



# Preliminary Environmental Information for Junction 24 Somersfield site

July 2011

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# Introduction

The following presents Preliminary Environmental Information (PEI) relating EDF Energy's proposals to use the 'Somerfield' site for the purposes of park and ride, freight management, a temporary staff induction centre and courier consolidation facilities. The PEI is provided in support of this consultation – Proposed Changes to the Preferred Proposals including M5 Junction 24 and Highway Improvements in the Bridgwater Area' – allowing stakeholders to be appraised of the Environmental Impact Assessment (EIA) studies which will be undertaken including the requirement for further surveys to allow characterisation of baseline environmental conditions. An initial appraisal of the potential sources of environmental impacts and their likely significance arising from the works is presented.

Views from all stakeholders are welcome with respect to the proposed scope and content of the EIA studies which EDF Energy intends to undertake for the Somerfield site and due consideration will be given to any comments which are received.

## Noise

The nearest noise sensitive receptor is the Travelodge hotel located immediately to the south of the site. However, the hotel itself is screened from the site by a two-storey car park, and in any case is already exposed to noise levels from the M5 motorway and the A38 in excess of that likely to be generated by EDF Energy's use of the 'Somerfield' site. The nearest private residential dwellings to the site are located to the north-west. However, these properties are positioned on the opposite side of the A38, which, along with the M5 motorway, is, and will remain the dominant noise source at this location.

The EIA studies for the site will provide an assessment of the potential impacts of the on-site construction works, as well as the cumulative off-site road traffic noise impacts (with Hinkley Point C (HPC) and other Associated Development (AD) sites) during the operational phase. Site operational noise impacts associated with early morning and late night periods, such as vehicle movements and car door slams, are not anticipated to be significant due to the existing high background noise levels that result from road traffic on the M5 motorway. These would be scoped out at an early stage in the EIA process.

Given the existing use of the site and the high background levels due to the close proximity to the M5, noise impacts during limited construction works and operation of the site for the proposed activities are not likely to be significant. There will be no requirement for additional baseline survey effort, with regards to noise.

## Air Quality

The nearest air quality sensitive receptor is the Travelodge hotel immediately to the south of the site. However, only short-term Air Quality Objectives (AQOs) would apply as assessment criteria here as opposed to the long-term (annual) AQOs as occupancy of the hotel building would typically be limited in duration. The nearest private residential dwellings are located to the north-west on the opposite side of the A38, which, along with the M5 motorway, will remain the dominant source of air pollution at this location.

The EIA studies will provide an assessment of the potential impacts of the on-site construction works which are anticipated, as well as the cumulative (with Hinkley Point C and other Associated Development sites) off-site road traffic air quality impacts during its operation. Site operational air quality impacts (other than road traffic) will be negligible, and these will be scoped out at an early stage in the EIA process.

Given the existing use of the site and the high background levels due to the close proximity to the M5 motorway, air quality impacts during limited construction and long-term operation of the site as a park and ride and freight management facility, are not likely to be significant.

There will be no requirement for additional surveys with regards to air quality.

## Soils and Land Use

The site is currently developed, non-agricultural land and as a result no baseline soil or Agricultural Land Classification (ALC) surveys are required.

Given the developed status of the site, soils and land use issues can be scoped out of the EIA and thus an Environmental Statement (ES) chapter on these topics would not be required.

## Geology, Land Contamination and Groundwater

An Envirocheck report has been acquired and reviewed and this indicates that a gravel pit existed in the northern section of the site which later briefly became a caravan park. The site has existed in its current layout since around 2006. The EIA studies will review any historical site investigation information that may be available especially that which relates to the area of the site in the locality of the former gravel pit.

The EIA studies will provide an assessment of the potential impacts of the on-site construction works, operation and post-operation phases of the site. As the site is currently occupied by buildings and hardstandings (no significant in-ground works are anticipated) it is likely that there will be no significant risks posed to human health, the soil and built environments during such construction works or indeed operation or post-operation phases.

No impacts to geology are expected. No significant groundwater impacts are anticipated, assuming best practice was observed during the construction of the existing site layout and facilities (e.g. the correct sub-surface drainage and appropriate provisions for oil interceptors and fuel storage were accommodated). Access to such information will be requested from representatives of the current site owner and occupier and reviewed together with any existing information that may provide further characterisation of the contamination status of the site.

At this stage in the EIA process, an intrusive investigation is not proposed. However, if extensive in-ground works are required this position will be reviewed. The requirement for investigatory work will also be dependent on the availability and quality of existing information.

## Surface Water

There will be no requirement for additional surveys, with regards to surface water quality as long as the current drainage infrastructure details and future drainage strategy are made available for review.

The EIA studies will provide an assessment of the potential impacts to surface water quality status related to any construction works that may be required.

It is likely, given the compatibility of the current land use (which notably includes vehicle wash and above ground fuel storage facilities) that use of the site by EDF Energy would not represent a change or increase in the potential for surface water quality impacts to occur. There are not likely to be any significant impacts identified for this site, with regards to surface water quality.

The surface water quality impact assessment will be presented alongside hydrology and drainage discussions, as part of a combined 'surface water' ES chapter.

## Flood Risk and Drainage

Examination of the Environment Agency Flood Map has confirmed that the site is located in Flood Zone 1 and therefore has a low probability of flooding from fluvial and tidal sources. It is also expected that the risks of flooding from groundwater, and pluvial sources will be low. The risk of flooding from the nearby Bridgwater/Taunton canal is negligible due to the difference in elevation of the canal relative to the site.

Although the site is expected to have a low risk of flooding, a Flood Risk Assessment (FRA) may be required due to the size of the site (>1 ha). Requirements in this context will be confirmed with the Environment Agency. Should an FRA be needed, it is probable that only a short Level 1 Scoping FRA will be required in order to examine the risks of flooding from all sources. It is anticipated that much of the information required to develop this assessment is already available, having been considered for the Junction 24 site presented in previous consultations. No detailed modelling of fluvial or tidal flood risk will be necessary due to the location in Flood Zone 1.

The main anticipated issues are therefore centred on the suitability of the existing drainage arrangements on and/or near the site. A preliminary examination of the Wessex Water sewer map (dated December 2009) indicates the presence of a foul sewer (this requires confirmation) along the main access road in front of the site.

The drainage arrangements at the site will be investigated further through walkover survey and discussions with representatives of the existing site owner and occupier, the Environment Agency and Wessex Water.

## Ecology

Following a site walkover it has been identified that the buildings on site have very limited potential to support bat roosts and there is low potential for reptiles to occur around the car park area. The areas of vegetation on site are very limited and occur primarily around the existing car park, although there are a number of mature trees, with bat potential. It is anticipated that birds would nest in almost any of the vegetation on site and bats may well forage/commute along the vegetation around the site. There is no documented evidence to suggest that there is significant potential for other legally protected or notable species to occur.

Given the observed site conditions the limited ecological constraints include the mature trees, breeding birds and possibly reptiles and/or bats depending on the extent of changes to existing layout and any changes to the lighting regime. The ES would provide an assessment of impacts to these receptors. However, based on the current situation and use on site (e.g. that the site is well lit at night) and the likely use of the site, and alterations required to accommodate this, it is not anticipated that these constraints will be significant or sufficient to warrant extensive mitigation. Overall no significant impacts on ecology are anticipated.

## Historic Environment

There are no recorded heritage assets within the site boundary. The nearest recorded archaeological remains are to the west of the A38, to the north and south of Dawes Farm. Construction activities associated with the current site use are likely to have removed any archaeological interest from the site.

There are no Scheduled Monuments, Grade I or Grade II\* Listed Buildings within the vicinity of the site. The site of the Battle of Sedgemoor, which is included on the English Heritage Register of Historic Battlefields, is located to the east of the M5 motorway, approximately 3.5km to the north-east of the site. There are three Grade II Listed Buildings to the east of the M5 motorway, approximately 500m from the site.

The settings of the registered battlefield and the Listed Buildings will not be affected in the event that no significant modifications to the existing site layout are required.

There will be no requirement for additional surveys and it is suggested that Historic Environment should be scoped out of the EIA and that a Historic Environment chapter of the ES should not be required.

## Landscape and Visual Impact

There are no landscape designations within the site boundary. An area of locally designated land Green Wedge, Edge or Strategic Gap lies within 500m of the site boundary to the north-east along the River Parrett. The site and its immediate surroundings are located within National Landscape Character Area 146 Vale of Taunton and Quantock Fringes. At a district level the Sedgemoor Landscape Assessment and Countryside Design Summary includes the site within two landscape character areas; the Lowland Hills Character Area (Quantock Hills sub-area) and within the Levels and Moors Character Area (Levels sub-area).

Two National Trails lie within 1km of the site boundary. An assessment will be undertaken with respect to the visual impact of the development on these and other visual receptors in area. It is thought that due to the nature of the existing site and mature vegetation along the A38 and out towards the M5 motorway, any visual impacts will be of no more than minor adverse significance. Any impacts from lighting are assumed to be negligible since the site is already lit and located within a lit industrial/commercial area.

Potential visual impacts will be investigated further using Zone of Theoretical Visibility (ZTV) analysis and field surveys. A tree survey will be required to assess the suitability of existing trees for retention.

## Socio-economics

The site is currently in use as a distribution depot although operations are being scaled down by the landowner. It is therefore likely that the site baseline will be an unused brownfield site. The main likely socio-economic impacts are the direct economic impacts of the workforce required to construct and then operate the site, and the impact of this workforce on the local economy. The assessment would also consider impacts (if any) on neighbouring uses. The impact of the development would be considered alongside that related to the other Associated Development sites.

## Recreation and Amenity

The definitive Public Right of Way (PRoW) map provided by Somerset County Council identifies one PRoW (footpath reference BW23/69) running from east to west outside but adjacent to the northern boundary of the site. This PRoW provides access from Huntworth to southern Bridgwater, and part of it includes a pedestrian only route over the M5 motorway. A number of PRoW are located within 500m of the site boundary although they are not directly linked to the site. These include PRoW reference BW23/38 (340m to the north-east) and BW23/83 (480m to the north-east and north).

A number of recreational facilities are located within 500m of the site, namely Unique Health and Fitness Club (located approximately 120m to the north at the nearest boundary point), and Bridgwater Lawn Tennis Club (approximately 430m to the south). In addition, the construction of Stockmoor Village would result in the provision of amenity space, which could be located within 100m of the site.

The EIA studies for the site will provide an assessment of the potential direct impacts of the on-site construction works and operational phase activities on recreation and amenity receptors. The potential disturbance (indirect) impacts will be assessed within other relevant ES chapters (i.e. Noise, Air Quality, Landscape and Visual Impact, and Transport). A site walkover would be undertaken in the study area to confirm the presence or absence of other recreation and amenity receptors not yet identified.

Given the existing developed nature of the site it is unlikely that any direct impacts would arise on recreation and amenity receptors either during construction or operation. Activities on the site during construction and operation could potentially result in indirect disturbance effects (such as construction noise, dust, visual impact, and severance) to users of recreation and amenity receptors. However, given the existing use of the site and the high background levels of noise and traffic due to the close proximity to the M5 motorway and A38, these indirect impacts are not likely to be significant.