

# Hornsea 4

## Traffic and Transport

The onshore construction for Hornsea Four is expected to last for approximately 36 months with peaks and troughs of activity throughout the construction period. A range of mitigation will be committed to by Hornsea Four to manage the impact of construction traffic throughout this period.

### Our assessments

An assessment of potential impacts associated with an increase in construction traffic has been undertaken in close consultation with the East Riding of Yorkshire Council to ensure that all road users are considered.

The assessment work has been informed by site visits, a desk study and collection of existing traffic flow and collision data. The assessment takes into account forecast construction traffic generation (e.g. Heavy Goods Vehicles (HGVs) and construction personnel) and the proposed access locations required to construct Hornsea Four.

We have assessed an absolute worst case for peak HGV flows, based on the alignment of the most intensive construction activity occurring simultaneously across the entire Hornsea Four project. HGV traffic has been assumed to originate entirely from the south to further represent a worst case.

### Assessing the significance

The significance of the effect upon traffic and transport is determined by both the magnitude of the impact and the sensitivity of the receptor.

### Defining magnitude of the impact

Hornsea Four has set out the following criteria for defining magnitude of the impact upon transport and transport:

- Major – Changes in total traffic flows of over 90%.
- Moderate – Changes in total traffic flows of 60.1 to 90%.
- Minor – Changes in total traffic flows of 30.1 to 60%.
- Negligible – Changes in total traffic flows of less than 30%.

### Defining sensitivity of a road

The sensitivity of a road (link) can be defined by the type of user groups who may use it. This includes Non-Motorised Users (NMU), including pedestrians, cyclists and equestrians.

The different sensitivity levels applied to the assessment are broadly defined as:

- Very High – High concentrations of sensitive receptors (e.g. hospitals, schools, residential dwellings, areas with high footfall etc.) with limited or no separation from traffic provided by the highway environment and high levels of NMU activity.
- High – Concentrations of sensitive receptors with limited separation from traffic provided by the highway environment and low to moderate levels of NMU activity.
- Medium – A low concentration of sensitive receptors and some separation from traffic provided by the highway environment.
- Low – Few sensitive receptors and / or highway environment can accommodate changes in volumes of traffic.

### Traffic and Transport study area

The Hornsea Four traffic and transport study area is the area within which environmental impacts may occur and was agreed with East Riding of Yorkshire Council.

The area has been informed by determining the most probable routes for traffic, both for the movement of materials and employees during construction of Hornsea Four.

The area is divided into 90 separate highway sections known as links, which are defined as sections of road with similar characteristics and traffic flows. The traffic flow data for these links has been informed by traffic surveys and existing data.

Based on the duration of construction, along with several other factors (including the maximum design scenario), we have estimated peak HGV movements (transporting goods from a source location to a predefined destination) based on two-way traffic movements. These movements represent the inbound (loaded trip from the source) and outbound (unloaded trip back to the source) flows. For example, 20 two-way movements comprise 10 inbound trips from the source and 10 outbound trips to the source.

We have assessed an absolute worst case of up to 1,097 two-way vehicle movements per day combined across all 90 links. However, across the duration of onshore construction for Hornsea Four (approximately 36 months), we expect peak daily flows to be much lower than this.

## Impacts and effects

Hornsea Four has made a number of commitments to reduce the impacts and effects caused by an increase in construction traffic.

A selection of these are set out below with their relevant commitment ID assigned within the Hornsea Four Commitments Register:



Create a new access from the A1079 to route construction traffic away from Cottingham and Dunswell **(Co150)**.



Developing a Construction Traffic Management Plan **(Co144)**.



Installing temporary access of the highway network to facilitate vehicular access, in line with local authorities' requirements **(Co62)**.



Keeping core working hours for the construction of the onshore components of Hornsea Four to 7am-6pm Monday to Friday and 7am-1pm on Saturdays **(Co36)**.



Avoiding HGV construction traffic through Foston on the Wolds **(Co171)**.

## Developing a Construction Traffic Management Plan (CTMP)

Hornsea Four has made a commitment to develop a CTMP in accordance with the outline CTMP to be submitted with our final Development Consent Order (DCO) application.

The final CTMP will set standards and procedures for:

1. Managing the numbers and routing of HGVs during the construction phase;
2. Managing the movement of employee traffic during the construction phase;
3. Details of localised road improvements necessary to facilitate safe use of the existing road network; and
4. Details of measures to manage the safe passage of HGV traffic via the local highway network.