes that the area within which the application site is situated was extensively reclaimed during the nineteenth century, and this limits the possibility of pre-nineteenth century strata being identified on the site. In

addition to reclamation coincident with the industrial use of the site there is also evidence of extensive tipping across the site (of up to 2m deep). The DBA comments that "As far as it is possible to ascertain it is probable that there is good survival [of industrial remains, our italics] beneath this tipping".

5.2 At page 9, the DBA notes that the development will be based on piled foundations and will be preceded by remediation works to be carried out

before construction. "It is understood that this remediation will be to a depth of 2-3m. The remediation and piling are likely to cause severe damage to the visible and below ground remains on the site, i.e. the industrial period remains."

5.3 While virtually all structures and plant have been cleared from the site, we would agree with the main conclusion of the assessment in the DBA that "the actual and potential survival of significant archaeological remains that will throw light on the industrial processes that took place on the site is considered to be high."

5.4 In summary, highly adverse impacts on some archaeological assets of high importance are likely, and further highly adverse impacts on archaeological assets of potentially high importance are possible.

Planning Policy

6.1 The National Planning Policy Framework (2018) provides as follows:

Paragraph 195

Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

1. *a) the nature of the heritage asset prevents all reasonable uses of the site; and*
2. *b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*
3. *c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and*
4. *the harm or loss is outweighed by the benefit of bringing the site back into use.*

Paragraph 197

The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a

balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

6.2 Relevant development plan policy is also found in Redcar & Cleveland Local Plan (adopted 2018). Policy HE3 states that:

Development that may affect a known or possible archaeological site, whether designated or non-designated, will require the results of a desk-based assessment to be submitted as part of the planning application

An archaeological evaluation may also be required to identify the most appropriate course of action.

Development that affects a site where archaeology exists or where there is evidence that archaeological remains may exist will only be permitted if:

1. *The harm or loss of significance is necessary to achieve public benefits that outweigh that harm or loss. Harm or loss may be avoided by preservation in situ or refusal; or*
2. *Where in situ preservation is not required, appropriate satisfactory provision is in place for archaeological investigation, recording and reporting to take place before, or where necessary during, development. Where archaeological investigation, recording and reporting has taken place it will be necessary to publish the findings within an agreed timetable.*

6.3 In application of the above policies to the proposal our advice to the LPA in this instance is that if the public benefit and other aspects of the proposal are considered to outweigh the identified harm to the important non-designated heritage asset, the harm can be successfully mitigated by a programme of archaeological work, including some in situ preservation of the asset. This could be achieved as set out below.

Recommendation

7.1 The DBA recommends that:

a) The surviving bases of the late19th and 20th century blast furnaces should be retained on site and consideration be given to their proper preservation and interpretation. (Figure 26 [of the DBA] gives an indication of the area involved, the precise area and size of this needs to be identified through detailed survey)
b) There should be an archaeological survey of the site as at present in order to record surviving features.
c) There should be archaeological analysis of the sequence of trial trenches and boreholes that South Tees Development Corporation is proposing to better understand the archaeology of the site and to attempt to identify the precise location and possible survival of the 1853 Eston Iron Works Blast Furnaces.

d) There should be archaeological monitoring of ground disturbance works in the vicinity of the surviving blast furnace bases and those of the Eston Iron Works to record features related to their use.

7.2 These are reasonable recommendations and ones which can be developed and secured by any planning permission granted. It is important to note a preliminary aspect to the archaeological work required, consisting of archaeological evaluation of trenching and borehole data, together with an initial survey (drawn and photographed) of all upstanding remains. The survey will assist in accurately identifying the area where remains should be preserved in situ protected from construction works and consolidated before the new development is brought into use. Again, before construction works commence on the site, there will then be a requirement (if practical given the extent of overburden) for any further remains of high significance suggested by the borehole/trenching data, or observed during the initial survey, to be the subject of detailed archaeological investigation (stripped, mapped and sampled). Subsequent to this phase of archaeological work on site, would be a watching brief of all ground disturbance during the remediation works (i.e. overburden and waste removal) and during groundworks e.g. piling, and installation of services, in all areas of the site identified as archaeologically sensitive (mainly but not exclusively) adjacent to remains of 19th century blast furnaces.

7.3 In line with planning policy the results of archaeological investigation should be made publicly available within a reasonable period of time following completion of the investigations. It will also be necessary to agree with the developer a regime for the consolidation and on-going preservation of the remains retained in situ.

7.4 Should it be considered that the public benefits of the proposal outweigh the harm to the heritage asset in this case we suggest the following archaeological condition be attached to any planning permission granted for the development.

(a) No development shall take place until a written scheme of investigation (WSI) for archaeological work has been submitted to and approved in writing by the local planning authority. The WSI shall as a minimum make provision for:

- *Before remediation or development commences, archaeological evaluation of borehole and trenching data*
- *Before remediation or development commences, initial archaeological survey (drawn and photographed) of the whole application site, with particular emphasis on the remains the subject of preservation in situ*
- *Where practical and before remediation or construction works takes place on site an archaeological strip, map and sample of remains of high significance suggested by the borehole/trenching data, or observed during the initial survey*

- An archaeological watching brief of all ground disturbance during the remediation works and during construction groundworks in areas identified as archaeologically sensitive
- Protection during development, followed by consolidation and preservation of high value remains left in situ
- a general programme of works and monitoring arrangements, including reasonable notification to the local planning authority of commencement of works

- details of staff involvement in carrying out the work (including specialists), and their qualifications and responsibilities
- the timetable for completing post-excavation assessment.

(b) Provision for the analysis, archiving and publication of the results of the archaeological surveys and excavations shall be secured to the satisfaction of the local planning authority by the developer before the development is brought into use.

(c) The development shall not without the prior written approval of the local planning authority be carried out otherwise than in accordance with the approved WSI, and the consolidation and preservation of on-site remains as provided for in the WSI (or as otherwise agreed at any time in writing by the local planning authority) shall be secured by the developer and/or landowner on an on-going basis.

REASON: The site contains remains of significant archaeological interest, some of which merit preservation in situ

Redcar and Cleveland Borough Council (Natural Heritage Manager)

I would have no objections to this application, due to the statement that the most appropriate areas of the site will be developed enhanced environmentally in terms of wildlife habitat

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.

Policy SD1(Sustainable Development) of the plan promotes sustainable development in accordance with the NPPF. The plan requires development proposals that accord with the plan to be approved without delay. The broad assessment of the submission is that the development does propose sustainable development in accordance with policy set out in the NPPF and that subject to the detailed assessment of the application, complies with policy SD1.

Policy SD2 (Locational Policy) provides that, the majority of development will be focused in the urban and coastal areas with limited development in the rural hinterland. The development proposed will take place on land within the urban area of South Tees, on previously developed vacant land. Provided the detailed assessment of the application demonstrates there is no adverse impact from the development locally or on sensitive environments, the development will comply with policy SD2 of the plan.

Policy SD3 (Development Limits) states that within development limits and subject to meeting other policies in the plan, development will be supported. The application site is within development limits and approval of the application would accord with policy SD3 provided the development complies with relevant detailed planning policy as assessed below.

Policy SD4 sets out a range of criteria against which development is assessed. A detailed assessment of the application ES is set out below with commentary on relevant SD4 criteria and other relevant detailed plan policies.

The application site lies in an area identified under policy ED6 (Promoting Economic Growth) which safeguards such allocations for employment related development. In addition, the policy requires applications to have regard to the South Tees Area SPD and the associated Master Plan prepared by the STDC; proposals which contribute positively to growth will be supported.

Policy LS4 (South Tees Spatial Strategy) sets out policy for the STDC area.

The site is covered by policy MWC8 of the Mineral and Waste Plan as a general location for large waste management facilities.

Subject to detailed assessment the development will comply with policy ED6, LS4 of the RCLP 2018 and MWC8 of the Mineral and Waste Plan.

The following policies are assessed against the information provided in the ES and supporting documents;

- N1 Landscape
- N4 Biodiversity and Geological Conservation
- HE2 Heritage Assets
- HE3 Archaeological Sites and Monuments
- T1 Transport and New Development

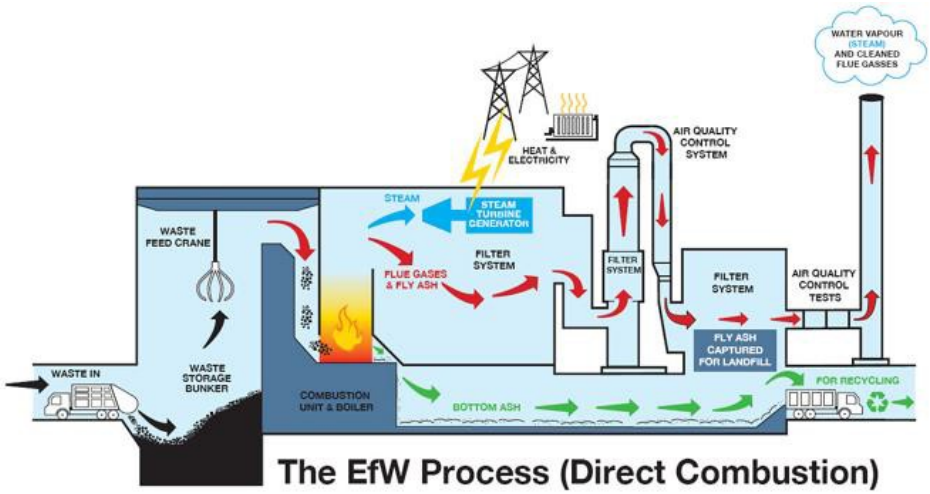
The ES references several other matters which form part of the overall assessment and are assessed alongside detailed planning policy.

Design and Access and Planning Statement

The submitted DA provides a detailed explanation of the development itself and the processes involved.

> *The proposed development will comprise of an ERF capable of processing up to 450,000 tonnes of municipal solid waste (MSW) waste per annum, generating 35MW of electricity to export to the national grid.*
> *The facility will have potential for future expansion to CHP so heat export will be enabled when local markets are available, and these can be exploited. This is not part of the current submission. The development covers a 10-hectare site and will include the main building, where the reception and treatment of all residual waste will take place. The waste feedstock for the ERF will be supplied by MSW sourced within the Tees Valley and neighbouring Durham County Council and Newcastle City Council. No hazardous waste would be used at the proposed facility.*
>
> *The main building will be approximately 140 metres by 70 metres by 50 metres high, with the stack being 80 metres in height. Hard and soft landscaping will form part of the design of the site. Hard landscaping will be used for access roads, walkways and parking areas. Soft landscaping will include grass and vegetation, the full details to be dealt with by reserved matters.*

The development will incinerate waste and this will generate steam which in turn generates electricity. Emissions are monitored and the resultant ash and metals are processed for recycling.



The EfW Process (Direct Combustion)

Several buildings form the development, a tipping hall for the delivery of waste; boiler hall; turbine hall; flue gas treatment building; air cooled condenser building and stack (up to 80m high) several other minor structures support the installation and its processes.

The application site form part of the STDC area and the former SSI development, the site form part of the Prairie site and is one of the first development sites to be brought forward under the STDC programme. The site currently has EZ status.

The SSI Torpedo Shed, lies to the south of the site and is still in operation. Lackenby steelmaking complex is situated to the east. South Tees Freight Park lies to the west. South Bank Coke Ovens are located to the north east.

The area of influence or zone of influence (ZoI) for the project is taken to be 10km from the proposed works location to follow DEFRA air emissions guidance (DEFRA, 2016). These distances are based on potential impacts from the facility once in operation as impacts during construction are likely to be more local.

There are six European designated sites within the project zone of influence that will be considered in this assessment. These are:

- Teesmouth and Cleveland Coast SPA;
- Teesmouth and Cleveland Coast Ramsar;
- North York Moors SAC; and
- North York Moors SPA.

A Habitat Regulations Assessment Screening document has been prepared and is submitted as part of the Planning Application.

> *The STDC Regeneration Master Plan provides details of the history of the Grangetown Prairie site which has a long history of iron and steel works. The site is situated within an industrial area and was once extensively occupied with buildings and freight rail infrastructure associated with such works, that were cleared in the 1980's. Former uses included the Cleveland Iron and Steel Works, where the heavy end operations (coke ovens, iron making and steel making) were located along the western periphery of the site, with mills dominating the central and eastern zones. The Torpedo Ladle Workshop was previously home to open hearth furnaces. The original site entrance still exists and, if re-opened, provides the site with direct vehicular access to the A66 at the existing Whitworth Road junction, through the Bolckow Industrial Estate.*

The development will be served by a new access off Eston Road serving a new internal service road, this will be provided by STDC as enabling works to serve development sites in the area. Vehicles will enter via a weighbridge and use a one-way internal system. Construction 2wl take approximately 36 months.

The DA sets out a background to the application and the new waste contract.

Changes in waste management policies, and the coming to an end of the existing EfW contracts, have led to the preparation of a revised Draft JWMS (which is in the process of being adopted), extending it until 2035. As with previous and current JWMS, the revised document focus is the sustainable management of waste within the Tees Valley.

An Options Appraisals Report was prepared to inform the development of the updated Strategy, paying regard to:

- moving waste up the waste hierarchy (diagram can be found figure 9-2) of option through prevention, reuse, recycling and composting activities; and
- the identification of a long-term residual waste treatment solution for the region.

The DA states….

> *waste trends tend to reflect economic growth. Predicted increase in population and housing is likely to increase waste generated across the Tees Valley. The Draft JWMS recognises that if economic regeneration planned by the Tees Valley Combined Authority is achieved, population and housing will increase, resulting in between 392,000 to 420,000 tonnes of LACW by 2035 and an assumed future waste growth rate of approximately 0.25% per annum.*

The work undertaken as part of the Draft JWMS looked at waste trends, quantity of material collected for recycling and composting across Tees Valley, with the aim of devising a high quality, accessible and affordable waste management service that would meet a number of policy objectives.

The *Options Appraisal* was supported by a series of supplementary reports that provided technical waste management information used in preparation of the revised JWMS and to informed selection of a Draft Preferred Option.

> *Options across the waste hierarchy were considered during the Options Appraisal process, these included:*
>
> - *Waste prevention, Reuse and Recycling Options;*
> - *Recycling and Composting Collection Options;*
> - *Residual Waste Treatment Options*
> - *For residual waste treatment, the primary waste treatment options at the Tees Valley included:*
> - *Further contract extension (beyond 2025) for the existing ERF contract;*
> - *New build energy recovery facility;*
> - *New build refuse derived fuel facility (RDF); and*
> - *Utilise third party energy recovery facility capacity.*

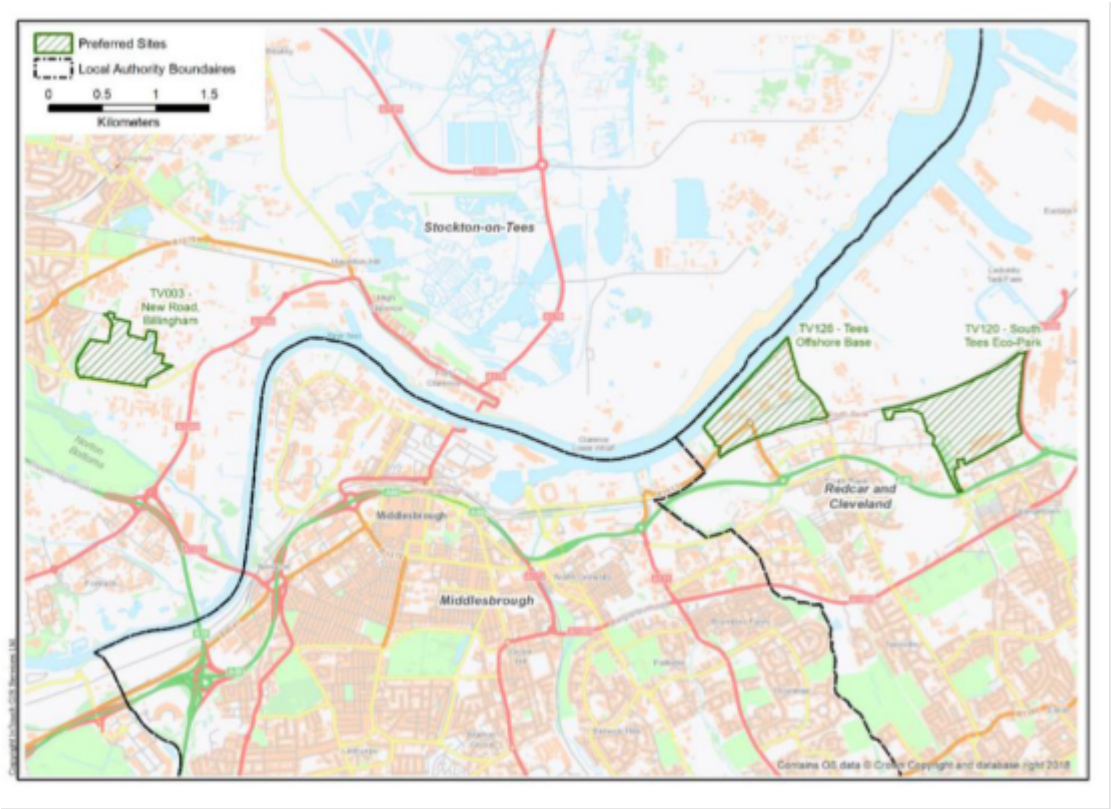
Twenty combinations of the waste treatment options were considered (the full details of the assessment are set out within the Options Appraisal). The outcom, was the following Preferred Option:

- *adoption of prevention, reuse and recycling initiatives;*
- *the introduction of high recycling collections including separate food waste collections; and*
- *a new energy recovery facility with the ability to utilise the heat produced, through the development of Combined Heat and Power (CHP).*

The Preferred Option would:

- *Contribute to reducing the amount of waste generated compared to the baseline forecast;*
- *Increase the recycling and composting rate by 13-14% by the midpoint of the Strategy period (2027) to bring the overall recycling and composting rate to between 45-50%. This is a significant improvement on the current performance and reflects the challenges faced in an urban industrial setting;*
- *Further increase the recovery of waste by 3-4%;*
- *Further reduce the waste sent to landfill;*
- *Reduce the carbon impact of waste management; and*
- *Create/secure employment within Tees Valley.*

A site selection process was then undertaken; the initial list was some 176 locations which after screening was reduced to 55, after further sifting based on selection criteria 3 sites were identified for the new facility.



Site TV120 'South Tees Eco Park' (now known as Grangetown Prairie) is the preferred location for the proposed development. The site has Enterprise Zone status, on brownfield land, available for development located within an industrial area, with good existing transport links. The site is allocated for strategic waste development within the Redcar Borough Council Local Plan, the Tees Valley Joint Minerals and Waste

Development Plan Documents (The Minerals and Waste Core Strategy DPD and the Minerals and Waste Policies and Sites DPD), the South Tees Area Supplementary Planning Document (SPD) and STDC Regeneration Master Plan. The site is well screened on most of its sides. The site was also granted planning permission in 2008 (planning application ref: R/2007/0994/FFM) for the erection of waste autoclave and community recycling facilities, four-storey office accommodation and associated infrastructure. The previous application gives an indication of the scale and massing of suitable development in this location.

The DA then describes the pre-application consultation carried out in respect of the application including meetings with RCBC officers and a range of stakeholders. The SCI carried out meets the requirements of the RCBC Statement of Community Involvement DPD.

The DA then goes on to provide a planning policy context in including; the NPPF the national waste strategy as set out in Our Waste, Our Resources: A Strategy for England 2018, DEFRA's 25-year Environment Plan the RCBC Local Plan and South Tees Area SPD. the Tees Valley Joint Minerals and Waste Development Plan Document, the current and emerging

Tees Valley Joint Waste Management Strategy. The DA also references the STDC Master Plan.

The DA sets out a summary planning policy review which concludes;

- The proposed ERF is a viable and valuable concept with meets policy requirements in terms of waste disposal
- The proposal aligns with key policies in the development plan and associated policy documents
- The development aligns with national policy in the NPPF
- The local of the site allows the development to be accommodated in landscape terms with limited impact
- The development is on previously developed brownfield land
- The development accords with key local plan policy and the South Tees Area SPD
- The application recognises the existence of historic blast furnace remains which can be preserved on site
- The application proposes the retention of local habitats as identified in the ecological assessment
- No issues are raised in respect of flood and the development will have a limited and acceptable impact in terms of traffic and highways.

The DA then sets out a summary of the following matters; Landscape and Visual Impact Assessment (LVIA); Flood Risk; Water Framework Directive; Traffic and Transportation; Noise and Air Quality and each of these and other matters are examined in detail below.

The DA concludes the proposed development is in line with the waste hierarchy and circular economy, national, local planning policies and strategies including the current and emerging Joint Waste Management Strategy.

The DA Statement provides an informative background document the application which explains the origins of the development proposal, site and options appraisals carried out and an overview of policy analysis.

Assessment of the 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 introduction of the ES sets out the regulatory framework and purpose of the EIA process. The ES sets out the revisions to the regulations in terms of competency and the assessment of EIA documents.

The ES confirms the development is Schedule 1 development.

Reference is also made to the Environment Agency permitting requirements and consents and issue raised by that process are also covered in the ES e.g. Water Framework Directive and Flood Risk Assessment supports the application.

Chapter 1 Introduction

Sets out the scope and structure of the ES and the relevant topic chapters and these reflect the scooping exercise carried out with the LPA.

- Chapter 6 Ecology and Biodiversity;
- Chapter 7 Landscape and Visual Impact;
- Chapter 8 Hydrology, Hydrogeology, Geology and Contamination
- Chapter 9 Flood Risk and Water Quality;
- Chapter 10 Archaeology and Cultural Heritage;
- Chapter 11 Socio-economic
- Chapter 12 Air Quality, Noise and Human Health
- Chapter 13 Traffic and Transportation
- Chapter 14 Cumulative Impacts

The ES has been based on the Highways Agency's Design Manual for Roads and Bridges (DMRB) Volumes 10 and 11. Figures (except where included in the text) and appendices are included in Volume 2. Relevant Technical Reports are included in Volume 3.

The receptor chapters are generally formatted as follows:

- **Methodology**: includes baseline data collection, survey methods, current legislation and guidance pertinent to the receptor, as well as the definition of sensitivity of receptors for that topic, magnitude of potential effects and the assessment of the significance of the environmental receptor.

- **Baseline**: a description of the baseline conditions including the development of the baseline without the proposed development.

- **Assessment of impacts**: identification of predicted impacts, the expected environmental effects of the predicted impacts, and an evaluation of significance of the predicted effects. Assumptions and uncertainties are outlined.

- **Mitigation:** identification of ways to avoid, reduce or remedy environmental effects.

- **Residual impacts**: the significance of effects following mitigation, including highlighting any residual impacts that cannot be mitigated.

- **Summary**

-

Chapter 2 Background

Sets out the background to the application and the nature of the project;

> *Hartlepool Borough Council is procuring a new Residual Waste Treatment Contract, working in partnership with the other Tees Valley authorities. The proposed Energy Recovery Facility will be capable of processing up to 450,000 tonnes of waste per annum. The need for the proposed development has arisen from the Tees Valley Joint Waste Strategy, which has recently been extended until 2035 (from 2020). The identification of a long-term residual waste treatment solution for the region was highlighted during the Options Appraisal process, which was undertaken by the Tees Valley Councils and resulted in the selection of a draft Preferred Option. A comprehensive site identification and selection process was undertaken to support the development of an Outline Business Case for the proposed development. An appraisal of potential locations was undertaken using a systematic, evidence-based analysis. The initial long list included 176 sites which were screened and shortlisted to 3 Preferred Sites. The Proposed Development Site ("the site") is located on the former South Tees Eco Park, Grangetown Prairie, located to the north of Grangetown approximately 4 miles to the north east of Middlesbrough Town centre. The Proposed Development Site extends to an area of approximately 10 hectares…*
>
> *The River Tees is located approximately 1.2km to the north of the development. It is well defined by existing infrastructure corridors such as the Tees Valley Railway Line, which runs along the north of the Site.*
>
> *The Proposed Development Site is brownfield, comprising made up ground and has a heavy industrial history. The Proposed Development Site was cleared for redevelopment during the 1980s. Future access onto the site will be from the southeast. The scheme is located within the combined administrative area of the five Tees Valley Authorities: Darlington Borough Council; Hartlepool Borough Council; Middlesbrough Council; Redcar & Cleveland Borough Council; and Stockton-on-Tees Borough Council.*

The ES sets out the planning policy context for the application as set out in the NPPF; RCLP 2018, Joint Waste Management Strategy 2008 and 2019 and the South Tees Area SPD and STDC Masterplan and this narrative is accurate and properly reflects the planning policy context for the application.

Chapter 3 Consideration of Alternatives

The EIA Regulations require consideration of reasonable alternatives and this section sets out the background to that requirement. The ES sets out a comprehensive narrative of the options appraisal exercise based on the objective of securing a long-term sustainable waste treatment option for the Tees Valley authorities post 2025.

The Outline Business Case considered several long-term treatment options along with an assessment of potential locations. The analysis examined 20 scenarios which examined the impact of changes to collection and prevention, re-use and recycling initiatives concluding;

….based on the agreed evaluation criteria, and regardless of weighting, the preferred option would be; all prevention, re-use and recycling initiatives, high recycling collections and new energy recovery facility. The outcome is consistent with the approach adopted in the existing Waste Strategy.

The analysis then considered site location beginning with a long list of 176 sites, narrowed down to 20 and then 3 shortlisted sites. Each of the short-listed sites was assessed using a combination of GIS, observation at the site visits, and other information that was gained through the site assessment process.

The assessment considered:

- *relevant policy for the site;*
- *the availability of each site;*
- *the deliverability of each site, including infrastructure, human and environmental constraints; and*
- *key features identified from the site visit including, the current state of the site, its location within the study area, the presence of overhead lines or other infrastructure….*

The preferred location lies with one of the six plots the South Tees Development Corporation (STDC) within the area locally known as the 'Grangetown Prairies'…. STDC will undertake the construction of a new site access on the corner of Eston Road in addition to the internal highway links. The proposed development site lies at the north-western corner of within Zone 1', Grangetown Prairie. This zone is identified as the 'South Industrial Zone'. It is the first Phase of re-development planned between 2019 and 2022.

The ES gives a detailed explanation of the process to be carried out at the plant and key components of the development as illustrated on the *parameters plans* and a general explanation of the construction programme. Hours of construction are stated to be 07:30 to 1800 Monday to Friday, 0800 to 13:30 Saturday and no working on Sundays or Bank Holidays unless there were exceptional requirements.

Chapter 4 Consultation

This section of the ES provides a narrative of the pre-application consultation carried out in respect of the project including pre-application meeting with RCBC planning officers; the completion of the *Screening* and *Scoping* procedures under the EIA regulations. In terms of the latter procedure the ES

sets out all the responses received from stakeholders and statutory consultees as part of the scoping of the ES.

The ES also references the extensive consultation carried out by the STDC in the preparation of its Masterplan and RCBC in terms of the South Tees SPD, both of which reference the development site. Officers are satisfied that the extensive consultation carried in respect of the SPD and Masterplan combined with the public consultation on the planning application meet the policy objectives set out in the adopted and draft Statement of Community Involvement (SCI).

Chapter 5 Methodology

This section of the ES set out the methodology of the application of the EIA process. The impact identification process is outlined as;

- *Overlay the proposed scheme onto the baseline information;*
- *Consider the interactions of the scheme with the environmental receptors throughout the life of the project (construction and operation) and identify potential impacts;*
- *Establish appropriate mitigation measures required to remove or reduce potential impacts to an acceptable level, and determine what environmental improvements or enhancements may be delivered; and*
- *Determine the significance of the residual impacts.*
- *Impacts of the scheme are discussed and summarised in each topic section*

The assessment of any impact is determined through significance and a sensitive value or scale expressed from *negligible* to *very high.*

> *The sensitivity of a receptor is determined by its vulnerability or rarity, its level of statutory or non-statutory protection, special expertise, views of consultees, and professional judgement. Where appropriate, further justification for the assessment of the sensitivity of a receptor or environmental resource is provided within the relevant assessment chapters.*
>
> *The magnitude of the impact is dependent upon the frequency, extent and timescale of the impact. The frequency is the number of times an impacting activity takes place through the life of the Scheme (construction and operation)*
>
> *The significance of the environmental effects is measured through the combination of the sensitivity of the receptor and the magnitude of the impacts and they vary in degrees of significance. The degree of significance is described as follows:*
>
> *Negligible: The impact is only very slightly detectable/noticeable or is undetectable and of no significance.*

Minor: The impact is slightly detectable/noticeable and of some temporary and localised effect, or a reversible nature.
Moderate: The impact is easily detectable/noticeable and likely to be of either temporary or permanent effect, unlikely to exceed local influence.
Major: The impact is easily detectable/noticeable and likely to be of permanent, long-term significance, with irreversible implications exceeding the local area.

The degrees of significance can be beneficial or adverse to the environment and this will be noted within the individual assessments of each impact…

The next stage of the process is mitigation and the ES, along with consultee responses and the planning assessment will inform the use of planning conditions. The ES states;

In general, any environmental effects assessed as moderate or major are considered significant within the terms of EIA regulations; therefore, any potential impacts of moderate or greater significance will be identified as priorities for mitigation…

For each of the environmental topic areas mitigation measures have been identified to reduce any potential effects to an acceptable level and, where possible, prevent any significant impacts on the environment as a result of the scheme…

The mitigation measures are discussed in detail in each of the topic chapters and are set out in an Environmental Action Plan (EAP). The EAP is the means through which the environmental impacts set out in the ES are managed, and it contains the objectives, actions and targets that will be monitored throughout the detailed design, construction and post constructions stages of the Scheme. This will ensure that the proposed mitigation measures are undertaken.

A Construction Environmental Management Plan (CEMP) will be prepared by the contractor so it can be referenced throughout the construction phase to identify any potential impacts and provide the associated specific mitigation measures where necessary. The CEMP will also detail guidelines and procedures that are to be followed by the contractor to ensure the adequate management of generic site environmental aspects…

Measures incorporated into the scheme design are described as 'embedded mitigation'. Such Mitigation is particularly beneficial as there is greater certainty that it will be delivered.

Where it may not be possible to design-out an impact, then specific mitigation is required. This may include for example habitat compensation or new planting, landscape screening or attenuation / storage of drainage.

A summary table detailing the environmental effects without mitigation, with the proposed mitigation and any residual impacts following the implementation of mitigation measures, can be found at the end of each topic section. These tables are combined as the summary of Environmental Commitments in Section 15.

Net Environmental Gain

Environmental Net Gain (ENG) was proposed in the Government's 25 Year Environment Plan as a development to the increasingly established Biodiversity Net Gain (BNG).

The Plan committed to embed ENG for development, including housing and infrastructure as a critical enabler of its headline pledge.

Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity in a better state than before. The principle assumes that developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected and managed through the application of the mandatory mitigation. BNG aims to halt the current loss of biodiversity through development.

DEFRA has recently consulted on making biodiversity net gain an element of the English planning system however many developers are already designing net gain into their development projects and national planning policy frameworks already encourage the net gain approach (CIEEM, 2019).

Biodiversity net gain still relies on the application of the mitigation hierarchy to avoid, mitigate or compensate for biodiversity losses. It is additional to these approaches, not instead of them.

Chapter 5 of the ES summaries the approach to assessment and mitigation and the application of the EIA procedure. It provides an informed narrative that provides the basis for the assessment of the proposal and the mitigation strategy to deal with any significant negative effects, which if effectively delivered will meet policy objectives set out in the NPPF and development plan.

Chapter 6 Ecology and Biodiversity

The section begins by providing narrative on designated sites, protected species and biodiversity. The narrative then summarises policy in the NPPF and RCLP 2018. The survey area for the studies is confirmed at 2km buffer around the site, this constitutes the zone of influence for the development and operation of the plant. Natural England has provided best practice guidance on the assessment of impacts on specific species. The impact assessment is based on published guidance by Chartered Institute of Ecological and Environmental Management (CIEEM), 2018 and the Interim Advice Note 130/10, Ecology and Nature Conservation: Criteria for Impact Assessment,

provided by Highways England (2010). This take the form of evaluation / characterisation of impacts and determination of significant effects.

The ES recognises that it is not possible to asses every single ecological impact and so focuses on;

- International and European
- National
- Regional
- County
- Local

Ecological features have been valued using a scale with examples provided of criteria used when defining the level of importance. The ES states;

> *The impact assessment process involves:*
>
> *• Identifying and characterising impacts;*
> *• Incorporating measures to avoid and mitigate (reduce) these impacts;*
> *• Assessing the significance of any residual effects after mitigation;*
> *• Identifying appropriate compensation measures to offset residual effects; and*
> *• Identifying opportunities for ecological enhancement*
>
> *The assessment includes potential impacts (direct, indirect, secondary and cumulative) on each ecological feature determined as important from all phases of the project and describes in detail the impacts that are likely to be significant, making reference to the following characteristics:*
>
> - *Positive or negative*
> - *Extent*
> - *Magnitude*
> - *Duration*
> - *Timing*
> - *Frequency*
> - *Reversibility*
>
> *Significance is a concept related to the weight / importance that should be attached to effects when decisions are made, especially in relation to mitigation requirements. For the purpose of ecological assessment, 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. In broad terms, significant effects encompass impacts (both positive or adverse) on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).*

The ES measures those impacts from *neutral* through to *very large.*

The baseline assessment is supported by studies undertaken by INCA and the project team. Desk based studies were sourced from MAGIC and ERICNE The supporting narrative identifies the key ecological constrains of the SPA and Ramsar sites. The ES also identifies the SSSI and two further statutory designated sites are considered in the Habitats Regulations Assessment within a wider radius of 10km from the site.

There are no locally designated nature conservation sites within a 2km radius of the proposed development.

> *There are three Priority Habitats designated under Section 41 of the NERC Act (2006) within 2km, including mudflats, intertidal substrate foreshore and deciduous woodland. Mudflats are present 1.6km north west, surrounded by intertidal substrate foreshore, and are associated with the Teesmouth and Cleveland Coast SPA and Ramsar sites. Small areas of deciduous woodland are present to the south of the site, with the closest area located 200m south east in Clay Lane Commercial Park.*

Several protected species were identified from ERICNE within 2km of the site and they are listed

- no badgers were recorded in this buffer area;
- one record of Common Pipistrelle Pipistrellus pipistrellus was returned as well as one unidentified bat roost in 2010.
- nineteen species of bird were identified by ERICNE within 2km
- no records of fish or freshwater pearl mussel were recorded
- Two species of invertebrate were identified, all of which are afforded protection under Section 41 of the NERC Act (2006). Several records of Small Heath Coenonympha pamphilus were returned, from 2002 and 2005, as well as several records of Wall Lasiommata megera were returned in 2002.
- No records of reptile species were returned by ERICNE within 2km of the site.
- Other mammals; five mammal species were returned from ERICNE within 2km and are summarised.
- No records of White-Clawed Crayfish Austropotamobius pallipes were returned by ERICNE within 2km of the site
- One record of American Mink Mustela vison was returned within 2km in 2010. No other invasive non-native species records were returned from
- Giant Hogweed Heracleum mantegazzianum is known to be present at Teesport, 1km north east (INCA, 2018)

Both INCA and the commissioning Authority Hartlepool BC conducted preliminary site surveys including bat surveys, and water samples were checked for DNA of GCN the following data is provided in the ES;

Field Survey Results Habitats

Brownfield (J1.3 Cultivated/disturbed land - ephemeral/short). *Most of the site comprises brownfield habitat, which is developing on thin calcareous soils. This is a Tees Valley Local Biodiversity Action Plan Habitat and a NERC Act 2006, Habitat of Principal Importance, listed as Open Mosaic Habitats on Previously Developed Land. While the five qualifying criteria were broadly met, the site has not been comprehensively cleared of industrial artefacts and was littered with concrete, rubble, cable, steel, timbers and other materials. This has reduced the nature conservation value of the site, although this habitat is a material consideration in planning and is subject to the mitigation hierarchy.*

Ponds (G1 Standing water). *There were several shallow ponds present on site, with very clear water. However, it is likely that many of these ponds, particularly in the north-eastern area, may merge into one larger water body or several smaller water bodies depending on the time of year. Some ponds appeared polluted, due to the lack of submerged vegetation and the soils present were considered highly permeable. Many of the ponds were surrounded by a narrow fringe of Common Reed Phragmites australis. A medium-sized pond was present in the north-east corner of the site, which had formed on a white, chalk-like precipitate. Ponds are a Tees Valley Local Biodiversity Action Plan Habitat and are listed as a Habitat of Principal Importance under the NERC Act 2006 (Section 41).*

Scrub (A2.1 Dense/continuous scrub). *Areas of scrub were present throughout the site, comprising largely of Sea Buckthorn Hippophae rhamnoides as well as Buddleia, Birch Betula sp. and Willow Salix spp.*

Woodland (A1.1.1 Broadleaved semi-natural woodland). *The south-western corner of the site comprises of young woodland with species such as Silver Birch Betula pendula, some Rowan Sorbus aucuparia and Willow Salix spp. Buddleia bushes were also present on the sides of the embankment.*

Earth bank *A small earth bank was present bordering the track to the south of the site. This was similarly littered with concrete, rubble and other materials, like much of the site.*

Hardstanding *A concrete track ran along the northern, eastern and southern borders of the site. There were several small areas of concrete surrounding the ponds in the centre of the site.*
The former course of Holme Beck runs immediately to the west of the site, in a north/northwest direction, and comprising the linear topographic low. The watercourse is now culverted and diverted to lie north of the site boundary, being culverted to the east to join the Cleveland Channel which flows into the Lackenby Channel…

Species

Amphibian; *A single Smooth Newt was seen in the large pond in the north-eastern corner of the site (INCA, 2018). Common Toad tadpoles were present in almost all the pools of standing water in the Grangetown Prairie area (INCA, 2018). The ponds were still present in the surveys by Hartlepool Borough Council, which are anticipated to still provide breeding habitat. Hibernacula was also present in the piles of rubble and wood on site. The results of the DNA tests in 2018 were negative for GCN. No records of GCN were returned from ERICNE within 2km and previous surveys by INCA and Peak Ecology for GCN in the wider area, within a 5km radius, returned negative results (INCA, 2018). There is suitable habitat for amphibians on site, breeding in the ponds and utilising the piles of rubble and wood for refugia.*

Badger *Although, the open grassland on site provides suitable foraging habitat for Badger, however no foraging or digging signs were identified on site.*

Bats; *The buildings surrounding the site were assessed as having negligible roosting potential for bats (INCA, 2018). The water bodies and young woodland to the south of the site offer limited foraging opportunities only for bats, which would be limited to Common Pipistrelle.*

Birds; *A flock of approximately 200 Herring Gulls Larus argentatus were observed utilising the large pond in the north-eastern corner of the site (National Grid Reference NZ 54486 21455) for bathing and a Moorhen Gallinula chlorops was present among the smaller pools. Single breeding territories of Lapwing Vanellus vanellus and Skylark Alauda arvenis were recorded on the proposed development site and in the surrounding area. Passerine birds were also noted in the surrounding area (INCA, 2018). Surveys by Hartlepool Borough Council also noted the potential for the site to support several bird species including Lapwing, Herring Gull, Black-Headed Gull Chroicocephalus ridibundus, Skylark, Reed Bunting and Meadow Pipit Anthus pratensis. These birds were seen to be utilising the water bodies present on site and the shrub areas of suitable nesting and foraging habitats. The undisturbed open ground also offers suitable nesting opportunities for ground nesting birds. All of these bird species are listed under Section 41 of the NERC Act (2006) as Species of Principal Importance, apart from Black-Headed Gull, Meadow Pipit and Moorhen. Lapwing, Herring Gull and Skylark are also red listed BoCC4.*

Brown Hare*; Two Brown Hare were seen on site during the field survey in May 2018 (INCA, 2018). Brown Hare was also seen during the site visit on the 13th November 2019. The grassland within the scrub on site provides suitable habitat for the creation of forms, whilst scrub species on site provide suitable foraging habitat.*

***Butterflies**; There is potential for both Dingy Skipper Erynnis tages and Grayling to be present on site as there are foraging opportunities on Birds Foot Trefoil Lotus corniculatus and Red Fescue Festuca rubra. Surveys by Hartlepool Borough Council also noted the site had potential to support these species as well as Wall and Small Heath. Meadow brown Maniola jurtina and Common Blue Polyommatus icarus butterflies and Painted Ladies Vanessa cardui have also been recorded on site. The widespread coverage of Buddleia on site would also provide foraging habitat for these NERC Act 2006 (Section 41) Species of Principal Importance.*

***Fish**; No fish were noted in any of the ponds, most likely due to their ephemeral nature. Holme Beck, located south of the site, lacked suitable substrate for fish spawning and it is anticipated that will have been subject to pollution through leaching. Therefore, this was assessed as unsuitable for fish. There is, however, potential for fish to be present within the Tees Estuary.*

***Freshwater Pearl Mussel;** Due to the poor water quality and lack of flow within Holme Beck, it was considered unsuitable for Freshwater Pearl Mussel as it is a filter-feeder.*

***Otters**; Lutra lutra have been recorded at Dabholm Gut, Coatham Marsh and several locations north of the River Tees (INCA, 2018). Otters are known to occupy large home ranges; however, the habitats present on site offer negligible opportunities for foraging or resting and therefore Otters are unlikely to venture onto the site. No field signs, spraints or holts, were identified in any of the field surveys.*

***Reptiles**; Basking reptiles may utilise the exposed hardstanding areas on site, particularly in the central part of the site around the blast furnace area. Areas of scrub will provide shaded areas for reptiles and areas of rubble, wood and earth will offer.*

The ES then sets out the narrative in term of air quality and habitats and the impact of dry and wet deposition of specific polluting compounds based on published data for ecologically sensitive areas.

Impacts

The ES then sets out a narrative on the impact of the development on ecological interests.

Impacts During Construction

The impact assessment covers an area of 10km as a zone of influence (ZoI) and excludes the area of archaeological interest on the site. A Habitats Regulations Screening Assessment was undertaken to assess the impacts of

the proposed facility on European statutory designated sites and is provided in Volume 3 of the ES.

Impacts on Statutory and Non-Statutory Sites

The ES assesses the six designated European designated sites and found no *significant* effects. The ES references three other projects that cumulatively could contribute to impacts (CCS, Tees CCCP power plant and Sirius Minerals Mine) only the latter is likely to have significant effects. The ES states;

> *The HRA Screening Assessment concluded that in the absence of mitigation, the project will have likely significant effects both alone and in-combination on the Teesmouth and Cleveland Coast SPA, pSPA, Ramsar and pRamsar. As a result, the HRA process was required to proceed to an Appropriate Assessment. This will be undertaken during detailed design / reserved matters stage. The Teesmouth and Cleveland Coast SSSI bird features will be subject to the same adverse impacts as the other European designated sites both during construction and de-commissioning, and works will be subject to the submission of a SSSI assent application to Natural England. No non-statutory sites or locally designated wildlife sites were identified within 2km of the development site. It is not anticipated that there will be any adverse impacts on any non-statutory sites further than 2km from the site.*

Impacts on Habitats

The ES states;

> *Several Tees Valley Local Biodiversity Action Plan and NERC Act 2006 (Schedule 41) Habitats of Principal Importance recorded that will be lost as part of the construction of the facility. Ponds and open mosaic habitats on previously developed land are present throughout the development site. During decommissioning, habitat will not be impacted through direct habitat loss. Early successional species will naturally recolonise the area surrounding the decommissioned facility, or if it is to be demolished, the footprint of the building. Given time, the habitat is predicted to return to the pre-development state. Habitats will be impacted in the following ways during construction of the facility.*
>
> The impacts include;
>
> - Loss of open mosaic and ponds within the site which have value for common tod and newts
> - Loss of scrub
> - Loss of limited young woodland
> - Earth bank, but this is of low value

- Loss of hardstandings
- Impact on running water from contaminants
- Spread of non-invasive species

Impacts on Species

The ES then provides an assessment on the impact of the development on species, the ES concludes that the development will have an impact on site because of loss of habitat during construction and decommissioning. Indirect impacts to species are anticipated from air pollution through increased vehicle movements and release of compounds into the water environment. There are no impacts on European protected species anticipated. Summaries of the impact status associated with each species is summarised as;

- Amphibians; will be impacted by direct habitat loss and disturbance during construction works. Common Toad is evident from the recording of tadpoles in all areas of standing water present during the 2018 INCA survey. Testing produced a negative result for Great Crested Newt (GCN) and no populations of GCN have been recorded within 5km of the site. It is not expected that GCN will be impacted as a result of the works.
- Badger; no foraging or digging signs were identified on site. It is not anticipated that this species will be adversely impacted by the works.
- Bats; no trees or buildings either within or adjacent to the site possessing potential for roosting bats were noted. Open habitat within the development site provides suitable foraging habitat for bats, therefore there is the potential for loss of foraging habitat. However, impacts on bats through the proposed development are assessed as *negligible.*
- Birds; impacts to bird species will include loss of ponds used by Herring Gull and Black-headed Gull, loss of shrubs used for nesting and foraging by passerine species and loss of undisturbed open ground suitable for supporting ground nesting birds. Skylark and Lapwing are the main ground nesting birds of concern as single breeding territories of these species were recorded on site during the 2018 INCA survey. Increased vehicle movements as a result of the construction of the development will cause rises in air pollution and disturbance. Birds are particularly susceptible to air pollution which can cause a number of issues including reproductive problems. Therefore, air pollution could cause an adverse impact on birds on the site and the surrounding area.
- Brown Hare; the grassland on site provides suitable habitat for the creation of forms, whilst scrub species on site provide suitable foraging habitat. Potential impacts on this species could occur through direct loss of habitat and disturbance during construction. Brown Hare have a large home range, therefore loss of habitat within the works footprint is not expected to cause a significant impact. Disturbance from construction will be temporary and therefore is not assessed as
- causing a likely significant increase in disturbance levels combined with disturbance across the whole STDC site.

- Butterflies; the site is likely to support a number of butterflies, among these are species listed under Schedule 41 of the NERC Act 2006 Species of Principal Importance, such as Grayling, Wall, Dingy Skipper and Small Heath. Impacts to butterfly species on site will be from loss of habitat, although no larval foodplants were identified within the footprint of the works.
- Fish; the only watercourse on site is Holme Beck. Due to the contaminated nature of the water and the lack of suitable substrate within the channel, it is not expected that fish will be present on site. There may be indirect impacts on fish through accidental release of compounds into the water environment, however it is expected that embedded mitigation measures will be in place to prevent this occurrence.
- Freshwater Pearl Mussel; as the ponds on site appear polluted and soils present are highly permeable; it is anticipated that the Holme Beck will have been subject to pollution through leaching. The poor water quality and lack of flow within the Holme Beck was considered unsuitable for Freshwater Pearl Mussel due to the species filter feeding habits.
- Otter; the only watercourse noted on site was Holme Beck. This was a small channel running along the west side of the 'Grangetown Prairie'. The majority of the watercourse was lined by concrete and possessed low ecological value as only a very small section of the bank remained in a vegetated state. No impact from the works on Otter is anticipated due to the lack of suitable habitat on site.
- Reptiles; exposed concrete areas suitable for basking reptiles were recorded throughout the site. These were mainly concentrated in the central part of the site around the blast furnace area. Areas of scrub will provide shaded areas for reptiles and areas of rubble, wood and earth will provide suitable hibernacula. Despite this, it is not expected that reptiles will be present on site due to the isolation of the brownfield habitat on site from other surrounding habitats. The nearest record for reptiles is approximately 1km away. Impacts on reptiles are expected to be negligible, however some minimal mitigation measures shall be put in place for reptiles, in case of the unlikely event of encountering them on site.
- Water Vole; as with Otter, there is no suitable habitat on site as Holme Beck is mainly concrete lined. No impacts on this species is anticipated as a result of the works.
- White-clawed Crayfish; This species is considered to be absent from Cleveland.
- Other mammals; mammal species may utilise the area in a transient manner and therefore no adverse construction impacts are anticipated as they are able to translocate into the surrounding areas.

Impacts during operation

During the operation phase, likely significant effects from four potential hazards were identified during the HRA Screening Assessment. These are:

- Introduction of synthetic compounds
- Introduction of non-synthetic compounds
- Introduction of Invasive Non-native Species
- Air pollution

All of the hazards were identified as likely significant effects on the Teesmouth and Cleveland Coast SPA, pSPA, Ramsar and pRamsar. No hazards were assessed to produce a likely significant effect on the North York Moors SAC and SPA. It is not anticipated that there will be any adverse impacts on any non-statutory sites further than 2km from the site.

Impacts on Habitats

The ES notes there will be impacts on habitats surrounding the site and again this relates to the open mosaic habitat parts of which will remain after development with the planned biodiversity area aiming to maintain brownfield connectivity throughout the Grangetown Prairie site. Ponds may be impacted by accidental release of compounds, but the existing ponds are of low value and impacts will not be severe. The remaining scrub will be included in the biodiversity area adverse impacts upon the remaining scrub habitat are anticipated from the potential introduction of invasive non-native species and pollution, but this is not expected to be an adverse impact.

Running Water; releases of contaminants into Holme Beck are not anticipated as part of the operation of the facility. Accidental releases of compounds into the watercourse may impact upon the water quality.

Impacts on Species

Direct impacts to species through disturbance are anticipated during the operation of the facility. Indirect impacts to species are anticipated from air pollution through increased vehicle movements and release of compounds into the water environment.

There is no risk of impact on amphibians as a result of the GCN DNA testing not risk to badgers which are not present on the site.

The facility is anticipated to be in operation 24 hours a day with waste deliveries between 7am and 3pm. There may be impacts upon both foraging and commuting bats through night-time lighting.

Increased vehicle movements as a result of the transport of waste to and from the facility during operation will cause rises in air pollution and disturbance. Birds are particularly susceptible to air pollution which can cause a number of issues including reproductive problems. Therefore, air pollution could cause an adverse impact on birds on the site and the surrounding area.

Brown Hare - disturbance will mainly be caused by vehicle movements during waste deliveries and shift changes; however, it is not anticipated that levels of disturbance will rise above existing levels present in other areas.

Butterflies - impacts on butterflies are not anticipated during the operation of the facility.

Fish - accidental release of compounds into the watercourse as a result of the operation of the facility may cause impacts on any fish in the watercourse by increasing levels of contaminants.

Freshwater Pearl Mussel - impacts upon this species are unlikely during the operation of the facility.

Otter - The Holme Beck is assessed as being unsuitable for Otter, therefore no impact from the operation of the facility on Otter is anticipated due to the lack of suitable habitat on site.

Reptiles - It is not expected that reptiles will be present on site, therefore impacts on reptiles are assessed as negligible from the operation of the facility.

Water Vole - as with Otter, there is no suitable habitat on site, therefore no impacts on this species is anticipated as a result of the facility operation.

White-clawed Crayfish - this species is considered to be absent from Cleveland.

Other mammals – no operational impacts on other mammal species are anticipated.

Mitigation

The ES sets out a mitigation strategy which may be summarised as follows;

Construction operations will be managed through the preparation of a Construction Environmental Management Plan (CEMP). This document will be prepared by the Principal Contractor and implement the Environmental Commitments stated in Chapter 15 of the ES;

- Measures will include procedures to prevent introduction on non-native species.
- Measures to prevent pollution during the construction process

Construction

Sensitive parts of the site will be safeguarded and 7ha of land will be safeguarded and enhanced as part of the development. If lighting is required during working this will be the minimum required. Pre-commencement surveys will include breeding birds and ground nests and clearance will only take place outside bird breeding periods, if clearance is required within a season, an ecologist will carry out additional checks.

Additional ground will be provided for amphibians as part of a biodiversity enhancement strategy with additional refuges. Suitable breeding habitat will be available for reptiles within the biodiversity area and will provide enough mitigation for the loss of habitat within the works footprint.

Operation

In terms of habitats the ES recommends the removal of some existing non-native species; the detailed design will deal with the technical measures to minimise release of pollutants and the use of lighting.

Ecological Enhancement Strategy

As required by emerging regulations and development plan policy the development will include measures to enhance the biodiversity of the area.

As habitat loss in inevitable as part of the development it is proposed to retain part of the site in the south west corner of the site to mitigate the habitat loss.

There are issues with the creation of ponds but reed beds may be incorporated as part of a sustainable drainage strategy. The biodiversity area will be improved by integrating the biodiversity area and heritage area to increase the size of the biodiversity area whilst still conserving the heritage assets. Natural colonisation of the heritage area is suggested after placing material from the footprint of the works on the archaeological remains to help create more brownfield habitat as any anthropogenic intervention through planting of trees etc. may impact upon the heritage assets. Planting of shallow rooting grassland plants is also an option. Other enhancements will be the creation of refuges and seed planting to provide plant stock that will encourage butterflies etc.

Residual Impacts

Following detailed surveys of the development and application of the appropriate mitigation following the mitigation hierarchy, no significant residual impacts are predicted during construction, operation or decommissioning of the project.

Planning Assessment

The ES sets out an appropriate analysis of the ecological baseline of the site and surroundings. The ES assesses the prevailing conditions in terms of ecology and although the site generally has limited value in terms of ecology than other more environmentally sensitive areas, there are some aspect of the site which are of ecological importance and reflect the establishment and development of ecology on under used previously developed land.

The ES examines the impact of the construction process connected with the project and proposes an appropriate response in terms of mitigation through a Construction Environmental Management Plan (CEMP) a matter which can be dealt with by planning condition. Mitigation mainly takes the form of the reservation of an area of land where a biodiversity improvement scheme can be implemented that combine sustainable drainage and landscaping of the site.

Impacts from the operation the plant will be more limited and centred on the prevention of pollution, much of this will be achieved by on-site management and maintenance of the ecological areas. In accordance with policy the ES sets out a strategy for ecological enhancement within the site based on the ecological reserve including creation of reed beds and refuges.

Policy N4 of the local plan seeks to protect and enhance the borough's biodiversity. The application site does not fall within any of the identified areas for improvement but as required by policy the issue of biodiversity and geodiversity is being given consideration at the earliest stage of the project which incorporates enhancement measures and net gains. Some impacts will result from the development in terms of habitat loss, but appropriate mitigation and net gains are included in the overall assessment. The development is consistent with policy SD4(h) in that it will not result in an unacceptable or adverse impact on Natura 2000 sites.

The impact of the development on the SPA and other sensitive environments has been assessed and is acceptable.

In terms of air quality, the ES concludes the development will have no unacceptable impact in terms of human health and the nearest sensitive receptors. Critically, Natural England did raise the issue of air quality impact in terms of the SPS / Ramsar SSSI coastal sites and, at the request of NE the agent carried out additional modelling to assess those impact and, whilst it was concluded there would be no significant effects from the development, this is appreciated on modelling and the limited data provided in an outline application, as a result it has been agreed that the precautionary principle should be applied and at RM stage a revised HRA will be adopted and a final air quality assessment submitted to confirm that there will be no such effects. This has been agreed with Natural England.

In summary, the LPA is satisfied that the ES has properly addressed the issue of ecological impacts through the adoption of a Habitats Regulations Assessment screening decision and subsequent Appropriate Assessment. The ES is robust assessment that identifies the impacts of the development on ecology and proposes an appropriate mitigation strategy

Chapter 7 Landscape and Visual Impact

The ES sets out the accepted methodology of assessing the baseline conditions, the impact of the development in landscape and visual amenity terms and a mitigation strategy. The study draws a distinction between landscape impacts at baseline, during construction and the operation from year 0 to 15 years.

The application is, of course, made in outline and so as is the usual practice the applicant submits *parameters plans* which set out a worst-case scenario for the impact of the development. The ES assesses the impact of the main flue stack at around 80m and the main structure of the building and the two components that will have the greatest impact.

The ES considers the sensitivity of several identified receptors and the magnitude of the impact of the development on each which will range from *neglible* to *significant*. The ES identifies a Zone of Theoretical Visual Impact and using GIS and other mapping data identifies areas where the development will be visible from and a selected number of viewpoints (VPs) are assessed in detail.

The study area is across a 15km radius with a detailed assessment within 5km of the site. The ES sets out an appropriate policy context based on the NPPF / PPG and local planning policy and explains the ES methodology.

The baseline assessment references national regional and local designations in Redcar, Stockton and Hartlepool and each local landscape typology. The study assesses impacts based on two main land use types of industrial and residential. It recognises the high sensitivity and susceptibility of the Eston hills Broad Landscape Area to change and the medium risk to Redcar Flatts Landscape Area, the two local designations closest to the site.

The ES sets out a brief history of the landscape of the area drawing on information provided in the archaeology section of the ES, this history dates from around 1885.

The ES recognises, and it is accepted for the purposes of assessment of the application that the future landscape of the area will in large part be dictated by the allocations in the local plan which is for employment / commercial development. The ES assesses impacts on the landscape fabric and the physical appearance of the area and site, and impacts on the landscape character, the effect on the key characteristics of the landscape character areas potentially affected by the proposed development.

The ES comments;

> *The presence of large-scale industrial development is a key characteristic of the 5km focussed Study Area and has influenced and often given rise to the residential development alongside it. The proximity of the more sensitive landscapes to the fringes of the urban areas is well documented over many decades and overall sensitivity to the type of development proposed is considered low. As a result, the landscape can accommodate this proposal without any significant effects arising on either the national or local level landscape character areas and types, and in some circumstances, gives rise to slight beneficial effects due to the redevelopment of derelict brownfield areas within the allocated employments zones. There are no residual significant impacts on landscape character resulting from the proposed development. Other recorded impacts of note are as follows:*
>
> • *Slight adverse effect on the landform of the site.*
> • *Slight adverse effect on the vegetation cover of the site*
> • *Slight beneficial effect on the pattern and scale of the site.*
> • *Slight beneficial effect on the land use of the site.*
> • *Slight beneficial effect on the identified Industrial Area.*

The baseline assessment in terms of visual amenity is established using a number of geographic references including PROW, recreational receptors, residential receptors and settlements with transport routes. The study makes it clear that where there are no or neglible impacts, these are *scoped out* of the final assessment.

The ZVI established that up to 2km from the site views to the development will be frequent but the impact will be limited because of the existing urban landscape and this is supported by information provided in the individual viewpoint assessments. The concentration of impacts is at the range of 2-5km which are frequent but mitigated by the existing urban fabric, specific areas include the A1053 and Eston Hills, beyond the 5km limit the impacts are less pronounced and limited to specific locations.

The ES comments;

> *Field studies identified that close-range views from sensitive receptors are most likely to experience a change in their visual amenity. Therefore, the viewpoint assessment has concentrated on these areas, with a focus on landscape and visual impacts within 5km of the site, within residential areas in Redcar (with a focus on Dormanstown, Grangetown, Lazenby, Lackenby, Eston, Normanby and South Bank), residential areas in Middlesbrough (with a focus on Ormesby and Bramble Farm), and the public rights of way network within the Eston Hills and along the river and coastline.*

The ES examines the impact of development buildings and stack at 80m from number of viewpoints each is illustrated with photographs and analysis. In terms of visual effects, the ES modelled two main components the main mass of the building and the stack. The stack occupying a greater vertical angle in assessed views, the impact of the development will decrease over distance and the ES seeks to assess those variable impacts.

The ES states;

> *The presence of large-scale industrial areas including buildings large in both mass and height, and widespread vertical infrastructure, including pylons, chimney stacks, flues and wind turbines has long influenced the visual amenity of the 15km Study Area, and is an accepted and historic element of it. As a result, receptors have a reduced sensitivity to the type of change proposed and changes will be experienced within the existing context of the large-scale industrial landscape of the River Tees corridor. As a result, the visual amenity can accommodate this proposal without widespread significant effects arising.*

The ES states there are an isolated number of residual *significant* visual impacts to some sensitive receptors and these are identified an assessed.

In terms of the mitigation strategy the ES recognises the limitations of reducing the impact of such a large development, it states;

> *This landscape and visual assessment chapter has been produced to support the outline planning application for the proposed ERF and at the time of writing no detailed design was available for the project. As such it is important to note that assessment has been judged on the worst-case scenario, taking into account the minimum expected mitigation that can be assumed to be applied to the project. For the purposes of this chapter the mitigation that has been taken into account at this stage of the proposed project includes the following:*
>
> - *Design and construction of a modern, purpose built, industrial ERF facility in line with the outline design parameters;*
> - *Grassland mitigation areas as shown on Figure 6.5 (Volume 2), providing biodiversity gain and setting the facility in context;*
> - *On completion of the construction of the facility, the building and its immediate surroundings will be maintained by the occupier to an appropriate and acceptable standard in line with any approved planning permission.*
>
> *The vision for the site should be one of a contemporary functional, modern, industrial facility set in a green environment, with the potential for use of green roofs and walls on the smaller ancillary buildings, sustainable cladding where possible and an external environment which promotes brownfield biodiversity and regeneration of green infrastructure within this large industrial environment.*

These suggestions combined with consideration of colour, lighting, materials and interpretation of heritage assists could combine to provide an opportunity for a landmark building of positivity on a site well known for its decline.

In terms of the overall mitigation strategy this is focused on good design and use of an appropriate pallete of materials and the landscape setting of the site.

Based on the findings of the preceding LVIA and in particular the limited number of significant residual effects predicted in relation to the development, and its compliance with current national, regional and local landscape policy, the proposed facility is considered to be appropriate in the current landscape and visual baseline condition in and around the application site. Given the existing industrial context, the form and scale of buildings in the vicinity of the application site, and the restrictions on intervisibility the landscape character and visual amenity of the Study Area is considered capable of accommodating a carefully designed industrial facility that reflects the scale and form of other buildings nearby.

Planning Assessment

The Landscape and Visual Impact analysis provides a robust assessment of the impact of the development. Although an outline application, the applicant has set out in *parameters plans* the critical elements of the proposed development in terms of overall massing and main vent stack which is based on an 80m height. The ES assesses a *worst-case scenario* based on the parameters plans and so the logic is that if the development is concluded to be acceptable based on those plans, then a scheme of a lesser scale would also be acceptable.

The ES has deployed an accepted technique of assessment based on a theoretical zone of visual impact (ZVI) and the parameters plans. The assessment considers distances up to 15km but concentrates on impacts closer to the site. The overall conclusion of the ES in terms of landscape and visual impact are accepted, the application site is noted as being in an area allocated for employment related development in the RCLP 2018. In addition, provision is made in the Mineral LP for waste recovery developments in the area.

The ES demonstrates that whilst here will be a significant impact from the development in areas and certain viewpoints closer to the site, that impact reduces over distance and although the development will be visible from more sensitive receptors such as the Eston Hills, the impact itself is judged to be no more than *slight to moderate adverse*.

The location of the site and the prevailing built form north of the trunk road is industrial with some buildings and structures of significant scale. The overall context for the site is characterised currently as open undeveloped previously

developed land but sits at the heart of an industrial area with the Lackenby works to the east and commercial development to the south and west.

The nearest residential receptors are south of the A66 several hundred metres for the site with limited views, views to the site form the nearest public highway are from John Boyle Road and Eston Road, the development will be prominent from these viewpoints set against the undeveloped remainder of the Prairie site but given the scale and character of other structures and land use in the locality will be readily absorbed into the urban landscape.

The Landscape and Visual Impact Assessment has concluded that the development can be accommodated within the urban area of the site with no unacceptable impact in terms of landscape and impact on visual amenity. The development will not adversely impact local sensitive receptors and although the viewpoint analysis confirms there will be impacts, these are judged to be acceptable. Officers agree with this assessment and conclude that the development complies with policy SD1 (Sustainable Development) in that the development will improve in part the environmental conditions of the area; SD4 (General Development Principles) (b) in that the development will not adversely affect the amenity or landscape character of the area (i) make efficient use of land in terms of scale massing and design; (j) respect the character of the site and surroundings in terms of general proportions, form, massing, height, size and scale and (k) take the opportunity to improve the character and quality of the area.

Final details are required to be agreed at the Reserved Matters stage but the mitigation strategy outline in the ES focuses rightly on the detail of materials, external elevations, development setting (building and landscape design) and outstanding matters in this respect can be dealt with by planning conditions.

Chapter 8 Hydrology, Hydrogeology, Geology and Contamination

This section of the ES begins by setting the regulatory and planning policy context for the water environment referencing the NPPF, enhancing the environment and minimising the risk of pollution, dealing with the issue of flooding and climate change; managing the location of development in terms of vulnerability to flooding. The ES notes the objective of Planning Practice Guidance in terms of good design. Within the development plan policy SD1 and SD7 deal with protecting water quality and dealing with flood risk. The ES also refers to the European Water Directive and Water Act 2003 and related primary legislation and guidance issued by the EA in terms of permitting and design.

- The analysis in the ES is based on the approach
- The type of effect (long-term, short-term, or intermittent; positive, negative or neutral);
- The probability of effect occurring;
- Receptor sensitivity and
- The magnitude (severity) of the effect

The ES notes that the conclusion of the Flood Risk Assessment and outline drainage strategy that the site is not at risk of flooding and so this is scoped out of the assessment.

Baseline

Data gathering was predominantly desk based with data received from the EA and RCBC and previous site reports. This still permitted the identification of sensitive receptors in both the surface and groundwater environment.

In terms of climate the area experiences less rainfall than the national average (885 mm), with low runoff rates and a small proportion of groundwater inputs making upriver flow. The ES identifies the River Tees as the major water body affecting assessment of the site along with several identified small surface water bodies, ponds, lagoons and come culverted features.

The ES notes that although the underlying geology is not a sensitive receptor, it does influence the behaviour and quality of groundwater and so it is described as part of the baseline assessment. The area is identified as being of low geological hazard risk (shrink swell, running sands, landslide), and is not located within a Coal Mining Area.

In terms of land quality, the ES notes the site was previously the site of a steelworks which has impacted on the present quality of the soils and the hydrogeology and groundwater vulnerability of the site is described.

The general groundwater quality of the area is assessed as poor, largely as a result of the impact of industry. Current water abstractions (six) are north of the Tees and will not impact the application site. The nearest abstraction in terms of impact is tidal and related to the cooling of a power station. Information provided by the EA on discharge consents show none relate directly to the application site. There are no sites designated for geological importance within the footprint of the proposed development.

Taking into account a climate change component where summers are drier and winters more wet, in the absence of the proposed development it is likely that the land use and management of the site and its immediate surrounds would remain the same, changes to the water environment would therefore not be anticipated. The ES notes;

Development of the site would be unlikely to result in any changes to the water environment which would alter baseline conditions provided that they implement standard measures to avoid flood risk, manage surface water drainage and prevent pollution, and adhere to relevant policy and legislation.

Impacts and Significant Effects – Construction

The ES examines two potential impacts;

- Potential adverse effects on drainage patterns, surface water flows and aquifer recharge, principally in relation to a change in runoff patterns and drainage, and associated with groundworks from site development and;
- Potential pollution to watercourses and underlying aquifers through increased suspended sediment release on or adjacent to the proposed development

Surface watercourses flows could be impacted by excavation and increased surface water run-off however, given the nature of the ground runoff rates during construction are unlikely to vary. Without mitigation, the impact on the Tees is judged as significant but for other water receptors, not significant.

Surface water quality could be impacted by suspended solids entering the water during construction or be washed into water course by heavy rai,. the risk is from stored fuels etc. but this will be dealt with by on-site management. Oil interceptors will form part of the drainage infrastructure and foul water will be dealt with by mains drains. The impact on remaining water bodies will not be significant.

In terms of discharge flows, the impacts of the development are judged to be neglible and not significant in terms of water quality, …. *for the very low sensitivity freshwater river discharge receptors, this would result in a negligible level of effect of pollution which would be deemed to be not significant.*

The predicted impact of the development process on groundwater aquifer flows is not significant and in terms of water quality the same impact is predicted with limited impact from piling provided it is carried out in accordance with EA guidance.

In terms of human health and in the absence of mitigation, the risk from contaminants is judged to be moderate to major which would be significant in EIA terms.

Potential Impacts & Significant Effects – Operation

The site will be developed with new drainage infrastructure which will limit changes to flow rates, this will also allow for effective control over water quality and the disposal of surface and foul water on separate systems so minimising environmental impacts, the same conclusions are drawn for discharge flows and water quality. No significant adverse impacts are predicted for the groundwater aquifer in terms of flows and water quality.

The presence of residual contamination within shallow soils and groundwater, may present a risk to human health during the operation phase. Effects on human health could be of moderate magnitude of change, without mitigation, this would result in a large level of effect which would be deemed to be significant in EIA terms.

Decommissioning impacts would be the subject of a separate evaluation exercise.

Mitigation

The ES provides detail of the activities proposed as part of the development of the set; the key areas being;

- Installation pf drains
- Raising of land levels
- Earthworks and
- Piling works

These activities may have impacts to the groundwater body underlying the site. In addition, the installation of new land drains will ultimately discharge to the River Tees. The ES sets out the environmental measures have been designed to protect the water environment and human health at the site from any significant impacts. In summary, these are;

- A drainage strategy as set out in the FRA and the use of a detention basis with hydrobrake.
- Restriction of and on-site management of run-off rates
- Avoiding works in poor weather conditions
- Agreement of run off rates with the LLFA
- Filtering of water before discharge
- Bunding of potential sources of contamination
- Environmental measures will be implemented during construction to deliver adherence to the EA's PPG notes, CIRIA guidance into Construction Method Statements and other current best practice. These will be set out in a Construction Environmental Management Plan (CEMP)
- Monitoring
- Control over disposal of surplus material
- In advance of site development, an updated Contaminated Land Risk Assessment

Contamination from the movement of soils will be mitigated by the adoption of a materials management plan. A watching brief will also be maintained during site re-development works.

Residual effects

Following site investigation and water environment monitoring of the development and application of the appropriate mitigation strategy, no significant residual impacts are predicted during construction, operation or de-commissioning of the project.

Planning Assessment

The ES present a robust assessment of the impact of the development in terms of hydrology, hydrogeology, geology and contamination.

The ES focusses on the impact of the development on hydrology and hydrogeology concluding that, provided the appropriate mitigation strategy is implemented effectively, there will be no unacceptable significant impacts from the development of the project or its operation. The ES strategy achieves the objectives set out in the NPPF and policy SD1 and SD7 in respect of flood risk, climate change and disposal of surface water run-off. The development is also consistent with policy SD4(e) in that the project will not put the environment, human health and safety at unacceptable risk.

The ES identifies no issues in respect of contamination that may not be dealt with by planning conditions.

The development will be subject to other consenting regimes and in accordance with para 179 and 183 of the NPPF the responsibility for securing a safe development is the developer / landowner and the LPA is to assume that other consenting regimes will operate effectively, particularly in respect of pollution / emissions.

The EA have raised no objections to the application but recommend planning conditions which are considered appropriate.

Chapter 9 Flood Risk and Water Quality

The ES focusses on three main areas;

- The development needs to give due regard to the objectives of the Water Framework Directive
- Any discharges to the Tees Estuary will need to assess the impact to the protected areas, and to the objectives of the WFD
- A site-specific FRA

A Flood Risk Assessment (FRA), including Drainage Impact Assessment (DIA) and Water Framework Directive Assessments have been prepared and are provided in Volume 3 of the ES.

The ES sets out the regulatory and policy framework for the subject including legislation dealing with general water quality matters; national planning guidance set out in the NPPF and policy SD7 of the RCLP 2018.

For the purposes of this assessment water resources include; water quantity, surface water quality, groundwater (quantity and quality) and flood and drainage risk issues. This section assesses the water environment at the site and those hydraulically linked features in the surrounding environs. Impacts are expressed as:

- Adverse – detrimental or negative impacts on an environmental resource or receptor;
- Beneficial – advantageous or positive impact on an environmental resource or receptor.

The general approach of the impact assessment to determine the significance of impacts follows the methodology described in Section 5 of the ES. Water receptors are classified as high, medium, low and neglible value.

Baseline

The ES describes the location of the site and watercourses on the Prairie site, it notes the site is within Flood Zone 1 excluding the climate change component but predicted changes in sea level will not be above existing levels on site. Local flood zones 2/3 do not impact on the site and the site is not at risk of fluvial and tidal flooding. In accordance with the NPPF, the development is defined as essential infrastructure and is appropriate in flood zone 1. The site is impacted only by localised ponding.

The ES states;

> *A WFD Assessment has been completed for this proposal and is provided in Volume 3. This WFD assessment aims to determine the effects of the proposed facility on ecological, hydromorphological and chemical quality and identify any potential impacts that could cause deterioration in the current status of the water body or could hinder the water body from meeting its WFD objectives in the future….*
>
> *As requested by the EA's consultation response, a WFD assessment is included in Volume and which includes more details regarding surface water quality. In summary, all of the water bodies have an overall classification of Moderate. No data were received from the EA regarding pollution incidents within the vicinity of the site.*

Assessment of Impacts During Construction

Construction activities that pose a risk to water quality include:

- *Localised flooding from unattenuated surface water during rainfall;*
- *pollution from poor/inappropriate management of site drainage;*
- *import of non-native invasive species;*
- *exposure of bare ground, earth movement, stockpiling material, mobilising of sediment into surface water receptors through runoff from the site;*
- *wheel washing run-off, or muddy run-off from construction access tracks within the site;*
- *pollution due to vandalism of stores or plant;*
- *poor/inappropriate storage of materials and chemicals/fuels and wastes such as on permeable surfaces, adjacent to watercourses or without sufficient bunding capacity;*
- *accidental spillages of fuels and polluting materials such as concrete; and creation of preferential pathways via piling operations, drainage schemes and services corridors.*

Assessment of Impacts During Operation

Flood Risk modelling demonstrates that there are no clear off-site impacts that are required to be managed. Localised ponding will be managed, and the site will be bunded where necessary. De-commissioning impact will be similar to those of construction.

Mitigation

The development will include;

- the adoption of appropriate sustainable drainage systems and features
- the proposed drainage layout includes for a fuel/oil interceptor based on the nature of the development as the site will require frequent deliveries of waste, therefore, potential for HGVs
- It is recommended that both processed and pre-processed waste should be located within bunded areas or raised above existing ground levels to avoid mobilisation of contaminants during higher rainfall events

Overall the impacts to the biological, hydromorphological and physico-chemical elements of the water bodies can all be mitigated against using the same measures:

- Completion of an HRA, implementing the resulting conclusions and recommendations
- Discharge through connection to mains sewage or obtain an appropriate Environmental Permit from the EA
- Abstraction from a Surface Water (including the Tees Estuary) obtaining a Water Resource licence

Residual Impacts

No significant residual impacts are predicted during construction, operation or decommissioning of the project.

Planning Assessment

The ES provides an appropriate assessment of flood risk and related matters. The site does not lie in an area at risk of flooding and the development has limited potential to contribute to the issue of flood risk once completed. Surface water run-off from the site may be managed in an appropriate manner, with no residual impacts predicted in the assessment.

Policy SD7 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 an indicated-on EA mapping. The ES demonstrates that the development has taken account of flood risk and appropriate mitigation, assessing the use of SUDs, separation of foul and surface water and the development is in compliance with the RC Flood Risk Assessment.

Surface water disposal is in accordance with policy with managed disposal via appropriate management systems.

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 and reckoned that planning conditions be added to a grant of panning permission.

In view of the above the development complies with policy in the NPPF, policy SD7 and SD4(f) of the RCLP 2018.

Chapter 10 Archaeology and Cultural Heritage

The ES begins by setting out NPPF policy, legislation and local planning policy in respect of archaeology and cultural heritage. The methodology included a desk-based assessment by Tees Archaeology; the RCBC HER; online version of the National Record of the Historic Environment and the BGS; OS maps and aerial surveys and a site assessment.

Using an appropriate impact methodology, the ES sets out heritage values and magnitude of impacts.

Baseline Conditions

The site does not support any designated heritage assets, the nearest listed building being in South Bank. The ES does assess the impact the 80m stack on designated assets some distance from the site (up to 6km)

The ES assesses pre-history on which here is limited evidence. There is evidence of Roman history and this is illustrated with finds in Darlington and other parts of the Tees Valley.

Evidence of early medieval occupation is reflected in local place name geography. Medieval history broadly reflects present settlements and post medieval the major change was the impact of enclosures.

The 19th and 20th century were dominated by industrial development with Grangetown and South Bank being developed to support industry. The application site has been developed and redeveloped several times. Typical development included the local rail line; the development of Eston Iron Works in 1853 which included 6 furnaces within the application site, the start of steel making locally and the settlements that supported that industry, there are no visual signs above ground but remains may exist below.

The ES states on the primary archaeological interest;

> *By the 1870s Bolckow and Vaughan were the leading firm on Teesside in developing steel production as opposed to iron and the Cleveland Works (HER5629) were constructed between 1874-76. The Cleveland Works were the first in Teesside at which steel was produced in bulk and initially used Bessemer conversion vessels; four of these were located on 3.7m high platforms in the north western part of the development area but their precise location is unknown. The Bessemer conversion vessels were served by a new set of three, 20m high, blast furnaces which were oriented north-south. The Cleveland Works replaced the original Eston Iron Works, which were demolished.*
>
> *The original three furnaces of the Cleveland Works were replaced by two 'Bessemer' furnaces between 1911 and 1913. These were known as 'Yankee' furnaces in that they copied American practice, but the Bessemer name was taken from their proximity to the Bessemer converters. One of the furnaces was demolished after the First World War and a replacement (No.5) constructed in 1937, continuing in use until 1986. The other furnace (No 4) continued in use until 1993. Whilst all of the superstructures of these furnaces have gone the bases of the furnaces, which lie within the Proposed Development Site, are still visible. The bases of blast furnaces are present as significant raised mounds c. 2m high with their adjoining raised working surfaces and occupy an area roughly 100m north south and 50m east-west. There is visible detail in the sides of these mounds including a stone base (of probable 19th century date) and brick-built conduits, probably providing access for the blast.*
>
> *The furnaces were served by a 'Hi Line' where the charge was run straight to the top off an elevated rail line, of which parts of the embankment and metal trestles survive. Blast stoves required to provide the hot gases needed to achieve the blast, later coke ovens, part of a rolling, mill, the*

laboratory, welfare facilities and cooling towers were also located within the Proposed Development Area.

In 1913 Bolckow and Vaughan replaced the Bessemer converters with a set of open-hearth steel making furnaces (North Steel Plant) and a South Steel Plant was constructed during the First World War. Both of these plants which are located in the east of the study area were closed by 1928 due to the economic downturn after the end of the war. In 1929 Bolckow and Vaughan was bought by Dorman Long and as the economic situation improved prior to the Second World War rolling mills were established to the east of the Proposed Development Area.

The works ceased on the 1980s and the structures cleared except for the bases. Rail lines are still visible in some areas along with some built elements; these are of value because they have potential to yield information on historic industrial processes, the first undertaken on a commercial basis.

The ES comments;

The demolition of the visible structures of the site has severed its connection to the local communities and there is no access to the site. At present, it is difficult for people to understand the remains that survive on the site, however there is a strong possibility that with improved access and interpretation, the local community could engage with the surviving blast furnaces as clear and understandable links to the past of their area. There is considered to be a medium communal value to the industrial heritage assets……..

The aesthetic significance of the site is low from that perspective however the remaining blast furnace bases have potential to allow an understanding the core processes that took place at the site and as such are intellectually stimulating.

Following the decommissioning of the blast furnaces in the 1990s English Heritage assessed their cultural heritage significance and concluded they are of national importance. The cultural heritage value of the blast furnaces is therefore, considered to be high. The cultural heritage value of any further archaeological remains associated with the iron and steel works within the site will be dependent on the extent of their surviving evidential value but are most likely to be of medium value.

The ES concludes that the archaeological potential of the site for the 10th and 20th centre is high.

Future Baseline Conditions and Impacts during Construction

The ES comments STDC will undertake remediation of the site to remove sub-surface structures to a depth of 2.5m and to mitigate the effects of ground contaminants within the site. The area identified as nationally significant, will not undergo remediation. The area will be fenced and protected from plant

movements. It is probable that the remediation will result in the removal of sub-surface archaeological remains in any areas where intrusive remediation is undertaken. A detailed Geotechnical Investigation, with archaeological watching brief, will be completed to further develop the remediation works.

Any archaeological investigation of archaeological remains would be undertaken either in advance of, or during the remediation works. It is anticipated below ground archaeological remains will have been removed from the majority of the site, but until the detailed design for remediation is known there remains the potential for archaeological remains to still be present in parts of the site not subject to remediation activities.

Impacts

The association with the nearest listed buildings in South Bank are now lost and the development will not adversely impact on the character and setting of those assets, nor is there any significant impact on Conservation Areas save for long distance views to the site.

The remediation works required to be undertaken on the site may impact the archaeological resource, but the extent of this impact will not be known until the detailed programme is agreed. Those parts of the site to be development will destroy remains of medium cultural value and this would be irreversible.

> *The preservation in situ of the blast furnaces will secure their conservation in the long-term. The consolidation of the structural remains prior to their covering and seeding with grassland species will improve their structural integrity and survival. This will have the effect of conserving the evidential value the blast furnaces hold and arresting the decline in the condition of the asset. The implementation of interpretation of the blast furnaces within the wider site context will allow their heritage significance to be better revealed and understood, even without the remains being widely visible.*
>
> *The preservation in situ and interpretation is considered to result in a minor positive magnitude of impact on these archaeological remains of high cultural heritage value. This would result in a long term, minor-moderate beneficial significance of effect.*

Mitigation

In terms of embedded mitigation an area of some 2ha will be excluded from the development of the site and will be a *non-intervention* area. This part of the site will be enclosed and covered on substrate and allowed to develop and brownfield grassland; this will contribute to biodiversity on the site and allow the preservation of the remains in situ. The blast furnace bases could be interpreted on site through the use of information boards placing them in the wider historical context of the iron and steel works in the region.

If it is determined that archaeological remains may be present a programme of archaeological investigation may be required in advance of, or during construction. Whilst the monitoring of piles would not be productive, the intrusive works associated with the removal of sub-surface obstructions, the installation of the pile mat and bases for the piling rigs may allow archaeological remains to be exposed and investigated. Any archaeological investigation should be undertaken in accordance with a Written Scheme of Investigation (WSI) agreed in advance with the Planning Authority's Archaeological Adviser and the Standards and Guidance from the Chartered Institute for Archaeologists.

Residual Impacts and Significance of Effect

The archaeological investigation and recording of any archaeological remains present on the site will allow aspects of their evidential value which would otherwise be lost to be recorded and interpreted. Through the deposition of the report with the HER and the archive with a suitable repository public benefits will accrue in the form of increased knowledge and understanding of the site. This will result in a reduced loss of evidential value and therefore the residual magnitude of impact is considered to be moderate negative. This would result in a minor-moderate adverse significance of effect on these remains of medium cultural heritage value.

The residual impact and significance of effect on the blast furnaces are unchanged as a minor-moderate beneficial effect as there is no additional mitigation to be implemented as part of the application.

Planning Assessment

The ES has examined appropriate resources for information in respect of the archaeological potential of the site and the impact of the development ton heritage assets. It correctly identifies those listed assets and Conservation Areas etc. that lie within the study area. The assessment of that data demonstrates a historical link between the development of steel making in the area and the local communities of South Bank and Grangetown in the 19C and 20C as key historic developments, a link that is now lost.

The ES concludes that given the location of the site there will be no direct adverse impact on heritage assets, save for longer views to the site from such areas. The ES does conclude, based on the evidence obtained, that the site has value as the site of the first steel works locally that underwent severe iteration until it closed in the 1980s. The ES recognises that the archaeological resource will be impacted by the development in terms of remediation and piling etc. and this will see resources lost, however, the main site of the blast furnaces will be preserved in situ through the reservation of the south east part of the site and an interpretation strategy.

The Council's consultant archaeologist comments;

In application of the above policies (the NPPF and BDLP) *to the proposal our advice to the LPA in this instance is that if the public benefit and other aspects of the proposal are considered to outweigh the identified harm to the important non-designated heritage asset, the harm can be successfully mitigated by a programme of archaeological work, including some in situ preservation of the asset.*

A condition in respect of archaeological investigation is recommended.

In view of the above it is concluded the development complies with policy in the NPPF and policy SD4(c) (General Development Principles) and HE1(Conservation Areas) HE2 (Heritage Assets) and HE3 (Archaeological Sites and Monuments) of the RCLP 2018.

Chapter 11 Socio Economic

The baseline assessment comprises the objective of securing the delivery of a new facility to serve the Tees Valley and the ES summarises the business case for the development. The ES then describes the demographics of the area and profiles data in terms of the economy, employment and income. It provides narrative on housing, tourism, crime and traffic and commuting, public rights of way, air quality and noise.

Impacts

Employment

The development will provide 42 full time jobs and around 300 during the course of construction. Projections estimate that around 50% of those jobs could be secured locally. Additional benefits will accrue to the supply chain and the benefit of the multiplier effect.

Housing

The scheme is unlikely to place additional pressure on local housing stock And the impact on the local housing market is judged to be not significant.

Tourism

The ES concluded that there will be no direct impact on tourism as a result of the development. The application site is located in a historically industrial part of the area and whilst there will be views to the site from more sensitive locations such as Eston Nab, it is concluded the development will not inlfunece people’s decision to visit the area. The impact on the local tourism is judged to be not significant.

Crime

There may be a risk during the construction phase in terms of materials and plant, the contractor will be responsible for site security. Crime rates are noted to be high in the Tees Valley but concentrated in local areas. The issue of crime in so far as it relates to the development, will be dealt with by an onsite security presence.

Traffic and Commuting

The ES recognises the impact of traffic and assesses the commuting pattern for the local area. The site will be served by a new access provided by STDC. Construction will take approximately 36 months with traffic peaking in the first 12 months. The facility is designed to have the capacity to receive up to 450,000 tonnes of waste per annum and waste deliveries to the expected to finish by 1600 hours, removing operational trips on the highway network during rush hour. Waste will be received from all Tees Valley Boroughs and other councils in the region party to the waste contract. The facility will receive waste 8-hour operation (7am -3pm) Monday to Friday and Saturday morning. It is likely that there will be peaks mid-morning and mid-afternoon, Monday to Friday and Saturday morning. The facility will function 365 days a year, with waste received 305 days per year.

Staffing will operate 24-hours over three shifts (08:00 – 16:00, 16:00 to 00:00 and 00:00 to 08:00).

Public Rights of Way

The Teesdale Way forms part of The EIA Scoping Response and states that there should be no interference with the availability and use of the PROW.

Air Quality

This is dealt with as a separate topic in the ES (see below)

Noise

This is dealt with as a separate topic in the ES (see below) but the overarching approach will be for the impact of the development to be mitigated via a Construction Management Plan (CMP).

Mitigation

The impact of the development in terms of employment will be positive and so no mitigation is required. The socio-economic impacts of the proposed development on local employment is likely to be positive and no mitigation is therefore required. It is recommended that when seeking employees for the operational stage of the scheme, the client use of the Grangetown Training and Employment Hub, a local scheme operated through a partnership

between Jobcentre Plus, R&CBC, Coast and Country Housing, Work Programme providers, training providers and individual projects. The scheme occupies a community centre in Grangetown and aims to get local residents into work. Many employers involved in local activity engage with the centre as it helps them deliver agreed targets, they have to employ local labour as well as supporting them to fill vacancies with appropriately skilled workers.

No significant impact are predicted in terms of housing or tourism and so no mitigation is required. The issue of crime will be dealt with by on-site security.

In terms of traffic and commuting the ES concluded the impact will not be significant in terms of the local network. Transport of waste will be by road with some possibility of rail service in the future. The ES comments;

Commuting via public transport, or cycling or walking, can be beneficial to the local air quality, reduce the District's contribution to climate change, and increase the health and wellbeing of employees. Measures to be adopted could include:

- Car share schemes;
- Electric car charging points;
- Secure cycle parking, showers and lockers;
- Cycle to Work scheme;
- Discounted public transport season tickets.
- An Environmental Rewards Scheme for employees. Many employers now offer financial incentives for their staff to commute via an environmentally friendly method e.g. cycling or via public transport. This could result in a reduction in private cars travelling to and from the site, lessening traffic impacts

Whilst traffic impacts are predicted not to be significant measure can also include;

- Procurement of the materials required for construction could be planned carefully to minimise excess material and waste and the need to transport materials
- Materials could be sources as locally to the site as possible
- Materials could be transported to the site via shipping or rail freight due to the immediate proximity of the site to the Tees Estuary and rail line.
- For the volumes of material assumed to be needed for the construction, the only two viable methods of transportation are via the road network or shipping. As shipping (currently the preferred method) would lead to less severe adverse socio-economic impacts, no mitigation is suggested. It is not possible to eliminate all adverse impacts in this case, however traffic impacts against the baseline are not deemed to be significant.

Air Quality

Socio-economic impacts of the proposed development on air quality is likely to not be significant and no mitigation is therefore required.

Noise

Socio-economic impacts of the proposed development on noise is likely to not be significant and no mitigation is therefore required.

Construction Impact Mitigation Measures

In order to mitigate any socio-economic impacts arising from construction of the scheme, some or all of the following measures should be adopted:

• Informing, respecting and showing courtesy to those affected by the work;
• Minimising the impact of deliveries, parking and work on the public highway;
• Contributing to and supporting the local community and economy; and
• Working to create a positive and lasting impression

Site Construction Environmental Management Plan (CEMP) should be developed and maintained throughout operations, covering management of construction impacts such as noise, dust, waste, water run-off/pollution. Assessment of the site under the Considerate Constructors Scheme (CCS) to maintain best practice site management in line with an industry recognised benchmark scheme.

Planning Assessment

The environmental impact of the development is fully assessed in the reminder of the ES. In terms of the socio-economic impact of the development, the proposal respond to key objectives set out in the NPPF and Development Plan. The application promotes sustainable development in accordance with policy SD1 SD2 and the detailed criteria set out in policy SD4. Flood and related matters will be dealt with in accordance with policy SD7.

Critically the development respond to the policy requirement of LS4 and the South Tees SPD to deliver economic growth and the regeneration of the STDC area.

Chapter 12 Air Quality, Noise and Human Health

The Executive Summary of the revised supporting report recognises that dust emissions from construction could be an issue that would impact the local environment but with mitigation measures in place residual effects would not be significant.

The study also assesses the impact of emissions from the operation of the plant and traffic generation. The air quality effects on human health are judged to be not significant, but effects on sensitive habitats without mitigation are judged to be potentially significant due to existing conditions at the ecological sites. Consideration of whether impacts from the proposed facility cause a significant effect needs to be assessed by an experienced ecologist. Consideration has also been given to Middlesbrough Borough Council's Local Nitrogen Dioxide Plan. The proposed development will not cause any exceedances of or delay compliance with the limit values.

The scope of the assessment cover both construction and operation of the plant in terms of possible emissions. The proposed facility will also result in changes in traffic flows on local roads due to delivery of the waste and staff commuting to and from the facility. The emissions associated with these changes could impact air quality at local sensitive receptors. Consideration of the impact of road traffic has been given to NO^2 and particulate matter (both PM10 and PM2.5) as these are the pollutants of most concern with regards to road traffic emissions.

There are also a number of sensitive ecological sites, including:

- Ramsar, Special Area of Conservation (SAC) and Special Protection Area (SPA) sites within 5 km of the site boundary:
- Teesmouth and Cleveland Coast Ramsar
- Teesmouth and Cleveland Coast SPA
- Site of Special Scientific Interest (SSSI) sites within 2 km of the site boundary:
- Teesmouth and Cleveland Coast SSSI
- There are no National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Sites of Importance for Nature Conservation (SINC) or Ancient Woodland (AW) sites within 2 km of the site boundary.

The impacts have been assessed at these relevant locations.

The ES sets out the legislative background, Control of Pollution Act 1974 and the 2008 Ambient Air Quality Directive, the planning policy context as set out in the NPPF and Planning Guidance and Development Plan and associated national guidance. The context of Air Quality Strategy and Local Air Quality Management is set out along with the Industrial Emissions Directive. The ES also assesses the impact of the development in terms of designated nature conservation sites and human health.

The ES references a number of guidance documents dealing with emissions as a result of development and in terms of the exposure key receptors are defined as human health and ecologically sensitive areas with narrative on the limits on those receptors.

Air Quality Assessment Methodology

Baseline

A baseline assessment was completed which comprised a number of survey sources.

Impacts

The ES identifies dust emissions during the course of construction as one source of emissions, albeit temporary. Impacts are assessed in terms of modelled emissions based on fuel and the process of combustion. The ES provides detailed narrative on how the emissions are measured with reference to specific methodologies, this is broadly broken down into construction and operation impacts. The ES provides detailed narrative of the effects of dry deposition and wet deposition on ecologically sensitive areas and human health. Narrative is then provided on effects significance and the guidance issued by the EA in respect of impacts on nature conservation.

The ES models a receptor grid for the purposes of assessment and impacts on some 52 residential properties were modelled, the ES also models road traffic impacts in terms of emissions.

The ES then provides a detailed breakdown of the baseline conditions in respect of local air quality, it notes RCBC does not have any Air Quality Management Areas (AQMA's) and there are none within 5km of the development. Data from RCBC / MBC automated monitoring stations is set out for 2014-18 along with data from additional diffusion tubes. This is combined with DEFRA and other emissions data from monitoring programmes. Finally, deposition fluxes are identified on the coastal SPA.

Assessment of impacts

Construction Impacts

The magnitude of potential dust emissions is judged to be large given the size of the site and the earthworks required in addition that same degree of impact is judged associated with the construction of the buildings and construction vehicle movements. The development is adjoining mainly commercial sites and guidance suggests no material impact beyond 350m from the site and these sites are judged to be low in sensitivity. Overall the EA concludes that the sensitivity of the surrounding areas is low, and the impact of unmitigated dust emissions is low to negligible.

Operational Impacts

The ES assesses the operational impacts based on a range of pollutants, a number requiring further analysis, others are discounted as having a negligible impact.

Mitigation

It is noted that as part of the EA licensing arrangements the developer will be required to demonstrate best available techniques (BAT). Two specific noise climates are to be managed, construction and operation.

The scheme CEMP will include management and monitoring requirements for noise and dust emissions during the construction stage. Basic compliance will include:

- Work to be carried out during daytime hours, avoiding early morning and night work.
- Vehicles only to run when required, avoiding idling. Diesel generators only to be used when operation is essential.
- Adoption of a Dust Action Plan
- Detailed site management
- Monitoring of impacts
- Operation of plant
- Waste management

Residual Impacts

No residual significant effects are predicted as a result of the development.

The ES summarises the issue as;

The impacts of the construction works on dust and ambient PM10 concentrations have been assessed and the risk of dust causing a loss of local amenity and increased exposure to PM10 concentrations during construction works has been used to identify appropriate mitigation measures. Provided these are implemented, for example through a planning condition, the residual impacts are considered to be not significant.

The operational impacts of emissions from the Proposed Facility's stack and the development traffic have been predicted. The impacts have been assessed against the relevant air quality assessment levels taking into account relevant exposure.

During the Environmental Permitting process, the Proposed Facility will be required to demonstrate that Best Available Techniques (BAT) have been implemented. This will impact on the design of the facility. The 2019 BREF note sets out BAT for facilities such as this.

The operational air quality effects on human health are judged to be not significant. This professional judgement is made in accordance with the methodology and assessment criteria set out earlier in this report and takes account of the assessment that:

- *the annual mean impacts of pollutant emissions in relation to the human health receptors are negligible based on the location with the greatest impact for the vast majority of pollutants*
- *two group 3 metals (arsenic and chromium (VI)) have the potential for significant adverse effects based on the maximum emissions measured from existing similar facilities. However, based on the average emissions from existing facilities, which are more likely, the impacts are descripted as negligible; and*
- *the short-term mean impacts of pollutant emissions in relation to the human health receptors are insignificant.*

The operational air quality effects on sensitive habitats without mitigation are judged to be potentially significant due to current exceedances of the AQALs. Consideration of whether these impacts cause a significant effect needs to be assessed by a suitably experienced ecologist. The maximum predicted concentration with the proposed facility at the limit value receptors are all well below the limit value and the impacts are therefore insignificant. The proposed development will not change the outcome of the Middlesbrough Borough Council's Local Nitrogen Dioxide Plan or delay compliance with the limit values.

Planning Assessment

Based on the broad assessment set out in the ES the development raise no issues in terms of emissions that would to be dealt with through the EA permitting regime and other regulatory functions. The development will not result in excessive impacts in terms of noise, the development site being located several hundred meters from the nearest sensitive receptor.

Whilst the LPA must be mindful of the advice set out in the NPPF (para183)

> *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.*

The LPA is satisfied that the development will have no impacts in terms of emissions, noise and impact on human health that cannot be mitigated to an appropriate level by planning conditions or other regulatory regimes. The development raises no issues in respect of policy SD4(b)(e)(f)(m)(n); SD7 and policy ED6.

Chapter 13 Traffic and Transportation

The ES considers the anticipated effects of the proposed development on driver delay, severance, pedestrian delay, pedestrian amenity and accidents and safety. A Transport Statement (TS) has been prepared by Fore Consulting Ltd under separate cover to demonstrate that the proposed development is acceptable in planning terms and deliverable, subject to appropriate mitigation. The ES sets out legislation, planning policy and guidance contained in the NPPF, Development Plan and PPG.

The ES sets out the parameters for the study area, it explains the modelled scenarios;

1. Existing in 2019 based on current traffic conditions as established by survey
2. Base 2025 assuming no development but predicting traffic patterns based on known development commitments but including traffic growth forecasts
3. 2025 (With Proposed Development) - This scenario represents a future year situation on the study highway network with the proposed development taking place

A scoping exercise was undertaken with the RCBC Highways team to identify any potential developments within the vicinity of the site. RCBC highways have confirmed that there are no such committed developments. However, JBA advised that the following committed developments should, in terms of traffic impact, be accounted for as part of the cumulative assessments:

- Kirkleatham Lane (Application Reference: R/2016/0663/OOM) – Outline Planning Permission granted and Reserved matters application (Application Reference: R/2019/0485/RMM) for details of appearance, landscaping, layout and scale of 550 dwellings and associated facilities.

- Land at Low Grange Farm (Application Reference: R/2014/0372/OOM) Outline consent granted for a site of 1250 dwellings

In terms of highway safety, details of road traffic collisions that have been recorded across the study highway network within the latest five-year period (2014 to 2018), walking and cycling routes have been identified along with public transport links.

Characterisation of Impact

The impact of the development is assessed in terms of driver delay; severance; pedestrian amenity; accidents and safety. Impacts are measured in terms of magnitude, defined groups as suggested in IEMA guidance.
The ES predicts the impact of the development based on identified groups, magnitude, impact, receptor sensitivity and impact significance, only impacts which are major and moderate are assessed as being significant.

Baseline

The ES presents average hourly traffic flows and total HGV flows over 24-hour (00:00-24:00) Average Annual Daily Traffic (AADT) and 18-hour (06:00-24:00) Average Annual Weekday Traffic (AAWT) time periods for all highway links in the study area in the Existing 2019 scenario are presented. An assessment of highways safety is made based on accident data, concluding the level of accidents locally is not abnormally high. The ES provides narrative on walking links, cycle links, public transport links including bus services and the nearest bus stops and rail services.

Impacts (during construction)

Embedded into the development is vehicular access to an appropriate standard provided by STDC as part of infrastructure delivery in their development area. Details are yet to be agreed but a separate access for private cars and HGVs will be provided.

As discussed with RCBC Highways, access points into the site will be provided from simple priority junctions onto the new link road. In line with the Tees Valley Design Guide & Specification for Residential and Industrial Estates Development, the design of the access points will include;

- A public footpath approximately 200m in length provides access between the residential area of South Bank and Cargo Fleet, between Harcourt Road and Skippers Lane, to the south west of the site.
- Siting of accesses on the same side of the carriageway will require a minimum separation distance of 90.0m. Siting of accesses on the opposite side of the carriageway will require a minimum separation distance of 40.0m.
- Minimum carriageway width of 7.3m and visibility splay of 2.4 x 43.0m to be provided for 30mph carriageways.
- Minimum junction kerb radii of 12.0m.

It is envisaged that the link road infrastructure serving the STDC site masterplan will be built to adoptable standards and will be offered for adoption under Section 38 of the Highways Act. Auto-tracking of large vehicles around the proposed development site will be provided as part of subsequent planning applications for reserved matters. The layout of the pedestrian and cycle connections will be designed to tie into the existing infrastructure to ensure that users of the site and wider STDC masterplan area can access the existing public transport infrastructure and services.

Car parking provision at the site will be provided to accommodate the proposed staff shift patterns. Based on the current estimated levels of staff it is proposed to provide approximately 33 car park spaces, including two electric vehicle charging points. The internal site layout will also accommodate an appropriate level of cycle parking, to be agreed with RCBC at the detailed design stage.

Construction of the proposed development is anticipated to take approximately 3 years with work commencing on site in 2022. It is anticipated that the full site will be completed in 2025. Vehicle movements generated by the construction process are likely to be associated with the delivery of plant and construction materials, as well as construction staff travelling to and from the proposed development site. All construction vehicles will access the site via the A66 / Eston Road / Church Lane four-arm signalised junction.

The potential impacts from a transport perspective include additional large vehicles on the network that are associated with construction, as well as private vehicles from construction workers. The movement of construction traffic may result in a temporary adverse impact on the operation of the local road network (in terms of pedestrian and driver delay on the main routes to and from the proposed development site) and may also adversely affect pedestrian amenity, severance and accidents and safety. In addition, construction vehicles could carry mud or dust on to the local road network. During the construction phase, the potential impact of the proposed development is considered to be of minor adverse significance at the local level, prior to the implementation of mitigation measures. The potential impact will be medium-term (3 years), but non-permanent.

Impacts (during operation)

The ES concludes the impact of the operation of the plant in terms of severance driver delay and pedestrian delay would be negligible. In terms of pedestrian amenity, although the change will be permanent, this is also predicted to be negligible. The potential impact of the proposed development on accidents and safety is considered to be of minor adverse significance at the local level. The potential impact will be permanent.

The likely impact of the proposed development on all links in the study area, in terms of accidents and safety, has been identified as being of minor adverse significance at the local level, no mitigation measures are therefore required.

Residual Impacts

The potential impact of the proposed development during the construction phase are identified as being of minor adverse significance at the local level. it is considered that the residual impacts of construction traffic on the main routes to and from the site will be reduced to an impact of negligible significance. In summary, following the implementation of a CEMP and MMP, the residual impact of the proposed development during the construction phase is considered to be of negligible significance.

Planning Assessment

The ES and associated Transport Assessment conclude that the development can be accommodated on the local road network without any undue impacts

in terms of highway safety and capacity. The development raise no issues in respect of the policy set out in the NPPF and policy TA1 of the Development Plan.

Chapter 14 Cumulative Impacts and Intra project cumulative effects

The ES has, as required by regulations, assessed the cumulative impact of the development with other consented / proposed projects. These are mapped around defined buffer and are listed as;

- Housing development at Kirkleatham Lane
- Land at Low Grange (housing development)
- MGT Biomass Power Plant
- Teesside CCPP Power Plant (Wilton)
- Northern Gateway Terminal PD Ports
- Peak Minerals Development
- York potash Mine, conveyor, processing plant etc.
- Tees Carbon Cluster

For the most part, the ES concludes the cumulative impact of development will not be significant, only in respect of listed areas are impacts are considered to be significant and this is limited to impacts on statutory and non-statutory ecological sites, habitats and species and water courses but none are of a scale that cannot be satisfactorily mitigated by planning conditions and none are of a scale or nature that merit a refusal pf permission.

Chapter 15 Environmental Commitments

This section of the ES sets out the mitigation strategy based on the proposed mitigation measure identified in each of the preceding topic chapters and proposed to be included in the Construction Environmental Management Plan (CEMP)

In summary this includes;

Hydrology, Geology and Contamination

Pre-Development

- an updated Contaminated Land Risk Assessment

During Construction

- pollution prevention measures
- timing and management of excavation / potential pollution
- surface water drainage from stored spoil
- maintenance of plant and machinery
- location of plant and wheel washing facilities
- emergency response protocols

- effluent for welfare facilities
- pollution prevention in terms of sediment / oil / fluid leaks
- monitoring of groundworker

Embedded Design

- design of drainage infrastructure
- storage of all chemical and oils etc

Flood Risk and Water Quality

During Construction

- compliance with the FRA
- discharges are to be agreed with NWL or EA as necessary
- minimise abstraction and discharge points
- all culverts to appropriate design
- site management of water environment

Embedded Design

- Appropriate design of drainage infrastructure
- Appropriate on-site water attenuation
- Onsite drainage infrastructure to include climate change component
- Appropriate SUDS provision

Archaeology and Cultural Heritage

During Construction

- Area to be fenced and protected during earth moving and construction.
- Area to be top soiled from site derived material to protect the buried archaeology.
- Implementation of a programme of archaeological recording and reporting prior to or during construction

Socio Economic

During Development

- Securing employees from local labour markets
- Appropriate site security
- Management of vehicle movements to avoid peak hours
- EV points and Travel Plan
- Procurement of materials to avoid waste
- Minimise impact of deliveries on the highway network
- Contribution to and supporting the local economy
- Working to create a positive and lasting impression / Assessment of the site under the Considerate Constructors Scheme (CCS).

The environmental commitments set out in the ES will inform the planning conditions.

Other matters

Planning Obligations

Policy SD5 of the Development Plan sets out those developer contributions that may be sought in respect of new developments, this includes the delivery of local employment and training. The application site is located within the STDC area and will be developed on STD land however, RCBC remain the planning authority and it has been agreed the Council will lead on the delivery of planning obligations until such time as such arrangements might be transferred to the STDC through their contractual arrangements.

It has been agreed with the applicant that the permission shall be subject to a section 106 agreement which provides for use of local labour and a commuted sum of £250,000 to support the local employment hub or other appropriate training and employment programmes.

CONCLUSION

The application for the development of an energy from waste plant is generally consistent with development plan policy which allocates the area for employment related development. In addition, the development is consistent with the STDC Master Plan and South Tees Area SPD. In addition, the development is consistent with the Tees Valley Minerals and Waste Core Strategy and Policies and Sites DPDs. There is no policy objection to the principle of development.

In terms of the detailed assessment of the application the application is supported by an Environmental Impact Assessment as Schedule 1 development. The background to the development is fully explained along with additional information provided in the Design and Access Statement. The ES sets out consideration of alternatives as required by the regulations.

The methodology of the ES is acceptable and is considered a robust document which properly outlines the baselines conditions of the site, the impact of the development of the site and its future operation. The scope of the ES is that which was previously agreed with the LPA and other stakeholders and additional information and modelling was carried out in respect of the impact of air quality on the SPA and other sensitive sited at the request of Natural England.

In terms of ecology the application site is of limited but locally important value. Full field surveys have been carried out and impact assessed. The application proposes an ecological enhancement strategy to compensate for habitat loss and impacts. It is proposed initially that this will be on site, but this may be delivered outside the terms of this permission in an agreement with STDC. Such an agreement will be outside the terms of this current application. A

Construction Environment Management Plan will deal with the outstanding matters.

The landscape impact of the development has been robustly assessed. The development is proposed in an area of commercial activity which lends itself to large scale development with the minimum of landscape impacts. Mitigation of these impacts will be achieved through embedded design features at the RM stage.

No issues are raised in respect of hydrology, hydrogeology, geology and contamination and all remaining matters may be dealt with by planning conditions.

No issues are raised in respect of flood risk and water quality and all remaining matters may be dealt with by planning conditions.

The ES provides a detailed assessment of the archaeological resource of the site and identifies and area of interest which may see an area of the site remain undeveloped. The Council's consultant recommends a condition relating to alcohological investigation.

The ES explains the socio-economic impact of the development which is overall positive in planning terms with limited residual impacts.

In terms of air quality, the ES concludes the development will have no unacceptable impact in terms of human health and the nearest sensitive receptors. Critically, Natural England did raise the issue of air quality impact in terms of the SPS / Ramsar SSSI coastal sites and, at the request of NE the agent carried out additional modelling to assess those impact and, whilst it was concluded there would be no significant effects from the development, this is appreciated on modelling and the limited data provided in an outline application, as a result it has been agreed that the precautionary principle should be applied and at RM stage a revised HRA will be adopted and a final air quality assessment submitted to confirm that there will be no such effects. This has been agreed with Natural England.

No objection is raised to the development in respect of transport impact and construction and operational traffic can be accommodated on the local network with no unacceptable adverse impacts.

The ES properly assesses the cumulative impact of the development with other committed schemes, but this raised no policy issues.

Finally, the ES sets out the mitigation strategy based on the proposed mitigation measure identified in each of the preceding topic chapters and proposed to be included in the Construction Environmental Management Plan (CEMP).

RECOMMENDATION

A. THAT THE DIRECTOR OF GROWTH ECONOMY AND ENVIRONMENT BE AUTHORISED TO ENTER INTO AN AGREEMENT UNDER SECTION 106 OF THE PLANNING ACT (AS AMENDED) TO SECURE THE FOLLOWING PLANNING OBLIGATIONS;

(i) A PROVISION TO PROMOTE THE USE OF LOCAL LABOUR (A LOCAL LABOUR AGREEMENT)
(ii) A FINANCIAL CONTRIBUTION TO BE PAID ON FINANCIAL CLOSE OF THE CONTRACT FOR THE SUM OF £250,000 TO SUPPORT THE DELIVERY OF EMPLOYMENT AND TRAINING IN THE BOROUGH

B. THAT ON COMPLETION OF THE AGREEMENT THE DIRECTOR EXERCISE DELEGATED AUTHORITY TO GRANT PLANNING PERMISSION SUBJECT TO THE FOLLOWING CONDITIONS AND REASONS;

GRANT PLANNING PERMISSION subject to the following conditions:

1. Details of the access, appearance, landscaping, layout and scale (hereinafter called the Reserved Matters) shall be submitted to and approved by the Local Planning Authority before any development takes place and the development shall be carried out as approved. Application for the approval of the Reserved Matters shall be made within 3 years of the date of this permission.

   REASON: Required to be imposed pursuant to Section 92 of the Town and Country Planning Act 1990 (as amended)

2. 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: Required to be imposed pursuant to Section 92 of the Town and Country Planning Act 1990 (as amended)

3. Upon the approval of the Reserved Matters, and prior to the implementation of the approved scheme, the development shall be the subject of an updated Habitats Regulations Assessment and additional supplementary air quality assessment. The HRA and additional air quality assessment shall confirm, based on the approved detail of the development and its processes, the conclusions of the Environmental Impact Assessment and Air Quality Assessment that the development will not give rise to significant adverse impacts on designated sites. Where significant impacts not previously identified are assessed to arise from the approved detailed scheme, the additional information shall set

out those mitigation measures to be employed to minimise or eliminate such impacts.

REASON; Whilst the Local Planning Authority and Natural England are satisfied based on the information submitted with the outline application, that the development is unlikely to have significant impacts on local designated sites, this conclusion partly based on modelling of data and an outline planning application with limited information as to the final technical design of the development, the Local Planning Authority considers it appropriate to adopt the precautionary principle to confirm those conclusions once the detail of the scheme and its operational process are confirmed.

4. No development shall take place until a Construction Environmental Management Plan (CEMP) for the development has been submitted and approved in writing by the Local Planning Authority. The approved CEMP shall be adhered to throughout the construction period and shall include details of all those mitigation measures set out in Chapter 15 of Volume 1 of the submitted Environmental Impact Assessment December 2019 and Chapter 7 (Mitigation) of the Air Quality Assessment Rev 02 6 March 2020. In addition, the CEMP shall set out;

   i. The method to be used to control the emission of dust, noise and vibration from construction works, including any details of any mitigation measures required;
   ii. Measures to control the deposit of mud and debris on adjoining public highways
   iii. Site fencing and security
   iv. Temporary contractors' buildings, plant, storage of materials, lighting and parking for site operatives
   v. The use of temporary generators
   vi. The arrangement or turning of vehicles within the site so that they may enter and leave in forward gear
   vii. A risk assessment of construction activities with potentially damaging effects on local ecological receptors including any measures to protect those receptors during construction
   viii. Roles and responsibilities for the implementation of the CEMP requirements and measures.

   REASON; To mitigate the impact of the development in accordance with the strategy set out in the Environmental Assessment.

   REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required as the environmental impact of the development will occur on the commencement of development.

5. Development shall not commence until a scheme to deal with any site contamination has been submitted and approved in writing by the Local Planning Authority. The approved scheme shall include an investigation and assessment to identify the extent of contamination and the

measures to be taken to avoid risk to the site occupants when the site is developed. Development shall not proceed until the measures approved in the scheme have been implemented.

REASON: To ensure that the development takes account of any contamination present on the site in the interests of the safety and amenity of occupiers and visitors to the site.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required because the risk form contamination will be present on the commencement of works.

6. If, during the course of development and contamination not previously considered is identified, additional measures for the remediation of this source of contamination shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

   REASON: To ensure that the development takes account of any contamination present on the site in the interests of the safety and amenity of occupiers and visitors to the site.

7. No development shall take place until a written scheme of investigation (WSI) for archaeological work has been submitted to and approved in writing by the local planning authority. The WSI shall as a minimum make provision for:

   i. Before remediation or development commences, archaeological evaluation of borehole and trenching data
   ii. Before remediation or development commences, initial archaeological survey (drawn and photographed) of the whole application site, with particular emphasis on the remains the subject of preservation in situ
   iii. Where practical and before remediation or construction works takes place on site an archaeological strip, map and sample of remains of high significance suggested by the borehole/trenching data, or observed during the initial survey
   iv. An archaeological watching brief of all ground disturbance during the remediation works and during construction ground works in areas identified as archaeologically sensitive
   v. Protection during development, followed by consolidation and preservation of high value remains left in situ
   vi. a general programme of works and monitoring arrangements, including reasonable notification to the local planning authority of commencement of works
   vii. details of staff involvement in carrying out the work (including specialists), and their qualifications and responsibilities
   viii. the timetable for completing post-excavation assessment.

(a) Provision for the analysis, archiving and publication of the results of the archaeological surveys and excavations shall be secured to the satisfaction of the local planning authority by the developer before the development is brought into use.

(b) The development shall not without the prior written approval of the local planning authority be carried out otherwise than in accordance with the approved WSI, and the consolidation and preservation of on-site remains as provided for in the WSI (or as otherwise agreed at any time in writing by the local planning authority) shall be secured by the developer and/or landowner on an on-going basis.

REASON: The site contains remains of significant archaeological interest, some of which merit preservation in situ.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required to ensure that no remains are disturbed or otherwise compromised by site excavation of other ground works.

8. Development shall not commence until a detailed scheme for the disposal of foul water from the development hereby approved has been submitted to and approved in writing by the Local Planning Authority in consultation with Northumbrian Water and the Lead Local Flood Authority. 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: A pre-commencement condition is required to ensure that excavations and groundworks do not compromise the installation of the approved foul water drainage infrastructure.

9. Prior to the commencement of the development, or in such extended time as may be agreed in writing with the Local Planning Authority, details shall be submitted and approved of the surface water drainage scheme and the development shall be completed in accordance with the approved scheme.

The design of the drainage scheme shall include;

(i) Restriction of surface water greenfield run-off rates (QBAR value) with sufficient storage within the system to accommodate a 1 in 30-year storm.
(ii) The method used for calculation of the existing greenfield run-off rate shall be the ICP SUDS method. The design shall also ensure that storm water resulting from a 1 in 100-year event, plus climate change surcharging the system, can be stored on site with minimal risk to

persons or property and without overflowing into drains, local highways or watercourses.
(iii) Full Micro Drainage design files (mdx files) including a catchment plan
(iv) The flow path of flood waters for the site as a result on a 1 in 100-year event plus climate change

REASON: To ensure the development is supported by a suitably designed surface water disposal infrastructure scheme and to minimise the risk flooding in the locality.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required to ensure that excavations and groundworks do not compromise the installation of the approved surface water drainage infrastructure.

10. Prior to the commencement of the development, or in such extended time that may be agreed with the Local Planning Authority, details of a Surface Water Drainage Management Plan shall be submitted and approved by the Local Planning Authority. The Management Plan shall include;

(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
(iv) Measures to control silt levels entering the system and out falling into any watercourse during the construction process. The development shall, in all respects, be carried out in accordance with the approved Management Plan.

REASON: To ensure the development is supported by an appropriately designed surface water disposal infrastructure scheme and to minimise the risk of increased flooding and contamination of the system during the construction process.

REASON FOR PRE-COMMENCEMENT: A pre-commencement condition is required to ensure that excavations and groundworks do not compromise the installation of the approved surface water drainage infrastructure.

11. The development shall not be occupied until a Management & Maintenance Plan for the surface water drainage scheme has been submitted to and approved by the Local Planning Authority; the plan shall include details of the following;

(i) A plan clearly identifying the sections of surface water system that are to be adopted
(ii) Arrangements for the short- and long-term maintenance of the SuDS elements of the surface water system

REASON: To ensure that the surface water drainage infrastructure is maintained to minimise the risk flooding in the locality.

12. Prior to the commencement of the development final details shall be agreed of the finished floor levels of the development and the development completed 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.

13. No development, other that site preparation works, shall take place unless details have been submitted and approved of a biodiversity improvement plan for the site has been submitted to an approved by the Local Planning Authority. The Plan shall set out those measures identified in the Environmental Statement that will be implemented to offset predicted impacts on the biodiversity value of the site and those measures to be implemented to improve the biodiversity value of the area.

    REASON: To mitigate the impact of the development on the biodiversity interest on the site and to secure net improvement to that value in accordance with national and local planning policy.

14. No development, other that site preparation works, and construction of the works compound shall take place unless details have been submitted and approved of a landscaping scheme for the site. The scheme shall include size, type and species of plant and the proposed layout and surfacing of all landscaped areas. A programme of implementation and subsequent maintenance shall also be submitted, and the development completed in accordance with the approved details.

    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.

15. All planting, seeding or turfing comprised in the approved details of landscaping shall be carried out in the first planting and seeding season following the occupation of the buildings or the completion of the development, whichever is sooner, and any trees or plants which within a period of five years from the completion of the development die, are removed, or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species unless the Local Planning Authority gives written consent to any variation.

REASON: To ensure the satisfactory implementation of the approved scheme in the interests of the visual amenities of the locality.

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.

INFORMATIVES

Network Rail

Asset Protection
We would advise that developer that if for any reason construction work is required to take place within 10m of the railway boundary, they should consult with our Asset Protection Team (details below) to ensure that there will be no impact on operational railway safety. This will include use of crane, plant and machinery and any excavation or construction work within that distance.

Drainage
All surface and foul water arising from the proposed works must be collected and diverted away from Network Rail property. All soakaways must be located so as to discharge away from the railway infrastructure. The following points need to be addressed:

1. There should be no increase to average or peak flows of surface water run off leading towards Network Rail assets, including earthworks, bridges and culverts. There should be no ponding of water near the railway boundary caused by the development.

2. All surface water run-off and sewage effluent should be handled in accordance with Local Council and Water Company regulations.

Fail Safe Use of Crane and Plant
All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a "fail safe" manner such that in the event of mishandling, collapse or failure, no materials or plant are capable of falling within 3.0m of the nearest rail of the adjacent railway line, or where the railway is electrified, within 3.0m of overhead electrical equipment or supports.

Excavations/Earthworks
All excavations/ earthworks carried out in the vicinity of Network Rail property/ structures must be designed and executed such that no interference with the integrity of that property/ structure can occur. If temporary works compounds are to be located adjacent to the operational railway, these should be included in a method statement for approval by Network Rail. Prior to commencement of works, full details of excavations and earthworks to be carried out near the railway undertaker's boundary fence should be submitted for the approval of

the Local Planning Authority acting in consultation with the railway undertaker and the works shall only be carried out in accordance with the approved details. Where development may affect the railway, consultation with the Asset Protection Project Manager should be undertaken. Network Rail will not accept any liability for any settlement, disturbance or damage caused to any development by failure of the railway infrastructure nor for any noise or vibration arising from the normal use and/or maintenance of the operational railway. No right of support is given or can be claimed from Network Rails infrastructure or railway land.

Cranes
With a development of a certain height that may/will require use of a crane, the developer must bear in mind the following. Crane usage adjacent to railway infrastructure is subject to stipulations on size, capacity etc. which needs to be agreed by the Asset Protection Project Manager prior to implementation.

Access to Railway
All roads, paths or ways providing access to any part of the railway undertaker's land shall be kept open at all times during and after the development. In particular access to adjacent railway structures should remain clear and unrestricted at all times to ensure that our ongoing programme of inspection and maintenance is not hindered.

Environment Agency

Advice to Applicant

The proposed incinerator will require a permit under Schedule 5.1 Part A (1) of the Environmental Permitting Regulations (England and Wales) 2016. We will consider the following areas of potential harm when assessing the permit:

Management - including accident management, energy efficiency, efficient use of raw materials and avoidance, recovery and disposal of wastes,
Operations - including incoming waste and raw material management, waste charging, furnace types and requirements, validation of combustion conditions, combined incineration, flue gas recirculation, dump stacks and bypasses, cooling systems and boiler design,
Emissions - to surface water, sewer and air, odour, noise and vibration, monitoring and reporting of emissions

Receiving pre-application advice will help the Applicant submit a good quality application that can be processed (determined) smoothly and quickly. If the Applicant wishes to request either basic (free), or enhanced (chargeable) pre-application advice, they should complete the pre-application advice form.

Movement of Waste Offsite – Advice to Applicant

The application notes that there will be some waste that cannot be used after the energy recovery process.

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 and Wales.

The law required 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.

In order to meet the objectives of the waste hierarchy and obligations under the duty of care, it is important that waste is properly classified. Some waste (e.g. wood and wood-based products) may with be hazardous or non-hazardous waste dependent upon whether or not they have had preservative treatments.

Proper classification of the waste both ensures compliance and enables the correct onward handling and treatment to be applied. In the case of treated wood, it may require high temperature incineration in a directive compliant facility. More information on this can be found here: https://www.gov.uk/how-to-classify-different-types-of-waste.

If you require any local advice or guidance please contact your local Environment Agency office.

Best Available Techniques (BAT) – Advice to Applicant Whilst the Environment Agency has no objections to this application based on the information available, we would like to draw the Applicant's attention to the following informative comments:

The latest Waste Incineration Best Available Techniques Reference (BREF) document and inclusive BAT Conclusions (BATC's) will be published before the date of permit issue for the proposed development. Therefore, the permit for the proposed development will be written with the latest BATC's and revised emission limits, which the development will need to comply with from the date of permit issue.

The Environment Agency require all new proposed incineration facilities to be built Combined Heat and Power (CHP)-ready by imposing specific permit conditions. Environmental permit applications for these types of plants will therefore need to include a Best Available Technique (BAT) assessment for CHP-readiness. Permits for these plants are also likely to contain conditions that state opportunities to realise CHP should be reviewed from time to time. These opportunities may be created by building new heat loads near the plant or be due to changes in policy and financial incentives that make it more economically viable for the plant to be CHP.

Water Abstraction – Advice to Applicant

The submitted Environment Statement notes that "There are no proposed water abstractions for the site" therefore no licence should be required. However, if the Applicant does plan on temporary abstractions or dewatering of over 20,000 litres per day to enable the works a licence may be required. If they plan to abstract over 20,000 litres of water per day from the attenuation pond for any intervening purpose, they may require an abstraction or transfer licence.

Water Framework Directive (WFD) and Biodiversity Net Gain – Advice to Applicant

We agree with the conclusions of the WFD Assessment Report regarding the potential impacts and proposed mitigation of the proposed development relevant to adjacent waterbodies. The WFD should be updated upon submission of the reserved matters application having regard to the details of the proposal.

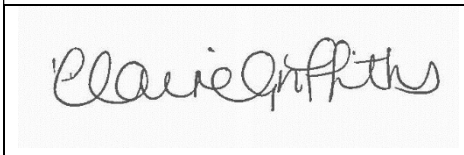
The proposed development site is located in an area of non-reportable waterbody under the Water Framework Directive (WFD). As such there is no specific monitoring that identifies the status of the water environment in this location or specific objectives that must be achieved. The general objectives of the WFD to prevent deterioration, protect and improve the ecological condition of waters does still apply to non-reportable waterbodies.
The site was formerly coastal grazing marsh associated with the Tees estuary. The development site has been heavily physically modified such that this original habitat has been lost in entirety and restoration is considered infeasible.

We encourage and support the proposal to provide on-site mitigation to improve the ecological condition. There are currently areas of open standing water within brownfield open mosaic habitat. We support the conclusions of the Ecology report dated 18 November 2019 which states:

Mitigation measure to include the safeguarding and enhancement of 5.73 Ha of Brownfield habitat, which is adequate to mitigate the loss of habitat, harm to priority species and to deliver a 10% biodiversity net

We also support the notion that areas of open water habitat are preserved and incorporated into such mitigation.

Case Officer	
Adrian Miller	Head of Planning and Development
	6 April 2020

Delegated Approval Signature	
Claire Griffiths	Development Services Manager
	15/04/2020