
Appendix 4: South Tees Regeneration Master Plan - Northern Industrial Zone

05 North Industrial Zone

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5.01 North Industrial Zone Development Overview

TARGET INDUSTRIES

- Major space users/ large scale manufacturing
- Energy Innovation
- Peak energy storage
- Bulk materials
- Mineral processing

ASSETS & OPPORTUNITIES

- Approximately 929 acres of gross available land
- Close proximity to existing main entrance
- Adjacent to existing wastewater treatment plant
- Close proximity to existing substation
- Large, relatively flat areas of contiguous land
- Existing sea water intake pipes
- Operational Redcar Bulk Terminal
- Redcar Blast Furnace as potential heritage site
- Existing road infrastructure
- Rail connectivity

5.02 North Industrial Zone Development Strategy

The North Industrial Development Zone, approximately 929-acres, provides a large, relatively flat area of contiguous land that is uniquely suitable to accommodate tenants with substantial plot size requirements. There is also an existing road network within this zone, currently connecting the bulk terminal to the regional highway network. The proposed plan preserves and improves some of these vehicular corridors as part of the framework for potential industrial subdivision, generally planned as a grid with a flexible infrastructure that allows for easy parcel assemblage and utility configurations.

Users for this zone will likely be OEMs and supporting tier 1 component manufacturers. The focus will lean towards manufacturing and energy innovation, and bulk materials. Proximity to the existing Redcar Bulk Terminal (RBT) will provide incentive for tenants requiring regular supply of bulk materials to support operations. There is a planned 2 berth expansion at the terminal, which has been notionally indicated in land use and illustrative plans for this zone. RBT may also be attractive to users seeking to export large quantities of bulk material, like mineral processing facilities.

To accommodate this potential demand, two 50 acre parcels with direct bulk terminal adjacency have been provided in the plan. RBT also offers strong potential for construction materials import for new developments and have recently signed an agreement

ADVANCED MANUFACTURING

Manufacturing generally requires a higher proportion of skilled members of its workforce. In searching for premises manufacturers look to locate in areas which historically possess the types of skills required, can demonstrate an available labour force currently and have a skills training agenda geared towards the education of new entrants to the workforce.

Manufacturing, particularly large scale and heavy manufacturing processes, almost invariably consume significant amounts of electrical power and often other utilities as well. However availability of these services to industrial sites is often limited, requiring significant levels of capital investment to provide the necessary level of supply and often involving lengthy delays.

Large scale manufacturing often involves the take up of large parcels of land which are often unavailable within developer controlled industrial areas, as other uses can provide stronger monetary returns. The North Industrial Zone and its proximity to RBT and other transport infrastructure, clearly responds to requirements of manufacturing companies. This is evidenced by the high level of advanced manufacturing sector enquiries for the STDC site, which have been received since the Master Plan was published.

ALTERNATIVE ENERGY

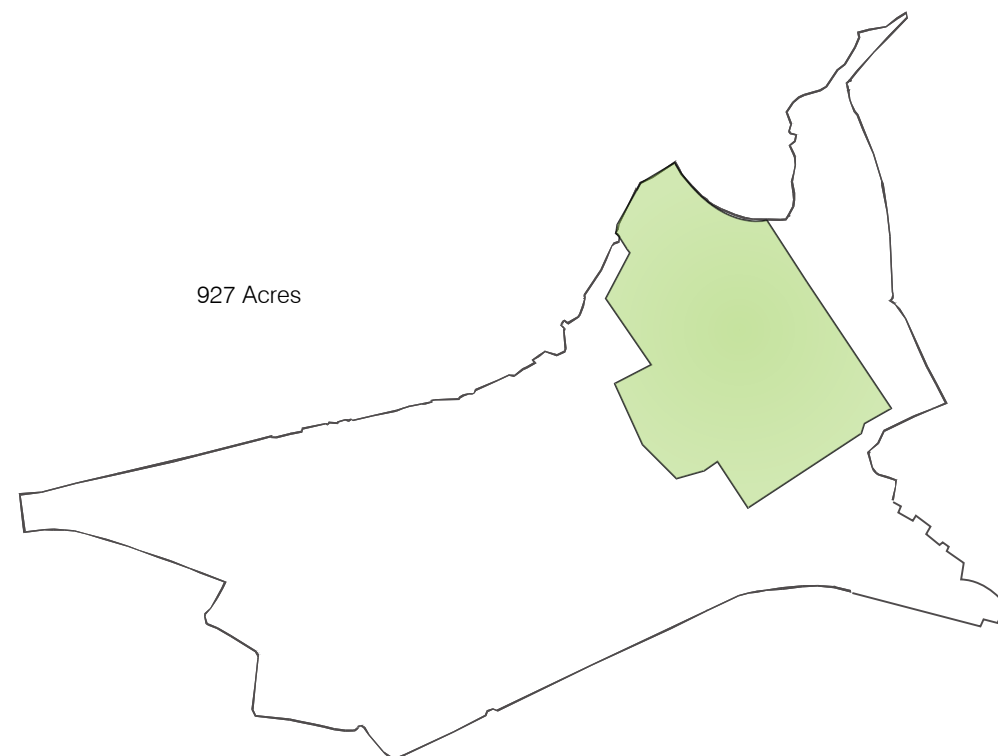
A secondary industrial land use zone has been identified as targeting energy innovation. This will include all innovative energy production and transmission technology manufacturing as well as energy efficiency products, such as high performance building materials.

Potential tenants for this zone include photovoltaic module manufacturing, lithium ion battery production and recycling, and prefabricated housing - all of which can benefit from a built-in labour force from the surrounding community, access to reduced cost steel components, and superior logistics opportunities and multi modal port connectivity.

HERITAGE

In order to retain some of the site's industrial past, a 20-acre heritage parcel that contains the Redcar Blast Furnace may be preserved and transformed into a common use area for the North Industrial Development Zone. This area will be largely an open space recreation site, but may include shared facilities such as convenience retail and other services for on-site workers and local residents.

Should the proposal be viable, the main furnace, stacks, and conveyors could be dramatically lit at night and positioned as a sculptural reminder of how South Tees Development Corporation has bridged the generations to form the next logical future for the site.



SEZ OPPORTUNITY

With additional study, the North Industrial Development Zone could potentially be planned as a Special Economic Zone (SEZ) to encourage foreign direct investment.

SEZs include business and trade laws that are different from the rest of the country and aim to increase trade, and investment, job creation and effective administration. The benefits a company gains by being in a special economic zone may mean it can produce and trade goods at a lower price, to enhance global competitiveness. This area could also benefit from any future Free Zone status.

POWER PRODUCTION

Strong market interest exists from several potential occupiers for both generation and storage of power. Several options for power generation have been identified for the North Industrial Zone, one for turbine-based generation, the other for alternative energy generation (e.g. photovoltaics). There may also be additional opportunity for tidal based generation adjacent to the North Industrial Zone.

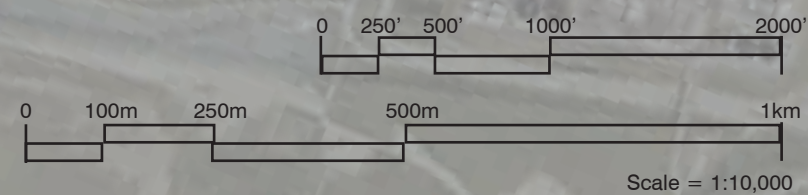
The UK offshore wind industry has committed to work with UK Government on a transformative sector deal, which, by 2030, will deliver thousands of additional skilled jobs and billions of pounds worth of export opportunities. Through this deal, the industry aims to generate one third of the UK's electricity from offshore wind by 2030. This scaled up ambition, coupled with the Government's Clean Growth Strategy, means the industry will more than double its capacity from 13GW deployed or contracted today, to 30GW by the end of the next decade. UK Government's emerging contracts will necessitate the manufacture of over 2,000 new wind turbines, to serve projects such as Dogger Bank, and government has mandated that all new contracts must attain a minimum of 50% UK content.

In response to this emerging step change in the UK offshore wind industry, STDC has received numerous proposals from investors, including the manufacture of: gravity foundations; monopiles and transition pieces; top sides; blades; nacelles; and gearing systems. Interest has also been shown in establishing an onshore engineering base to serve Dogger Bank and there are significant linked opportunities for offshore oil and gas rig decommissioning, which could produce a major feedstock for metals production projects.



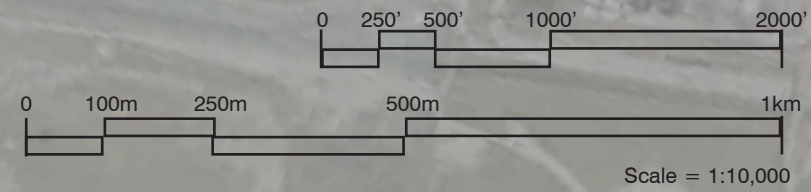


- Industrial (Offshore Fabrication)
- Industrial Advanced Manufacturing
- Industrial (Bulks and other Processing)
- Bulk Terminal & Port-related Industry
- Open Space & Heritage Sites
- Power & Energy





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5.04 Conceptual Massing Views (for illustrative purposes)





5.06 Parcel Flexibility

Plots sited in the NI Zone were initially conceptually sized based off of real-world facilities, these have since been refined in light of investor interest parcel size requirements and preferred locations. While initial plot sizes were estimated based on reasonable precedent, several factors have led to variation in updates in plot size demand. The influence of unforeseen market demand, technology changes, product evolution and automation will all have impacts on the ultimate requirements for land subdivision.

In general, primary roads will be considered fixed on the plan, with flexible secondary roads and parcel divisions. As the grain of the development becomes more predictable, parcel subdivision may modify to allow differing land demands. By removing secondary roads from the plan and reducing parcel divisions, larger plots may be created. Inversely, if plot demand shifts to a smaller grain, secondary roads and additional parcel divisions may be added to accommodate this shifting trend.

NORTH INDUSTRIAL ZONE ALTERNATIVES

The primary parcel alternative shown adjacent for the North Industrial Zone shows a 125-acre Major Power Generation user to the east, over 380-acres of Advanced Manufacturing, retention of the Redcar Blast Furnace as a heritage asset and an Energy From Waste Power plant to the north west. Adjacent to these parcels within RBT, Offshore Manufacturing, Port operations and a 100-acre corridor of Bulk Materials Processing are shown. Spatial requirements of interested investors have been incorporated within the most suitable site location, both of investor preference and to ensure effective residual parcel layouts and sizes, sufficient space for internal zone infrastructure networks and to enable connection continuity to external zones and the main infrastructure spine-road corridor.

Alternative land use and parcel division strategies are shown on this page; these options illustrate how simple subdivision changes can provide variation in parcel sizes and alterations to infrastructure network routes.

