

Localism Act 2011

Acquisition of Land Act 1981

Inquiry into:

**THE SOUTH TEES DEVELOPMENT CORPORATION
(LAND AT THE FORMER REDCAR STEEL WORKS, REDCAR)
COMPULSORY PURCHASE ORDER 2019**

Proof of Evidence

of

John McNicholas BSc (Hons), CEng, MICE

On behalf of South Tees Development Corporation

Appendices

Document Ref: STDC2/3



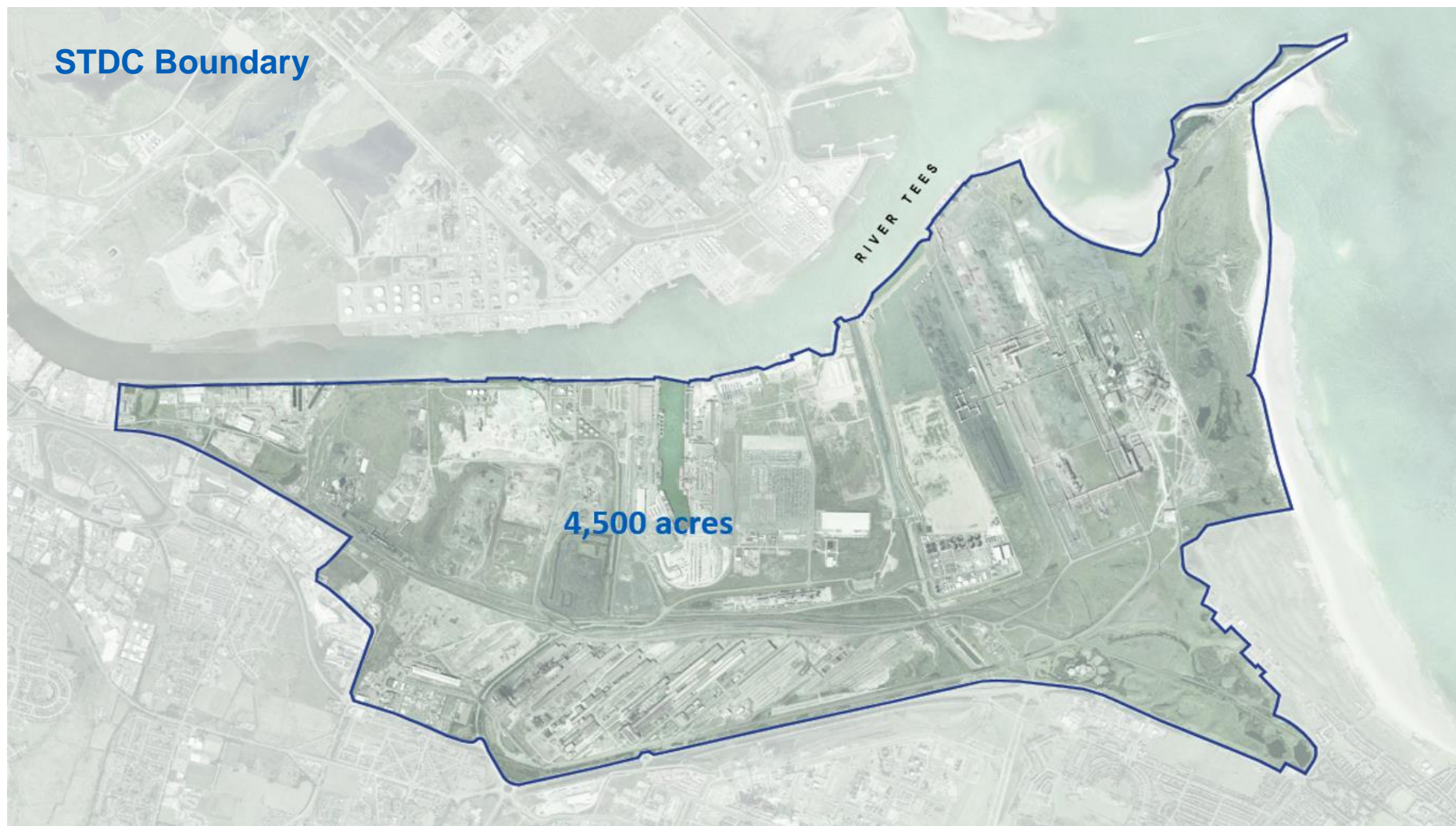
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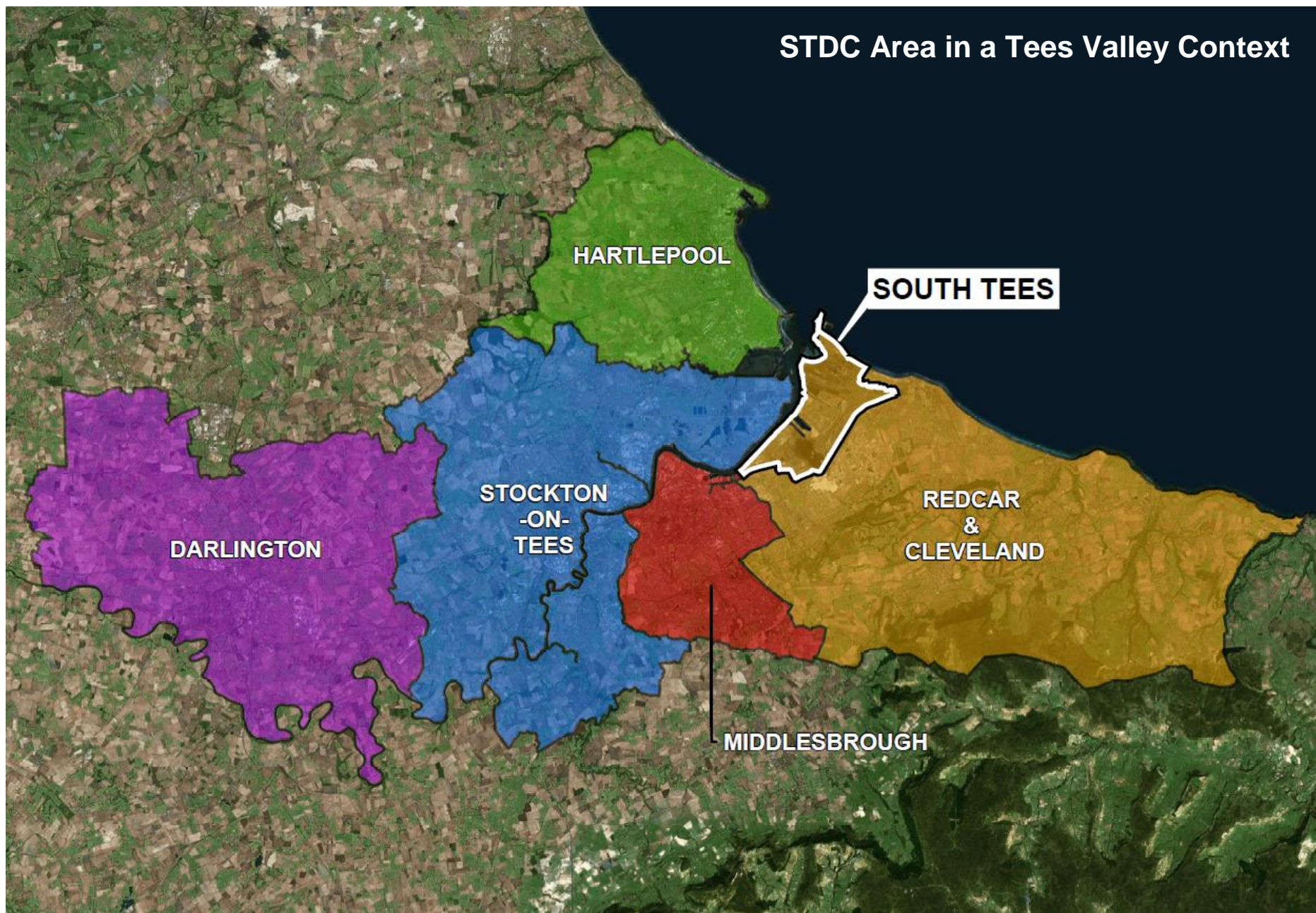
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APPENDIX A

LOCATION PLANS OF STDC AREA





STDC Area in a Tees Valley Context

HARTLEPOOL

SOUTH TEES

DARLINGTON

STOCKTON
-ON-
TEES

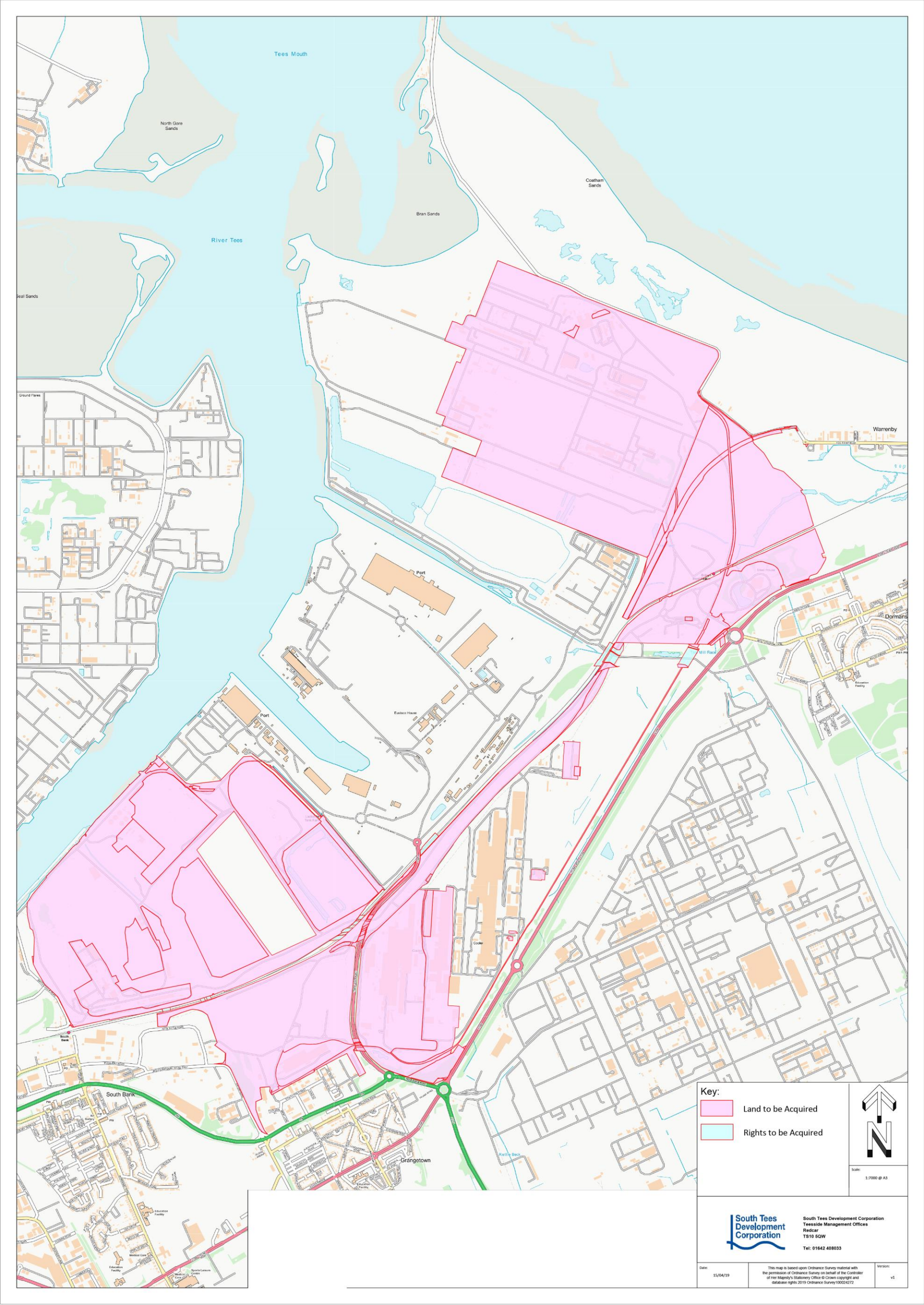
REDCAR
&
CLEVELAND

MIDDLESBROUGH



APPENDIX B

ORDER LAND PLAN



Order Land Plan

APPENDIX C

AERIAL PHOTOGRAPHS OF STDC AREA

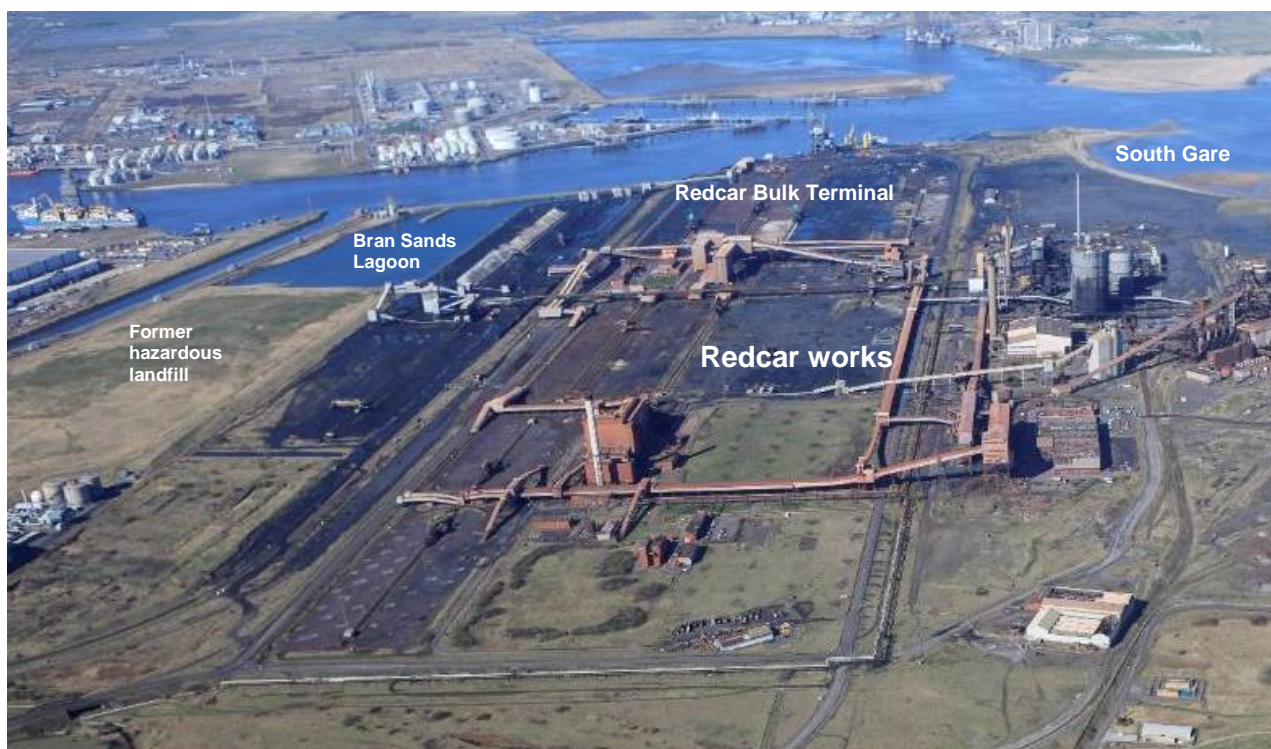




Aerial view of STDC Area looking southwest

APPENDIX D

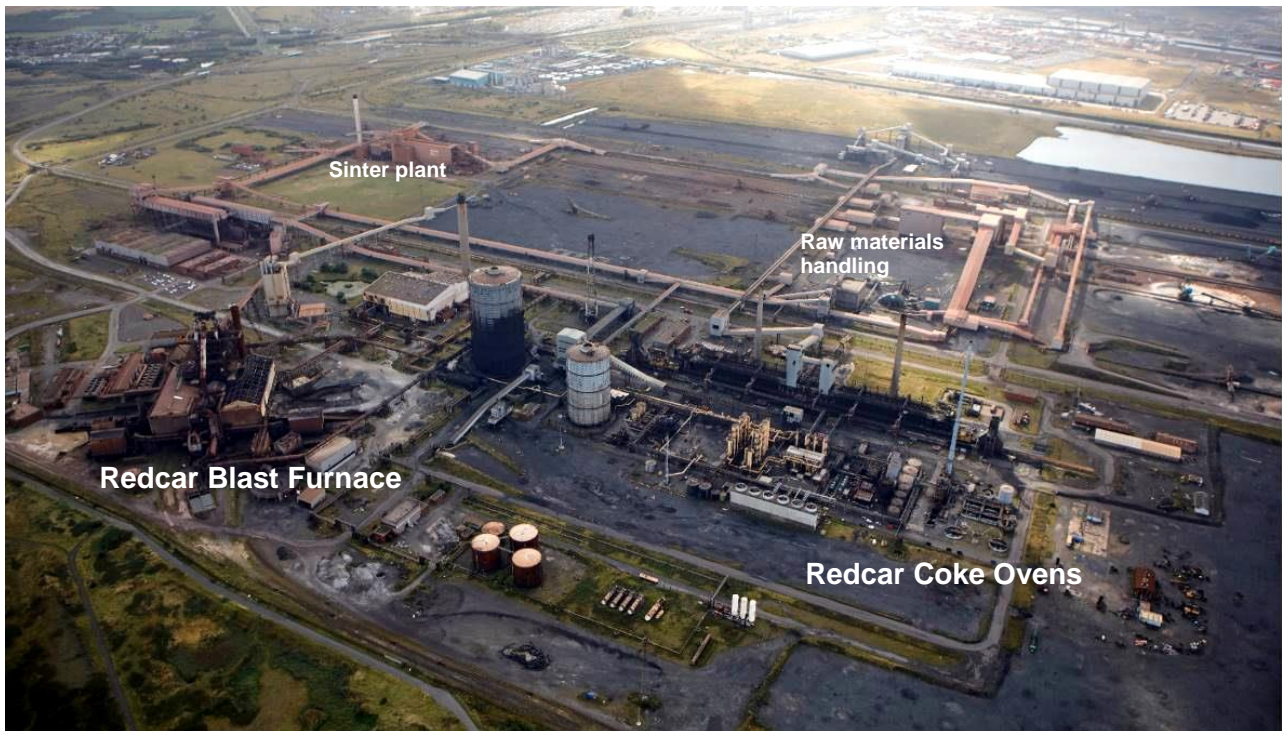
PHOTOGRAPHS SHOWING CHARACTER AND CURRENT LAND USE



1. Former SSI Redcar works with Redcar Bulk Terminal beyond



2. Redcar Bulk Terminal with former SSI Redcar works beyond



3. View onto former SSI Redcar works with Redcar Blast Furnace (RBF) and Redcar Coke Ovens (RCO) in the foreground



4. View onto RBF, RCO and associated gas holders



5. View onto RCO



6. View onto former Tata land (now STDC) at Redcar, with Steel House in the foreground



7. View onto former SSI steelmaking facility at Lackenby, with the former Tata (now STDC) Coil Plate Mill and British Steel's operational Teesside Beam Mill in the background



8. View onto former SSI steelmaking facility at Lackenby, with the former Tata (now STDC) Coil Plate Mill to the right, and Teesside Beam Mill beyond



9. View onto the Cleveland Prairie site at Grangetown, with various waste management facilities and PD Teesport beyond



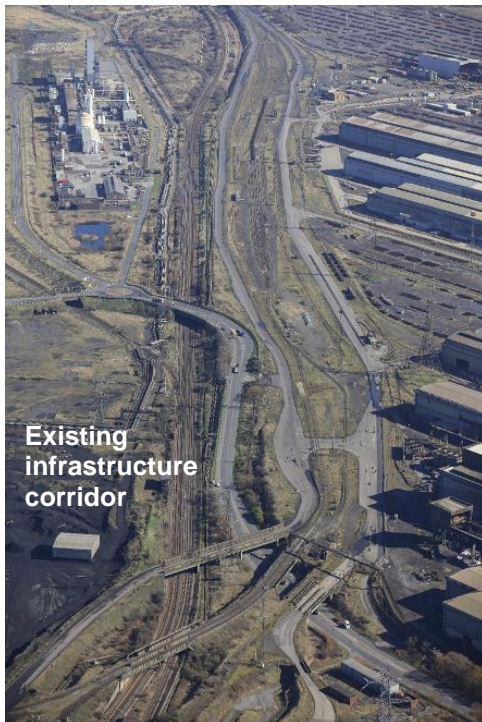
10. View onto the former SSI SLEMS and High Tip waste management facilities, with Tarmac land occupancy in the foreground and other areas denoted



11. View onto South Bank Wharf and former Tata land at South Bank (now STDC), with South Bank Coke Ovens in the background



12. View onto South Bank Coke Ovens, with land leased by Tarmac for slag materials processing situated to the left



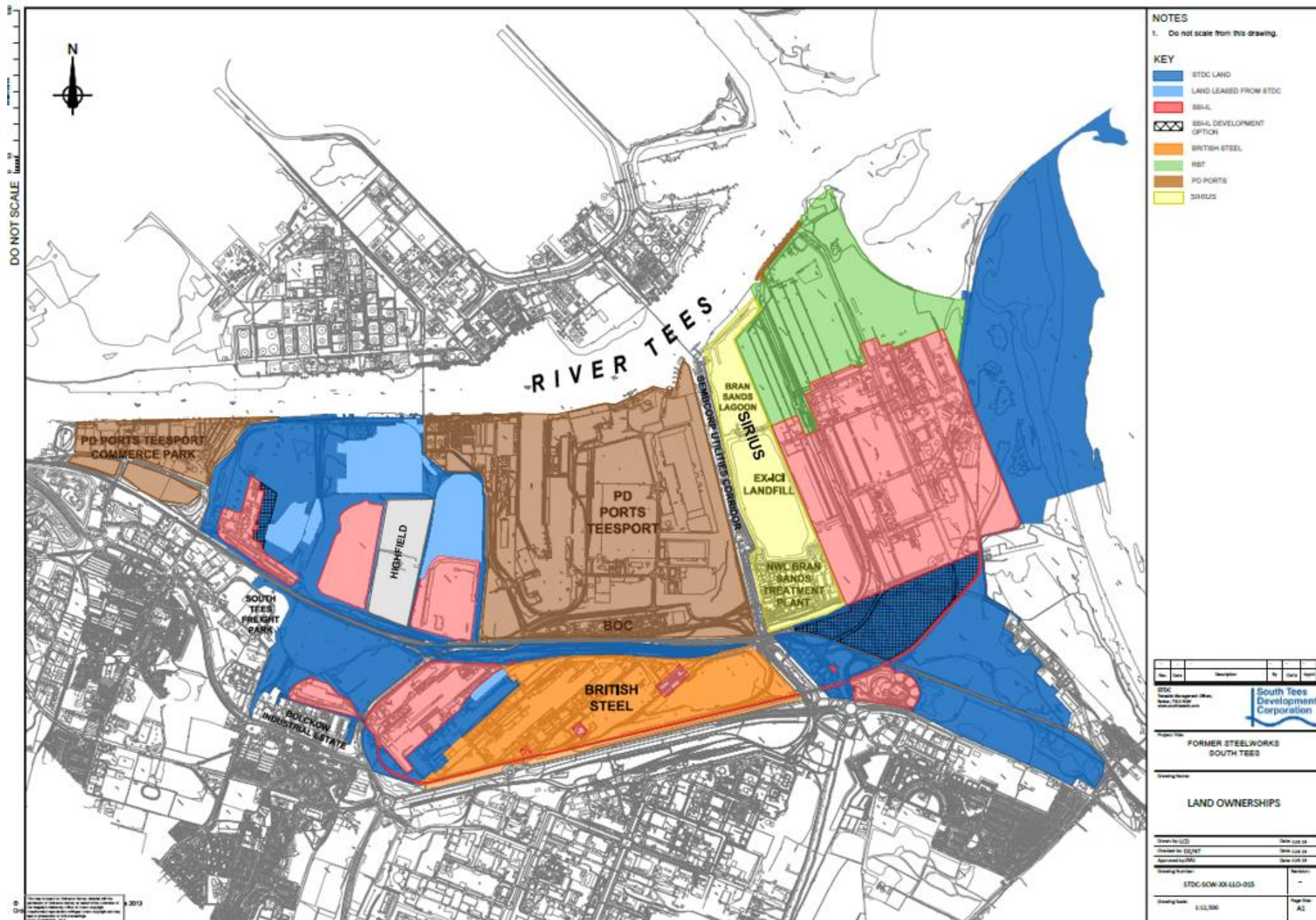
13. View onto existing transport infrastructure, at Lackenby (on the left) and Redcar (on the right), showing multiple existing bridges now in STDC ownership and emphasising overall infrastructure complexity



14. View onto PD Ports Teesport

APPENDIX E

INDICATIVE LAND OWNERSHIP PLAN



Indicative Land Ownership Plan

APPENDIX F

SCHEME OVERVIEW PRESENTATION

South Tees Regeneration Programme

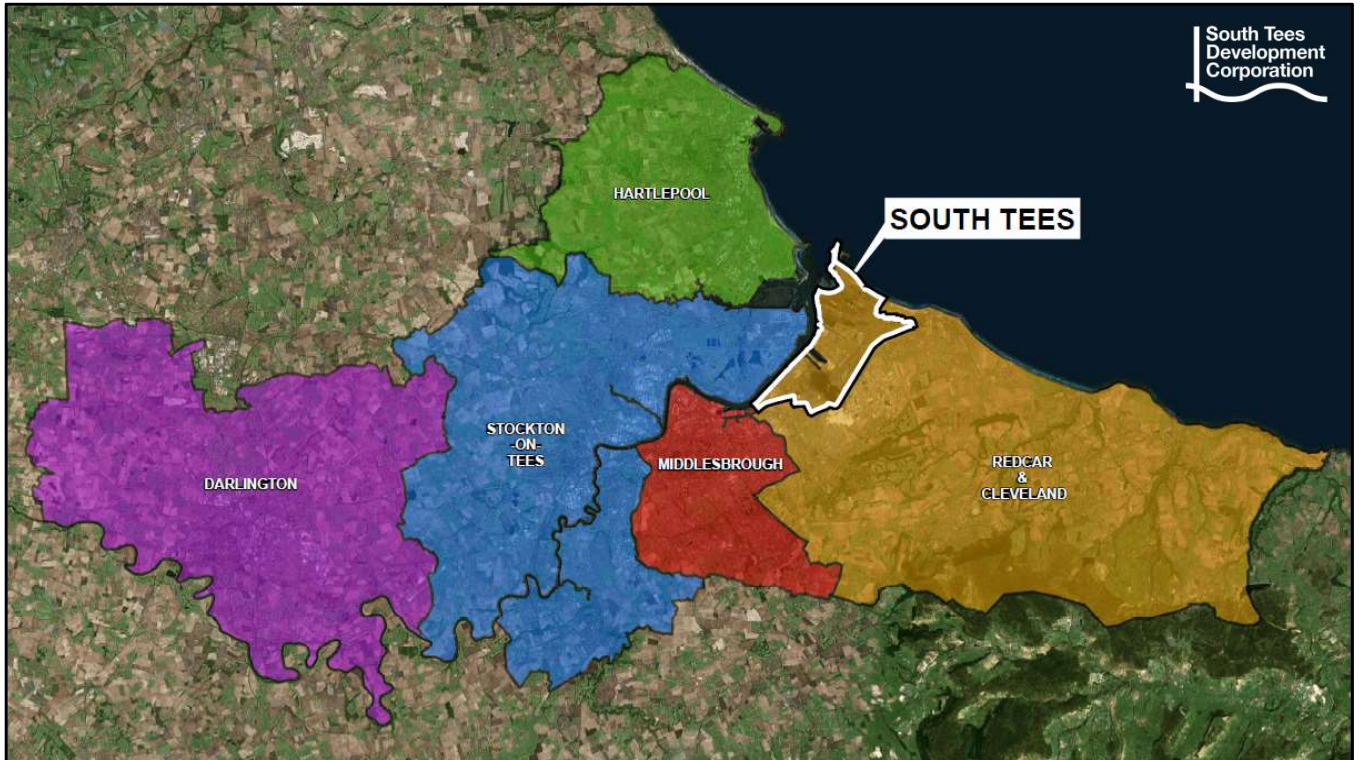


South Tees Regeneration Programme



STDC Area Location





- STDC Area in a sub-regional, Tees Valley context
- Located wholly within the borough of Redcar & Cleveland
- Approximately 33% of the size of the borough of Middlesbrough



- STDC Area in a local context
- Stretching from Redcar, some 8.0 kilometres (5 miles) almost to Middlesbrough
- Located within the industrial heartland of the Tees Valley

South Tees Regeneration Programme

- Largest regeneration opportunity in the UK
- Largest ever single industrial development
- A programme of national significance
- Major opportunity area for UK Government's Industrial Strategy
- Key to the Northern Powerhouse initiative
- **Special Economic Area.....potential Free Zone?**

4,500 acres



- The STDC constitutional boundary, encompassing an area close to 4,500 acres (1,800 hectares)
- As an example, an area 1.5 times the size of the Heathrow Airport complex
- Largest single regeneration opportunity presently in the UK
- Has already had Special Economic Area status allocated
- Has been identified as a prime opportunity area for establishing the UK's first Free Zone (or Freeport) in a post-Brexit world

South Tees Regeneration Programme



Land Use





- View of the STDC Area looking downstream, northwest, towards the North Sea



- View of STDC Area from South Bank towards the North Sea



- View onto former and existing steelmaking and steel product manufacturing facilities, with PD Ports Teesport beyond



- View over land at Redcar, with Steel House in the foreground and the former SSI Redcar ironmaking complex beyond



- View across the STDC Area looking upstream from the sea, southwest towards Middlesbrough, with the former SSI Redcar works and Redcar Bulk Terminal in the centre



- View onto South Gare and Coatham Sands, formerly within Tata ownership (now STDC)
- Parts of these areas are subject to various environmental designations including SPA and SSSI



- View onto Redcar Bulk Terminal, which, with a berthing draft of 17 metres, is the deepest port facility on the eastern seaboard of the UK
- The associated RBT hinterland area measures close to 320 acres (130 hectares)



- PD Ports Teesport, with Tees Dock in the centre
- Currently, the sixth largest port in the UK



- View onto the redundant South Bank Wharf, vacant former Tata land (now STDC) at South Bank, with the former SSI South Bank Coke Ovens and various landfill and waste treatments facilities in the background

South Tees Regeneration Programme



Land Characteristics and Condition





- Redcar works, showing ageing, 1970s assets in a declining condition, which have remained dormant for over four years
- Note the extensive array of overland conveyors and pipework traversing the site



- Further view onto principal works facilities at Redcar, showing areas of major building and plant deterioration



- Redcar Coke Ovens, over 40 years old
- Major contributor to the inventory of hazardous substances giving rise to the CoMAH Upper Tier status allocated to the former SSI estate



- Assets at Lackenby, notably, the former SSI steelmaking facility, built in the 1950s that has now remained dormant for over four years, with all floating assets removed by the Official Receiver



- Existing building assets at Lackenby



- British Steel's operational Teesside Beam Mill



- Principal area of waste management facilities, notably, the former SSI assets of High Tip and SLEMS
- High Tip requires significant remedial works to satisfy Environment Agency requirements before it can be brought back into useful life – these works have been outstanding for many years
- SLEMS contains around 1.0 million tonnes of BOS Oxide material requiring a remedial solution, which will be costly



- Former SSI South Bank Coke Ovens (SBCO), which are of 1970s vintage. SBCO actually closed just before the liquidation of SSI UK.
- Like Redcar Coke Ovens, it is a major contributor to the CoMAH inventory of hazardous substances, giving rise to the Upper Tier status of the former SSI estate.
- SBCO is where the ammonia washers are located. It was the attempted demolition of these particular assets that led to the tragic fatalities that occurred in September 2019



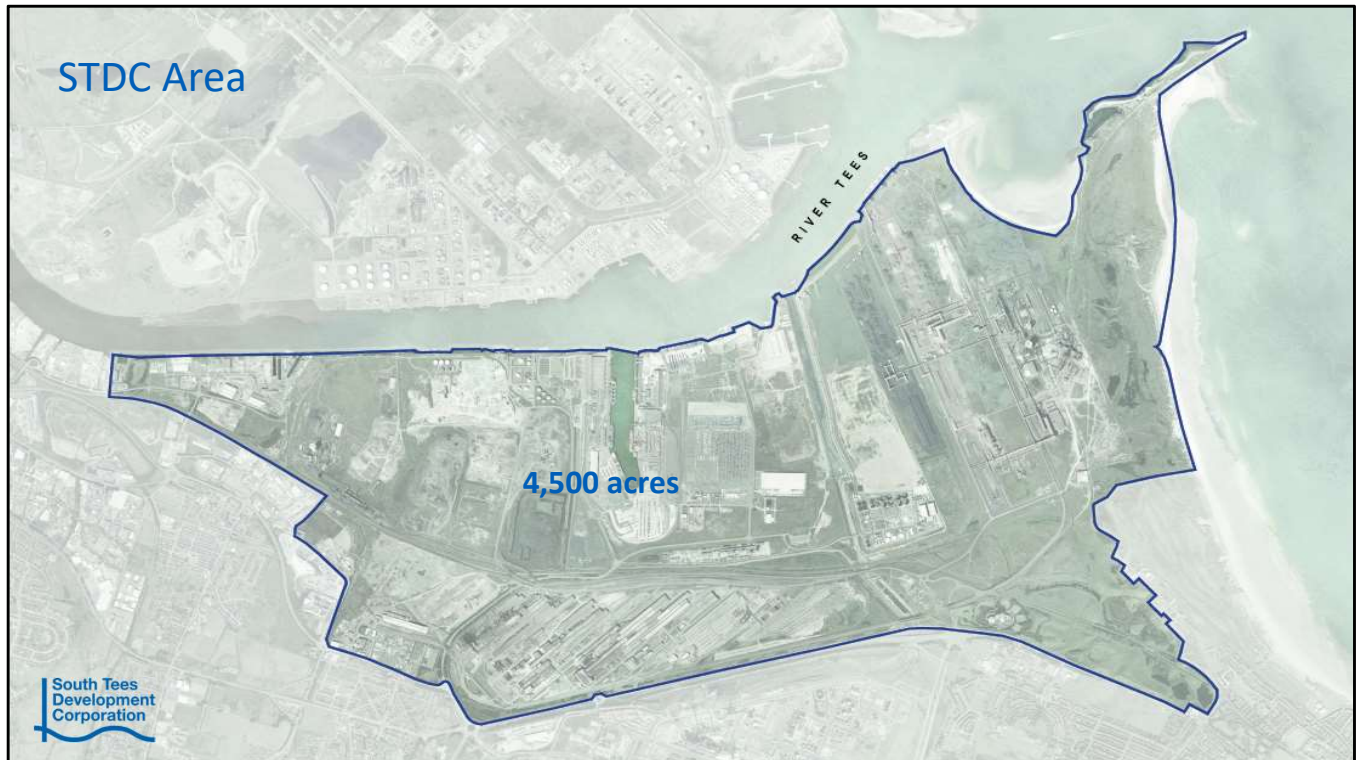
- These images highlight the complexity of the existing, shared site infrastructure
- Of note on the left image is the array of bridges at one end of the existing infrastructure corridor, the majority of which, if not all, will require major maintenance and, in most cases, replacement, as traffic movements grow under an area redevelopment scenario
- Investment in new primary transport and utilities infrastructure represents a major financial undertaking, that would be almost impossible to realise under a fragmented, piecemeal approach to redevelopment
- Virtually all infrastructure assets are age and/or condition expired

South Tees Regeneration Programme

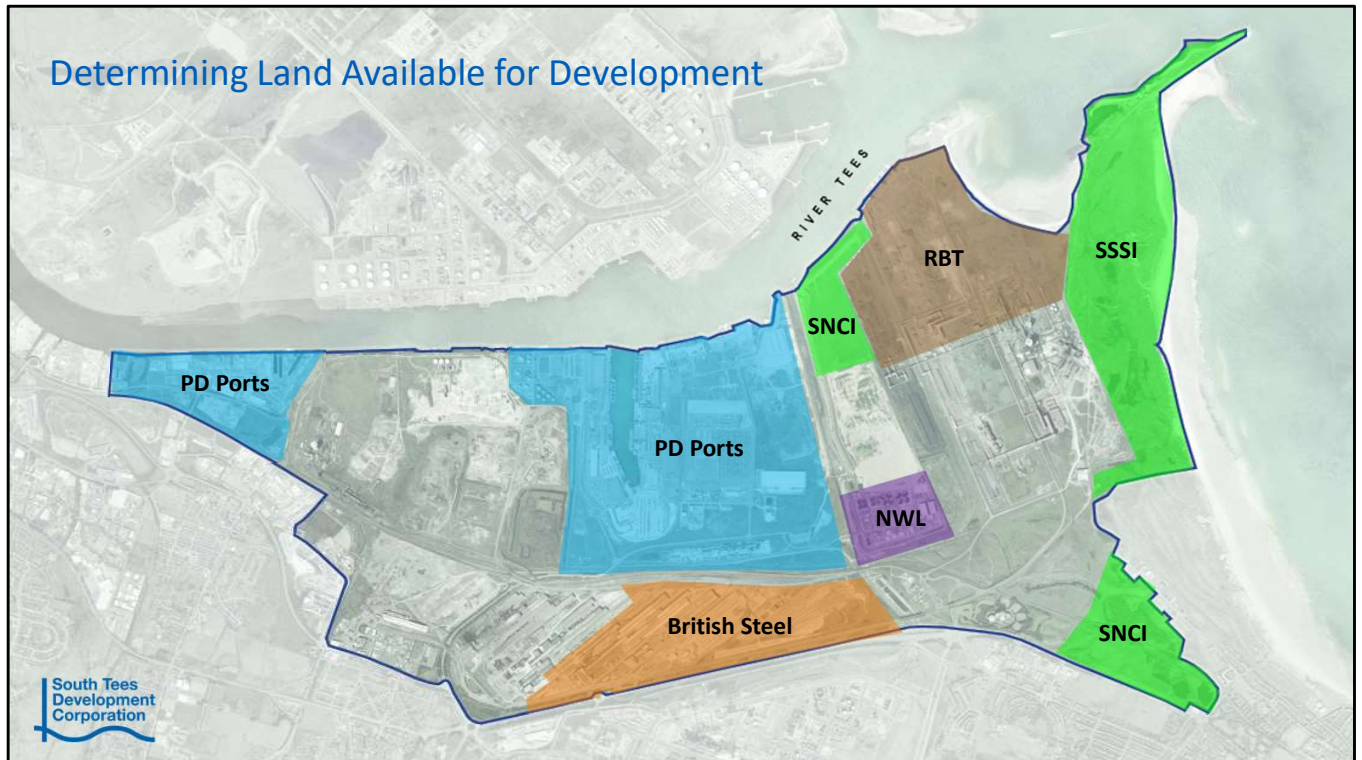


The Opportunity

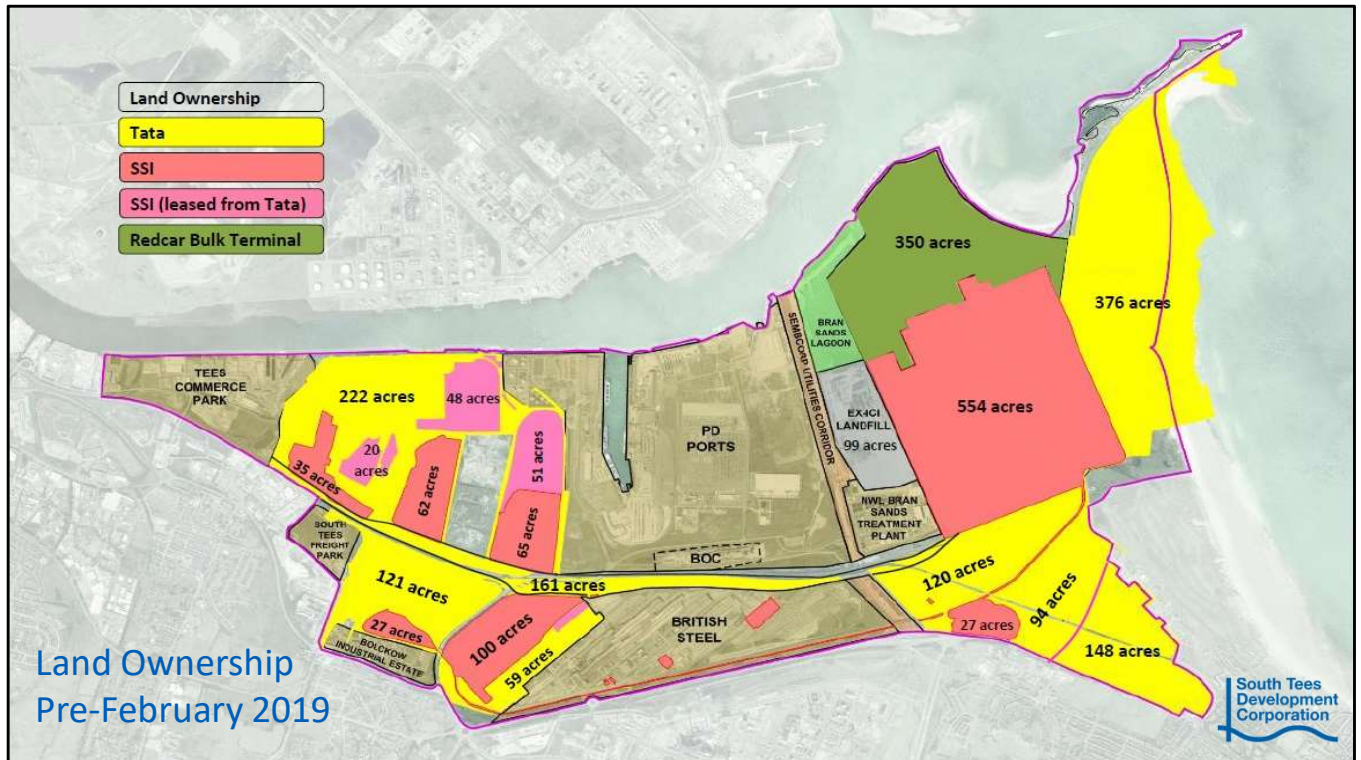




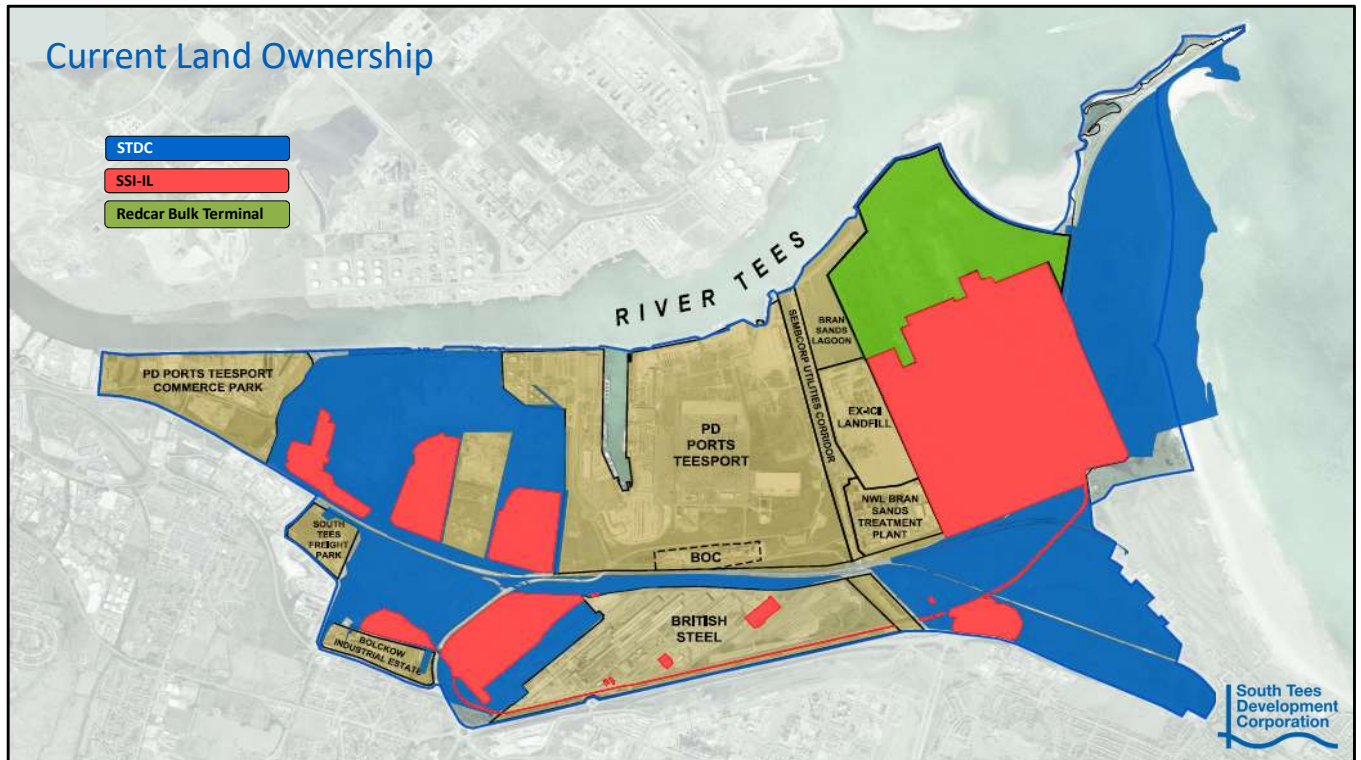
- The constitutional boundary of the STDC area



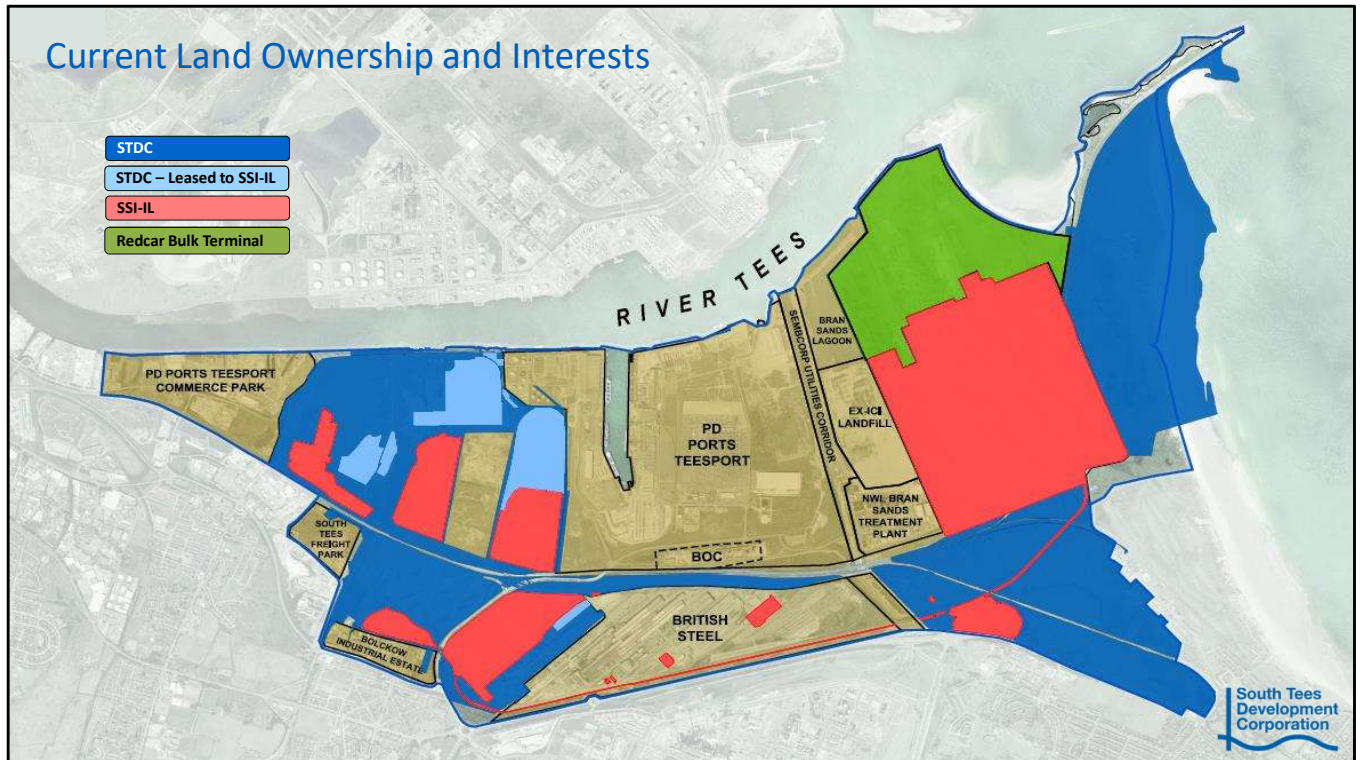
- Existing principal landowners and operators, including areas carrying various environmental designations



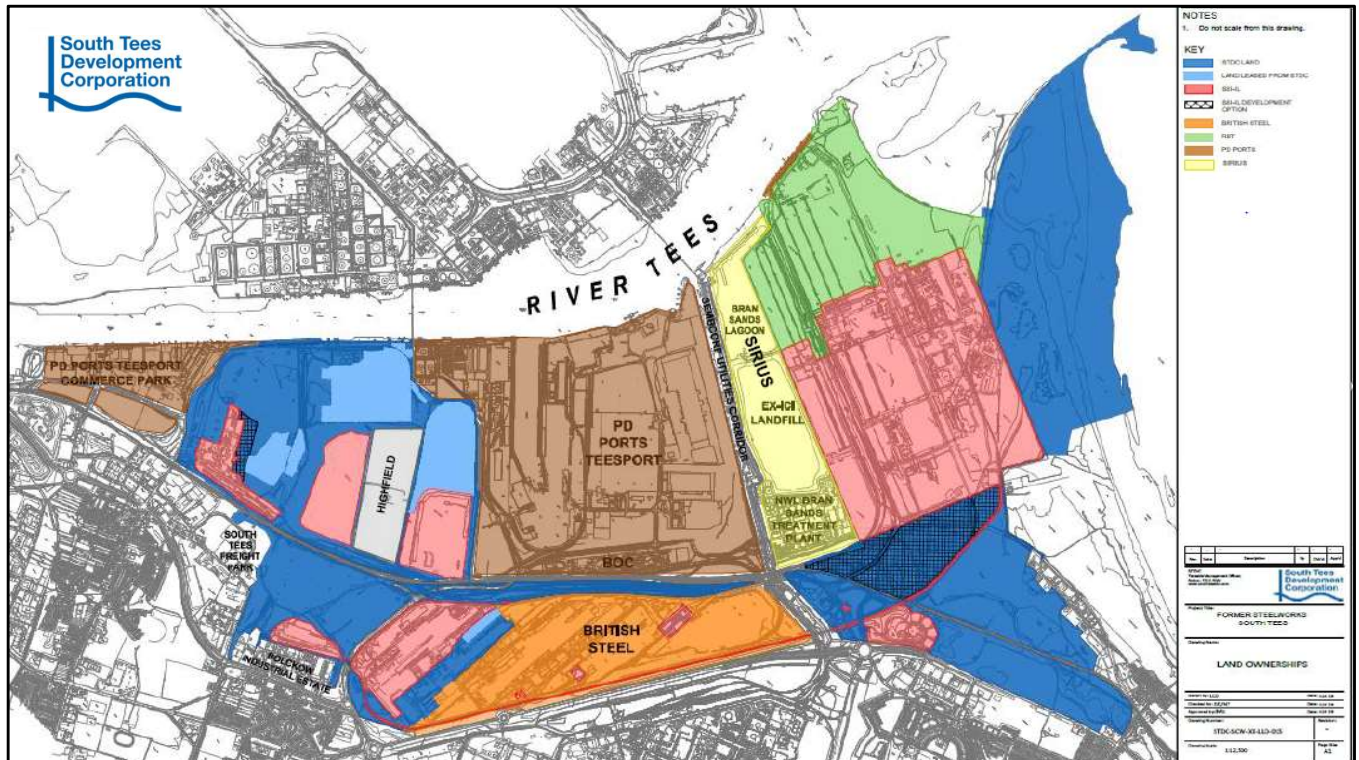
- An indicative land ownership map prior to STDC's acquisition of Tata assets in February 2019, with approximate land areas shown
- Note in particular the fragmentation in land ownerships in the upstream section of the Area



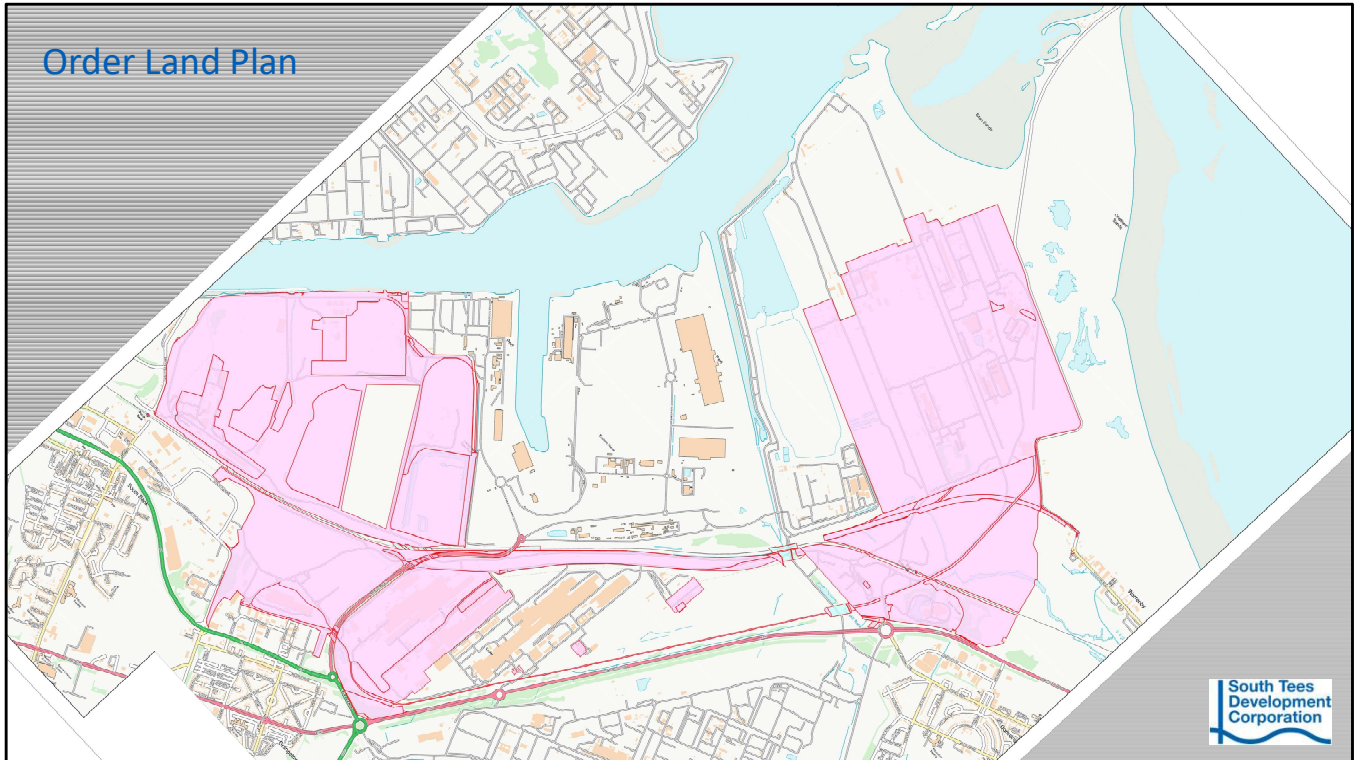
- This plan broadly defines the position on ownership of the redundant iron and steel making land post-February 2019



- Land ownership showing leased areas



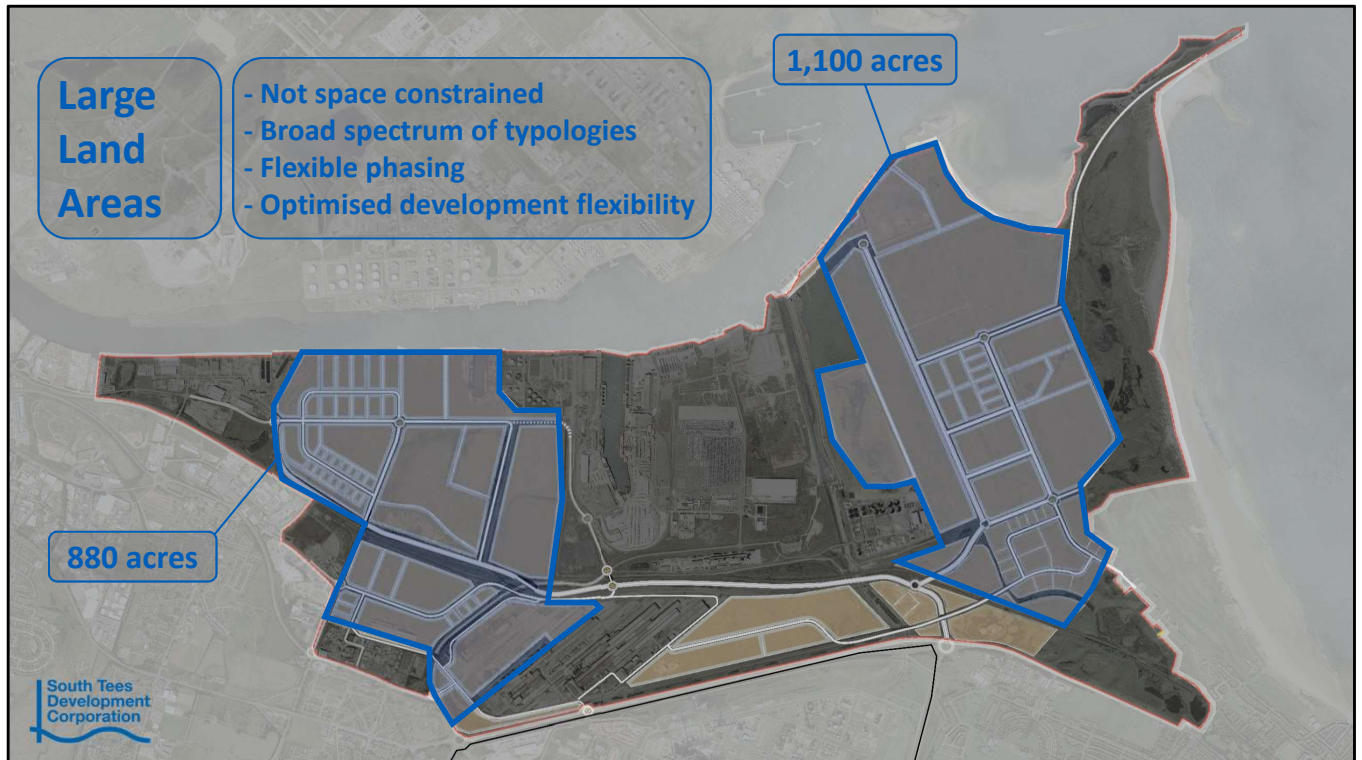
- This plan is a more detailed ownership map for the STDC Area
- Areas that were under option to SSI from Tata to 2023 are shown, denoted by cross-hatching. While these areas are owned by STDC, they are precluded from development pending acquisition of the Thai banks interests or expiry of the option



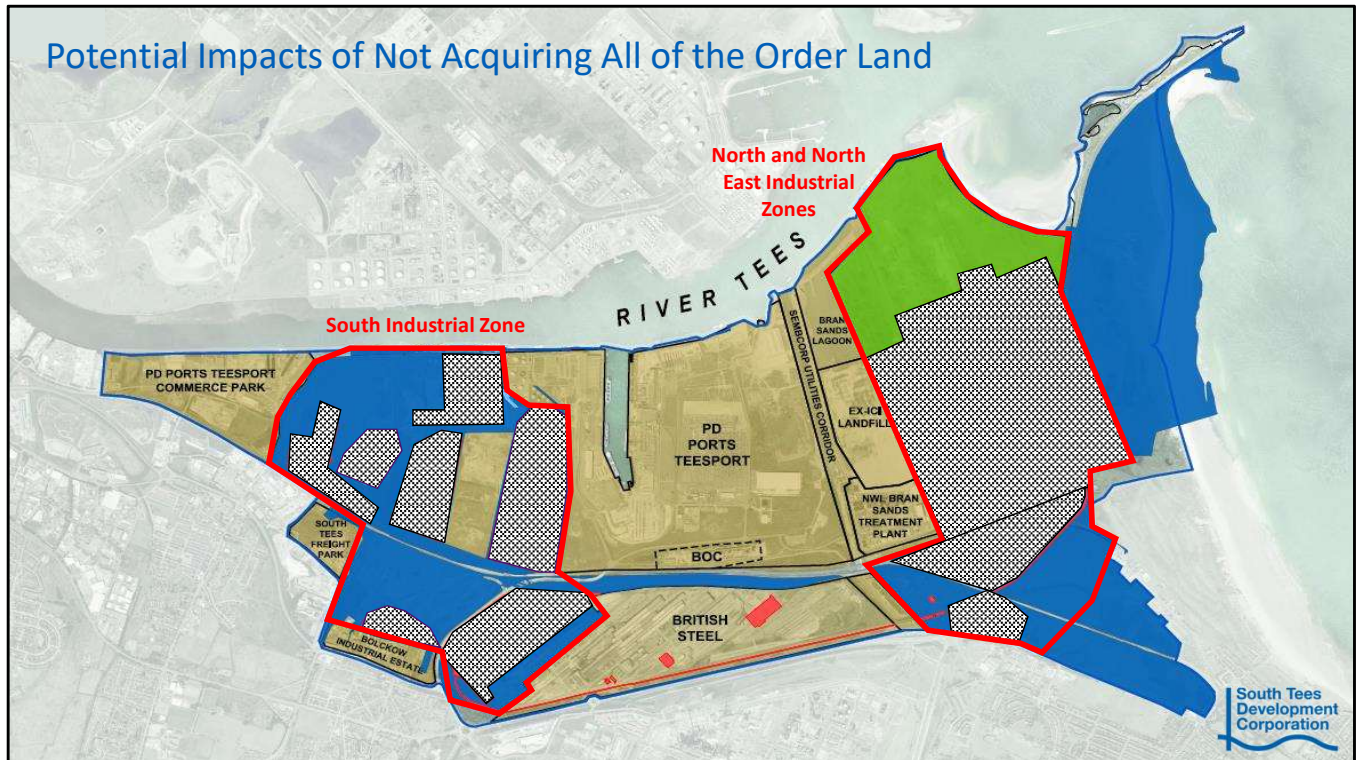
- The Order Land Plan



- This plan indicates the land potentially available for development taking account of the Order Land, Redcar Bulk Terminal and land under the ownership of British Steel that was identified by them, in 2017, as being land that they would likely be able to progressively offer up for redevelopment



- This plan highlights the opportunity to create very large land areas for development, offering significant flexibility to the redevelopment proposition and the chance to effect a major transformation in the STDC Area



- This slide highlights the position that could be realised from a failure to acquire all of the Order Land and related interests
- At Redcar, in the North Industrial Zone, RBT becomes isolated as a development opportunity, and in North East Industrial Zone, the available is impacted by the SSI option on the Teardrop site
- At South Bank and Grangetown, in the South Industrial Zone, the disparate arrangement of land parcels is self-evident, as is the compromised development opportunity that would arise from a fragmented land assembly

South Tees Regeneration Programme



Key Programme Facts



Funding and Investment



- Land Acquisition and Development Enabling Works £600 million
- Inward Investment in New Industries/Developments £50 billion - £75 billion

Key Metrics and Outcomes

Metric	Outcome
Land to be released for development	✓ 890 hectares (2,200 acres)
Job opportunities created	✓ 20,000
Additional Gross Value Added in to the Tees Valley economy	✓ £1.0 billion per annum
Major income stream for the Tees Valley	✓ Rental from new development and Site Management fund
Increased river berth capacity	✓ 2 kilometres (1.2 miles)
New highways infrastructure	✓ 40 kilometres (25 miles)
Freight railway infrastructure improvements	✓ 50 kilometres (31 miles)
Area of brownfield land subject to environmental improvement	✓ 930 hectares (2,300 acres)
Enhancements to land and habitats with environmental designations	✓ 215 hectares (530 acres)
Low cost power provision to new businesses	✓ 1,000 Mega-Watts

Indirect Outcomes

Other outcomes

Improved accessibility to Teesport

Enhancement of community assets

Strengthened links with Wilton International

Retention and preservation of heritage assets

Improved connectivity with Redcar town centre

Reinforcement of case for Eastern Crossing of the Tees

Strengthened profile of the Tees Valley in the global marketplace

Bolstering the viability of realising a much improved Tees Valley rail network and airport freight hub

South Tees Regeneration Programme



Master Plan



The Master Plan Vision

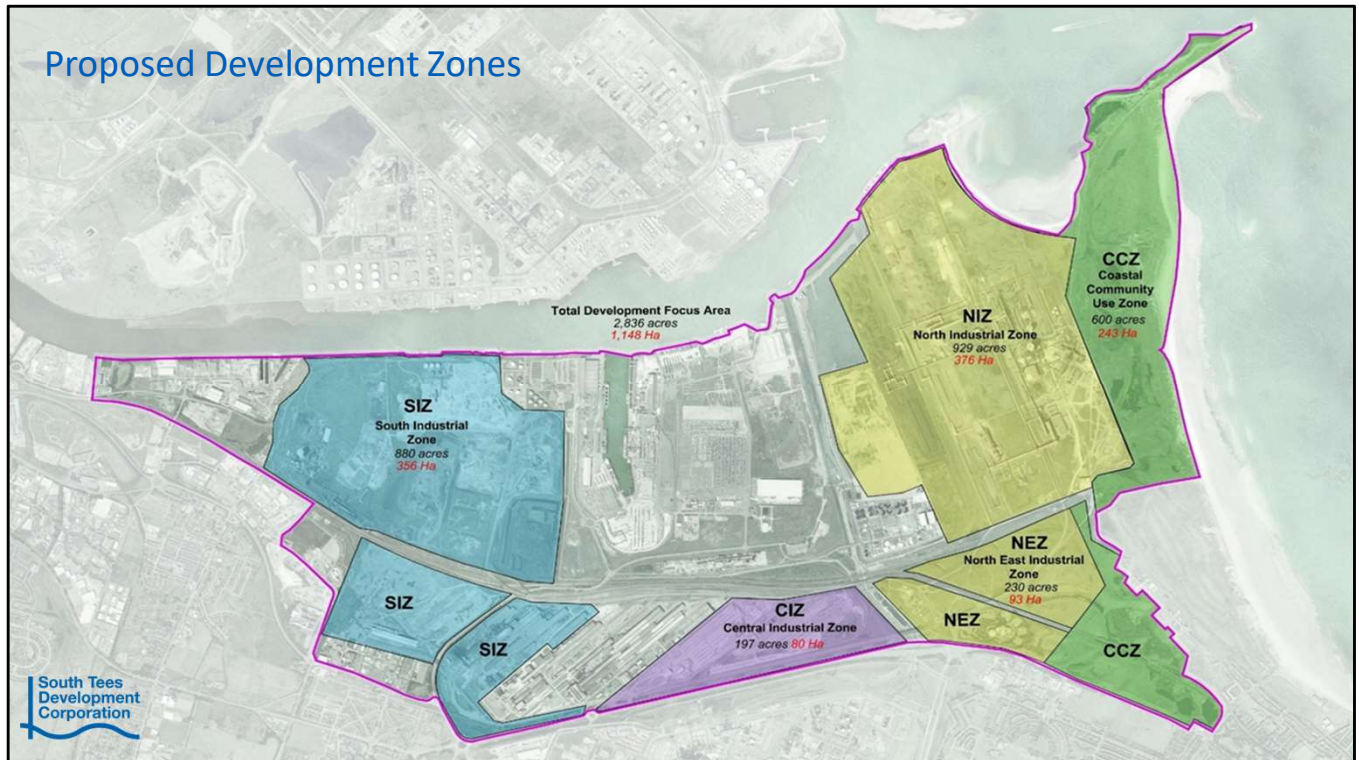


Creation of an exemplar, world class industrial business park, renowned for its manufacturing excellence, that...

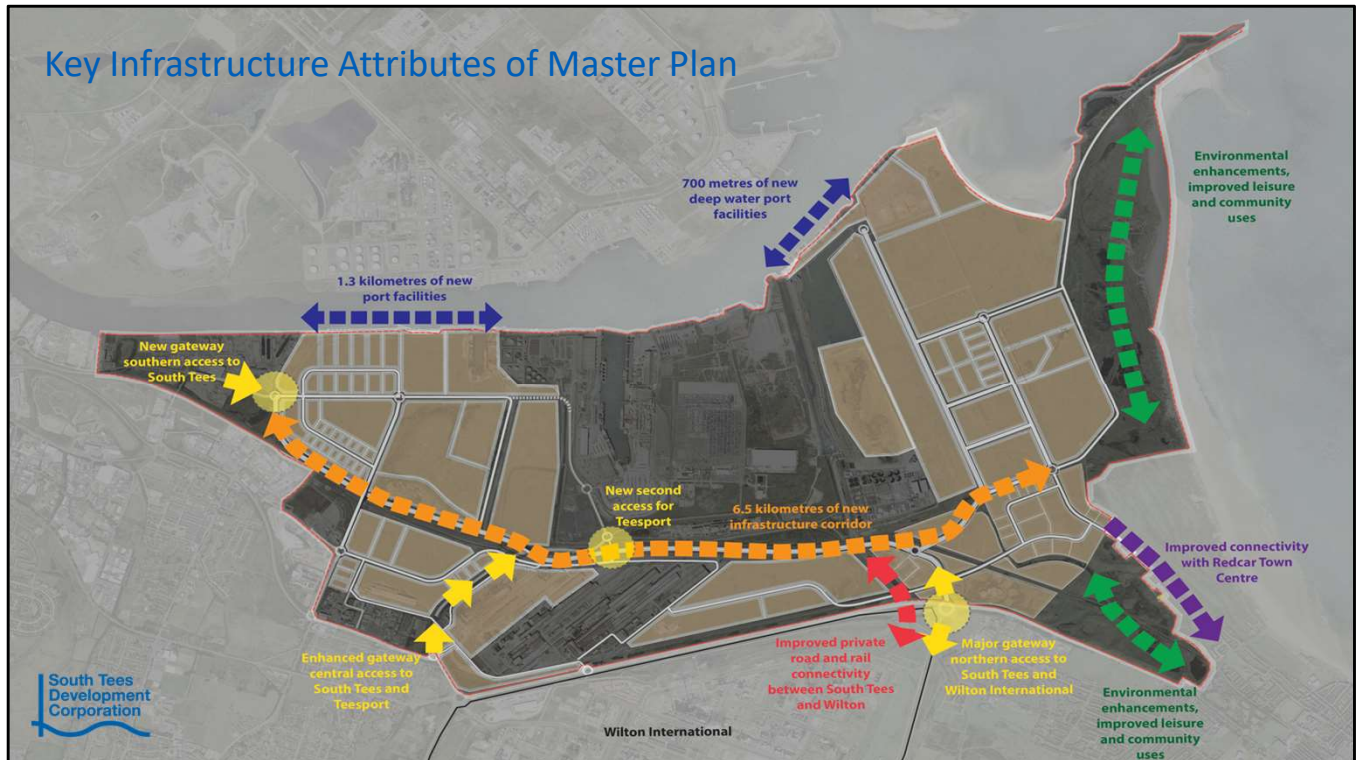
- *Sees South Tees transformed into a hotbed of new industry and enterprise*
- *Makes a substantial contribution to the sustained economic growth of the Tees Valley*
- *Improves outcomes and benefits for local communities*



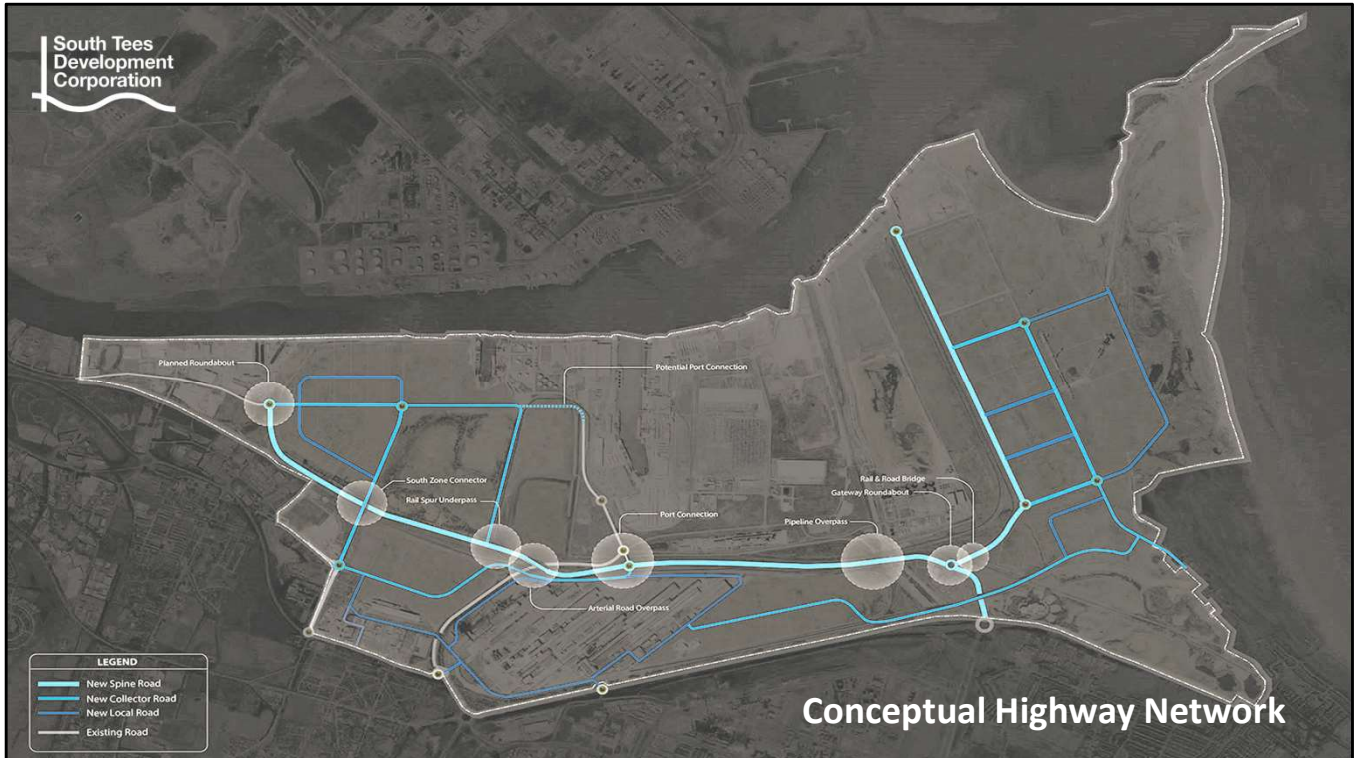
- The focus is very much on advance manufacturing, clean energy, clean growth and the circular economy
- The evolution of the Master Plan was beneficially informed by significant early investor interest which served to galvanise STDC's thinking on the proposed mix of uses most likely to achieve the ambitions of the Plan



- The Master Plan proposes four industrial zones:
 - North
 - North East
 - South, and
 - Central
- A fifth, Coastal Community Zone (CCZ) is also proposed, which encapsulates the areas along the northern and north-eastern fringes of the Area that are home to a number of sites designated at international, national and local levels for reasons of ecological importance and biodiversity conservation



- The Master Plan envisages the development of primary infrastructure spine to serve the entire development, that will link the various industrial zones together and provide connectivity to and for major operators, such as PD Ports Teesport
- Three primary access points are proposed, one of these has already been constructed by STDC
- Of particular note is the opportunity to realise some 2.0 kilometres (or 1.2 miles) of new deep-water river berth capacity



- The plan is that the comprehensive redevelopment of the Area be underpinned by a new highway network extending to some 40 kilometres (or 25 miles)
- This will be critical to the proper functionality of the development



- A view on the concept for the proposed infrastructure corridor showing the relationship between road and rail, and the need for new bridge crossings



- A further view on the concept for the infrastructure corridor (or spine) showing connectivity with PD Ports Teesport from within the development, that is presently not available



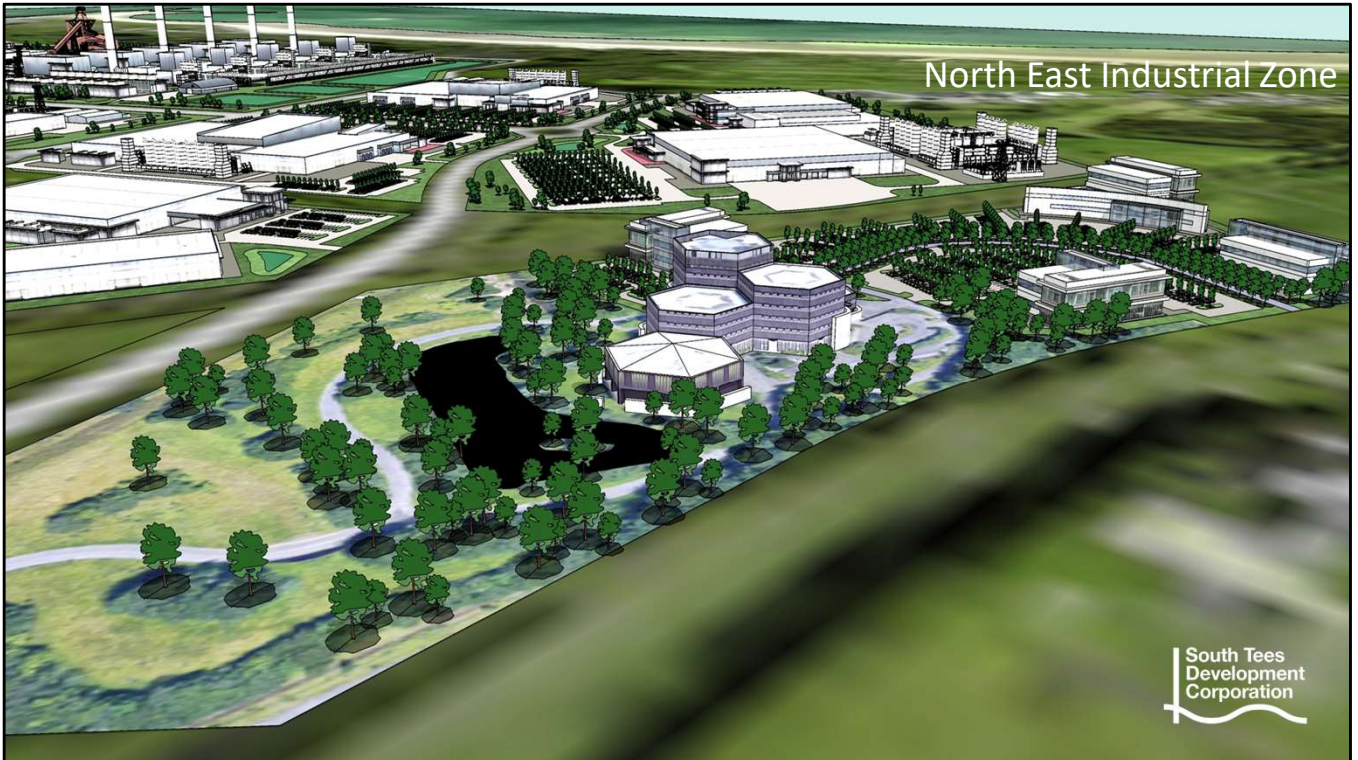
- The original Master Plan model



- A new, alternative Master Plan model reflecting the proposition for realising a major offshore wind cluster on the South Industrial Zone



- Perspective on North Industrial Zone development



- Perspective on North East Industrial Zone development



- Perspective on South Industrial Zone development, at South Bank



- Perspective on South Industrial Zone development, Prairie Site



- Overall perspective

South Tees Regeneration Programme



Expansion of Port Facilities





- The existing, under-utilised RBT, with unused water frontage immediately upstream



- Proposed modernisation of RBT and development of the upstream 700 metres of river frontage to realise expanded deep water port facilities – a proposal contained with the Sirius consented DCO



- A further perspective on the improved and new port facilities at Redcar



- Approximately 1.3 kilometres (0.8 miles) of dilapidated and non-utilised river frontage and berthing facilities at South Bank



- A concept for the proposed transformation of river frontage at South Bank, realising extensive, new deep-water port facilities



- An alternative proposal reflecting how land and river frontage at South Bank could be redeveloped to respond to the growing offshore wind market and the establishment of a cluster on South Tees

South Tees Regeneration Programme



Development Interest





- 299MW biomass power generation facility within PD Ports Teesport, that will be operational in 2020



Sirius Minerals

Polyhalite Production and Export

South Tees
Development
Corporation

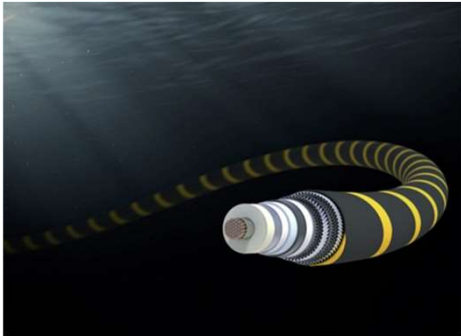
- The Sirius project, involving the establishment of major production facilities at nearby Wilton International and storage and export facilities on RBT, with a proposal for expansion over time



- This project is presently going through a DCO process, with plans to commence construction in 2022 and to be operational by 2026
- In addition to power generation and capturing of its own carbon, the facility will also address the carbon capture demands of major industry within the Tees Valley, including new developments within the STDC Area



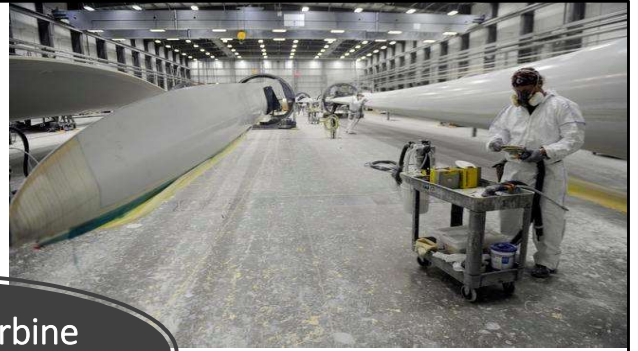
- Many proposals have been received for clean energy and energy storage uses, and dialogue continues regarding energy from waste development opportunities



Large diameter sub-sea interconnector cable manufacturing

South Tees
Development
Corporation

- A project that would see the manufacture of large-scale transshipment cable to deliver 1.3GW per annum of clean power to the UK



Offshore Wind Turbine Manufacturing



- STDC has received numerous recent enquiries concerning the establishment of various offshore wind assembly and manufacturing uses, extending to the creation of a major offshore wind hub (or cluster) to help meet the 60% UK content target set by HM Government in the latest Sector Deal



Hydrogen Economy Hydrogen vehicle refuelling



- The Tees Valley is establishing a leading position in the hydrogen economy, and STDC is presently considering proposals within this sector



- Numerous enquiries have been received concerning metals manufacturing uses, especially focused on recycling of scrap steel and other metals



Recycling and the circular economy

South Tees
Development
Corporation

- Recycling uses have been a regular theme within the extensive array of enquires received to date, including offshore rig decommissioning

South Tees Regeneration Programme



APPENDIX G

LATEST PHASING PLAN

APPENDIX H

SCHEDULE OF TECHNICAL AND OTHER REPORTS

SCHEDULE OF TECHNICAL AND OTHER REPORTS

Ground Investigation Related Reports				
No.	Title/Description	Location	By	Date
1	Examination of 14 Bulk Samples from Redcar SLS1015 for AEG Ltd.	SSI Redcar	TRS	Jul-17
2	SSI Redcar - SSI 2 - Factual Report Initial Trial Pitting	SSI Redcar	CH2M	Nov-17
3	SSI Redcar - SSI 1 - Factual Report Initial Trial Pitting	SSI Redcar	CH2M	Nov-17
4	Former SSI Steelworks Redcar: Replacement CLE3/8 Landfill Boreholes	SSI High Tip	Arcadis	Jan-18
5	Former SSI Steelworks Redcar- Advance Boreholes SSI 1, areas C & D	SSI Redcar	AEG	Feb-18
6	Examination of 24 Bulk Samples from Redcar SLS1015 for AEG Ltd.	SSI Redcar	TRS	Apr-18
7	Contract 2B: Site Condition Report	SSI Steel House	Arcadis	May-18
8	Contract 3: Site Condition Report	SSI Lackenby	Arcadis	May-18
9	SSI Redcar - Initial GI Works - Geoenvironmental Summary	SSI Redcar	CH2M	May-18
10	Contract 1 and 2A: Site Condition Report	SSI Redcar	Arcadis	Jun-18
11	SSI Priority GI Areas Contracts 1 and 2A: Final Factual Report	SSI Redcar	AEG	Jun-18
12	SSI Priority GI Areas Contract 2B: Final Factual Report	SSI Steel House	AEG	Jun-18
13	SSI Priority GI Areas Contract 3: Final Factual Report	SSI Lackenby	AEG	Jun-18
14	Contract 2B: Geotechnical Risk Assessment Report	SSI Steel House	Arcadis	Sep-18
15	Contract 1 and 2A: Geotechnical Risk Assessment Report	SSI Redcar	Arcadis	Nov-18
16	Contract 3: Geotechnical Risk Assessment Report	SSI Lackenby	Arcadis	Nov-18
17	Contract 1 and 2A: Ground Remediation Options Appraisal Report	SSI Redcar	Arcadis	Dec-18
18	Contract 2B: Ground Remediation Options Appraisal Report	SSI Steel House	Arcadis	Dec-18
19	Contract 3: Ground Remediation Options Appraisal Report	SSI Lackenby	Arcadis	Dec-18
20	Former SLEMS Landfill: Intrusive Investigation Report	SSI SLEMS	Arcadis	Jan-19

Other Reports			
No.	Title/Description	By	Date
21	Technical Memo - Archaeology Overview	CH2M	Apr-17
22	Phase 1 Geo-Environmental Desk Studies (Site Areas: SSI1, SSI2, SSI3, Tata Steel (TS) TS1, TS2, TS3 and TS4	CH2M	Aug-17
23	Phase 1 Site- Wide Ecological Appraisal	CH2M	Jun-17
24	Rail Infrastructure Assessment	CH2M	Nov-17
25	Internal Highways Condition Surveys	CH2M	Jul-17
26	Internal Bridges Condition Surveys	CH2M	Jul-17
27	Port Advisory Services Technical Memo	CH2M	Apr-18
28	Site-Wide Flood Risk Assessment	CH2M	May-17

Other Reports			
No.	Title/Description	By	Date
29	Property Market Assessment	Lambert Smith Hampton	Sep-16
30	Steel House, Redcar - Architectural, Civil & Structural, and MEPH Building Services Condition Survey	CH2M	Aug-17
31	Tata Steel Land Asset Management Plans and Related Liabilities Schedules	CH2M	Oct-18
32	Demolition Study of the former Sahaviriya Steel Industries Iron and Steel Making facilities, Redcar and Lackenby	DDM	Mar-19
33	Phase 1 Ecology Habitat Surveys, Prairie Site	INCA	2019
34	Outline Remediation Strategy, STDC Land	Wood	2019
35	South Tees Development Corporation, Energy Network Assessment	UK Power Networks Services Ltd	Nov-19
36	South Tees Regeneration Master Plan	CH2M	Oct-17 (Revised Nov-19)