

Tees Valley Joint Minerals and Waste Development Plan Documents

Background Paper No. 7

Infrastructure Strategy

May 2010

Contents

1. Introduction	1
2. Haverton Hill	2
3. South Tees Eco Park	3
4. Rail Network	5
5. New Road, Billingham	6
6. Sewage Treatment	7
7. Indirect Infrastructure Improvements	8

1. Introduction

1.1 Background

1.1.1 Planning Policy Statement 12: creating strong communities through Local Spatial Planning advises that the Core Strategy should be supported by evidence that the physical, social and green infrastructure needed to enable the development proposed for the area, can be delivered. This evidence should cover who will provide the infrastructure and when it will be provided. The Core Strategy should draw on, and in parallel influence, any strategies and investment plans of the local authorities and other organisations.

1.1.2 The infrastructure planning process should identify, as far as possible:

- Infrastructure needs and costs;
- Phasing of development;
- Funding sources; and
- Responsibilities for delivery.

1.1.3 In relation to the Minerals and Waste DPDs, the key area of infrastructure provision to be considered is the transport infrastructure; and the specific areas where infrastructure provision is required includes:

- A rail connection to the Haverton Hill site;
- Off site highways improvements and on site access at the South Tees Eco Park; and
- Wider improvements to the rail network;

Potentially, infrastructure may also be required for:

- Rail connections to the South Tees Eco Park and New Road, Billingham; and
- Access to port facilities for the South Tees Eco Park.

1.1.4 In addition, there may be infrastructure requirements related to Northumbrian Water's role in providing sewage treatment.

2. Haverton Hill

- 2.1.1 The existing highways and drainage infrastructure on the site are all sufficient to service the extended facilities which are proposed at Haverton Hill, with a new sub-station being required to provide an appropriate electrical connection to the National Grid. The provision of a sub-station and the carrying out of other on-site infrastructure works required, including landscaping, vehicle parking areas and internal access roads, would all be the operator's responsibility.
- 2.1.2 It is proposed that the energy from waste facility at Haverton Hill will be connected to the rail network through the use of an existing spur off the adjacent Belasis Lane Junction. There is sufficient space adjacent to the existing sidings on the spur line to construct the rail loading facilities and the construction of these would be the responsibility of the operator. Rail traffic would be routed through either Norton Junction or Darlington from the wider rail network, and then follow the Billingham to Stockton line to the Belasis Lane Junction. Discussions between the operator and Network Rail have confirmed there are no significant issues with using this route and it would not prejudice the existing intermittent freight movements on these parts of the network.
- 2.1.3 All funding and responsibility for the rail loading facilities would lie with the operator of the Haverton Hill facility. Planned Network Rail improvements to the wider rail network in the Tees Valley area will benefit the freight traffic but are not necessary to the delivery of this facility. The use of the facilities for transport of waste materials to the site will be dependent on the supply of suitable waste from the operator's contracts but if this situation does not arise, the operator could set up these facilities and allow other businesses in the area opportunity to use the facilities. There is no specific requirement for the rail loading facility to be developed by a particular time as the waste management facilities can operate without this facility. The waste management facilities are anticipated to be operational by 2013 and the rail facility could also be operational by this time¹.

¹ Information from Stockton-on-Tees Borough Council planning application 08/2469/EIS, Connecting the Tees Valley, Tees Valley Regeneration and partners, October 2006 and East Coast Main Line Route Utilisation Strategy, Network Rail, February 2008.

3. South Tees Eco Park

3.1.1 Highways improvements are required in order to ensure suitable access is provided to the Eco-Park from the public highway and also to upgrade parts of the nearby highway network to accommodate the anticipated increases in traffic. Three separate access points would be provided to the site; one primarily for HGV traffic, one for staff vehicles and visitors and one for a third party tenant and secondary emergency access. Five junctions of the A66 have been identified as requiring improvement works of varying scales to ensure traffic flows do not worsen from their current situation along with two junctions on the A1053. Further details of the works identified are shown below. Funding of £2.2million to assist with these improvement works has been secured from ONE North East. Redcar and Cleveland Borough Council is assisting with the delivery of the project through the management of the procurement of works and the partnership of organisations involved (including the council, operator, ONE North East and Renew Tees Valley) who are responsible for provision of infrastructure.

Table 3.1 South Tees Eco-Park: highways and access works required

Location	Improvements
Staff and Visitor Access (Whitworth Street)	Extended two lane flare for left turning vehicles to increase capacity
HGV access (Eston Road)	Preferred option is provision of roundabout (alternatively a ghost island right turn would also work)
Third party access (Tees Dock Road)	Any permanent works to be determined by third party tenant in future
A66/A171 Cargo Fleet Rd/Cambridge Road junction	Revise lane markings on A66(E) entry to allow both lanes to provide ahead access. Widen exit onto Cargo Fleet Lane from South Bank Road junction to allow a two lane exit.
A66/Middlesbrough Road	Increase entry width and extend flare section of A66 (E and W) to provide additional capacity.
A66/Normanby Road	Provide traffic signalled layout with two ahead lanes in both directions on A66 and separate right turn lanes off A66.
A66/Eston Road	Provide traffic signalled layout with two ahead lanes in both directions on A66 and separate right turn lanes off A66.
A66/Tees Dock Road	Increased flare length.
A1085/A1053 Greystones Road	Revise lane markings on Tees Dock Road approach to allow ahead movement in both lanes.
A174/A1053 Greystones Road	Increase carriage way on roundabout by A174 (W) entry to three lanes by providing flare on existing two lanes.

- 3.1.2 The majority of these access and highways improvement works will be required either prior to the development of the site or during the first year after it opens. However, the improvements works to the junctions on the A1053 are linked to the wider Teesport redevelopment and these would only be required once this redevelopment is underway. In addition, the access point for the third party tenant and secondary emergency access would not be required until this tenant is developing their part of the site.
- 3.1.3 In addition there is potential for the Eco-Park to be connected to the rail network or to import/export materials via a port facility. These connections would be dependent on the success of operations at the Eco-Park and the nature of the contracts the operator can win. There is therefore no specific requirement to identify delivery mechanisms at this stage but Network Rail's plans to make improvements to the wider rail network and the proposed improvements to Teesport would both help to facilitate these connections.²

² Information from Redcar and Cleveland Borough Council planning applications R/2007/0994/FFM and R/2007/0995OOM, and www.redcar-cleveland.gov.uk (regeneration pages)

4. Rail Network

- 4.1.1 While the local rail network in the Tees Valley has previously carried larger amounts of freight traffic than it does at present, there are improvement works which will help with the increased freight traffic which may result from the sites contained in the Policies and Sites DPD. These upgrades will also assist in the delivery of development and regeneration schemes covered in other Local Development Framework documents.
- 4.1.2 Specific projects which would provide benefits to the whole rail system and which would assist in the movement of freight include:
- signalling improvements at Darlington South, Eaglescliffe and Bowesfield and Thornaby East junctions (scheduled for completion 2103/14);
 - Renewal of Tees Bridge (completed 2009); and
 - Bridge works at Albert Road, Middlesbrough.
- 4.1.3 The proposed Tees Valley Metro system would also see improvements to the existing rail network across the Tees Valley which would have an additional benefit of allowing additional freight services to Tees Port and the Northern Gateway development. In addition, it is an aspiration of Network Rail for the Northallerton to Teesport line to be upgraded to allow W10 freight clearance.³

³ Connecting the Tees Valley, Tees Valley Regeneration and partners, October 2006 and East Coast Main Line Route Utilisation Strategy, Network Rail, February 2008.

5. New Road, Billingham

- 5.1.1 Depending on the success of future operations, there is potential for this allocation to utilise an existing rail line. There is an existing freight rail line which runs through the site and there is sufficient land available within the site to provide loading facilities. The provision of the loading facilities and other connection developments within the site would be the responsibility of the operator and would be dependent on the waste management operation is developed in this location and the contract entered into by the operators.
- 5.1.2 The wider improvement works being undertaken by Network Rail in the Tees valley would benefit to the movement of freight to and from the site onto the general rail system.
-

6. Sewage Treatment

- 6.1.1 The provision of sewage treatment is the responsibility of Northumbrian Water Ltd (NWL) across the plan area and they require a variety of infrastructure measures in order to provide this service. These measures include the sewage treatment works themselves, the sewer system and plant such as pumping stations and control kiosks to manage the system.
- 6.1.2 NWL are themselves responsible for the provision, maintenance and upgrade of this infrastructure system. In the Tees Valley NWL operate the Bran Sands Regional Sludge Treatment Centre which deals with the sludge generated from other sewage treatment works in the North East and industrial wastes from the adjacent chemical, steel and heavy industry sites.
- 6.1.3 In the North East as a whole from 2010 to 2015, NWL are committed to:
- Develop an integrated long term drainage plan;
 - A major programme to address flooding from sewers;
 - Additional cleaning of sewers to reduce flooding from blockages;
 - Increases to the sewerage system capacity to cope with new development and population movement;
 - Levels of sewer replacement being increased to sustainable levels;
 - Increased 'real time' monitoring and management of the sewerage system to aid planning;
 - Achieve as near as possible to 100% discharge consent compliance by 2015;
 - Further significant reduction in pollution incidents by 2015;
 - Reduce sewage litter by customer campaigns and reducing system spills; and
 - Further improvements to river & bathing water quality.
- 6.1.4 To achieve these aims the company has identified it will need to invest £1.27 billion across all of its operations (including water supply and operations in Essex and Suffolk) over this five year period and has adopted a business plan which sets out how this finance will be generated. The Plan refers to making of efficiency savings to existing operations, producing 20% of energy from self-generated renewable sources and income received from customer bills.⁴

⁴ Looking to the Future; Company Strategy North East Version; Final Business Plan, Northumbrian Water Ltd, April 2009

7. Indirect Infrastructure Improvements

- 7.1.1 Other LDF documents adopted or in production also contain details of wider infrastructure improvements required in the Tees Valley. While these are not directly required to deliver the Minerals and Waste DPDs, their implementation will have indirect benefits through the enhancement of public highways to benefit road haulage, improvements to sustainable transport provision to benefit employees accessing sites and in helping to create an economically successful area which will benefit all businesses. Some of these infrastructure improvements are detailed below.
- 7.1.2 The Tees Valley City Region Business Case and City Region Development Programme (September 2006) sets out a forward strategy for improving economic performance and urban competitiveness which includes providing modern, competitive transport infrastructure that improves both internal and external connectivity.
- 7.1.3 The existing transport system is regarded as a potential constraint on economic growth, in particular the ability of the trunk road network to cope with future development and the lack of accessibility of jobs by public transport. Key projects are based around tackling projected traffic growth on the trunk road network through the provision of quality public transport, enhancing the local road network and demand management.
- 7.1.4 At this strategic level, a Multi Area Agreement (MAA) has been signed, including targets relating to the reliability of the City Region road network. The aim of the agreement as it relates to transport is to develop an integrated programme, involving highway improvements which can help support regeneration, a much-improved public transport system, especially the development of the Tees Valley bus network and 'Metro' scheme.
- 7.1.5 In terms of funding, the MAA will:
- Allow funding to be moved between different projects and programmes to make best use of the money available;
 - Provide more certainty of funding over a longer period of time;
 - Allow Tees Valley Unlimited⁵ more autonomy;
 - Simplify the process where funding bids for projects have to be made to different bodies and to more than one Government department.

⁵ Tees Valley Unlimited is a partnership of public, private and voluntary bodies which coordinate activities, appropriate to a city region level, designed to improve the economic performance of the entire Tees Valley.

7.2 Specific Highway Infrastructure Improvements

Strategic Highway Network

- 7.2.1 The A19(T)/A66(T)/A174(T) Development Study has been commissioned with the purpose to review the current capacity of the trunk road network and predict future demand. A package of trunk road and associated local interventions will be prepared to ensure that the Tees Valley's transport networks are capable of facilitating the planned regeneration of the sub-region over the next 20 years, to the satisfaction of all stakeholders. An associated Action Plan will identify key projects, phasing, costs and responsibilities.

Local Highway Network

- 7.2.2 The Local Transport Plan (LTP) identifies two major schemes which includes the East Billingham Transport Corridor.
- 7.2.3 The East Billingham Transport Corridor will address a local issue in the Billingham area, particularly the volume of Heavy Goods Vehicles using existing routes through Billingham to and from the industrial areas to the east of the town. An initial feasibility study carried out in 2004, concluded that there were no existing alternative routes away from residential areas, and that the most appropriate solution was the construction of a new link road between A1046 Haverton Hill Road and A1185 Seal Sands Link Road
- 7.2.4 Two potential routes were identified. It was estimated that these would cost £17.9m and £16.5m respectively. The scheme was assessed as part of the Regional Funding Allocation process but did not come out as a priority for funding during the period up to and including 2015/16. However, a phased approach to delivering the scheme involving the construction of the northern section of the route could have potential.
- 7.2.5 The Regional Funding Allocation was re-profiled in July 2009 to allow smaller schemes to be delivered in the short term. £5 million was allocated to the East Billingham Transport Corridor to allow this to be delivered by 2011. The landowners who may be affected by the route are being kept informed of all discussions to allow them to influence the final design and ensure local environmental issues are fully accounted for.
-
