



## 7.0 TRANSPORT CONNECTIONS

### 7.1 National Transport Connections

#### Overview

Efficient and reliable accessibility to a new container port is crucial. The Transport White Paper 1998 highlights the importance of ports in the supply chain and notes in particular the need to make full use of existing infrastructure. Both the White Paper and the Government's subsequent 10 Year Transport Plan stress the need to improve rail access to major ports and highlight the development work being done by the Strategic Rail Authority (SRA) in respect of links to the Haven Ports (which include Harwich and Felixstowe).

Bathside Bay enjoys a number of strategic location benefits:

- it is situated adjacent to the existing Harwich International Port, a nationally and internationally important multi-purpose freight and passenger port, strategically located in the south east of the UK;
- it has direct access onto the A120(T), part of both the national trunk road network and the European Union's Trans-European Transport Network; and
- it links directly into the national rail network, providing access to markets throughout the UK via a number of routes.

Government policy for ports is guided by Modern Ports: A UK Policy, issued in November 2000. The policy recognises that port expansion will inevitably generate inland traffic. Three factors are highlighted as being essential for port customers, with respect to both road and rail facilities:

- good access to port facilities;

- clear connections to the road and rail networks; and
- good access to markets, avoiding congestion and bottlenecks.

The proposed Bathside Bay development is in a unique position as a new container facility to take advantage of the advantages offered by its location among the Haven Ports. In addition, HPUK has given a great deal of consideration to both the siting of the development and the way in which it links into the national and local transport networks.

#### Rail Connections

The SRA has a clear remit to promote the use of railways and secure the development of the network. In its Freight Strategy of 2001, the SRA promotes the provision of new trunk route capacity and recognises the need to respond to new port developments by planning ahead for the rail network. It makes specific reference to routes into and out of Harwich and Felixstowe.

The SRA's Strategic Plan was subsequently issued in 2002, and revised in 2003. This focuses on the need to link key container ports to the West Coast Mainline (WCML), which has spare capacity for 9'6" containers. The UK container market is increasingly being dominated by these larger containers (currently the majority of containers are 8'6" in height).

The stated policy of the SRA is to deliver an 80% growth in the use of rail freight by 2010/2011. The SRA's initiatives to achieve this include upgrading key routes to and from the UK's major ports, including the Haven Ports.

At present, work is taking place on the ground to enhance the gauge on the route from Harwich and Felixstowe to the WCML, via the Great Eastern Mainline (GEML) and the North London Line, to "W10" gauge (ie capable of taking 9'6" containers on standard wagons). This will enable the efficient movement of containers to and from the Haven



Ports. Development work is also underway to eventually upgrade both the gauge and capacity of the cross-country route from these ports to the WCML, via Nuneaton (referred to as Felixstowe to Nuneaton, or F2N). This work is very high on the list of the SRA's priorities.

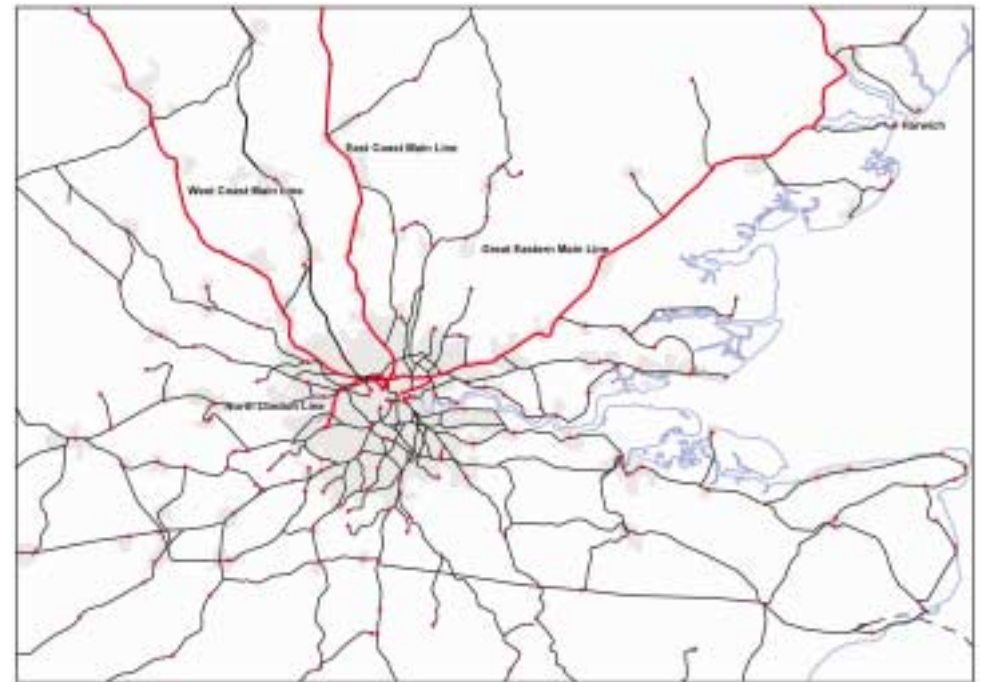
In recognition of the need to promote the use of the rail network for the movement of containers, HPUK has included a rail terminal linked to existing rail facilities in its proposals for Bathside Bay. This will be capable of handling 775 m long trains (the longest train length which is expected to be accommodated on the national rail network in the foreseeable future) and forms a key part of the development.

Development of demand at Bathside Bay will be dependent on a number of factors. Eventual demand is forecast to reach about 1.68 million TEU by 2017. In excess of 20% of container moves are expected to be containers in transit, or "transshipment". These containers will not exit the port by road or rail, but will remain temporarily within the port thus reducing the potential numbers of lorries on the road network. Some will be transferred directly between ships, while others will be discharged from vessels and moved to a stack for loading onto appropriate vessels. This is in line with conventional practices at the Port of Felixstowe and elsewhere.

Of those containers which will be headed inland (ie after exclusion of transshipment), it is cautiously expected that some 22.5% will be moved by rail. This is approximately equivalent to the existing rail share at the Port of Felixstowe and is supported by the SRA.

Rail movements into and out of the proposed Bathside Bay development will be made via a branch line between Manningtree and Harwich Town. This line is double-tracked and is electrified. The line links into the GEML at a junction at Manningtree.

From Manningtree, the GEML heads generally west towards London, where it links into



**Rail connections**



the North London Line, and north through Suffolk and Norfolk to Norwich. At Stowmarket, a cross-country route heads off through Bury St Edmunds, Newmarket, Ely, Peterborough and Leicester, towards Nuneaton, where it joins the West Coast Mainline.

It is to be noted that Harwich itself was originally a railway port and the rail share for freight was historically very high, reaching some 95% of all freight movements up to the mid-1980s. At its peak in around 1985, maximum usage amounted to six container trains in either direction per day, each of up to 20-plus wagons of 60', to and from locations such as Halewood and Manchester, with seven trains accessing and departing from the train ferry.

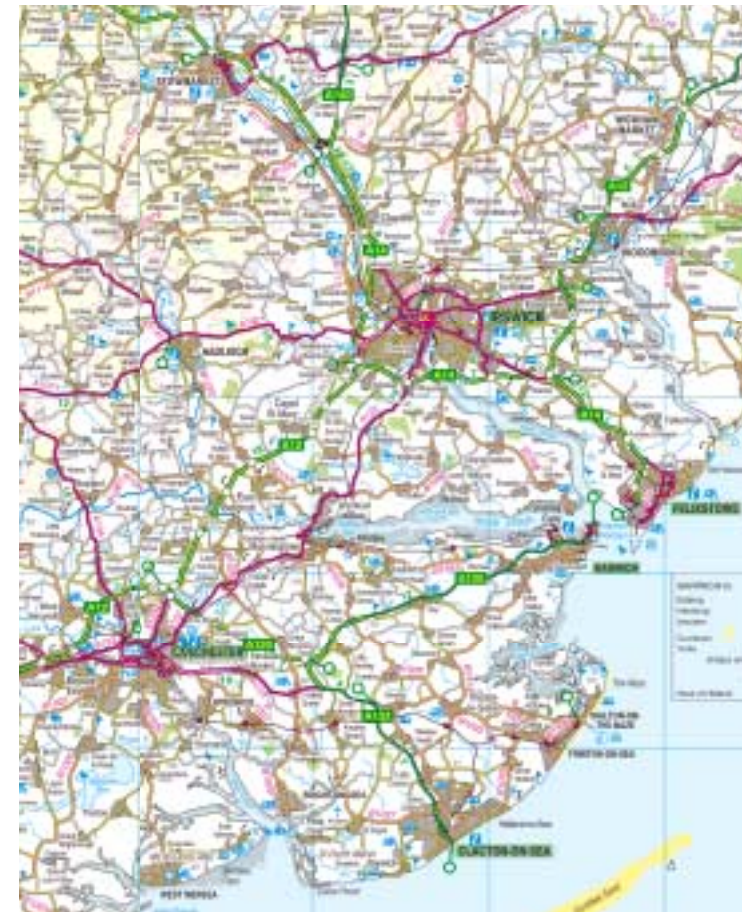
### **Road Connections**

There are various recent initiatives to improve the road infrastructure linking the Haven Ports to the rest of the national trunk road network.

The Highways Agency prepared a Route Management Strategy in June 2001 for both the A12(T) and A120(T). This is a 10-year programme, aiming to maximise the contribution of these two routes towards the Government's transport objectives. The strategy has proposed a number of high priority actions with respect to the A120(T), including:

- improving the A12/A120 Crown Interchange westbound off-slip to Colchester;
- signalling the A12/A120 Crown Interchange; and
- installing a roundabout at the A120(T) Hare Green/Harwich Road junction.

In addition, a programme of multi-modal studies has been undertaken by regional



**Road connections**



Government Offices throughout the UK to determine priorities for major transport investment within particular study areas or route corridors.

The most relevant of these to the proposed Bathside Bay development is the London to Ipswich Multi-modal Study (LOIS). This commenced in September 2000 and reported its findings at the end of 2002. The study area for LOIS is roughly bounded by the M11/A11, the A14 and the sea, with the core study area focused on the A12(T) from the M25 to Ipswich, the A120 between Colchester and Harwich and the Great Eastern Mainline railway (GEML).

The recommendations of the study include the following:

- upgrading the A120(T) between Hare Green and Harwich to dual carriageway;
- duelling the A120(T) between Braintree and the A12(T);
- widening the A12(T) to six lanes between the M25 and A120(T) (Ardleigh junction); and
- further widening of the A12(T) north of the A120(T) (Colchester to the Copdock roundabout).

The study also recommends road user charging along the A12(T) after 2011, in line with a number of other multi-modal studies.

As noted, direct access into Bathside Bay will be gained onto the A120(T). This road carries up to around 30,000 vehicles per day, a large proportion of which comprise lorries and other vehicles travelling to and from Harwich International Port.

The A120(T) therefore performs an important national function for the movement of freight

and passenger traffic travelling between Harwich and the rest of national road network. It also provides for the movement of abnormally heavy, wide and high vehicles to and from Harwich.

## 7.2 Travel Plan

Travel Plans have an important role to play in reducing the level of vehicular activity associated with new developments, in line with Government policy. A Travel Plan has been prepared in draft for the Bathside Bay development, so that accessibility to the site can continue to be improved by all modes. Amongst the issues that are being covered are:

- building on the results of a sustainability audit undertaken for the Bathside Bay site;
- investigating alternative means of travel
- working with Essex County Council to promote increased bus use; and
- continued liaison with Sustrans over the use of cycling facilities.

The Travel Plan will be an evolving document and will continue to be developed in the months following submission of the planning application, in conjunction with Essex County Council officers.



## Glossary

AOD	Above Ordnance Datum - a datum level established by Ordnance Survey from which the level of all features in the UK are related. Ordnance Datum is 2.02m above Chart Datum.	HGV	Heavy Goods Vehicle
AONB	Area of Outstanding Natural Beauty	HIP	Harwich International Port Limited a subsidiary company of Hutchison Ports UK Limited
BIP	Boarder Inspection Post	HRO	Harbour Revision Order - an application/order made under the Harbours Act 1964
CD	Chart Datum - typically the lowest water level of the largest tide of the year.	HPUK	Hutchison Ports UK Limited the parent company of Harwich International Port Limited
Deepwater berth	A berth of 14.5m below Chart Datum.	ILE	Institute of Lighting Engineers
Direct deep-sea	refers to all containers shipped directly between the UK and non-European markets.	IMV	Internal Movement Vehicle, a tractor unit with a trailer, used to transport containers between gantry cranes and storage areas in the operational area.
DETR	Department of the Environment, Transport and the Regions	OPI	Overriding Public Interest
ECC	Essex County Council	PDI	Pre-Delivery Inspection building for imported cars - on eastern side of the bay.
EEDA	East of England Development Agency	PPG	A series of Planning and Policy Guidance notes
EIA	Environmental Impact Assessment	Reach Stacker	A large piece of equipment with the capability of lifting containers on and off of trains using a frame which reaches out over the container and lifts it from the top. Can also be used for the stacking of containers in a storage area.
ES	Environmental Statement - in accordance with Regulation 4(6) of the Harbour Works (Environmental Impact Assessment Regulations 1999)	RMG	Rail Mounted Gantry crane, used in the operational area to service the rail terminal.
GDP	Gross Domestic Product	RTG	Rubber Tyre Gantry crane, used in the operational area to service the container storage area
GPDO	General Permitted Development Order	SAM	Scheduled Ancient Monument
GVA	Gross Valued Added - an economic indicator measuring output of an area in £		



Short-sea:	to / from destinations in North-west Europe.
SPA	Special Protection Area - a site designated for its European nature conservation interest.
SRA	Strategic Rail Authority
TA	Transport Assessment
TEU	Twenty foot Equivalent Unit, a means of measuring the volume of a container in terms of the I.S.O. (International Standards Organisation) standard 20 foot container, e.g.:1 x 40 ft container = 2 TEUs.1 x 20 ft container = 1 TEU
Transshipment	The requirement to move a container from one vessel to another vessel at a hub port to enable to onward carriage of the container.
Trailer trains	One IMV having the capability of pulling up to 5 trailers used within the operational area of the port to transfer containers between gantry cranes.

**Note:**

Images within this document have been sourced from library material.



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