

# **Sizewell C Beach Landing Facility Comments on Preliminary Environmental Information (PEI) Chapter 3 – Freight Management Strategy**

## **1 Introduction**

### **1.1 Appointment**

- 1.1.1 Alison Farmer Associates (AFA) was appointed by the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) to undertake a review of the Sizewell C PEI: Chapter 3 Freight Management Strategy in the context of the AONB designation.
- 1.1.2 Documents which have been reviewed have included:
- PEI Chapter 3: Freight Management Strategy
  - ES Chapter 13 Landscape and Visual and associated appendices/figures

### **1.2 Scope of work**

- 1.2.1 This review focuses on the AONB and the landscape and visual effects arising from the proposed changes to the Beach Landing Facilities. Effects on landscape beyond the AONB designation are not considered.
- 1.2.2 Chapter 3 of the Consultation Document Nov-Dec 2020 sets out the potential changes to the Freight Management Strategy. These changes are made to ensure transport of freight transport is as sustainable as possible and to take account of stakeholder responses which advocate maximum use of rail and sea.
- 1.2.3 This review is based on information provided within the documents listed above. It is noted that the PEI Chapter 3 sets out if additional assessment work is required in relation to changes to the Permanent Beach Landscape Facility and addition of one of the four options for a further temporary facility. This review seeks to constructively highlight broad issues and any gaps in information. It seeks to inform the AONB formal response to Consultation as well as to highlight aspects which need to be addressed within any update of the existing LVIA (Chapter 13 of the Environment Statement (ES)). Where specific aspects of the scheme are not mentioned in this report it should not be taken as acceptance of what is proposed.

### **1.3 Approach**

- 1.3.1 The review has comprised desk top study only.

## 2 Enhancement of Permanent Beach Landing Facility

### 2.1 Summary of Effects set out in Chapter 13 of ES

2.1.1 The permanent BLF is required for the delivery of large Abnormal Indivisible Loads (AILs). The ES considered and set out the landscape and visual effects of the proposed development (including the PBLF) in Chapter 13 of the ES. The assessment identified that there would be significant adverse effects on the following receptors (in part due to the proposed BLF).

- Coastal Dunes and Shingle Ridges LCT (both immediately adjacent to Sizewell and also extending along the coast to the north)
- Visual Receptors Group 8 Dunwich to Minsmere Coast
- Visual receptors Group 12 Minsmere to Sizewell Coast

2.1.2 Moderate adverse effects were also identified along the coast to the north and south of the main construction site.

### 2.2 Proposed Changes to Permanent BLF

2.2.1 Since submission of the Application, further work has identified potential for more material to be brought to site by sea including more regular deliveries of AILs.

2.2.2 The table below summaries the key proposed changes to the PBLF in order for it to receive increased deliveries of AILS by up to 333% (i.e. from 30 barges per campaign to 100 barges per campaign).

ES Permanent BLF	Enhanced Permanent BLF
70m long	100m long (addition of 10 piles)
No submerged beams or grillage required	Submerged beams and grillage required across an area of 3,000m <sup>2</sup> (additional 50 timber piles – presumed submerged)
Reprofiling of sea bed for barges to land	No reprofiling of sea bed required
Deck removed when not in use	Deck removed when not in use
30 beach landings between 1 April – 31 October	100 beach landings between 1 April – 31 October

2.2.3 In simple terms the proposed changes will result in increased length of pier, introduction of grillage and increase usage. However, the level of information provided in the PEI is limited and no visual material is provided to show the proposed changes. Figure 2.10 of the ES shows the PBLF but when it is not in use. Visualisation of it in use (as a worst case scenario) and in relation to the proposed enhancement would be beneficial.

2.2.4 Similarly, no further information is provided regarding the increased number of vehicular movements which will be required within the AONB in order to unload

the AILs from the barges and deliver them to the construction site. Reference is made only to the reduction in vehicular movements on the main road network.

## **2.3 Likely Changes to Landscape Character, Visual Effects and AONB Special Qualities**

2.3.1 Were landscape and visual effects have already been identified as significant adverse within the ES, the proposed changes to the PBLF are unlikely to make a difference to overall judgements. However, this is not to say that the proposed changes will have no effect. Clearly increased activity and use of the PBLF will also give rise to increase vehicular movements and noise, as well as increased activity in offshore waters. As a result there will be further negative effects on the AONB's defined qualities of landscape quality, scenic quality and tranquillity

2.3.2 Where landscape and visual effects are judged to be moderate adverse the proposed changes to the PBLF may give rise to an increase level of effect particularly in views along the coast where the BLF is seen to project further out to sea, and more AILs are being delivered to site.

2.3.3 It is noted in Table 3.6 page 48 that no further assessment is required for the enhancement to the permanent BLF. However, given that the effects will occur within a nationally designated landscape it is considered important that they are nevertheless set out in detail and evidence provided as to where effects have been mitigated as far as possible. The proposed alteration to the PBLF is likely to give rise to affects in the AONB such as:

- Changes in the perceived coastal geometry and visual line of the coast
- Increased visual clutter out to sea
- Visual intrusion and further loss of tranquillity
- Increased activity on the shoreline including HGV movements
- Increased disruption to the coastal path

## **2.4 Additional Information/Clarification Required**

2.4.1 To be clear about the detailed effects and to ensure adequate mitigation in relation to the AONB it would be helpful to have the following additional information:

- detailed drawings of enhanced PBLF structure/layout
- Information on method of construction (especially grilling and extent to which any new structures will be visible above the waterlevel)
- additional visualisation from VP 31 looking along the coast and out to sea to show the effect of PBLF and proposed changes.

2.4.2 Additional clarification is also required in relation to the following:

- Any increased length of time required to construct the enhanced PBLF

- Clarification as to whether the PBLF would be used at night.
- Clarification as to whether the proposed enhancement would result in any alteration to the use of the PBLF during operation of Sizewell C e.g. once every 5-10 years for 1 week at a time

### 3 Options for New Temporary BLF

#### 3.1 Summary of Four Options

3.1.1 The PEI sets out four options for the temporary BLF. It highlights that, as a temporary feature, it is likely to be in operation up to 2030 (para 3.3.16 of consultation documents Nov-Dec 2020), although it is noted that the construction phase at Sizewell C could last until 2032 (para 3.1.3). After this time it will be dismantled with the removal of the pier and conveyor and restoration of the beach/coastal path route. The table below shows a comparison of the four temporary BLF options provided in the PEI.

Option	Length of pier	No of Barges per delivery/campaign	Shape of Pier	Night operation	Dependant on tides	Tonnage
1	120m	1 barge/70 over 7 months	Straight	Yes	Yes	<200,000
2	150m	1 barge/100 over 7 months	T shaped	Yes	Yes	>200,000
3	270m	2 barges/400 over 7 months	Self elevating platform	Yes	No	<1,400,000
4	400m	2 barges/460 over 7 months	Self elevating platform	Yes	No	>1,400,000

3.1.2 In all options the TBLF will be longer than the PBLF. It is also noted that the TBLF is likely to be narrower and the structural components (such as piling) would also be reduced in size accordingly (para 3.3.33). It is not clear why in Option 1 a 120m pier can only accommodate 70 deliveries over a campaign where as the PBLF at 70m or even 100m long can accommodate 100 barges per campaign.

#### 3.2 Key Additional Effects Which May Arise

3.2.1 All four options are likely to give rise to landscape and visual effects and impact on the special qualities of the AONB. In simple terms the longer and more substantial the pier the more visible it is likely to be for greater distances along the coast. In addition the more activity and deliveries by barge the greater the effects on landscape character and special qualities of the AONB. All four options will result in physical landscape effects across the beach in the vicinity of the main construction site. These effects are considered in more detail below:

##### 3.2.2 Landscape Effects:

- Physical fragmentation of the shoreline due to hopper crossing the beach to the main construction site
- Cumulative visual effects when considered in association with the PBLF
- Alterations to the perceptions and geometry of the coastline when viewed from more distant locations along the coast. Reference should be made to the Suffolk Coast Sea Defences, Potential Landscape and Visual Effects, [prepared as part of the Touching the Tide Landscape Partnership in June 2016] highlights the sensitivity of this part of the coast in terms of simple coastal geometry (pages 45/46).

### 3.2.3 Visual Effects:

- The consideration of the four TBLF will require a comparison of the visual effects of each. Use of ZTVs for each option will help to demonstrate how a longer length of pier will give rise to increased visibility of structures in the offshore environment and thus along the coast. This will also inform how this increased visibility may affect the special qualities of the AONB
- Particular viewpoints which will need review include: 6, 17, 26 and 31.

### 3.2.4 Defined AONB Special Qualities:

- Loss of tranquillity due to noise from hopper usage and movement of aggregate
- Further loss of tranquillity due to use of night time lighting
- Loss of naturalness of the coast and simple geometry through the introduction of new manmade elements
- Cumulative landscape and visual effects of the TBLF and the PBLF. Options to mitigate and minimise cumulative effects should include options in terms of proximity of the two piers. Locating the piers closer together may reduce/increase effects.

## 3.3 Additional Information/Clarification Required

### 3.3.1 Additional information is required on the following:

- Width and height of pier and hopper
- Layout plan showing both Temporary and Permanent Piers, hopper, conveyor, access road, coastal path, sea defence, main construction site and any new temporary storage facilities for aggregate.
- Underpass of coastal path beneath the conveyor (noted on page 50 table 3.7 of PEI).
- ZTVs of TBLF options and in association with PBLF – consideration of design of structures to work visually together
- Assessment of cumulative effects of structures on the foreshore
- Liaison with assessment of noise/vibration and recreational effects. The former should include effects on users of the Coastal Path.
- Confirmation that no aggregate or delivered materials will be stored on the beach and that it will be directly transported to stockpiles within the main construction site
- Confirmation that no vehicular access onto the TBLF pier is required and that the pier will only accommodate the conveyor
- Details of proposed lighting
- Preparation of new visualisations showing day and night time views and cumulative effects
- Information of length of time it takes to unload a 3,000 tonne delivery from one barge.

## 4 Conclusions

### 4.1 Summary

- 4.1.1 The proposed alterations for delivery of freight to the site especially during construction has sought to enhance the capacity for sustainable freight transport and at the same time respond to stakeholders advocating the maximum use of rail and sea. The proposed enhancement of the Permanent BLF and options for a temporary BLF seek to address this. Nevertheless, they will give rise to additional structures and activity within the AONB and therefore additional negative impacts on the defined qualities of this nationally designated landscape both within and beyond the proposed development area
- 4.1.2 The ES identified that there would be significant adverse effects on the landscape, visual receptors and special qualities of the AONB in the vicinity of the site and along the coast to the north/south. The proposed changes to the PBLF and possible addition of a temporary BLF will not alter the category of effects where they are determined as already significant adverse. However, from some locations further along the coast, the proposed changes will result in an increase in effect and this will need to be clearly set out.
- 4.1.3 In reaching an optimum balance between road, rail and sea transportation of materials it is essential that the high value of the AONB coastal landscape is given sufficient weight in decision making. It does not appear from the current documentation that an assessment of that balance has been undertaken.
- 4.1.4 The proposed changes to the DCO application would increase the harm to defined AONB qualities in this part of the nationally designated landscape. Any preferred BLF proposals should demonstrate minimisation of adverse effects on the AONB through careful design and mitigation.