South Industrial Zone

Environmental Statement

July 2020

Volume 2

Chapter O - Mitigation, Monitoring and Compensation

Contents

O1.0 Introduction

O1.1 The Environmental Statement ('ES') has identified a series of mitigation and ongoing monitoring and / or management and compensation measures which are designed to limit or remove any significant adverse environmental effects of the proposed development at part of the South Industrial Zone, Redcar.

O1.2 Schedule 4, Part 7 of the Town and Country Planning (Environmental Impact Assessment) ('EIA') Regulations 2017 (as amended) requires an ES to provide:

"A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example preparation of a post-project analysis)."

O1.3 The Planning Practice Guidance ('PPG') confirms that *"mitigation measures proposed in an Environmental Statement are designed to* ***limit or remove any significant adverse environmental effects*** *of a development. Local planning authorities will need to consider carefully how mitigation measures proposed in an Environmental Statement are to be secured"* [ref. ID: 4-051-20170728].

O1.4 In accordance with Regulation 26(3) of the 2017 EIA Regulations (as amended), the PPG further states that *"if planning permission or subsequent consent is to be granted, the local planning authority or Secretary of State must* ***consider whether it is appropriate to impose monitoring measures****"* [ref. ID: 4-051-20170728].

O1.5 This chapter presents the mitigation, monitoring and compensation measures proposed throughout the ES, and the mechanism for securing these. This is identified to assist in the ongoing consideration of the ES and to assist Redcar & Cleveland Borough Council ('RCBC) in forming its reasoned conclusion of the proposed development.

O1.6 Most of the measures are standard best practice processes but are summarised below for completeness, while others are specific to the development. The majority of measures are capable of being secured via a planning condition or obligation.

O2.0 Mitigation and Monitoring

O2.1 This section of the ES sets out the mitigation measures proposed throughout the technical chapters of the ES, including those measures 'embedded' into the design as part of the EIA process.

'Embedded' Measures

O2.2 As set out in Chapter B of this ES, the iterative process of EIA has resulted in the incorporation of a range of 'in-built' mitigation measures into the design of the proposed development. These are aspects of the design which have been specifically included in the scheme design, and are assumptions on which the assessment and resultant additional mitigation have been based.

O2.3 These include the following:

1 **Maximum Development Height**: for the purpose of this EIA, the maximum development height at the site will be 46m and the maximum building height of 40.21 AOD (above ordnance datum) within all of the developable areas marked on the Parameters Plan;

2 **Site Levels**: the minimum finished floor level ('FFL') will be 5.79m AOD. This has been determined to enable development to be at the same level as the proposed quay (being brought forward as part of a separate application). It has also been determined by a requirement of the Environment Agency ('EA') to provide mitigation in the event of flooding;

3 **Earthworks**: the EIA is based on the assumption that the site will be cut and fill neutral. This will allow for the re-use of site won material on site. To enable this, the FFL across the site may need to be greater than 5.79m AOD. The development parameters above have therefore been set to provide flexibility in how the site is brought forward. Within the maximum development height of 46m, warehouses can be brought forward based on different FFL and building heights as long as they do not exceed the maximum parameter;

It is also assumed for the purpose of this EIA that all hazardous site-won materials resulting from demolition that cannot be re-used on site will be transported to the Highfield Landfill Site which is identified on the Parameters Plan;

4 **Site Access**: two vehicular accesses will be provided. The main access into the site will be via the new roundabout junction which has been constructed at the junction of Smith's Dock Road and Dockside Road. The roundabout has been constructed to serve the STDC Regeneration Masterplan and facilitate access into the area. There is also a secondary access provided on the north eastern boundary of the site which connects to Tees Dock Road. These are shown on the accompanying Access Drawings at Appendix B4;

O2.4 The above measures are built-in features of the submitted scheme, and serve to mitigate potential effects on environmental receptors that might otherwise result in significant effects or require additional mitigation measures.

Mitigation, Monitoring and Compensation Measures

O2.5 The proposed development is being brought forward within South Tees Development Corporation's ('STDC') masterplan area. As has been explained within Chapter B and the technical chapters of this ES, STDC is in the process of producing a series of area wide strategies to support the Masterplan. These will help to guide development and address environmental considerations on an area wide level. The mitigation, monitoring and compensation measures proposed as part of this development take into account the current 'draft' aims and objectives of

these documents. As these strategies are still emerging, it is not possible to commit to their requirements, however it is within the context of these proposals that site specific measures to limit or remove any significant impacts are proposed.

Mitigation Measures

O2.6 Table O2.1 sets out the secondary mitigation measures that have been identified within the relevant technical chapters in the ES and reference is made, where relevant to the wider STDC strategy. It is anticipated that the majority of these measures will be secured via planning condition or obligation (see section O3.0 of this chapter).

Table O2.1 Summary of Mitigation and Compensation

Environmental Topic	Summary of Identified Mitigation
During Construction	
Transport	A Construction Traffic Management Plan ('CTMP') will be implemented.
Biodiversity and Ecology	The Habitat Regulations Assessment that accompanies the ES identifies proposed mitigation measures for the Teesmouth and Cleveland Coast SPA. For The construction phase of the development this includes a Construction Environmental Management Plan ('CEMP') and it will include measures to: prevent and mitigate any accidents including, but not limited to, spills, storage of soils and control of construction related dust; and the construction of site hoarding. The CEMP will be in line with the Environment Agency's ('EA') Pollution Prevention for Business'. Other CEMP measures will include: • Construction works along the north-western boundary within 10m of the River Tees will be screened and this will involve opaque barriers; • Measures to prevent sediment, dust, surface water run-off and any other substances entering the River Tees; • Contaminated liquids or sediments will be directed away from the River Tees; • Any lighting of the construction areas will be directed away from the River Tees or utilise directional shielding to prevent light spill. Lighting of the construction areas will be reduced to as low as possible during night time hours. • Any removal of wetland that may be utilised by breeding shelduck should be removed outside of bird nesting season (March to August inclusive) and if not possible should be investigated by a Suitably Qualified Ecologist ('SQE'); • Any removal of trees, scrub, wetland habitats or areas of grassland or open mosaic habitat that may support nesting birds should be removed outside of nesting season (March to August inclusive). If it has to Be moved outside of this season it should be inspected by an SQE. • Any hedgehog found within the works areas will be moved to a safe and sheltered location. Any deep trenches and excavations will be covered at night.

Environmental Topic	Summary of Identified Mitigation
	The CEMP will be reviewed by a SQE. Updated Invasive Non-Native Species ('INNS') surveys are required to capture the most up to date information within the development site. Updated surveys in August 2020 are acceptable. An INNS Management Plan will be produced prior to each phase of construction work.
Noise and Vibration	During construction, works will be undertaken using standard best practice measures including (as necessary), a the use of quiet plant equipment, their correct maintenance and making sure they are operated with all covers in place. These measures will be a requirement of the CEMP.
Air Quality	Measures will be included within a CEMP. These include, but are not limited to: display of name and contact details for those accountable for air quality at the site; develop and implement stakeholder communication plans; develop and implement a Dust Management Plan; record all dust and air quality complaints; and plan site layout so machinery; dust causing activities are located away from receptors; remove materials that have the potential to produce dust from the site as soon as possible; cover, seed or fence stockpiles; produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials; and ensure equipment is readily available on site to clean any dry spillages. These air quality measures are similar in places to those identified above for biodiversity and ecology. A Travel Plan will also be implemented that will manage air pollution.
Water Management and Flooding	The CEMP will include measures that relate to water management and flooding, including the implementation of best practice guidance, including that from the EA and Pollution Prevention Guidance. A Surface Water Management Plan and Drainage Strategy will incorporate site wide drainage design. It is anticipated that his will come either at a site wide level or for each development phase. Consideration and appropriate measures shall be required to manage pockets of pluvial flooding at high rainfall events. The timing of excavation and re-placement of ground materials shall be sensitive to avoiding poor weather conditions. A Construction Method Statement will be incorporated into the CEMP. This will include, but not be limited to: measures to reduce the risk of site pollution and contamination; will include details of the soil of chemicals and oils; storage areas shall be located 10m away from any surface watercourse and areas at risk of flooding; and plant and machinery will be well maintained to minimise risks of oil leaks or similar. An emergency response protocol will be developed by contractors so that any accidental spillages are intercepted.

Environmental Topic	Summary of Identified Mitigation
	Measures will be incorporated into a Construction Waste Management Plan and CEMP to account for any contaminated nature of ground material and disposal of any material will be undertaken in accordance with Waste Management Licencing Regulations 1994 and the Duty of Care Requirements. Any piling will be subject to a Piling Risk Assessment.
Ground Conditions	A Remediation Design Statement for each development plot will set out how the proposed development conforms, where possible, to the emerging Outline Remediation Strategy for the wider STDC area. This should be informed by additional ground investigations and, or risk assessments, where required. The CEMP will implement measures relating to ground condition. These include, but are not limited to, measures to minimise dust generation, monitoring of confined spaces for potential ground gas accumulations; preparation and adoption of a site and task specific health and safety plan; damping of ground with water to minimise dust; ground gas monitoring; groundwater monitoring; and odour monitoring. Based on the results of the previous ground investigations as well as any further investigation undertaken, areas that pose a risk to human health as a result of identified contamination would be delineated and remediated prior to construction works. Further investigations are recommended to include, but are not limited to, the following tasks which will identify the need for further mitigation. • Survey of asbestos in made ground across the entire site including detection and, where detected, quantification of asbestos; • Monitoring and assessment of ground gas regime across the Site, especially in the vicinity of areas of adjacent landfilling / waste disposal to inform requirements for remediation and/or gas protection measures; • Assessment of soil quality with regard to potential contaminants of concern in specific areas where current data is limited e.g. Metals Recovery Area; • Assessment of groundwater quality across the entire site within the made ground, superficial deposits and, if considered required, the bedrock aquifer with temporal assessment of trends should significant contaminant be identified; and • Assess of geotechnical properties of the underlying ground to inform e.g. foundation and infrastructure design. Potential impacts specific to construction workers during site preparation, remediation and reclamation earthworks will be

Environmental Topic	Summary of Identified Mitigation
	mitigated by the following measures and through working in accordance with CIRIA C692 Environmental Good Practice on Site. A Construction Stage Surface Water Management Plan ('SWMP') will be implemented and revised on a regular basis. It will be prepared to minimise risk of impacts on air quality. It is also anticipated that this will include best practice measures to control water within the development. An appropriate Health and Safety Plan will be prepared if asbestos contaminated made ground is encountered during construction. A Watching Brief should also be prepared for the presence of asbestos containing material. A Materials Management Plan will be prepared which will detail the procedures and measures that will be taken to classify, track, remediate, store, use and if necessary, dispose of materials that will be encountered during the remediation works.
Socio-Economics	No mitigation measures are proposed for the construction phase of the development.
Waste and Materials Management	A Construction Waste Management Plan ('CWMP') will be prepared and this will include, but not be limited to the following measures: a commitment to achieve a high recycling and recovery rate for all waste generated on site; the sustainable procurement of construction materials; reviewing opportunities to utilise excavated materials from other developments in proximity to the site; having clearly defined and separated skips on site; and training staff to understand how they should sort waste. A licenced waste contractor will be appointed to manage this process. A STDC wide waste management strategy is currently being developed and, where possible, development specific measures will also accord with the principles set out within this strategy.
Climate Change	As the detailed nature of the scheme progresses, opportunities will be identified for efficient design and specification to reduce the embodied carbon of building materials and components. The development will, where possible, apply principles of the circular economy to maximise the quantity of recycled and reused materials. The CEMP will include measures such as: sourcing of materials locally, the use of lower emissions vehicles and planning to minimise the number of journeys required to site. The CEMP will also include wider sustainability principles, such as the use of electrical plants.
Landscape and Visual Impact	During construction, mitigation measures to reduce the LVIA impacts will be included within the CEMP. These measures include: implementation of best practice construction techniques; installation of suitable site hoarding; careful siting and management of material stockpiles; and the sensitive siting of welfare and other temporary structures.
Below Ground Heritage	Areas of archaeological potential should be subject to monitoring to determine the presence or absence of archaeology. Should significant archaeological remains survive, an appropriate level of

Environmental Topic	Summary of Identified Mitigation
	excavation and recording will be undertaken to ensure their preservation by record.
During Operation	
Transport	Where possible, the proposed development will be expected to accord with the emerging STDC Transport Strategy. This strategy includes aspirations for a reduction in car travel, cycling and walking options and transport infrastructure. As this strategy is not yet adopted no firm commitment can be made to accord with all of its requirements. The measures proposed are however best practice and the proposed development will accord with as many principles as possible. Separate to this a Car Parking Management Plan, Servicing Management Plan and a Framework Travel Plan will be required and these will require similar measures to those expected to be implement as part of the wider strategy. The Framework Travel Plan will include measures such as providing cycle parking, participating in the Cycle to Work Scheme, promoting national awareness days and measures to reduce car dependency. A site wide Travel Plan Coordinator will be appointed. Each occupier will be required to implement a Full Travel Plan. Development traffic will be provided with an alternative access via Steel House Roundabout to minimise the impact on Tees Dock Roundabout. It will be the role of the STDC transport strategy to assess whether additional mitigation measures are required on this section of the road network, rather than this application.
Biodiversity and Ecology	No mitigation measures have been identified For the Teesmouth and Cleveland Coast SPA within the HRA, however it is noted that a further assessment is undertaken for the detailed planning stage. Lighting installed will utilise directional shielding measures to prevent light spill onto the River Tees. Where possible, lighting columns within the proposed development will only transmit light downwards on to paths and be installed with shielding that prevents back-spill of light. This will be detailed in a Lighting Strategy and should be reviewed by an SQE. Future occupiers should be aware of the potential presence of nesting and breeding birds and the legal protection they are afforded. A post construction monitoring and maintenance plan should also be produced prior to the commencement of construction. One the scheme is operational, a monitoring report should be produced at specified intervals and shared with RCBC.
Noise and Vibration	Noise emissions from building service plants will be controlled through design to meet established noise criteria. As development plots come forward, individual occupiers will need to submit a detailed planning noise assessment to ensure that their operating levels to not exceed the established criteria. Good practice noise measures will be implemented through operational management plans.

Environmental Topic	Summary of Identified Mitigation
Air Quality	There are no significant effects predicted as a result of the operational phase of the development on air quality and therefore no mitigation measures are required.
Water Management and Flooding	The development will incorporate a Water Management and Drainage Strategy appropriate to the site to improve the management of water compared to the baseline conditions. Water discharge would be undertaken in accordance with the relevant environmental permits. The potential effects of the scheme will seek to be minimised by the water management and drainage strategy by reducing the runoff rate from the site as far as possible in light of the large extent of low permeability surfaces. Proposed discharge rates must be agreed with the Lead Local Flood Authority and, if required, Northumbrian Water Systems. The above drainage strategy will be developed and it will include consideration of design features to remove silt and other suspended solids, as well as capture any spills/oil and grease, prior to discharge. Once the site design and the water management and drainage strategy are available, a Water Framework Directive ('WFD') Assessment shall be undertaken. The water management strategy will not include infiltration SuDS such as soakaways, in order to limit mobilisation of contamination. The proposed development provides the opportunity to replace/improve all existing surface water drainage infrastructure where reasonably practicable. This may be required for infrastructure that is part of the site that does not currently have the required capacity as identified in the strategy and site design. Where possible, new drainage will be designed to current standards with allowances for additional rainfall and surface water flows under a climate change scenario. Effluent from welfare facilities on the site will either be taken off site for disposal and treatment or routed to the local sewer network.
Ground Conditions	As no ground gas monitoring has been undertaken to date, future development proposals should be supported by further investigations and an associated Gas Risk Assessment. This should incorporate any necessary protection measures appropriate to protect buildings and future site users from landfill gas migration. Site buildings will be designed with adequate ground gas mitigation measures to prevent the accumulation of ground gas in confined spaces. Maintenance workers that are required to undertake ground excavations during the operational life of development will be

Environmental Topic	Summary of Identified Mitigation
	provided with sufficient information on the nature of each sub-area, upon which to base site and task specific risk assessments. A clean service run area will be installed, as required, to protect future land users (maintenance). Any hazardous material storage required during the operational phase will be in full accordance with all associated statutory guidelines. Where required, storage tanks will be located within controlled areas and within bunding sufficient to contain liquids in case spillage or rupture. Materials used in infrastructure will be designed and specified accordingly taking due account of the potential for aggressive ground conditions such as those related to the possible presence of elevated sulphate or the presence of ground gas.
Socio-Economics	No mitigation measures are proposed as part of the operational phase of development.
Waste and Materials Management	A waste management system will need to consider the whole process of waste management including storage, collection, waste, transport, treatment and disposal. To mitigate the impact of the operational process, steps can be taken, including, but not limited to: the provision of adequate internal storage space inside offices; provision of recycling facilities in the development; and the provision of education and awareness to end users.
Climate Change	Mitigation measures for the operational phase of the development relate to the design of buildings, materials and their maintenance. Maintenance plans should be informed by a Life Cycle Costings exercise. These measures can be included within a Sustainability Statement. An Energy Management Strategy for each development plot will be required that includes the installation of low carbon and zero carbon technologies. This strategy will require the construction of energy efficient buildings to minimise energy demand. As noted above, the Travel Plan Framework should promote alternative transport to reduce the reliance on cars and to promote low carbon transport options.
Landscape and Visual Impact	During operation, the following mitigation measures will be implemented: • Buildings will be articulated in a way which reduces visual scale and massing; • Building colour and cladding will be appropriate and will help break up the visual massing. Overly reflective materials will be avoided; and • Tree planting and landscaping is proposed along the boundary line at Viewpoint 5 (Smiths Dock Road / Dockside Road) to soften and reduce the visual scale of the development.

Environmental Topic	Summary of Identified Mitigation
Below Ground Heritage	No mitigation or monitoring is required during the operational phase of the development.

Compensation Measures

O2.7 In addition to the proposed mitigation and monitoring measures described in Table P2.1 above, a series of compensation measures have been identified within Chapter D (Biodiversity and Ecology) of this ES.

O2.8 Compensation measures are proposed to reduce the residual effects resulting from the permanent loss of habitats and ecological features within the development site where it is not possible to implement direct mitigation measures. They are also proposed to facilitate the delivery of the emerging requirement for 10% biodiversity net gain on site (where possible). Compensation for habitats should be undertaken with the aim to provide habitats with the same or greater ecological function and, or diversity to the habitat that will be lost.

O2.9 It is proposed to compensate for the loss of habitat and ecological features through an off-site provision of habitat within the STDC Masterplan area. This off-site provision will be delivered through the wider South Tees Regeneration Masterplan Environment and Biodiversity Strategy which is intended to coordinate the off-site compensation approach for most, if not all, of the developments within the STDC area (including this development site).

O2.10 The strategy is being prepared by STDC in consultation with RCBC, Natural England ('NE') and the EA and the extent and location of this compensatory habitat will need to be agreed between these parties. It is anticipated that these discussions will take place as part of the wider consultation on the strategy.

O2.11 A targeted, long-term ecological monitoring and maintenance plan will be produced by an SQE, in collaboration with RCBC. This plan will identify any created or enhanced habitats installed as compensation for habitat loss or as enhancement features, describe a monitoring methodology to be implemented for the duration of the plan, identify the timescales for monitoring, and describe the methods for maintenance.

O2.12 Chapter N of the ES considered the requirement for additional mitigation to address any synergistic or cumulative effects. No mitigation measures have been identified in this regard.

O3.0 Means of Securing Mitigation

O3.1 This section sets out the means by which the mitigation and monitoring proposed throughout the ES (embedded and additional mitigation) can be secured. It also clarifies responsibility for implementing the proposed mitigation and monitoring.

O3.2 Paragraph 56 of the National Planning Policy Framework (Ref 2) states that *"Planning conditions must only be sought where they meet all of the following tests:*

a *Necessary to make the development acceptable in planning terms;*

b *Directly related to the development; and*

c *Fairly and reasonably related in scale and kind to the development".*

O3.3 The PPG states that *"**conditions** attached to a planning permission or subsequent consent may include mitigation measures…[whilst]… mitigation measures can only be secured through **planning obligations** which are enforceable by the local planning authority"* [ref. ID: 4-051-20170728]. The PPG also makes clear that any monitoring measures can be attached via planning conditions or planning obligations, as long as any provisions used are clear and precise and include clarity for all parties.

O3.4 The implementation of, or provision and implementation of, the following documents will be secured by way of planning condition or planning obligation.

Documents Required for Mitigation and Monitoring

O3.5 Mitigation and monitoring identified throughout the ES will be secured, in part, through the implementation of the following documents:

1 **Construction Environmental Management Plan ('CEMP'),** including the following measures and requirements specific to the proposed development:

a Construction works along the north-western boundary within 10m of the River Tees will be screened and this will involve opaque barriers;

b Measures to prevent sediment, dust, surface water run-off and any other substances entering the River Tees;

c The requirement for contaminated liquids or sediments will be directed away from the River Tees;

d A commitment to source materials locally, where possible;

e Lighting requirements, including any lighting of the construction areas will be directed away from the River Tees or utilise directional shielding to prevent light spill. Lighting of the construction areas will be reduced to as low as possible during night time hours;

f Removal of any removal of wetland that may be utilised by breeding shelduck should be removed outside of bird nesting season (March to August inclusive) and if not possible should be investigated by a SQE;

g Any removal of trees, scrub, wetland habitats or areas of grassland or open mosaic habitat that may support nesting birds should be removed outside of nesting season (March to August inclusive). If it has to be moved outside of this season it should be inspected by an SQE;

h Requirements relating to the control of noise, including but not limited to, the selection of quiet plant equipment, its correct maintenance and making sure it is operated with all covers in place;

i Requirements relating to the management of air quality, including, but not limited to: the display of contact details and management plans on site; the development and implementation of a Dust Management Plan; the recording all dust and air quality complaints; and plan site layout so machinery; the production a Construction Logistics Plan to manage the sustainable delivery of goods and materials; and ensure equipment is readily available on site to clean any dry spillages;

j Measures relating to ground conditions, including, but not limited to, measures to minimise dust generation, monitoring of confined spaces for potential ground gas accumulations; preparation and adoption of a site and task specific health and safety plan; damping of ground with water to minimise dust; ground gas monitoring; groundwater monitoring; and odour monitoring;

k Measures to reduce the landscape and visual impact of the construction process, including: installation of suitable site hoarding; careful siting and management of material stockpiles; and the sensitive siting of welfare and other temporary structures; and

l Measures relating to the management of water including the implementation of ESA guidance and Pollution Prevention Guidance.

2 The **CEMP** will also include the following management plans that relate to technical specialisms:

a **Construction Traffic Management Plan ('CTMP'**);

b **Car Parking Management Plan ('CPMP') and Servicing Management Plan ('SMP'**);

c **Dust Management Plan,** set out within the CEMP;

d **Construction Logistics Plan**, set out within the CEMP;

e **Construction Method Statement,** set out within the CEMP. This will include, but not be limited to: measures to reduce the risk of site pollution and contamination; will include details of the soil of chemicals and oils; a requirement that storage areas shall be located 10m away from any surface watercourse and areas at risk of flooding; and plant and machinery will be well maintained to minimise risks of oil leaks or similar. An emergency response protocol will be developed by contractors so that any accidental spillages are intercepted;

f **Construction Stage Surface Water Management Plan,** will be incorporated into the site wide drainage design;

g **Construction Waste Management Plan ('CWMP')** will be prepared and this will include, but not be limited to, the following measures:

i A commitment to achieve a high recycling and recovery rate for all waste generated on site;

ii The sustainable procurement of construction materials;

iii Reviewing opportunities to utilise excavated materials from other developments in proximity to the site;

iv Having clearly defined and separated skips on site; and

v Training staff to understand how they should sort waste.

h **Materials Management Plan** will be prepared which will detail the procedures and measures that will be taken to classify, track, remediate, store, use and if necessary, dispose of materials that will be encountered during the remediation works;

3 **Ground Remediation Design Statement** for each development plot at the point at which it is brought forward. Where possible, this should be in line with the wider emerging outline remediation strategy for the STDC area;

4 **Sustainability and Energy Strategy**, setting out information on the credentials of the proposed development, its materials, the requirement for the installation of low carbon and zero carbon technologies. This strategy will require the construction of energy efficient buildings to minimise energy demand. This strategy will link to the Travel Plan Framework which promotes alternative transport to reduce the reliance on cars and to promote low carbon transport options;

5 **Framework Travel Plan,** to include measures such as providing cycle parking, participating in the Cycle to Work Scheme, promoting national awareness days and measures to reduce car dependency. A site wide Travel Plan Coordinator will be appointed. Each occupier will be required to implement a Full Travel Plan;

6 **Operational Lighting Strategy** to require the lighting to be installed to utilise directional shielding measures to prevent light spill onto the River Tees. Where possible, lighting columns within the proposed development will only transmit light downwards on to paths and be installed with shielding that prevents back-spill of light;

7 **Operational Waste Management Strategy**, including details on the storage of waste, collection, transportation, treatment and disposal. This will also include details on hazardous waste, where relevant;

8 **Water Management and Design Strategy,** appropriate to the site to improve the management of water compared to the baseline conditions. It is envisaged that a site wide strategy will come forward along with a detailed strategy for each development plot. This will, where possible, be in accordance with the wider STDC drainage strategy for the masterplan area. This strategy will also include consideration of: reducing run off rates; and of design features to remove silt and other suspended solids, as well as capture any spills/oil and grease, prior to discharge. Once the drainage strategy is known a WFD Assessment will be undertaken; and

9 **A post construction Ecological Monitoring and Maintenance Plan**, should also be produced prior to the commencement of construction. One the scheme is operational, a monitoring report should be produced at specified intervals and shared with RCBC.

O3.6 Where appropriate, the above conditions will either be site wide requirements or they will be submitted for each development plot when its comes forward for development.

Other Planning Conditions

O3.7 It is anticipated that other mitigation and monitoring identified throughout the ES, which does not fall within the remit of a specific monitoring and mitigation document, will be secured via issue-specific planning conditions. These measures include:-

1 Constructions hours to be allowed 24 / 7;

2 **Ground investigations**, to establish the ground conditions on site and the identification of any further mitigation or monitoring required (such as a Health and Safety Plan). Suggested further investigations include asbestos, ground gas, contaminants of concern, ground water quality and geotechnical properties;

3 **Monitoring of on-site archaeological potential** and appropriate level of excavation and recording should remains survive;

4 **Piling Risk Assessment,** will be required for the construction phase of the development, as it is anticipated that piling is used;

5 **Detailed Noise Assessment** for each development plot to ensure operating levels to not exceed criteria. Good practice noise measures will be implemented through management plans;

6 **Gas Risk Assessment,** this should incorporate any necessary protection measures appropriate to protect buildings and future site users from landfill gas migration; and

7 **Design Statement,** to include information on how the buildings will be articulated, colours and materials. The implementation of boundary tree planting only in the location of viewpoint 5 (Smiths Dock Road / Dockside Road) to reduce the visual scale of the development).

Contributions

O3.8 The technical chapters of this ES have not identified the need for monitory contributions to be secured via S106 Agreement. This will be agreed with RCBC during the determination of the planning application.

Non-Financial Contributions

O3.9 No non-financial contributions have been identified within the technical chapters of this ES to reduce the environmental impact of the proposed development.

O3.10 STDC is, however, committed to providing employment opportunities, apprenticeships and training programmes during both the construction and operational phase of the development. This has been discussed with Officers at RCBC and it is expected that this will form an obligation within a S106 Agreement. This measure enhances the benefits of the scheme as it is not a required mitigation measure identified within the EIA.

Requirement for Additional Surveys and Information

O3.11 The technical chapters within this ES have identified the need for additional surveys and assessments to be undertaken once further scheme details are known. These are listed below and will either be submitted as part of an ES Addendum or at the Reserved Matters stage of development:

1 Construction Traffic Assessment and associated air quality assessment (where necessary);

2 Clarification and surveys on transport, relating to consultation responses that were received from Highways England and Middlesbrough Council immediately prior to submission of the outline planning application (see chapter c of this ES and its technical appendices for further details);

3 Construction Materials Assessment;

4 Updated INNS surveys are required to capture the most up to date information within the development site. These should be completed between May and August;

5 Further habitat surveys to understand the site's suitability for wintering birds. These surveys are currently ongoing;

6 Water Framework Directive Assessment will be undertaken once further details regarding water management for the proposed development are available;

7 Further assessment of ground conditions to fill current data gaps (see chapter H of this ES for further details). It is anticipated that this information or the required assessments will

be undertaken at the point at which a detailed remediation approach is chosen for the site and each development plot; and

8 The assessment of GHG has a result of operational processes at the development

O3.12 The assessment is each technical chapter is based on the outline development parameters set out within Chapter B of this ES and based on professional experience and industry standards. Where assumptions have been made, further assessments may be necessary once the detailed scheme is known. These will be tested, where relevant at the Reserved Matters stage of the planning process.

04.0 Summary

O4.1 This ES sets out the findings of an EIA of the proposed development at part of the South Industrial Estate, South Tees.

O4.2 The ES has assessed the potential for effects in relation to the following environmental matters:

- Transport;
- Biodiversity and Ecology;
- Noise and Vibration;
- Air Quality;
- Water Management and Flooding;
- Ground Conditions and Remediation;
- Socio-Economic;
- Waste and Materials Management;
- Climate Change (Greenhouse Gases);
- Landscape and Visual Impact; and
- Below Ground Heritage.

O4.3 The ES has also considered the possibility of impacts arising from either synergistic or cumulative effects. This chapter summarises the range of mitigation, compensation and monitoring measures that have been identified throughout the ES.

O4.4 The measures are largely capable of being enforced through planning conditions, either as part of management documents, as standalone conditions or obligations, financial contributions secured via a S106 agreement, or other non-financial obligations.

O4.5 This ES has been based on high level development parameters for the outline scheme. During the detailed design stage and the reserved matters process, environmental considerations will be revisited and where, relevant and necessary, updated as part of future submissions to RCBC.

05.0 Abbreviations & Definitions

1	AOD	Above Ordnance Datum
2	CEMP	Construction Environmental Management Plan
3	CTMP	Construction Traffic Management Plan
4	CWMP	Construction Waste Management Plan
5	EA	Environment Agency
6	EIA	Environmental Impact Assessment
7	ES	Environmental Statement
8	FFL	Finished Floor Level
9	INNS	Invasive Non-native Species
10	MMP	Materials Management Plan
11	PPG	Planning Practice Guidance
12	SPA	Special Protection Area
13	STDC	South Tees Development Corporation
14	SQE	Suitably Qualified Ecologist
15	RCBC	Redcar and Cleveland Borough Council
16	WFD	Water Framework Directive

06.0 References

1 Town and Country Planning (Environmental Impact Assessment) Regulations 2017

2 Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018

3 Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018

4 Planning Practice Guidance