



# The Sizewell C Project

## 6.9 Volume 8 Freight Management Facility Chapter 6 Landscape and Visual

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## Contents

6	Landscape and Visual .....	1
6.1	Introduction .....	1
6.2	Legislation, policy and guidance .....	1
6.3	Methodology .....	5
6.4	Baseline environment .....	15
6.5	Environmental design and mitigation .....	25
6.6	Assessment .....	28
6.7	Mitigation and monitoring .....	46
6.8	Residual effects .....	46
	References .....	56

## Tables

Table 6.1: Requirements of the National Policy Statements for Energy (EN-1) .....	3
Table 6.2: Summary of consultation responses that have informed the scope and methodology of the landscape and visual assessment .....	6
Table 6.3: Susceptibility of landscape and visual receptors .....	8
Table 6.4: Landscape Value .....	8
Table 6.5: Assessment of the value of receptors for landscape and visual impact assessments .....	9
Table 6.6: Scale of effect .....	10
Table 6.7: Duration of effect .....	10
Table 6.8: Extent of effect .....	11
Table 6.9: Representative viewpoints .....	22
Table 6.10: Summary of scale of effects on representative viewpoints .....	34
Table 6.11: Summary of effects for the construction phase .....	47
Table 6.12: Summary of effects for the operational phase .....	49
Table 6.13: Summary of effects for the removal and reinstatement phase .....	53

## Plates

Plate 6.1: Magnitude of effect .....	12
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Plate 6.2: Significance.....13

## **Figures**

Figure 6.1: Landscape Designations and Context

Figure 6.2: Topography

Figure 6.3: Landscape Character

Figure 6.4: Zone of Theoretical Visibility (ZTV) and Viewpoints

Figure 6.5: Representative Viewpoint 1: Photograph Panel

Figure 6.6: Representative Viewpoint 2: Photograph Panel

Figure 6.7: Representative Viewpoint 3: Photograph Panel

Figure 6.8: Representative Viewpoint 4: Photograph Panel

Figure 6.9: Representative Viewpoint 3: Existing view

Figure 6.10: Representative Viewpoint 3: Photowire

## **Appendices**

Appendix 6A: Illustrative Viewpoints

Appendix 6B: Night-time Appraisal

## 6 Landscape and Visual

### 6.1 Introduction

6.1.1 This chapter of **Volume 8** of the **Environmental Statement (ES)** presents an assessment of the potential effects on landscape and visual arising from the construction, operation and removal and reinstatement of the freight management facility at Seven Hills (referred to throughout this volume as the 'proposed development'). This includes an assessment of potential impacts, the significance of effects, the requirements for mitigation and the residual effects.

6.1.2 Detailed descriptions of the freight management facility site (referred to throughout this volume as the 'site'), the proposed development, and the different phases of development are provided in **Chapters 1** and **2** of this volume of the **ES**. A glossary of terms and list of abbreviations used in this chapter is provided in **Volume 1, Appendix 1A** of the **ES**.

6.1.3 The assessment has been informed by data from other assessments including ecological receptors and heritage assets identified in **Chapter 7** of this volume of the **ES** and **Chapter 9** of this volume of the **ES**, in how they contribute to the landscape character and value. Impacts on views are taken into account in the consideration of amenity and recreation in **Chapter 8** of this volume of the **ES**.

6.1.4 This assessment has been informed by data presented in the following technical appendices:

- **Appendix 6A** of this volume: Illustrative Viewpoints.
- **Appendix 6B** of this volume: Night time appraisal.

### 6.2 Legislation, policy and guidance

6.2.1 **Volume 1, Appendix 6I** of the **ES** identifies and describes legislation, policy and guidance of relevance to the assessment of the potential landscape and visual impacts associated with the Sizewell C Project across all **ES** volumes.

6.2.2 This section provides an overview of the specific legislation, policy and guidance of relevance to the assessment of the proposed development.

6.2.3 There are no additional policy considerations which relate to this assessment which are not already described in **Volume 1, Appendix 6I** of

the **ES**. Policies relating to local landscape designations are set out below as they have specific relevance given the Special Landscape Area (SLA) which covers parts of the study area. The site does not fall within the SLA. The response to policy requirements relating to ‘good design’ is also described in **section 6.5** of this chapter.

a) **International**

6.2.4 International legislation and policy relating to the landscape and visual assessment include the European Landscape Convention 2000 (Ref. 6.1).

6.2.5 The requirements of this, as relevant to the landscape and visual assessment, are set out in **Volume 1, Appendix 6I** of the **ES**.

b) **National**

6.2.6 National legislation and policies relating to landscape and visual assessment include:

- The Countryside and Rights of Way Act 2000 (Ref. 6.2).
- National Planning Policy Statements (NPSs) (Ref. 6.3-6.4).
- National Planning Policy Framework (NPPF) (Ref. 6.5).
- the Planning Practice Guidance for the Natural Environment (Ref. 6.6), Design: process and tools (Ref. 6.7) and Light Pollution (Ref. 6.8).
- Government’s 25 Year Environment Plan 2018 (Ref. 6.9).

6.2.7 The requirements of these, as relevant to the landscape and visual assessment, are set out in **Volume 1, Appendix 6I** of the **ES**.

i. **Overarching National Policy Statement for Energy (EN-1) (NPS EN-1)**

6.2.8 The NPS 2011 sets out the national policy for energy infrastructure. The overarching NPS for Energy (EN-1) (Ref. 6.3) and NPS for Nuclear Power Generation (EN-6) (Ref. 6.4) provide the primary policy framework within which the development will be considered.

6.2.9 **Table 6.1** below summarises the assessment-specific requirements in the Overarching NPS EN-1 and explains how these have been addressed within this chapter. Further details of the topic-specific requirement requirements are set out in **Volume 1, Appendix 6I** of the **ES**.

**Table 6.1: Requirements of the National Policy Statements for Energy (EN-1)**

Ref.	NPS topic requirement.	How the requirement has been addressed.
EN-1 5.9.9	<i>“... Areas of Outstanding Natural Beauty (AONBs) have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection”.</i>	The Suffolk Coast and Heaths AONB has been an important consideration throughout the assessment and design process. SZC Co. has liaised with the AONB Partnership to agree the AONB’s natural beauty and special qualities, as set out in the Natural Beauty and Special Quality Indicators document (Ref. 6.10) available through the Suffolk Coast and Heaths website, which form the basis of the assessment of effects on the AONB within the landscape and visual assessment chapters.
EN-1 5.9.12	<i>“The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.”</i>	

ii. National Planning Policy Framework, February 2019

6.2.10 The NPPF (Ref. 6.5) sets out the Government's planning policies for England.

6.2.11 In particular relation to landscape, paragraph 171 states that:

*“Plans should: distinguish between the hierarchy of international, national and locally designated sites”.*

6.2.12 The hierarchy of landscape designations has informed the criteria for assessing landscape value, a component of landscape sensitivity within the landscape and visual impact assessment, and effects on all hierarchies of landscape designation are considered within this chapter. Further detail on the NPPF as relevant to the landscape and visual assessment can be found in **Volume 1, Appendix 6I** of the **ES**.

c) Regional

6.2.13 There is no regional legislation or policy that is relevant to the landscape and visual assessment of the proposed development.

d) Local

6.2.14 Local policies relating to the landscape and visual assessment include:

- Suffolk Coastal District Council Local Plan Core Strategy and Development Management Policies 2013 (Ref. 6.11), including Strategic Policy SP1, Strategic Policy SP13, Strategic Policy SP14, Strategic Policy SP15, Development Management Policy DM21, Development Management Policy DM23 and Development Management Policy DM26.
- Suffolk Coastal District Council Site Allocations and Area Specific Policies – Development Plan Document 2017 (Ref. 6.12), including Policy SSP37 and Policy SSP38.
- Suffolk Coastal District Council Final Draft Local Plan 2019 (Ref. 6.13), including Draft policy SCLP3.4, Draft policy SCLP10.3, Draft policy SCLP10.4, Draft policy SCLP11.1 and Draft policy SCLP11.2.

6.2.15 The requirements of these, as relevant to the landscape and visual assessment, are set out in **Volume 1, Appendix 6I** of the **ES**. At a local level, policies relating to East Suffolk (formerly Suffolk Coastal and Waveney Districts) are considered.

e) **Guidance**

6.2.16 Guidance relating to the landscape and visual assessment include:

- National Character Area Profiles (NCA Profile 82 Suffolk Coast and Heaths 2015 (Ref. 6.14).
- East of England Regional Landscape Typology 2011 (Ref. 6.15).
- Suffolk Landscape Character Assessment 2008, revised 2011 (Ref. 6.16).
- Suffolk Coastal Landscape Character Assessment 2018 (Ref. 6.17).
- Suffolk Historic Landscape Characterisation 2012 (Ref. 6.18).
- Special Landscape Areas Paper 2016 (Ref. 6.19).

6.2.17 Further detail on this guidance is set out in **Volume 1, Appendix 6I** of the **ES**.

## 6.3 Methodology

### a) Scope of the assessment

6.3.1 The generic Environmental Impact Assessment (EIA) methodology is detailed in **Volume 1, Chapter 6** of the **ES**.

6.3.2 The full method of assessment for landscape and visual impact assessments that has been applied for the Sizewell C Project is included in **Volume 1, Appendix 6I** of the **ES**.

6.3.3 This section provides specific details of the landscape and visual impact assessment methodology applied to the assessment of the proposed development and a summary of the general approach to provide appropriate context for the assessment that follows. The scope of assessment considers the impacts of the construction, operational and removal and reinstatement phases of the proposed development.

6.3.4 The assessment methodology is based primarily upon the Guidelines for Landscape and Visual Impact Assessment (Ref. 6.20) which is considered to be best practice guidance for undertaking landscape and visual impact assessments.

6.3.5 The scope of this assessment has been established through a formal EIA scoping process undertaken with the Planning Inspectorate. A request for an EIA Scoping Opinion was initially issued to the Planning Inspectorate in 2014, with an updated request issued in 2019 provided in **Volume 1, Appendix 6A** of the **ES**.

6.3.6 Comments raised in the EIA Scoping Opinion received in 2014 and 2019 have been taken into account in the development of the assessment methodology. These are detailed in **Volume 1, Appendices 6A to 6C** of the **ES**.

### b) Consultation

6.3.7 The scope of the assessment has also been informed by ongoing consultation and engagement with statutory consultees throughout the design and assessment process. Full details of the consultation undertaken in relation to landscape and visual matters is provided at **Volume 1, Appendix 6I** of the **ES**. A summary of the general comments raised during the most recent meeting with consultees, and SZC Co.'s responses, are detailed in **Table 6.2**.

**Table 6.2: Summary of consultation responses that have informed the scope and methodology of the landscape and visual assessment.**

Consultee	Date	Summary of discussion/comments.
<p>Natural England; Suffolk County Council; Suffolk Coastal and Waveney District Councils (now East Suffolk Council); Suffolk Coast and Heaths AONB.</p>	<p>Meeting: 7 February 2019.</p>	<p>The purpose of the meeting was to confirm several matters regarding the scope and approach to the landscape and visual impact assessment, which had previously been discussed during several meetings, the first of which was in March 2014.</p> <p>The following points were agreed at the meeting:</p>
		<p>The landscape and visual impact assessment methodology to be used as the basis of the landscape and visual assessment chapters.</p>
		<p>The Suffolk County Council Landscape Character Assessment (LCA) (Ref. 6.16) is to be used as the basis for the assessment of effects on landscape character, informed by other studies, including the recently published Suffolk Coastal LCA.</p> <p>The landscape and visual assessment presents an assessment of the effects of the proposed development on Landscape Character Types (LCT) presented in the Suffolk County Council LCA. Where appropriate, reference is made to several other published LCAs.</p>
		<p>Version 1.8 of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities indicators document (Ref. 6.10) is to be used as the basis of the assessment of effects on the Suffolk Coast and Heaths AONB.</p> <p>The landscape and visual assessment presents an assessment of the effects of the proposed development on the natural beauty and special qualities indicators of the Suffolk Coast and Heaths AONB as recorded in Version 1.8 of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities indicators document.</p>
		<p>The SLA Paper (November 2016, Ref. 6.19) is to be used as the basis of the assessment of effects on the Special Landscape Area Designation.</p> <p>The landscape and visual assessment presents an assessment of the effects of the proposed development on the Special Landscape Areas Designation as recorded in the SLA Paper (November 2016).</p>
		<p>Agreement was reached on the location of representative viewpoints, illustrative viewpoints and the location of viewpoints to be used to generate photowire visualisations.</p> <p>The landscape and visual assessment presents an assessment of the effects of the proposed development on visual receptors. Reference is made to agreed Representative and Illustrative Viewpoint photographs. Visualisations have been prepared for agreed viewpoint locations.</p>

6.3.8 Further detail on consultation undertaken in relation to landscape and visual matters is provided in **Volume 2, Appendix 13H** of the **ES**.

c) **Study area**

6.3.9 The study area includes the land within the site boundary and land immediately beyond it to a distance of 2 kilometres (km), provided in **Figure 6.1**, and has been informed by the theoretical extent of visibility and likely significant effects.

6.3.10 **Section 6.4** of this chapter describes the extent of visibility, based on desk and field study.

d) **Assessment scenarios**

6.3.11 The landscape and visual assessment comprises the assessment of the construction, operation and removal and reinstatement phases of the proposed development, rather than specific assessment years.

e) **Assessment criteria**

6.3.12 As described in **Volume 1, Chapter 6** of the **ES**, the EIA methodology considers whether impacts of the proposed development would have an effect on any resources or receptors. Assessments broadly consider the magnitude of impacts and value/sensitivity of resources/receptors that could be affected in order to classify effects.

6.3.13 As set out within **Volume 1, Appendix 6I** of the **ES**, there are some minor differences between the landscape and visual assessment method and the generic method, or additions to it, to ensure that the method is suitable for the assessment of landscape and visual impacts of the proposed development. The assessment criteria include consideration of value and susceptibility in determining receptor sensitivity; and consideration of the scale, extent and duration of the effect in determining magnitude. These criteria are briefly outlined below and further detail on how these criteria are applied and combined to form judgements of sensitivity, magnitude and significance is provided within **Volume 1, Appendix 6I** of the **ES**.

i. **Sensitivity**

6.3.14 Sensitivity is assessed by combining the considerations of susceptibility and value.

6.3.15 The criteria used in the landscape and visual assessments for determining the sensitivity of receptors are set out below.

### Susceptibility

6.3.16 Susceptibility indicates the ability of a landscape or visual receptor to accommodate the proposed development “*without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*” (Ref. 6.20, para. 5.40) and is defined as set out in **Table 6.3**:

**Table 6.3: Susceptibility of landscape and visual receptors.**

Susceptibility	
High	Undue consequences are likely to arise from the proposed development.
Medium	Undue consequences may arrive from the proposed development.
Low	Undue consequences are unlikely to arise from the proposed development.

6.3.17 Susceptibility of landscape character areas/types is influenced by their characteristics and is frequently considered (though often recorded as ‘sensitivity’ rather than susceptibility) within documented landscape/ seascape character assessments and capacity studies.

6.3.18 Susceptibility of designated landscapes is influenced by the nature of the special qualities and purposes of designation and/or the valued elements, qualities or characteristics, indicating the degree to which these may be unduly affected by the development proposed.

6.3.19 Susceptibility of accessible or recreational landscapes is influenced by the nature of the landscape involved; the likely activities and expectations of people within that landscape and the degree to which those activities and expectations may be unduly affected by the development proposed.

6.3.20 Susceptibility of visual receptors is primarily a function of the expectations and occupation or activity of the receptors (Ref. 6.20, para 6.32).

### Value

6.3.21 Landscape value is the relative value that is attached to different landscapes by society as defined in **Table 6.4**:

**Table 6.4: Landscape Value.**

Landscape Value.	
National/ International.	Designated landscapes which are nationally or internationally designated for their landscape value.
Local/District.	Locally or regionally designated landscapes; also, areas which documentary evidence and/or site observation indicates as being more valued than the

Landscape Value.	
	surrounding area.
Community	‘Everyday’ landscape which is appreciated by the local community but has little or no wider recognition of its value.
Limited	Despoiled or degraded landscape with little or no evidence of being valued by the community.

6.3.22 Areas of landscape of greater than community value may be considered to be ‘valued landscapes’ in the context of NPPF paragraph 170.

6.3.23 For visual receptors, susceptibility and value are closely linked – the most valued views are also likely to be those where viewer’s expectations will be highest. Visual receptor value relates to the value of the view, e.g. a National Trail is nationally valued for access, not necessarily for the available views. It is therefore not possible to separate out visual receptor value from susceptibility. Typical examples of visual receptor sensitivity are plotted in a diagram within the appendix to **Volume 1, Chapter 6** of the **ES**.

Sensitivity

6.3.24 Landscape sensitivity and visual receptor sensitivity is assessed by combining the considerations of susceptibility and value described above. The differences in the tables below reflect a slightly greater emphasis on value in considering landscape receptors, and a greater emphasis on susceptibility in considering visual receptors, as defined in **Table 6.5**:

**Table 6.5: Assessment of the value of receptors for landscape and visual impact assessments.**

Sensitivity				
Landscape Sensitivity.				
		Susceptibility		
		High	Medium	Low
Value	National/International.	High	High-Medium.	Medium
	Local/District.	High-Medium.	Medium	Medium-Low.
	Community	Medium	Medium-Low.	Low
	Limited	Low	Low-Negligible.	Negligible
Visual Receptor Sensitivity.				
		Susceptibility		
		High	Medium	Low

Value	National/International.	High	High-Medium.	Medium
	Local/District.	High-Medium.	High-Medium.	Medium
	Community	High-Medium.	Medium	Medium-Low.
	Limited	Medium	Medium-Low.	Low

ii. Magnitude

6.3.25 The magnitude of effect is informed by combining the scale, duration and extent of an effect as set out in the Guidelines for Visual Impact Assessment (GLVIA) (Ref. 6.20, para. 3.26).

Scale

6.3.26 The scale of effect is assessed for all landscape and visual receptors and identifies the degree of change which would arise from the proposed development. The criteria for the assessment of scale of effect are set out in **Table 6.6**.

**Table 6.6: Scale of effect.**

Scale	
Large	Total or major alteration to key elements, features, qualities or characteristics, such that post development the baseline will be fundamentally changed.
Medium	Partial alteration to key elements, features, qualities or characteristics, such that post development the baseline will be noticeably changed.
Small	Minor alteration to key elements, features, qualities or characteristics, such that post development the baseline will be largely unchanged despite discernible differences.
Negligible	Very minor alteration to key elements, features, qualities or characteristics, such that post development the baseline will be fundamentally unchanged with barely perceptible differences.

Duration

6.3.27 Duration of effect is assessed for all landscape and visual receptors and identifies the time period over which the change to the receptor as a result of the development would arise. The criteria for the assessment of duration of effect, relevant to this assessment, is set out in **Table 6.7**.

**Table 6.7: Duration of effect.**

Duration	
Permanent	The change is expected to be permanent and there is no intention for it to be reversed. Or occurring for a period longer than 25 years.

Duration	
Long-term.	The change is expected to be in place for 11-25 years and will be reversed, fully mitigated or no longer occurring beyond that timeframe.
Medium-term.	The change is expected to be in place for 3-10 years and will be reversed, fully mitigated or no longer occurring beyond that timeframe.
Short-term.	The change is expected to be in place for 0-2 years and will be reversed, fully mitigated or no longer occurring beyond that timeframe.

6.3.28 As the proposed development (save for highway improvements to Felixstowe Road) is not permanent and would be reinstated to agricultural use after operation, there would be no permanent effects. Medium or short-term effects may be identified where mitigation planting is proposed or local factors will result in a reduced duration of effect (for example where maturing woodland would screen views in future).

Extent

6.3.29 Extent of effects is assessed for all receptors and indicates the geographic area over which the effects will be felt as defined in **Table 6.8**:

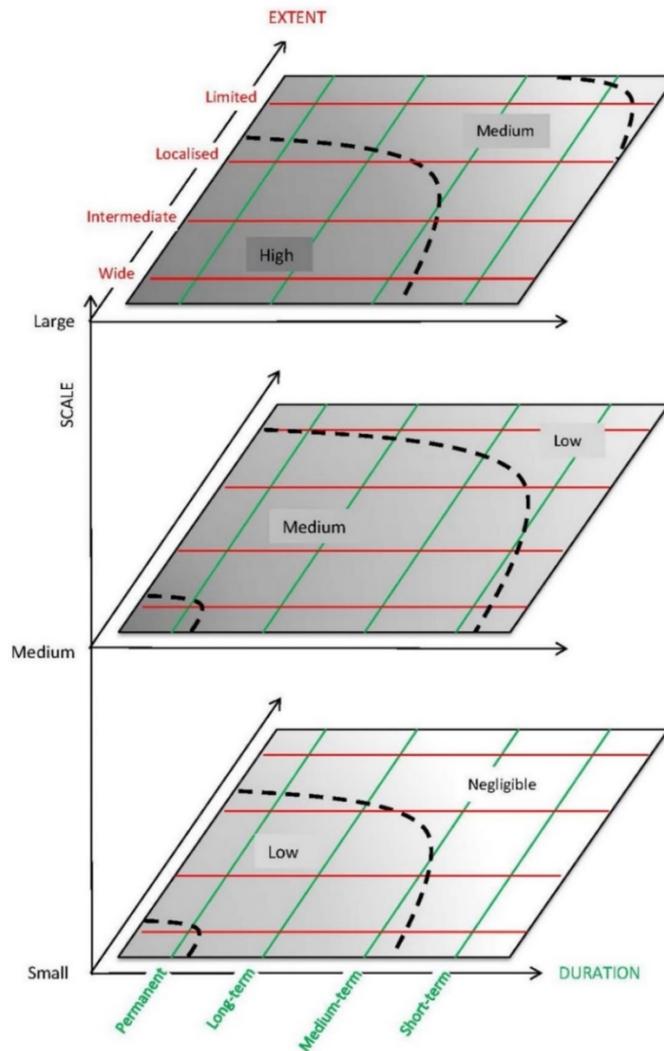
**Table 6.8: Extent of effect.**

Extent	Description
Wide	Beyond 4km, or more than half of receptor area.
Intermediate	Up to approximately 2-4km, or around half of receptor area.
Localised	Site and surroundings up to 2km, or part of receptor area (up to approximately 25%).
Limited	Site, or part of site, or small part of a receptor area (< approximately 10%).

Magnitude

6.3.30 The magnitude of effect is informed by combining the scale, duration and extent of effect. **Plate 6.1** below illustrates the judgement process:

Plate 6.1: Magnitude of effect



6.3.31 As can be seen in **Plate 6.1**, scale (shown as the layers of the diagram) is the primary factor in determining magnitude; most of each layer indicates that magnitude will typically be judged to be the same as scale, but may be higher if the effect is more widespread and longer term, or lower if it is constrained in geographic extent or timescale.

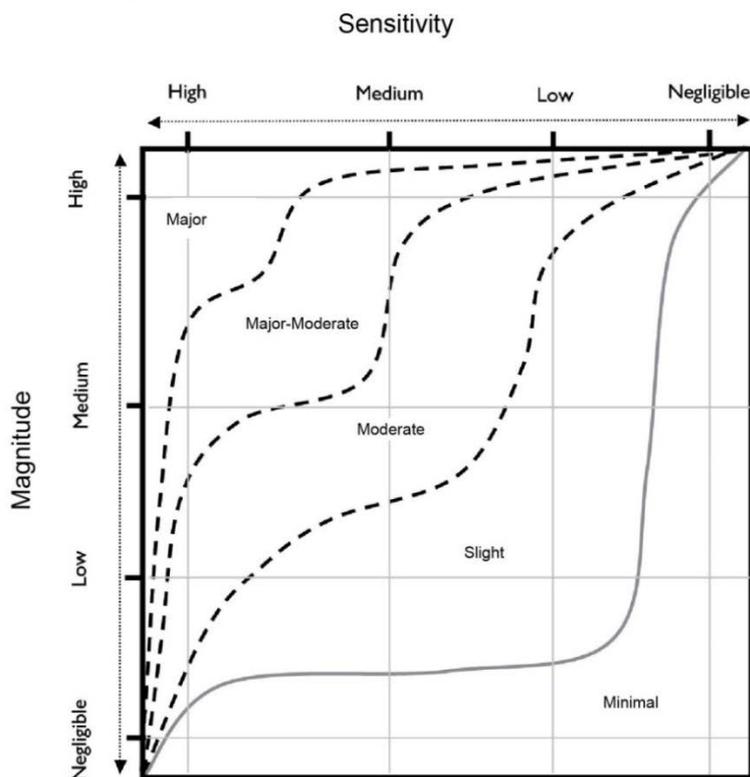
6.3.32 Where the scale of effect is judged to be negligible the magnitude is also assumed to be negligible and no further judgement is required.

iii. Significance of effects

6.3.33 The definitions of the significance of effect for the landscape and visual assessments are explained below.

6.3.34 Significance indicates the importance or gravity of the effect. The process of forming a judgement as to the degree of significance of the effect is based upon the assessments of magnitude of effects and sensitivity of the receptor to come to a professional judgement of how important the effect is. This judgement is illustrated by **Plate 6.2**.

**Plate 6.2: Significance**



6.3.35 The significance ratings indicate a 'sliding scale' of the relative importance of the effect, with major being the most important and minimal being the least.

6.3.36 Following the classification of an effect as presented above, a clear statement is made as to whether the effect is 'significant' or 'not significant'. Within this assessment, major-moderate or major effects are considered to be significant and effects of moderate significance or less are “of lesser concern” (Ref. 6.20, para 3.35) and are considered to be not significant. However, professional judgement is also applied where appropriate. It should also be noted that whilst an effect may be significant, that does not necessarily mean that such an impact would be unacceptable or should necessarily be regarded as an “undue consequence” (Ref. 6.20, para 5.40).

6.3.37 Where intermediate ratings are given, for example 'moderate-slight', this indicates an effect that is both less than moderate and more than slight,

rather than one which varies across the range. In such cases, the higher rating will always be given first. This does not mean that the impact is closer to that higher rating but is described in such a way to facilitate the identification of the more significant effects within tables.

6.3.38 Effects are defined as adverse, neutral or beneficial. Neutral effects are those which overall are neither adverse nor beneficial but may incorporate a combination of both. Further detail is provided in **Appendix 6I** of **Volume 1** of the **ES**.

f) **Assessment methodology**

6.3.39 The methodology has the following key stages, which are described in more detail in **Volume 1, Appendix 6I** of the **ES**:

- Baseline – includes the gathering of documented information; development of the scope of the assessment in consultation with the relevant local planning authorities and other relevant landscape and visual consultees; site visits and early input into the initial stages of design. Baseline site visits were undertaken during June and December 2018 and February to March 2019.
- Design – input into further stages of design including mitigation options to avoid or minimise landscape and visual impacts where possible.
- Assessment – includes an assessment of the landscape and visual effects of the design of the proposed development, including the proposed construction, operation and removal and reinstatement works, requiring site survey work to assess likely landscape and visual effects.
- Cumulative Assessment – assesses the effects of the proposal in combination with other developments, where required. More detail is provided in **Volume 10** of the **ES**.

g) **Assumptions and limitations**

6.3.40 The following assumption has been made in this assessment:

- the assessment and visualisations are based on the parameters for the temporary structures, landscape bunds and lighting provided in the description of development at **Chapter 2** of this volume of the **ES**;

- photography utilised in the assessment has been undertaken during the winter months, as requested by landscape and visual consultees, to represent a worst-case scenario;
- it is assumed that existing vegetation would remain in place during the construction and operation phases, unless the proposed development requires it to be removed or other circumstances indicate its likely removal; and
- the following estimated growth rates have been applied when considering the screening effect of any proposed planting (appropriate for the type of planting proposed, location and suitable management regime):
  - proposed screen planting at year 1 is assumed to be 800mm high;
  - proposed screen planting by year 10 is assumed to be 4.8m, assuming approximate growth rates of approximately 400mm per annum;
  - proposed hedgerow planting at year 1 is assumed to be 450mm high; and
  - proposed hedgerow planting by year 10 is assumed to be 3m, assuming approximate growth rates of approximately 400mm per annum and maintenance at an appropriate height for the locality.

6.3.41 No limitations have been identified respective to the assessment of the proposed development.

## 6.4 Baseline environment

6.4.1 This section presents a description of the baseline environmental characteristics within the site and in the surrounding area, with the full baseline description of the individual landscape and visual receptors being provided alongside the assessment in **section 6.6** of this chapter for ease of reference.

6.4.2 This section provides a review of the key local guidance documents and identifies those landscape and visual receptors which merit detailed consideration in the assessment of effects, and those which are 'scoped out' from further assessment as the effects *"have been judged unlikely to occur or so insignificant that it is not essential to consider them further"* (Ref. 6.20, Para 3.19).

6.4.3 Both this baseline section and the assessment of effects section, provided in **section 6.6** of this chapter, describe landscape character and visual receptors, before considering designated landscape. A number of representative and illustrative viewpoints are utilised to inform the baseline section, further detail of which is provided later in the section. Representative viewpoints represent the experience of different types of visual receptor and form the basis of assessment, while illustrative viewpoints demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations.

a) **Current baseline**

i. **Key local guidance documents**

6.4.4 The documents listed below are relevant to this assessment, further information about each of these can be found within **Volume 1, Appendix 6I** of the **ES**.

- Suffolk County Landscape Character Assessment (Ref. 6.16) – this document presents the landscape character baseline for the assessment of effects on landscape character.
- Sizewell C Design Principles: The Local Perspective (Ref. 6.21) – this document informs the approach to landscape and visual mitigation in relation to the proposed development.

ii. **Site and context**

6.4.5 The site is primarily agricultural land and consists of two small arable fields separated by an intermittent low hedgerow with occasional semi-mature hedgerow trees, running north-east to south-west through the centre of the site. The northern, eastern and western boundaries of the site are defined by similar intermittent field boundary hedgerows with occasional trees. The southern boundary follows the south side of Felixstowe Road and incorporates an additional stretch of road approximately 165 metres (m) long, to the west of the majority of the site. The southern boundary borders the Ipswich to Felixstowe railway line.

6.4.6 A number of small settlements exist within the study area including Bucklesham to the north, Levington to the south, and Nacton to the south-west. There are also a small number of individual private residential properties near the site, including 1 and 2 Keepers Cottages to the south-east and Whitehouse Farm to the south-west.

- 6.4.7 The land use within the 2km study area is comprised mainly of agricultural land, with arable farmland most common to the north of the site and pasture becoming more prevalent to the south. Large areas of woodland are also present, particularly to the west of the site, along with major road and rail routes, including the A12, A14 and the Ipswich to Felixstowe railway line. The River Orwell is located outside the south extent of the study area. The land immediately to the east of the site is both Registered Common Land and open access land.
- 6.4.8 With the exception of hedgerows along existing field boundaries, both along the site boundaries and through the centre of the site, and vegetation along Felixstowe Road, there are no other landscape features within the site. Along the northern side of Felixstowe Road, the field boundaries are predominantly open and unvegetated.
- 6.4.9 Reference should also be made to **Figure 6.1** which identifies key roads and settlements within the study area, **Chapter 8** of this volume of the **ES** and **Figure 8.1**, which identifies public rights of way (PRoW).
- 6.4.10 As shown on **Figure 6.2**, the site sits on a peninsula of land that runs from Ipswich to Felixstowe, between the valleys of the River Orwell and Mill River. The peninsula is relatively flat but is incised by small tributary valleys that join the larger river valleys. These larger valleys, located to the north-east and south-west of the site, are at a much lower elevation than the site.
- iii. [Zone of Theoretical Visibility Study](#)
- 6.4.11 A ZTV study was generated, based on the site layout and height parameters of the proposed development described in **Chapter 2** of this volume of the **ES**. This is shown on **Figure 6.4** and indicates areas of potential visibility.
- 6.4.12 The analysis was carried out using a topographic model and including settlements and woodlands (with heights derived from light detection and ranging with a 2m resolution for both surface mapping and terrain data) as visual barriers in order to provide a more realistic indication of potential visibility.
- 6.4.13 The ZTV study was used in the identification of those receptors that are likely to be most affected by the proposed development and those that may be scoped out. However, areas shown as having potential visibility may have visibility of the development screened by local features such as trees, hedgerows, embankments or buildings.

### Extent of Theoretical Visibility

- 6.4.14 **Figure 6.4** shows the ZTV and shows that theoretical visibility would be largely localised to within less than 1km of the site.
- 6.4.15 Directly to the north of the site, theoretical visibility would extend across the A14 and the first field north of the A14, approximately 350-400m, where an existing hedgerow would prevent views towards the site. To the north-east, theoretical visibility would extend further to approximately 900m at the edge of Bucklesham and adjacent field boundaries. There would be further fragmented visibility beyond this to the north-east from an area of higher ground.
- 6.4.16 To the east theoretical visibility would extend for approximately 850m, except where it is restricted by Mill Plantation, as far as tree belts at the eastern edge of the Registered Common Land. Narrow theoretical visibility splays are shown to extend to approximately 1650m through gaps in these tree belts. Theoretical visibility is shown to extend up to and beyond the extent of the study area to the south-east, although restricted visibility is shown around Levington Park due to the screening provided by the buildings and a localised valley feature.
- 6.4.17 To the south the ZTV extends approximately 650m-1km, to the edge of extensive woodlands at and around Decoy Wood. The ZTV shows potential visibility from limited locations on the northern edge of Levington to the south.
- 6.4.18 To the west theoretical visibility is shown to extend as far as the A1156, beyond which the woodland of Porter's Covert around Seven Hills Crematorium would obstruct visibility. To the north-west theoretical visibility is also shown to extend beyond the study area in isolated locations. However, it becomes noticeably fragmented after approximately 950m, beyond the A12.

### Zone of Visual Influence

- 6.4.19 As noted above, areas shown as having theoretical visibility may have visibility of the proposed development screened by existing features such as trees, hedgerows, embankments or buildings.
- 6.4.20 Site observations confirm that vegetation and buildings would noticeably reduce the extent of visibility towards the site from that illustrated by the ZTV. The anticipated main area of visibility, based on site observations, is annotated on the ZTV study as the 'zone of visual influence'. Field boundaries are typically formed from established hedgerows, often with

frequent hedgerow trees, and roads and footpaths are also typically bordered by hedgerows and hedgerow trees.

6.4.21 Views of the proposed development would generally be limited to within 1km of the site. In detail:

- to the north of the site the zone of visual influence (ZVI) would be limited by an existing hedgerow north of the A14 and would extend across the A14 and the first field to the north, approximately 350-400m;
- to the north-east the ZVI extends approximately 900m to the southern edge of Bucklesham and the adjacent field boundaries;
- to the east the ZVI would extend to the tree belts at the eastern edge of the Registered Common Land, approximately 850m, except where it would be restricted by Mill Plantation;
- to the south-east, south and south-west the ZVI extends between 250-750m to the vegetation on the edge of Bridge Road, to the north of Whitehouse Farm and Decoy Wood; and
- to the west and south west the ZVI extends approximately 450-800m before it is limited by Porter's Covert, the vegetation along the A1156, and vegetation along highway and field boundaries.

6.4.22 Beyond these areas, although some glimpsed views would arise, visibility would be minimal or very infrequent and effects on landscape and visual receptors beyond the ZVI are not assessed further.

#### iv. Landscape Character

6.4.23 Paragraphs 5.13 to 5.15 of the Guidelines for Visual Impact Assessment (Ref. 6.20) indicate that landscape character studies at the national or regional level are best used to 'set the scene' and understand the landscape context of a proposed development. It also indicates that assessments undertaken by or for local authorities provide more detail and that these should be used to form the basis of the assessment of effects on landscape character, albeit with (appropriately justified) adaptation, refinement and interpretation, where required. The relevant assessments are:

- National Character Area Profile (Ref. 6.14).

- East of England Regional Landscape Typology (Ref. 6.15).
- Suffolk Landscape Character Assessment (Ref. 6.16).
- Suffolk Coastal Landscape Character Assessment (Ref. 6.17).
- Suffolk Historic Landscape Characterisation (Ref. 6.18).

6.4.24 LCTs are illustrated on **Figure 6.3**.

#### National Landscape Character Area Profiles

6.4.25 At a national level, the site and study area are situated towards the southern edge of National Character Area (NCA) 82: Suffolk Coast and Heaths (Ref. 6.14). NCA 82 shows characteristics of gently undulating farmland with areas of woodland and forest plantation in the surrounding area. This NCA is described within the NCA summary as sparsely settled and “...mainly flat or gently rolling, often open but with few commanding viewpoints”. More than half of the NCA is utilised for arable and pig farming. The remainder of the NCA (beyond the study area) is coast, lowland heaths (Sandlings) and forest plantations. Settlement within the NCA consists “mainly of small villages and iconic coastal market towns” and “remains a lightly populated, undeveloped area”. The main settlements (Lowestoft, Ipswich and Felixstowe) are restricted to the northern and southern extremes of the NCA.

6.4.26 The site and surrounding area are generally representative of NCA82, being located in an area of farmland with sparse dispersal of settlements and areas of woodland within the vicinity. However, given the scale of the NCAs, and the presence of more detailed character areas at a local level, effects on NCAs are not assessed in detail.

#### East of England Landscape Typology

6.4.27 At a regional level, the site is predominantly within the Forested Estate Sandlands LCT, with a small area in the south of the site located in the Plateau Estate Farmlands LCT (Ref. 6.16). The description for the Forested Estate Sandlands character type indicates that it is “a relatively simple landscape comprising extensive areas of conifer plantations, arable land and some remnant heaths, reflecting the underlying sandy soils.”

6.4.28 This and the other regional LCTs identified within the study area broadly correspond with those identified in the Suffolk Landscape Character Assessment, but with greater subdivision in the County assessment. Given

the greater detail in the County assessment, effects on regional LCTs are not assessed in detail.

#### [Suffolk Landscape Character Assessment \(2008, revised 2011\)](#)

6.4.29 Local LCTs within the study area, as identified in the Suffolk Landscape Character Assessment (Ref. 6.16), include:

- Estate Sandlands.
- Plateau Estate Farmlands.
- Rolling Estate Sandlands.
- Saltmarsh and Intertidal Flats.
- Valley Meadowlands.

6.4.30 The site lies predominantly within the Estate Sandlands LCT, transitioning to Plateau Estate Farmlands LCT at Felixstowe Road in the south.

6.4.31 The landscape and visual effects on the Estate Sandlands and Plateau Estate Farmlands LCTs are assessed in **section 6.6** of this chapter.

6.4.32 The remaining local LCTs are excluded from more detailed assessment. As indicated by the ZVI and field study, there would be little to no potential visibility of the proposed development within these local LCTs, largely due to the effects of landform and the vegetation pattern.

#### [Suffolk Coastal Landscape Character Assessment \(July 2018\)](#)

6.4.33 The Suffolk Coastal Landscape Character Assessment (Ref. 6.17) forms part of the evidence base for the draft Suffolk Coastal District Council Local Plan (January 2019). As noted at **section 6.3** of this chapter, it has been agreed with landscape and visual consultees that the Suffolk County assessment would be used as the basis for assessment, as it is in the public domain and has been subject to consultation. Reference is therefore made below to the Suffolk Coastal Landscape Character Assessment where relevant.

#### [Suffolk Historic Landscape Characterisation \(version 3, 2008\)](#)

6.4.34 This study identifies the different types of historic landscape within the county and identifies the site as predominantly “18th-century and later enclosure – former common arable or heathland” (Ref. 6.18). The historic

landscape characterisation has informed the Suffolk Landscape Character Assessment which forms the main basis of the assessment and is not considered further.

v. Visual Environment

Visual Receptors

- 6.4.35 Visual receptors are *"the different groups of people who may experience views of the development"* (Ref. 6.20, Para 6.3). The ZTV study, baseline desk study and site visits have been used to identify those groups that may be significantly affected by the proposed development and receptors are grouped into areas where effects might be expected to be broadly similar, or areas which share particular factors in common (for example routes within an area of designated landscape). Baseline site visits were undertaken during June and December 2018 and February to March 2019, with assessment site visits undertaken during June and July 2019.
- 6.4.36 As described in relation to the ZVI and site context above, there are views across the site from local roads, rail routes and footpaths, as well as from adjacent Registered Common Land. However, views of the site from the wider landscape are relatively contained by woodland and the vegetation along field boundaries and roads. There is limited visibility of the site from settlements within the study area.
- 6.4.37 Four representative viewpoints have been selected to inform the assessment of the effects on visual receptors. These are identified in **Table 6.9**, with locations shown on **Figure 6.4** and illustrated by photopanels at **Figures 6.5, 6.6, 6.7, and 6.8**. Both the baseline and the assessment are further informed by two illustrative viewpoints (I1 to I2) which are illustrated by photographs in **Appendix 6A** of this volume.

**Table 6.9: Representative viewpoints**

VP No.	Location	Receptors	Approx. distance/direction from nearest site boundary.
R1	Junction of bridleways E-365/007/0 and E-365/006/0.	Users of bridleways E-365/007/0 and E-365/006/0 and surrounding Registered Common Land/open access land.	350m, east.
R2	Bridge Road/footpath E-365/012/0.	Motorists using Bridge Road, users of footpath and nearby workers.	325m, south.
R3	Footpath E-169/017/0, north of site.	User of Footpath E-169/017/0.	300m, north.

VP No.	Location	Receptors	Approx. distance/ direction from nearest site boundary.
R4	A1156 near entrance to Seven Hills Crematorium.	Motorists on the A1156 and visitors to crematorium.	700m, north-west.

### Receptor Groups

6.4.38 The main settlements within the study area are Bucklesham, which lies approximately 0.7km to the north, Levington, which lies approximately 1km to the south, and Nacton, which lies approximately 1.2km to the west. Field study and the ZVI confirm that the proposed development would not be visible from any of the settlements and effects on residents of and visitors to them are not considered further in the assessment of effects.

6.4.39 There are also a small number of dispersed farmsteads and individual properties in the study area.

6.4.40 As outlined above, desk and field study has confirmed the ZVI within which there may be visual effects arising from the proposed development which would be contained. Only the following visual receptor groups are likely to experience effects which would be greater than negligible and are considered further within the assessment of effects:

- Group 1 – users of PRow (Bridleways E/365/004/0, E/365/005/0, E-365/006/0, E-365/010/0, E-365/021/0 and Footpath E/365/024/0), Registered Common Land/open access land and residents of 1 and 2 Keepers Cottages to the east and south-east of the site;
- Group 2 – users of PRow (Bridleways E-365/007/0, E-365/008/0 and E-365/009/0, and Footpaths E-169/017/0, E-365/011/0 and E-365/026/0) east of Keepers Cottages and of the A14 ;
- Group 3 – users of footpath (E-365/012/0), Bridge Road and the Levington Park complex to the south of the site;
- Group 4 - users of local road (Felixstowe Road) within and to the south of the site;
- Group 5 – users of the A1156 to the west of the site around Porter’s Covert and Seven Hills Crematorium; and
- Group 6 – Users of footpath (E-169/017/0) and local roads (Tenth Road and Levington Lane) south of Bucklesham and north of the A14.

### Long Distance Routes

- 6.4.41 The A14 is the main road through the study area, running in a broadly east to west direction between Felixstowe and Ipswich, then on to Leicestershire. It runs in a south-east to north-westerly direction, adjacent to the northern boundary of the site. The Ipswich to Felixstowe railway line runs at a similar alignment, adjacent to the southern boundary of the site. Within the north-west of the study area, the A12 runs broadly from south to north-east.
- 6.4.42 In the south of the study area Sustrans National Cycle Route 51 runs from the north-west to the south-east. National Cycle Route 51 is a long-distance cycle route that connects Oxford to Felixstowe. The Stour and Orwell long distance walking route enters the very edge of the study area south of the site and runs around the edge of Levington Creek. The Stour and Orwell walk is a 70km long route that forms an extension west from Felixstowe to the Suffolk Coast Path and follows the coast and heaths along the estuaries of the Orwell and the Stour.
- 6.4.43 As indicated above, desk and field study has confirmed that the ZVI would extend to cover users of the A14 and the railway line. Users of both routes are considered in the assessment of effects.
- 6.4.44 The ZVI does not extend to cover the A12, National Cycle Route 51 or the Stour and Orwell Walk, and effects on these routes are not considered further.

### Specific Viewpoints

- 6.4.45 There are no panoramic viewpoints within the 2km study area (based on Ordnance Survey mapping) and no promoted or designated viewpoints have been identified.

#### vi. Landscape Designations and Value

##### National Landscape Designations

- 6.4.46 The site is not covered by any statutory landscape designations.
- 6.4.47 As shown on **Figure 6.1**, the Suffolk Coasts and Heaths AONB is located in the south-west of the study area. At its closest point it lies 500m to the west of the site.
- 6.4.48 Field survey and the ZVI discussed above have confirmed there would be no views of the proposed development from the AONB and no potential for

effects on the special qualities of the AONB. As such it is not considered further within the assessment.

#### Local Landscape Designations

- 6.4.49 As shown on **Figure 6.1**, a SLA, covering the valleys of Mill River and Kirton Brook, covers a small part of the study area approximately 1.2km to the north beyond Bucklesham and 1.7km to the east, around Hall Cottage at the north-east edge of the study area.
- 6.4.50 Field survey and the ZVI discussed above have confirmed there would be no views of the proposed development from the SLA and no potential for effects on the SLA. As such the SLA is not considered further within the assessment.

#### Local Landscape Value

- 6.4.51 Within the 2km study area there are a number of features that contribute to the value of the local landscape. These include a network of footpaths and recreational routes, a number of woodlands, including Decoy Wood, and Levington Creek. As indicated above in relation to landscape designations, part of the study area is covered by the Suffolk Coast and Heaths AONB and other parts are covered by SLAs. Within the AONB the landscape value is considered to be of national value and within the SLA the landscape value is considered to be local. Beyond these designated areas, none of these features are considered sufficiently valued to increase the landscape value above community value.

#### b) Future baseline

- 6.4.52 There are no committed developments or forecasted changes that would materially alter the baseline conditions during the construction, operation and removal and reinstatement phases of the proposed development.

### 6.5 Environmental design and mitigation

- 6.5.1 As detailed in **Volume 1, Chapter 6** of the **ES**, a number of primary mitigation measures have been identified through the iterative EIA process and have been incorporated into the design and construction planning of the proposed development. Tertiary mitigation measures are legal requirements or are standard practices that would be implemented as part of the proposed development.
- 6.5.2 The assessment of likely significant effects of the proposed development assumes that primary and tertiary mitigation measures are in place. For landscape and visual, these measures are identified below, with a summary

provided on how the measures contribute to the mitigation and management of potentially significant environmental effects.

a) **Primary mitigation**

6.5.3 Primary mitigation is often referred to as ‘embedded mitigation’ and includes modifications to the location or design to mitigate impacts; these measures become an inherent part of the proposed development.

6.5.4 **Chapter 2** of this volume of the **ES** and of the **Associated Development Design Principles** (Doc Ref. 8.3) document, detail a number of primary mitigation measures that seek to mitigate the potential impacts of the proposed development. Those of direct relevance in the landscape and visual context include:

- Retention of existing vegetation on site where possible to provide visual screening of the site for PRow and road users.
- The planting of additional screen planting around all boundaries of the site, to supplement the existing boundary vegetation. A 10m landscaped buffer zone is proposed to the northern, eastern and western boundaries, which would enhance existing vegetation in these areas. This planting would be retained during the removal and reinstatement phase, subject to landowner approval.
- The creation of three grassed landscaped bunds up to 3m high to parts of the eastern and western edges of the site using on-site material removed due to earthworks associated with the levelling of the site and topsoil storage.
- A general design approach aiming to create an unimposing appearance, with the buildings screened as far as possible and a maximum height of 4m.
- The canopy over the screen and search bays would have a maximum height of 6m and would be open sided, with the width of columns and the roof structure minimised to reduce the visual impact.
- Lighting columns within the car parking areas and along the access road would be restricted to 8m in height to minimise visibility during day and night time. Lanterns would utilise LED based light fittings with zero-degree tilt, and lighting along the perimeter would be fitted with a demountable light shield to reduce backward spill of light. To further assist on mitigating obtrusive light, a Central Management System has

**NOT PROTECTIVELY MARKED**

been proposed which would be capable of dimming parts of the site independently as usage changes throughout the day.

6.5.5 The listed mitigation measures aim to control and limit views of the proposed development from neighbouring receptors, including the A14, local roads and local PRow.

6.5.6 Following cessation of use of the proposed development, the buildings, lighting, surfacing and associated infrastructure, including drainage, would be removed. The topsoil stored in the landscape bunds would be used for reinstatement and the area would be returned to agricultural use. Where agreed with landowners, supplementary screening vegetation around the boundaries of the site and the highway improvements to Felixstowe Road would be permanently retained. Temporary hedgerow planting within the site would be removed and reinstated along the original hedgerow lines. The widened Felixstowe Road would remain in place but the road marking and signage for access to the site would be removed during the removal and reinstatement.

b) Tertiary mitigation

6.5.7 Tertiary mitigation will be required regardless of any EIA assessment, as it is imposed, for example, as a result of legislative requirements and/or standard sectoral practices.

6.5.8 The following tertiary mitigation measures have been included within the **Code of Construction Practice (CoCP)** (Doc Ref. 8.11) to minimise landscape and visual effects during the construction and removal and reinstatement phases:

- where construction lighting is required, minimum light levels for safe working and the minimum number of lighting elements to illuminate the work area safely will be used;
- lighting will be directed away from site boundaries to minimise nuisance from light spill. If lights cannot be positioned in such way because of physical constraints or for safety reasons, then local screening of the lights, including shielding of luminaires, where appropriate, will be used to reduce disturbance;
- task-specific lighting will be turned off on completion of the task, or at the end of the working day by the contractor; and
- contractors will consider the use of sensors or timing devices to automatically switch off lighting, where appropriate.

## 6.6 Assessment

### a) Introduction

6.6.1 This section presents the findings of the landscape and visual assessment for the construction, operation and removal and reinstatement of the proposed development.

6.6.2 This section identifies any likely significant effects that are predicted to occur and **section 6.7** of this chapter then identifies any secondary mitigation and monitoring measures that are proposed to minimise any adverse significant effects (if required).

6.6.3 Effects are assessed covering all stages; 12 to 18 months of construction and approximately 9-12 years of operation followed by approximately six months of removal and reinstatement works. Where relevant, a distinction is made between the period following completion, when construction is complete but before mitigation planting is fully mature (Year 1) and following establishment and initial maturation (Year 10) to capture the effects of proposed planting on views.

### b) Construction

6.6.4 As described in **Chapter 2** of this volume, the construction of the site would involve ground works to clear the site and reuse of material on-site to provide landscape bunds; the construction and installation of perimeter fencing, surfacing, lighting and buildings; and the planting of trees and hedgerows. The construction works would be expected to take 12 to 18 months in total and would involve the movement of construction vehicles, storage of materials, task lighting and gradual transformation of the site from a field to a freight management facility.

#### i. Landscape Fabric

6.6.5 A number of landscape features, comprising the physical fabric of the site would be modified or removed as follows:

- replacement of arable farmland with a freight management facility and new access road;
- changes to landform through cut and fill operations to level the site and create the landscape bunds;
- removal of approximately 200m of hedgerow through the centre of the site; and

- removal of approximately intermittent trees for approximately 180m to the south side of Felixstowe Road and 30m on the north side of the road, within the south of the site to facilitate the proposed access and improvement works to Felixstowe Road.

ii. **Landscape Character**

- 6.6.6 The scale of effects on landscape character are illustrated on **Figure 6.3**.
- 6.6.7 Large scale effects would only arise within the site in areas directly affected by the construction of the proposed development. In these areas the character would change from being two open fields to a construction site with moving construction vehicles and small cranes, to become a freight management facility contained by landscaped bunds and fencing.
- 6.6.8 Medium scale effects would arise in the adjacent fields to the south-east and north-west, between Felixstowe Road and the southern boundary of the A14. To the south-east these effects would extend as far as the Keepers Cottages access track and the surrounding woodland. To the north-west the effects would extend as far as the next field boundary from the site. In both of these areas, the construction works would alter the character of the open fields due to the proximity of the construction of the proposed development and its new structures, as well as general construction activity.
- 6.6.9 Small scale effects would arise in the fields adjacent to those with medium scale effects between Felixstowe Road and the A14 to the south-east and north-west, extending to one field past Keepers Cottages to the field boundary in the south-east and to the edge of the A1156 in the north-east. Further small-scale effects would arise to the north and east of the site, for one field north of the A14, in locations where the boundary of the A14 is open.
- 6.6.10 Beyond the above areas, occasional glimpsed views of the proposed development would not alter the character of the landscape.
- 6.6.11 For a development of this nature it is to be expected that there would be large scale effects on the character of the site itself, given that it is changing from agricultural land to a developed area. How rapidly effects diminish beyond the site depends on the scale, context, and visibility of the proposed development. In this instance effects would diminish rapidly in many areas due to the limited vertical scale of the proposed development and anticipated construction machinery; the embedded primary mitigation provided by existing and proposed vegetation; and the context in terms of terrain and vegetation within the wider landscape.

6.6.12 In **section 6.4** of this chapter, the Estate Sandlands and Plateau Estate Farmlands LCTs were identified as requiring more detailed assessment, based on the ZVI for the proposed development effects on these LCTs are considered below.

#### Estate Sandlands

6.6.13 As identified within the Suffolk Landscape Character Assessment (2008, revised 2011 (Ref. 6.16)), the majority of the site is located in the Estate Sandlands LCT. The key characteristics are described as:

- *“Flat or very gently rolling plateaux of free-draining sandy soils, overlying drift deposits of either glacial or fluvial origin.*
- *Chalky in parts of the Brecks, but uniformly acid and sandy in the south-east.*
- *Absence of watercourses.*
- *Extensive areas of heathland or acid grassland.*
- *Strongly geometric structure of fields enclosed in the 18th & 19<sup>th</sup> century.*
- *Large continuous blocks of commercial forestry.*
- *Characteristic ‘pine lines’ especially, but not solely, in the Brecks.*
- *Widespread planting of tree belts and rectilinear plantations.*
- *Generally, a landscape without ancient woodland, but there are some isolated and very significant exceptions.*
- *High incidence of relatively late, estate type, brick buildings.*
- *North-west slate roofs with white or yellow bricks. Flint is also widely used as a walling material.*
- *On the coast red brick with pan-tiled roofs, often black-glazed.”*

6.6.14 The Guidance Note supporting the Suffolk Landscape Character Assessment (Ref. 6.16) describes the forces of change acting upon this landscape, and the likely impacts on the landscape. This primarily advises

on the potential to accommodate developments, especially residential, and changes in existing land-use and management, frequently highlighting the potential adverse effects on landscape character. It notes: *“In respect of visual impact the regular nature of this landscape means that it does have more potential capacity to accept significant settlement expansion than the ancient countryside of the claylands. The sandland plateau with its simpler and more modern land cover pattern and extensive regular pattern of tree cover can be adapted to accept larger growth.”* Given these indications, the character type is judged to be of medium to low susceptibility.

6.6.15 The Guidance Note (Ref. 6.16) also prescribes landscape management guidelines, which should inform any development proposals and mitigation measures and have been taken into account in the site selection and design of the proposed development. These are:

- *“Reinforce the historic pattern of regular boundaries.*
- *Restore, maintain and enhance the pattern of locally distinctive ‘pine lines’.*
- *Restore, maintain and enhance the network of tree belts and pattern of small plantations found across much of this landscape type.*
- *Extend the cover of heathland paying particular attention to areas of commercial forestry as these have lower nutrients and a residual seed bank.*
- *Develop opportunities for locally distinctive species such as the rare Brecks plants.*
- *Protect distinctive geomorphology such as patterned ground.”*

6.6.16 The site and immediate surroundings lie outside both the AONB and the SLA, which relate more to the valley character types rather than the plateau/peninsula as shown by **Figure 6.1** and **Figure 6.3**. The character type is of community value as defined by the criteria in **section 6.4** of this chapter. Considering the susceptibility and value together, the character area is judged to be of medium-low sensitivity.

6.6.17 The site and surroundings are generally typical of the character type, being relatively flat in character, lacking in watercourses, with geometric field patterns and blocks of woodland to the west. These areas of woodland would help to screen views of the construction works, with additional

proposed planting helping to further screen visibility over time, although unlikely to provide effective screening during the construction phase.

6.6.18 As described above, the short-term effects during construction would be large scale within the limited extent of the site and medium scale in the adjacent fields to the south-east and north-west, affecting a localised extent. These effects would be of medium-low magnitude, resulting in a slight adverse effect, which is considered to be **not significant**.

6.6.19 As noted above, there would also be short-term, small scale effects during the construction phase in the fields adjacent to those with medium scale effects between Felixstowe Road and the A14, and for one field to the north of the A14. These limited effects would be of negligible magnitude and minimal neutral, which is considered to be **not significant**, as would effects on the remainder of the character type.

#### Plateau Estate Farmlands

6.6.20 As identified within the Suffolk Landscape Character Assessment (2008, revised 2011 (Ref. 6.16)), the southern part of the site, along Felixstowe Road, is located in the Plateau Estate Farmlands LCT. The key characteristics are described as:

- *“Flat landscape of light loams and sandy soils;*
- *Large scale rectilinear field pattern;*
- *Network of tree belts and coverts;*
- *Large areas of enclosed former heathland;*
- *18th- 19th & 20th century landscape parks;*
- *Clustered villages with a scattering of farmsteads around them;*
- *Former airfields; and*
- *Vernacular architecture is often 19th century estate type of brick and tile”.*

6.6.21 The Guidance Note supporting the Suffolk Landscape Character Assessment (Ref. 6.16) describes the forces of change acting upon this landscape, and the likely impacts on the landscape. This primarily advises on the potential to accommodate developments such as new residential

areas but notes that the “*simpler and more modern land cover pattern and extensive regular pattern of tree cover can be adapted to accept*” development and that “*if developments encroach on landscapes located on river valley sides or coastal slopes they will have a profound landscape impact on the character of these adjacent landscape types.*” The Suffolk Coastal District Landscape Character Assessment (Ref. 6.17) also notes that the historic parklands and tree cover are elements of the character which are more susceptible to adverse effects from development. Given these indications, the character type is judged to be of medium to low susceptibility.

6.6.22 The Guidance Note (Ref. 6.16) also prescribes landscape management guidelines, which should inform any development proposals and mitigation measures and have been taken into account in the site selection and design of the proposed development. These are:

- “*Reinforce the historic pattern of regular boundaries;*
- *Restore the quality of elm hedges with coppice management;*
- *Restore, maintain and enhance the network of tree belts and pattern of small plantations found across much of this landscape type; and*
- *Restore, maintain and enhance the historic parklands and the elements within them.*”

6.6.23 The site and immediate surroundings lie outside the AONB and SLA, which cover the valley character areas rather than the plateau as shown by **Figure 6.1** and **Figure 6.3**. The character type is of community value as defined by the criteria in **section 6.4** of this chapter. Considering the susceptibility and value together, the character area is judged to be of medium-low sensitivity.

6.6.24 The site and surroundings are typical of the character type. The characteristic woodlands to the south west of the site, along with additional planting proposed would partially screen and filter views of the proposed landscape bunds, which are themselves atypical features, but also provide further screening.

6.6.25 As described above, the short-term effects during construction would be large scale within the limited extent of the site and medium scale in the adjacent fields to the south-east and north-west, up to Felixstowe Road, also affecting a limited extent. These would be of medium-low magnitude,

resulting in a slight adverse effect, which is considered to be **not significant**.

6.6.26 As noted above, there would also be short-term, small scale effects during the construction phase in the fields adjacent to those with medium scale effects along Felixstowe Road. These limited effects would be of negligible magnitude, resulting in a minimal neutral effect, which is considered to be **not significant**, as would effects on the remainder of the character type.

iii. Visual Receptors

6.6.27 Annotated photographs and visualisations are shown on **Figures 6.5, 6.6, 6.7, 6.8, 6.9** and **6.10** of this landscape and visual assessment. The method of visualisation selected for each viewpoint has been informed by Landscape Institute Technical Guidance Note 06/19 Visual representation. Representative viewpoint 3 has been produced as a photowire visualisation, shown in **Figures 6.9** and **6.10**, in agreement with landscape and visual assessment consultees. Further detail about the visualisation methodology is provided in **Volume 1, Appendix 6I** of the **ES**.

6.6.28 The viewpoint description, description of effects and scale of effect for each viewpoint, with locations shown in **Figure 6.4**, is set out on the relevant photograph, provided in **Figures 6.5, 6.6, 6.7, and 6.8**. The scale of effect at each viewpoint is summarised in **Table 6.10** below:

**Table 6.10: Summary of scale of effects on representative viewpoints.**

Viewpoint number.	Location	Approximate Distance/Direction from Site.	Scale of effect: Beneficial, Adverse, Neutral.
R1	Junction of bridleways E-365/007/0 and E-365/006/0.	350m, east.	Medium, Adverse.
R2	Bridge Road/footpath E-365/012/0.	325m, south.	Small-negligible, Adverse.
R3	Footpath E-169/017/0, north of site.	300m, north.	Medium, Adverse.
R4	A1156 near entrance to Seven Hills Crematorium.	700m, north-west.	Small-negligible, Adverse.

6.6.29 Each of the viewpoints is a ‘sample’ of the potential effects, representing a wide range of receptors, including not only those actually at the viewpoint, but also those nearby, at a similar distance and/or direction. In addition, the two illustrative viewpoints (I1-I2) help to confirm the extents of likely visibility. Illustrative viewpoints are provided purely for reference to further

‘illustrate’ observations and judgements made within this landscape and visual assessment. Illustrative viewpoints, which do not contain a description of visual effects, are included within **Appendix 6A** of this volume.

6.6.30 From these viewpoints it can be seen that:

- Large scale visual effects, where the construction of the proposed development would form a major alteration to key elements features, qualities and characteristics of the view such that the baseline would be fundamentally changed, would be limited to locations immediately adjacent to the site, where there would be views of much of the construction or the construction activity would be in very close proximity.
- Medium scale effects during construction would occur in locations where there would be some separation from the construction, either as a result of distance or due to intervening road infrastructure or vegetation visually reducing the effects of construction. Medium scale effects would occur up to approximately 400m from the site.
- Beyond the extent of large and medium scale visual effects described above, effects would transition rapidly to small scale, due to the presence of existing vegetation (woodlands and hedgerows) that would soften and/or screen the presence of the construction phase, and eventually the security fencing and bunds, as well as restrict views of the roofs of taller vehicles and buildings.
- Beyond Felixstowe Road and the railway line to the south, and approximately 700-800m to the west and north-west, 350m to the north, beyond the A14 to the north-east and 800-950m to the east, the scale of effects reduce to negligible. This is due to the combination of topography, increasing distance from the site and layers of vegetation within the landscape combining to limit views to occasional glimpses of taller elements of construction machinery and eventually the proposed lighting columns once installed.

### Receptor Groups

6.6.31 Local residents and users of recreational routes and roads are judged to have high-medium sensitivity, using the methodology as set out above and within **Volume 1, Appendix 6I** of the **ES**.

- 6.6.32 Group 1 – Users of PRoW (Bridleways E/365/004/0, E/365/005/0, E-365/006/0, E-365/010/0, E-365/021/0 and Footpath E/365/024/0), Registered Common Land/open access land and residents of Keepers Cottages to the east of the site: This group of receptors includes users of the rights of way network between the site and Mill Plantation to the south east. Whilst the area to the east of the site is Registered Common Land, and indicated as open access land on OS mapping, it is actively farmed and appears to be little used as reported in the amenity and recreation assessment, as found in **Chapter 8** of this volume. Representative viewpoint 1 shows views from these receptors and indicates that during construction, effects would range from large scale adverse immediately adjacent to the site boundary, to medium scale adverse adjacent to Mill Plantation where there would still be some visibility of construction activity through the site boundary vegetation, but at a slight distance. These short-term effects would be of intermediate extent and would be of medium magnitude and would result in major-moderate adverse effects which are considered to be **significant**.
- 6.6.33 Group 2 – Users of PRoW (Bridleways E-365/007/0, E-365/008/0 and E-365/009/0, and Footpaths E-169/017/0, E-365/011/0 and E-365/026/0) and Registered Common Land/open access land east of Keepers Cottages and of the A14: This group of receptors includes users of the PRoW network either side of the A14, to the north and east of Mill Plantation. Similarly, to Group 1, the Registered Common Land/open access land is actively farmed. In addition, the PRoW network is fragmented by the A14. From these locations, there would be views of construction activity but Mill Plantation and the A14 would be more prominent in the views. Effects would be medium-small to small scale from those locations within this group that have views towards the site. These short-term effects would be of intermediate extent and would be of low-negligible magnitude and would result in slight adverse effects which are considered to be **not significant**.
- 6.6.34 Group 3 – Users of footpath (E-365/012/0), Bridge Road and the Levington Park complex to the south of the site: This group of receptors is located at the edge of the ZVI. Areas within the ZVI to the north west of the group are not publicly accessible and as indicated by illustrative viewpoint 2, the wooded areas to the west of the site would have no visibility of construction. Representative viewpoint 2 shows views from this group of receptors and indicates that from Bridge Road the vegetation along the Ipswich to Felixstowe railway line would largely screen visibility of the construction works. There would be small-negligible scale visual effects for users of Bridge Road and the surrounding area. These short-term effects would be of localised extent and would be of negligible magnitude and would result in minimal neutral effects which are considered to be **not significant**.

- 6.6.35 Group 4 - Users of local road (Felixstowe Road) within and to the south of the site: This group of receptors includes users of Felixstowe Road only. As such, this receptor group is considered to be of medium sensitivity (local road of community value and medium susceptibility). Where users of Felixstowe Road drive past and through the site, they would have open views of the construction phase, as the site boundary is currently open. These effects would be large scale and adverse but would reduce in scale rapidly further from the site boundary. These short-term effects on the high-medium sensitivity receptors would be of localised extent and would be of medium magnitude and would result in moderate adverse effects which are considered to be **not significant**.
- 6.6.36 Group 5 – Users of the A1156 to the west of the site around Porter's Covert and Seven Hills Crematorium: This group of receptors includes users of the A1156, as a local road, as well as visitors to the crematorium. Representative viewpoint 4 shows views from this receptor group and indicates that visual effects during construction would be of small-negligible scale as intervening vegetation would screen views of all but the taller construction equipment and the tops of lighting columns as they are built. These short-term effects would be of localised extent and would be of negligible magnitude and would result in minimal neutral effects which are considered to be **not significant**.
- 6.6.37 Group 6 – Users of public footpath (E-169/017/0) and local roads (Tenth Road and Levington Lane) south of Bucklesham and north of the A14: This group of receptors includes users of the PRoW network and local roads to the north of the site and the A14. Representative viewpoint 3 shows views from this receptor group and indicates that visual effects during construction would be of medium scale in location where there are open views towards the site, as the northern boundary of the site is relatively open. However, these views would be in the context of moving traffic along the A14, between the site and the receptors. These short-term effects would be of localised extent and would be of low magnitude and would result in slight adverse effects which are considered to be **not significant**.

#### Long Distance Routes

- 6.6.38 The A14 and the Ipswich to Felixstowe railway line are the two main routes through the study area and pass along the northern and southern boundaries of the site respectively. Users of the A14 are of low sensitivity, as indicated by the methodology set out above and in **Volume 1, Appendix 6I** of the **ES**, whilst rail passengers are of medium sensitivity.
- 6.6.39 Road users on the A14 would experience large scale effects as they pass the construction of the proposed development. Rail passengers would

experience similar views but with a larger amount of screening due to the existing woodland belt between the railway line and site, effects would be of a medium scale as users pass the construction of the proposed development. For both groups this would be a very brief part of a longer journey and the short-term effects would be of limited extent. The effects would be of medium magnitude and would result in slight adverse effects which are considered to be **not significant** for road users, and low magnitude, and would result in slight neutral effects which are considered to be **not significant** for rail passengers.

#### Specific Viewpoints

- 6.6.40 No specific viewpoints have been identified within the study area as requiring assessment.

#### Landscape Designations and Value

- 6.6.41 No designated landscapes have been identified within the study area as requiring assessment.

#### iv. Inter-relationship effects

- 6.6.42 This section provides a description of the identified inter-relationship effects that are anticipated to occur on landscape and visual receptors between the individual environmental effects arising from construction of the proposed development.
- 6.6.43 Inter-relationships would arise from the proposed development on the landscape features, which also represent habitats that are evaluated in **Chapter 7** of this volume. This chapter has been referenced in order to inform some judgements concerning the impact to landscape fabric and features.
- 6.6.44 Cultural and historic designations/attributes have been considered as one of the contributory factors towards overall landscape value and susceptibility. However, the effects of the proposed development on the historic/cultural receptors themselves are covered within **Chapter 9** of this volume.
- 6.6.45 In some cases, visual receptors are also recreational receptors assessed as part of the Amenity and Recreation Assessment within **Chapter 8** of this volume.

## c) Operation

## i. Landscape Character

6.6.46 The scale of effects on landscape character would remain as described in relation to the construction phase and as illustrated on **Figure 6.3** due to the introduction of new built development within the site and associated operational activity including increased traffic movements.

## Estate Sandlands

6.6.47 The key characteristics and landscape management guidelines for the Estate Sandlands LCT remain as reported in the construction section above. The medium to low susceptibility and community value are judged to result in medium-low sensitivity.

6.6.48 As described under the construction section above, the effects of the proposed development would be of large scale within the localised extent of the site, where the site would change from open fields to a freight management facility, and medium scale in the adjacent fields to the south-west and north-west where there would be an influence on the character of the landscape from the proximity of the proposed development and associated increased traffic movement. The medium to long-term effects would occur within a localised extent of the LCT. These effects would be of medium magnitude and would result in a moderate adverse effect that is considered to be **not significant**.

6.6.49 There would also be small scale effects in the fields adjacent to those with medium scale effects between Felixstowe Road and the A14, and for one field to the north of the A14. This would be as a result of the presence of the proposed development and associated increased traffic movements, but in the context of the existing traffic using the A14. These medium-term effects would be of negligible magnitude and would result in a minimal neutral effect that is considered to be **not significant**.

6.6.50 **Appendix 6B** of this volume considers the effects of the lighting elements of the proposed development on the Estate Sandlands LCT. The assessment indicates that the effects of lighting on this LCT would be of medium magnitude and would result in moderate adverse effects that are considered to be **not significant** given the lower levels of similar existing artificial lighting in the vicinity of the site.

## Plateau Estate Farmlands

6.6.51 The key characteristics and landscape management guidelines for the Plateau Estate Farmlands LCT remain as reported in the construction

section above. The medium to low susceptibility and community value are judged to result in medium-low sensitivity.

- 6.6.52 The effects of the proposed development would be of large scale within the localised extent of the site, where the site would change from open fields to a freight management facility, and medium scale in the adjacent fields to the south-west and north-west up to Felixstowe Road where there would be an influence on the character of the landscape from the proximity of the proposed development and associated increased traffic movement, also affecting a limited extent. These medium to long-term would be of medium magnitude, would result in moderate adverse effects that are considered to be **not significant**.
- 6.6.53 There would also be small scale effects in the fields adjacent to those with medium scale effects along Felixstowe Road. This would be as a result of the presence of the proposed development and associated increased traffic movements, but in the context of the existing traffic and train movements. These medium to long-term, limited effects would be of negligible magnitude, and would result in minimal neutral effects that are considered to be **not significant**.
- 6.6.54 **Appendix 6B** of this volume considers the effects of the lighting elements of the proposed development on the Plateau Estate Farmlands LCT. The assessment indicates that the effects of lighting on this LCT would be of medium-low magnitude and would result in moderate adverse effects that are considered to be **not significant** given the lower levels of similar existing artificial lighting in the vicinity of the site.

#### ii. Visual Receptors

- 6.6.55 The general bandings of the scale of visual effects remain as described in relation to the construction phase, due to the changes to views that would be introduced by the proposed development and associated operational activity including increased traffic movements, unless indicated otherwise in the assessment below. Local residents and users of recreational routes and roads remain high-medium sensitivity.

#### Receptor Groups

- 6.6.56 Group 1 – Users of PRoW (Bridleways E/365/004/0, E/365/005/0, E-365/006/0, E-365/010/0, E-365/021/0 and Footpath E/365/024/0), Registered Common Land/open access land and residents of Keepers Cottages to the east of the site: Viewpoint 1 represents views from these receptors to the east of the site. Effects at year 1 of the operation of the site would continue to be large scale and adverse where users of the PRoW would be adjacent to the site boundary and open views into the proposed

freight management facility, including some visibility of the stop and search canopy. Adjacent to Mill Plantation, where there would still be some visibility of the proposed development over the site boundary vegetation, but at a slight distance and with the proposed landscaped bund providing some screening, effects would reduce to medium-small scale and adverse. These medium-term effects would be of intermediate extent and would be of high-medium magnitude and would result in major-moderate adverse effects, which are considered to be **significant**.

- 6.6.57 By year 10 of operation, as the proposed planting along the eastern boundary of the site begins to mature and provide visual screening, assumed to be 4.8m high for woodland and shrub planting by this stage of the operational phase, this would reduce visual effects for this receptor group from large and medium-small scale to medium and small scale. These medium to long-term effects would remain of intermediate extent and would reduce to medium or low magnitude and would result in moderate to slight adverse effects that are considered to be **not significant**.
- 6.6.58 Group 2 – Users of PRoW (Bridleways E-365/007/0, E-365/008/0 and E-365/009/0, and Footpaths E-169/017/0, E-365/011/0 and E-365/026/0) and Registered Common Land/open access land east of Keepers Cottages and of the A14: Effects at year 1 of the operation of the site would continue to be medium-small to small scale and adverse from within this receptor group as there would be some visibility of the proposed development over the site boundary vegetation, including the lighting, buildings and stop and search canopy, but at a slight distance and with the proposed landscaped bund providing some screening. These medium to long-term would be of intermediate extent, and would result in moderate adverse effects, which are considered to be **not significant**.
- 6.6.59 By year 10 of operation, as the proposed planting along the eastern boundary of the site begins to mature and provide visual screening, assumed to be 4.8m high for woodland and shrub planting by the end of operation, this would reduce visual effects for this receptor group from medium-small to small scale to small scale. These medium to long-term effects on the high-medium sensitivity receptor would remain of intermediate extent and would reduce to low magnitude, and would result in slight adverse effects, which are considered to be **not significant**.
- 6.6.60 Group 3 – Users of footpath (E-365/012/0), Bridge Road and the Levington Park complex to the south of the site: Viewpoint 2 represents views from these receptors to the south of the site. Effects during the operation of the site would reduce to negligible scale as much of the proposed development would remain screened from view, at both year 1 and year 10, by the existing woodland belt between Felixstowe Road and the railway line, with

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only the tops of some of the proposed lighting columns likely to be visible through or slightly above the tree belt. The proposed tree and shrub planting along the northern edge of Felixstowe Road would strengthen this screening over time. These medium to long-term effects would be of localised extent and would be of negligible magnitude, and would result in minimal neutral effects, which are considered to be **not significant**.

- 6.6.61 Group 4 - Users of local road (Felixstowe Road) within and to the south of the site: Effects at year 1 of the operation of the site would continue to be of large scale and adverse for users of Felixstowe Road, with much of the proposed development clearly visible from the road. These medium-term effects would be of localised extent, medium magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.
- 6.6.62 By year 10, as the proposed planting along the northern edge of Felixstowe Road begins to mature and provide visual screening, assumed to be 4.8m high for woodland and shrub planting by the end of operation, this would reduce visual effects for road users from large scale to medium scale. These medium to long-term effects would remain of localised extent, medium magnitude and would result in moderate adverse effects, which are considered to be **not significant**.
- 6.6.63 Group 5 – Users of the A1156 to the west of the site around Porter’s Covert and Seven Hills Crematorium: Viewpoint 4 represents views from the A1156 and visitors to Seven Hills Crematorium. Effects throughout the operation of the site would remain of small-negligible scale as intervening landform and vegetation would screen views of all but taller vehicles and the tops of lighting columns. The proposed tree and shrub planting along the western boundary of the site would strengthen this screening over time. These medium-term effects would remain of localised extent and would be of negligible magnitude and would result in minimal neutral effects, which are considered to be **not significant**.
- 6.6.64 Group 6 – Users of footpath (E-169/017/0) and local roads (Tenth Road and Levington Lane) south of Bucklesham and north of the A14: Viewpoint 3 represents views from these receptors to the north of the site. Effects during the operation of the site would continue to be medium scale and adverse where there are open views towards the site, as the northern boundary of the site would initially remain relatively open and much of the proposed development would remain visible in the context of moving traffic along the A14. These medium-term effects would remain of localised extent and would be of medium magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.

- 6.6.65 By year 10, as the proposed planting along the northern boundary of the site begins to mature and provide visual screening, assumed to be 4.8m high for woodland and shrub planting by the end of operation, this would reduce visual effects for this receptor group from medium scale to small scale, with only taller elements such as lighting and the stop and search canopy likely to remain visible. These medium to long-term effects would remain of intermediate extent and would reduce to low magnitude and would result in slight adverse effects, which are considered to be **not significant**.
- 6.6.66 **Appendix 6B** of this volume considers the visual effects of the lighting elements of the proposed development on the visual receptor groups. For receptor group 4 (users of Felixstowe Road), the assessment of night time effects identifies that effects due to the introduction of a new lit area along a road that is currently unlit would be of medium magnitude and would result in moderate adverse effects, which are considered to be **not significant**. For those receptor groups consisting of PRow or open spaces that wouldn't be used at night (receptor groups 1 and 2), there would be no night time effects. For all other receptor groups, visual effects at night due to the introduction of new lighting but in the context of existing lights from traffic or due to limited visibility would be of low-negligible magnitude and would result in slight adverse effects, which are considered to be **not significant**.

#### Long Distance Routes

- 6.6.67 The A14 and the Ipswich to Felixstowe railway line are the two main routes through the study area and pass along the northern and southern boundaries of the site respectively. Users of the A14 are of low sensitivity, as indicated by the methodology set out above and in **Volume 1, Appendix 6I** of the **ES**, whilst rail passengers are of medium sensitivity.
- 6.6.68 At year 1 of operation, road users on the A14 would experience large scale effects as they pass the proposed development due to the relatively open views into the proposed development. This would be a very brief part of a longer journey and the medium-term effects would be of limited extent. The effects would be of medium magnitude and would result in slight adverse effects, which are considered to be **not significant**.
- 6.6.69 By year 10, as the proposed planting along the northern boundary of the site begins to mature and provide visual screening, assumed to be 4.8m high for woodland and shrub planting by the end of operation, this would reduce visual effects for this receptor group from large scale to small scale. This would remain a very brief part of a longer journey and the medium to long-term effects would continue to be of limited extent. The effects would

be of negligible magnitude and would result in minimal neutral effects, which are considered to be **not significant**.

6.6.70 Rail passengers on the Ipswich to Felixstowe railway line would experience similar fleeting views to those experienced by road users on the A14, but with a larger amount of screening due to the existing woodland belt between the railway line and site. This screening would be strengthened over time by the proposed planting along the northern edge of Felixstowe Road. Effects would be of a small scale as users pass the proposed development. The medium to long-term effects would be of limited extent. The effects would be of negligible magnitude and would result in minimal neutral effects, which are considered to be **not significant**.

6.6.71 **Appendix 6B** of this volume considers the visual effects of the lighting elements of the proposed development on users of the A14 and the Ipswich to Felixstowe rail line. The assessment indicates that the effects of lighting on low sensitivity road users, where a new lit area would be introduced for a short stretch of an unlit road, would be of medium magnitude, and would result in moderate adverse effects, which are considered to be **not significant**, and for medium sensitivity rail users, where there would be very little visibility of the proposed lighting along a short stretch of the route, and would result in minimal neutral effects, which are considered to be **not significant**.

#### Specific Viewpoints

6.6.72 No specific viewpoints have been identified within the study area as requiring assessment.

#### Landscape Designations and Value

6.6.73 No designated landscapes have been identified within the study area as requiring assessment.

#### iii. Inter-relationship effects

6.6.74 This section provides a description of the identified inter-relationship effects that are anticipated to occur on landscape and visual receptors between the individual environmental effects arising from operation of the proposed development.

6.6.75 Inter-relationships would arise from the proposed development on the landscape features, which also represent habitats that are evaluated in **Chapter 7** of this volume. The Terrestrial Ecology chapter has been referenced in order to inform some judgements concerning the impact to landscape fabric and features.

6.6.76 Cultural and historic designations/attributes have been considered as one of the contributory factors towards overall landscape value and susceptibility. However, the effects of the development on the historic/cultural receptors are considered within **Chapter 9** of this volume.

6.6.77 In some cases, visual receptors are also recreational receptors assessed as part of the Amenity and Recreation Assessment within **Chapter 8** of this volume.

d) **Removal and reinstatement**

6.6.78 The removal and reinstatement of the site would involve works to clear the site and replace the soil previously stored within the landscape bunds. The screening planting which would be provided around all boundaries of the site would be left in situ (where agreed with the landowner and allowing for access between fields) and the widened Felixstowe Road would remain in place with the road markings and signage to the site removed. If removal and reinstatement takes place in one phase, the removal and reinstatement works would take approximately six months. It is anticipated that removal and site reinstatement would follow a programme broadly the reverse of construction and involve the movement of demolition plant and vehicles, storage of materials, task lighting (when required) and gradual transformation of the site to remove the freight management facility and return the site to agricultural use. In addition, the hedgerow currently located through the centre of the site would be reinstated along the original alignment.

6.6.79 Given that the dismantling and site reinstatement would follow a programme broadly the reverse of construction, the effects of the removal and reinstatement works would not be notably different from the construction effects. The judgements relating to the significance of effects on the different landscape and visual receptor groups are assessed to be the same as for construction, with **significant** effects assessed to occur for receptor group 1 only as a result of the visibility of demolition plant, vehicles and activity to remove the park and ride facility in close proximity. A full summary of effects during removal is provided at **Table 6.13**.

6.6.80 Following completion of the removal and reinstatement works, the site would be returned to agricultural use and there would be no permanent landscape and visual effects.

i. **Inter-relationship effects**

6.6.81 This section provides a description of the identified inter-relationship effects that are anticipated to occur on landscape and visual receptors between the

individual environmental effects arising from removal and reinstatement of the proposed development.

6.6.82 Inter-relationships would arise from the proposed development on the landscape features, which also represent habitats that are evaluated in **Chapter 7** of this volume. The Terrestrial Ecology chapter has been referenced in order to inform some judgements concerning the impact to landscape fabric and features.

6.6.83 Cultural and historic designations/attributes have been considered as one of the contributory factors towards overall landscape value and susceptibility. However, the effects of the development on the historic/cultural receptors are considered within **Chapter 9** of this volume.

6.6.84 In some cases, visual receptors are also recreational receptors assessed as part of the Amenity and Recreation Assessment within **Chapter 8** of this volume.

## 6.7 Mitigation and monitoring

### a) Introduction

6.7.1 Primary and tertiary mitigation measures, which have been accounted for as part of the assessment, are summarised in **section 6.5** of this chapter. Where other mitigation is required to reduce or avoid an adverse significant effect, this is referred to as secondary mitigation and where reasonably practicable, secondary mitigation measures have been proposed.

6.7.2 No secondary mitigation measures are proposed for the landscape and visual assessment, given that the Sizewell C Project is not intended to be permanent. However, this section describes the proposed monitoring required of specific receptors/resources or for the effectiveness of a mitigation measure. The requirements, scope, frequency and duration of a given monitoring regime are set out, as far as possible, in this section.

### b) Monitoring

6.7.3 The proposed planting would require maintenance and management during the lifetime of the proposed development, with replacement of plant failures during the first few years of establishment (usually 5 years) as required.

## 6.8 Residual effects

6.8.1 **Table 6.11, Table 6.12 and Table 6.13** present a summary of the landscape and visual assessment. They identify the receptor/s likely to be impacted, the level of effect at year 10, which is considered to be the

medium to long-term effect once mitigation planting has become established and, where the effect is deemed to be significant, the tables include any additional mitigation proposed and the resulting residual effect.

6.8.2 Following completion of the removal and reinstatement works, the site would be returned to agricultural use and there would be no permanent landscape and visual effects.

**Table 6.11: Summary of effects for the construction phase.**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Landscape Character.					
Estate Sandlands.	Effects on the LCT within the site and adjacent fields to the south-east and north-west.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
	Effects on remainder of character type.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
Plateau Estate Farmlands.	Effects on the LCT within the site and adjacent fields to the south-east and north-west, up to Felixstowe Road.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
	Effects on remainder of character type.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
Visual Receptors.					
Receptor group 1:	Views of construction	Retention of existing	Major-moderate,	None	Major-moderate,

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Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Users of PRow, Registered Common Land/open access land and residents of Keepers Cottages to the east of the site.	activity, progressing towards views of the freight management facility.	vegetation; creation of landscaped bunds and proposed planting to screen and filter views.	adverse.		adverse <b>(significant)</b> .
Receptor group 2: Users of PRow and Registered Common Land/open access land east of Keepers Cottages and of the A14.	Views of construction activity, progressing towards views of perimeter fencing, with light columns and roofs of taller vehicles seen above planting and landscaped bund.	Retention of existing vegetation; creation of landscaped bunds and proposed planting to screen and filter views.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Receptor group 3: Users of public footpath, Bridge Road and the Levington Park complex to the south of the site.	Views of roofs of taller construction vehicles seen above existing vegetation.	Retention of existing vegetation.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
Receptor group 4: Users of Felixstowe Road within and to the south of the site.	Views of construction activity, progressing towards views of the freight management facility.	Retention of existing vegetation; creation of landscaped bunds and proposed planting to screen and filter views.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
Receptor group 5: Users of the	Views of roofs of taller construction vehicles seen	Retention of existing vegetation.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .

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Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
A1156 to the west of the site around Porter's Covert and Seven Hills Crematorium.	above existing vegetation.				
Receptor group 6: Users of public footpath and local roads south of Bucklesham and north of the A14.	Views of construction activity, progressing towards views of the freight management facility.	Retention of existing vegetation; creation of landscaped bunds and proposed planting to screen and filter views.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Motorists using the A14.	Brief views of construction activity, progressing to views of perimeter fencing and bunds.	Retention of existing vegetation; creation of landscaped bund and proposed planting to screen and filter views.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Rail passengers on the Ipswich to Felixstowe line.	Brief filtered views of construction activity, progressing to views of perimeter fencing and bunds.	Retention of existing vegetation; creation of landscaped bund and proposed planting to screen and filter views.	Slight, neutral.	None	Slight, neutral <b>(not significant)</b> .

**Table 6.12: Summary of effects for the operational phase**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Landscape Character.					
Estate Sandlands	Effects on the LCT within the site and	Retention of existing vegetation	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
	adjacent fields to the south-east and north-west.	where possible and proposed planting to integrate and screen.			
	Effects on remainder of character type.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
	Night-time effects on character type.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
Plateau Estate Farmlands.	Effects on the LCT within the site and adjacent fields to the south-east and north-west, up to Felixstowe Road.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
	Effects on remainder of character type.	Retention of existing vegetation where possible and proposed planting to integrate and screen.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
	Night-time effects on character type.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
Visual Receptors.					
Receptor group 1: Users of PRow, Registered Common Land/open	Views of the freight management facility, over site boundary planting.	Retention of existing vegetation; landscaped bunds and proposed planting to	Moderate to slight, adverse.	None	Moderate to slight, adverse <b>(not significant)</b> .

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
access land and residents of Keepers Cottages to the east of the site.		screen and filter views.			
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Negligible, neutral.	None	Negligible, neutral <b>(not significant)</b> .
Receptor group 2: Users of PRow and Registered Common Land/open access land east of Keepers Cottages and of the A14.	Views of perimeter fencing, with light columns and roofs of taller vehicles seen above planting and landscaped bund.	Retention of existing vegetation; landscaped bunds and proposed planting to screen and filter views.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Negligible, neutral.	None	Negligible, neutral <b>(not significant)</b> .
Receptor group 3: Users of public footpath, Bridge Road and the Levington Park complex to the south of the site.	Views of roofs of taller vehicles and lighting seen above existing vegetation.	Retention of existing vegetation.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Receptor group 4: Users of Felixstowe Road within and to the south of the site.	Views of the freight management facility, over site boundary planting.	Retention of existing vegetation; landscaped bunds and proposed planting to screen and filter views.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Receptor group 5: Users of the A1156 to the west of the site around Porter's Covert and Seven Hills Crematorium	Views of roofs of taller vehicles and lighting seen above existing vegetation.	Retention of existing vegetation.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Receptor group 6: Users of public footpath and local roads south of Bucklesham and north of the A14.	Views of the freight management facility, over site boundary planting.	Retention of existing vegetation; landscaped bunds and proposed planting to screen and filter views.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Motorists using the A14.	Brief views of freight management facility, over site boundary planting.	Retention of existing vegetation; landscaped bund and proposed planting to screen and filter views.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
Rail passengers on the Ipswich to Felixstowe line.	Brief filtered views of freight management facility, through existing vegetation.	Retention of existing vegetation; landscaped bund and proposed planting to screen and filter views.	Minimal, neutral.	None	Minimal, neutral <b>(not significant)</b> .
	Visibility of	Best practice	Minimal,	None	Minimal, neutral

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
	proposed lighting at night.	approach to lighting design.	neutral.		<b>(not significant).</b>

**Table 6.13: Summary of effects for the removal and reinstatement phase.**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
<b>Landscape Character</b>					
Estate Sandlands.	Effects on the LCT within the site and adjacent fields to the south-east and north-west.	--	Slight, adverse.	None	Slight, adverse <b>(not significant).</b>
	Effects on remainder of character type.	--	Minimal, neutral.	None	Minimal, neutral <b>(not significant).</b>
Plateau Estate Farmlands.	Effects on the LCT within the site and adjacent fields to the south-east and north-west, up to Felixstowe Road.	--	Slight, adverse.	None	Slight, adverse <b>(not significant).</b>
	Effects on remainder of character type.	--	Minimal, neutral.	None	Minimal, neutral <b>(not significant).</b>
<b>Visual Receptors.</b>					
Receptor group 1: Users of PRow, Registered Common Land/open access land and residents of Keepers Cottages to the east of the site.	Views of construction activity, progressing towards views of the freight management facility.	--	Major-moderate, adverse.	None	Major-moderate, adverse <b>(significant).</b>
Receptor	Views of	--	Slight, adverse.	None	Slight, adverse

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
group 2: Users of PRow and Registered Common Land/open access land east of Keepers Cottages and of the A14.	construction activity, progressing towards views of perimeter fencing, with light columns and roofs of taller vehicles seen above planting and landscaped bund.				<b>(not significant).</b>
Receptor group 3: Users of public footpath, Bridge Road and the Levington Park complex to the south of the site.	Views of roofs of taller construction vehicles seen above existing vegetation.	--	Minimal, neutral.	None	Minimal, neutral <b>(not significant).</b>
Receptor group 4: Users of Felixstowe Road within and to the south of the site.	Views of construction activity, progressing towards views of the freight management facility.	--	Moderate, adverse.	None	Moderate, adverse <b>(not significant).</b>
Receptor group 5: Users of the A1156 to the west of the site around Porter's Covert and Seven Hills Crematorium.	Views of roofs of taller construction vehicles seen above existing vegetation.	--	Minimal, neutral.	None	Minimal, neutral <b>(not significant).</b>
Receptor group 6: Users of public footpath and local roads south of	Views of construction activity, progressing towards views of the freight management	--	Slight, adverse.	None	Slight, adverse <b>(not significant).</b>

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Bucklesham and north of the A14.	facility.				
Motorists using the A14.	Brief views of construction activity, progressing to views of perimeter fencing and bunds.	--	Slight, adverse.	None	Slight, adverse <b>(not significant)</b> .
Rail passengers on the Ipswich to Felixstowe line.	Brief filtered views of construction activity, progressing to views of perimeter fencing and bunds.	--	Slight, neutral.	None	Slight, neutral <b>(not significant)</b> .

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