



# The Sizewell C Project

## 6.4 Volume 3 Northern Park and Ride Chapter 8 Amenity and Recreation

---

Revision: 1.0  
Applicable Regulation: Regulation 5(2)(a)  
PINS Reference Number: EN010012

---

May 2020

Planning Act 2008  
Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009



## Contents

8.	Amenity and Recreation .....	1
8.1	Introduction.....	1
8.2	Legislation, policy and guidance .....	1
8.3	Methodology .....	3
8.4	Baseline environment .....	10
8.5	Environmental design and mitigation .....	11
8.6	Assessment.....	15
8.7	Mitigation and monitoring.....	22
8.8	Residual effects .....	22
	References .....	25

## Tables

Table 8.1:	Sensitivity assessment summary.....	6
Table 8.2:	Classification of effects. ....	8
Table 8.3:	Definition of effects. ....	8
Table 8.4:	Summary of effects for the construction phase.....	23
Table 8.5:	Summary of effects for the operational phase .....	23
Table 8.6:	Summary of effects for the removal and reinstatement phase.....	24

## Plates

**None provided.**

## Figures

Figure 8.1: Amenity and recreation resources

## Appendices

**None provided.**

## 8. Amenity and Recreation

### 8.1 Introduction

8.1.1 This chapter of **Volume 3** of the **Environmental Statement (ES)** (Doc Ref. 6.4) presents an assessment of the potential effects on amenity and recreation arising from the construction, operation, and removal and reinstatement of the northern park and ride at Darsham (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.

8.1.2 Detailed descriptions of the northern park and ride site at Darsham (referred to throughout as the 'site'), the proposed development, and the different phases of development are provided in **Chapters 1 and 2** of **Volume 3** of the **ES**. A glossary of terms and list of abbreviations used in this chapter is provided in **Appendix 1A** of **Volume 1** of the **ES** (Doc Ref. 6.2).

8.1.3 This chapter assesses potential effects that may result from disturbance of users of nearby public rights of way (PRoW) (comprising public footpaths, bridleways, restricted byways and byways open to all traffic), cycle routes, outside recreational facilities, access land and public open space (referred to as recreational resources) from changes to views, noise, dust and other emissions, and traffic. This assessment has been informed by data from other assessments within the **ES** as follows:

- **Chapter 4** of this volume: Noise and vibration;
- **Chapter 5** of this volume: Air quality;
- **Chapter 6** of this volume: Landscape and Visual; and
- **Volume 2, Chapter 10**: Transport (Doc Ref. 6.3).

### 8.2 Legislation, policy and guidance

8.2.1 **Appendix 6K** of **Volume 1** of the **ES**, identifies and describes legislation, policy, and guidance of relevance to the assessment of the potential amenity and recreation impacts associated with the Sizewell C Project across all **ES** volumes.

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

## a) International

8.2.3 There is no international legislation or policy relevant to the amenity and recreation assessment.

## b) National

8.2.4 This assessment has been prepared with due regard to the requirements of the Countryside and Rights of Way Act 2000.

8.2.5 The Overarching National Policy Statement for Energy (NPS EN-1) (Ref. 8.1), and the National Policy Statement for Nuclear Power Generation (NPS EN-6) (Ref. 8.2) set out requirements for amenity and recreation associated with the development of major energy infrastructures. Other relevant national policy documents, including the National Planning Policy Framework 2019 (Ref. 8.3), and Planning Practice Guidance (Ref 8.4-8.7), set out legislation and guidance in relation to Open Access Land, PRoW, protecting tranquil areas, the benefits of recreation to health and wellbeing, and light pollution. The requirements set by these documents, as relevant to the amenity and recreation assessment of the proposed development, are discussed in detail in **Appendix 6K of Volume 1** of the **ES**.

## c) Regional

8.2.6 No regional policies are deemed relevant to the assessment of amenity and recreation effects.

## d) Local

8.2.7 **Appendix 6K of Volume 1** of the **ES** summarises the requirements of Suffolk Coastal District Council Local Plan Core Strategy and Development Management Policies 2013 (Ref. 8.8), and Suffolk Coastal District Council Final Draft Local Plan 2019 (Ref. 8.9), as relevant to the amenity and recreation assessment. No local policy over and above that described in **Appendix 6K of Volume 1** of the **ES** is deemed relevant to the assessment for this site.

## e) Guidance

8.2.8 Relevant guidance relating to the amenity and recreation assessment include:

- Suffolk Green Access Strategy DRAFT – Rights of Way Improvement Plan (Ref. 8.10).

8.2.9 Details of this, as relevant to the amenity and recreation assessment, are set out in **Appendix 6K** of **Volume 1** of the **ES**.

## 8.3 Methodology

### a) Scope of the assessment

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

8.3.2 The full method of assessment for amenity and recreation that has been applied for the Sizewell C Project is included in **Appendix 6K** of **Volume 1** of the **ES**.

8.3.3 This section provides specific details of the amenity and recreation 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, operation and removal and reinstatement of the proposed development.

8.3.4 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, see **Appendix 6A** of **Volume 1** of the **ES**.

8.3.5 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 **Appendices 6A** to **6C** of **Volume 1** of the **ES**.

8.3.6 An amenity and recreation impact assessment considers the effects of the proposed development on users of PRow, permissive footpaths, long distance recreational routes, cycle routes and accessible open spaces such as (inter alia) common land, nature reserves, sports facilities and water bodies.

8.3.7 This assessment considers the effects on the experience of users of amenity and recreation resources as a result of:

- physical changes to resources (for example changes to PRow through diversions or creation of new road crossings);

- changes to the experience people have when using recreational resources due to perceptual or actual changes to views, noise, air quality or traffic movements; and
- changes to the experience people have when using recreational resources due to increases in the number of people using them.

**8.3.8** This assessment also considers the effects on tranquillity experienced by recreational receptors as part of the overall assessment on amenity and recreation.

**8.3.9** There is no specific or general guidance on amenity and recreation impact assessment. The agreed methodology and study areas used in this chapter are informed by professional experience, review of other projects and through discussion and agreement with relevant consultees.

**b) Consultation**

**8.3.10** The scope of the assessment has also been informed through consultation and engagement with statutory consultees throughout the design and assessment process.

**8.3.11** The amenity and recreation impact assessment methodology and the study areas for the Sizewell C Project were consulted on between 2015 and 2019 as described in **Appendix 6K of Volume 1 of the ES**. The final methodology, which included the approach to the assessment of tranquillity, and study areas were discussed at a meeting with Suffolk County Council (SCC), Natural England, Suffolk Coast and Heaths Area of Outstanding Natural Beauty Partnership, and the Suffolk Local Access Forum on 7 February 2019. The agreed methodology report (including study areas) was issued to Suffolk County Council, East Suffolk Council, Natural England, Suffolk Coast and Heaths Area of Outstanding Natural Beauty Partnership and Suffolk Local Access Forum on 24 June 2019. No further comments on the methodology or study area were received from consultees, and they were agreed. No other responses that only specifically relate to this proposed development were raised.

**c) Study area**

**8.3.12** The study area includes the proposed development within the site boundary and land immediately beyond to a distance of 1 kilometre (km) (refer to **Figure 8.1** of this volume).

8.3.13 The determination of the study area was informed by a review of the proposals, supported by site visits, and an understanding of potential effects due to changes in views, noise and air quality, as well as the potential changes to numbers of people using resources and physical changes to resources.

8.3.14 The 1km study area was agreed with statutory consultees, and included in the 2019 EIA Scoping Report.

d) **Assessment scenarios**

8.3.15 The assessment of effects on amenity and recreation includes the assessment of the construction, operation, and removal and reinstatement phases of the proposed development, rather than specific assessment years.

8.3.16 For the operational phase the ‘worst-case’ visual effects are assessed (i.e. before planting matures), which would reduce over time as proposed planting matures and provides visual screening, and helps to integrate the proposed development into the landscape.

e) **Assessment criteria**

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

8.3.18 A detailed description of the assessment methodology used to assess the potential effects on amenity and recreation arising from the proposed development is provided in **Appendix 6K of Volume 1 of the ES**. A summary of the assessment criteria used in this assessment is presented in the following sub-sections.

i. **Sensitivity**

8.3.19 The assessment of sensitivity is based on the criteria summarised in **Table 8.1**. Sensitivity combines considerations of value and susceptibility and is assessed within the range of high, medium, low and very low.

**Table 8.1: Sensitivity assessment summary.**

Sensitivity	Description
High	Value: Receptors using a resource that is recognised at the national level for recreation or resources within landscapes (for example designated landscapes) that draw people nationally to experience their special qualities. Susceptibility: Receptor has a very low capacity to accommodate the proposed form of change.
Medium	Value: Receptors using a resource that is recognised at the regional or district level for recreation, or resources which lie within a landscape regionally or locally designated for reasons including its recreational value. Susceptibility: Receptor has a low capacity to accommodate the proposed form of change.
Low	Value: Receptors using a resource that is appreciated by the local community but has little or no wider recognition of its value for recreation. Susceptibility: Receptor has some tolerance to accommodate the proposed form of change.
Very low.	Value: Receptors using a resource that is degraded and with little or no evidence of being valued by the community for recreation. Susceptibility: Receptor is generally tolerant and can accommodate the proposed form of change.

8.3.20 Assessments of susceptibility and value may be different and professional judgement is used to conclude on the judgement of sensitivity. For example, value may be high and susceptibility may be low, and a professional judgement is made to determine whether sensitivity is high, low or in between, supported by narrative explanation.

ii. Magnitude

8.3.21 Magnitude of impact is based on the impact that the proposed development would have upon the amenity and recreation receptor. It is assessed within the range of high, medium, low, and very low with consideration given to scale, duration and extent of impact with reference to the following criteria.



**8.3.22** Scale of impact identifies the degree of change which would arise from the development. It is rated on the scale summarised:

- large – total or major alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience;
- medium - partial alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience;
- small – minor alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience; and
- negligible – very minor alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience.

**8.3.23** Duration of impact indicates the timescale over which it will be experienced. As the proposed development is not permanent, and would be removed, and the site reinstated to agricultural use after approximately 9-12 years there would be no permanent effects, and only the following durations are relevant to this assessment:

- long-term – ten to twenty-five years;
- medium-term – two to ten years; and
- short-term – zero to two years.

**8.3.24** Extent of impact indicates the geographic area of the resource used by the receptors over which the impacts will be experienced. This is determined as follows:

- limited – small part of a receptor area<sup>1</sup> (less than 10%);
- localised – part of receptor area (more than 10% but up to 25%);
- intermediate – approximately half of receptor area; and
- wide – more than half of receptor area.

**8.3.25** The degree to which each of the three criteria of scale, duration and extent influence the assessment of magnitude will be weighed by professional judgement and clearly described.

---

<sup>1</sup> Defined as the area or length of the resource used by receptors. For example, the length of a PRoW.

iii. Effect definitions

8.3.26 Following the assessment of the sensitivity of the receptor and the magnitude of impacts, effects are assessed by professional judgement with reference to the matrix shown in **Table 8.2**.

**Table 8.2: Classification of effects.**

Magnitude	Sensitivity of Receptor			
	Very low.	Low	Medium	High
Very low.	Negligible	Negligible	Minor	Minor
Low	Negligible	Minor	Minor	Moderate
Medium	Minor	Minor	Moderate	Major
High	Minor	Moderate	Major	Major

8.3.27 The definition of these effects is provided in **Table 8.3**.

**Table 8.3: Definition of effects.**

Effect	Description
Major	Effects, both adverse and beneficial, which are likely to be important considerations at a national to regional level, because they contribute to achieving national/regional objectives, or, which are likely to result in exceedance of statutory objectives and/or breaches of legislation.
Moderate	Effects which are likely to be important considerations at a regional and local level.
Minor	Effects that could be important considerations at a local level.
Negligible	Effects that are likely to have negligible or neutral influence, irrespective of other effects.

8.3.28 Intermediate ratings may also be given, e.g. ‘major-moderate’ and ‘moderate-minor’. Moderate-minor, for example, indicates an effect that is both less than moderate and more than minor, 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. Intermediate ratings may also be used for judgements of scale and magnitude.

8.3.29 Following the classification of an effect, a clear statement is made as to whether the effect is ‘significant’ or ‘not significant’. As a general rule, major, major-moderate and moderate effects are considered to be significant, and moderate-minor, minor, minor-negligible and negligible effects are

considered to be not significant. However, professional judgement is also applied, where appropriate.

**8.3.30** 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. The decision regarding the classification of effect and the decision regarding whether an effect is adverse, neutral or beneficial are entirely separate.

f) **Assessment methodology**

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

- **Baseline** – includes the gathering of documented information; development of the scope of the assessment in consultation with statutory 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 amenity and recreation impacts where possible.
- **Assessment** – includes an assessment of the amenity and recreation effects of the design of the proposed development, requiring site work, liaison with the noise, air quality, landscape and visual and transport consultants. Assessment site visits were undertaken during June and July 2019.
- **Cumulative Assessment** – assesses the effects of the proposed development in combination with other developments, where required as detailed in **Volume 10** of the **ES** (Doc Ref. 6.11).

g) **Assumptions and limitations**

**8.3.32** The following assumptions have been made in this assessment:

- The assessment is based on the parameters for the structures and lighting indicated in the description of development at **Chapter 2** of this volume.
- It is assumed that the estimated growth rates indicated in the landscape and visual assessment as seen in **Chapter 6** of this volume, for proposed planting would be achieved.

- It is assumed that no PRow diversions are required in relation to the proposed development.
- Assumptions have been made on the likely use of recreational routes based on site observations when undertaking baseline and assessment site visits.
- Tranquillity is not absolute and is relative to people's expectations in a particular location, and there are no standard nationally accepted ways of measuring effects on tranquillity in relation to amenity and recreation. The amenity and recreation assessment in this chapter is based on factors relating to tranquillity described earlier in this section.

8.3.33 The following limitations have been identified:

- No surveys of rights of way users have been undertaken in the vicinity of the site. As agreed with SCC, additional PRow surveys were not considered necessary to support this assessment.

## 8.4 Baseline environment

### a) Current baseline

8.4.1 This section provides a description of the existing amenity and recreation resources and receptors that are relevant to the assessment of the proposed development. Recreational resources are illustrated on **Figure 8.1** of this volume.

8.4.2 No PRow are located within the site boundary. Four PRow have been identified within the 1km study area that may be affected by the proposed development. Three of these, Footpaths E-216/008/0, E-216/009/0, and E-216/002/0, are located east of the site on the opposite side of the A12. All three footpaths are short (between 240 and 560 metres (m) in length), and follow a broadly east-west alignment terminating on the A12, and are not directly connected to the wider PRow network. The fourth PRow, Footpath E-584/010/0, is located to the west of the site, following a north-south alignment between Willow Marsh Lane to the north and Yoxford to the south. The PRow is well connected to the wider PRow network.

8.4.3 A small number of other footpaths are located within the study area, but further away from the site, or in areas with more restricted views of the site. These include Footpaths E-154/008/0 and E-216/004/0 to the north; E-216/001/0 to the east; E-584/013/0 to the south-west; E-584/009/0 to the west and E-154/009/0 to the north-west. Due to the intervening distance,

landform, development, and vegetation these footpaths are scoped out of further assessment.

8.4.4 A Sustrans link to National Cycle Route 1 runs along Willow Marsh Lane and along an off-road paved cycleway and footway parallel to (west of) the A12. Cyclists travelling east on Willow Marsh Lane and then south parallel to the A12 do not need to cross our cycle on the carriageway of the A12. The section on Willow Marsh Lane passes through the northern part of the site, and would be physically affected by the proposed development.

8.4.5 There are no other amenity and recreation resources potentially impacted by the proposed development.

#### b) Future baseline

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

8.4.7 There are two relevant consented developments to the east of the site. These include:

- application DC/14/0420/OUT for an 82-bedroom hotel on the opposite side of the A12 (Main Road), east of the proposed development. The scheme was consented in 2014, and applications have been submitted in relation to reserved matters and to discharge conditions; and
- application DC/13/2933/OUT for a new village hall, creation of village green, erection of 20 houses including 6 affordable homes, access and private roads located on the street approximately 0.5km east of the site. The scheme was consented in 2013, and applications have been submitted in relation to reserved matters. The proposals include publicly accessible open space. However, the open space would be located outside the area indicated by the landscape and visual assessment as seen in **Chapter 6** of this volume, to have visibility of the proposed development.

8.4.8 Committed developments are not likely to materially alter the use of recreational and amenity resources considered within this chapter.

## 8.5 Environmental design and mitigation

8.5.1 As detailed in **Chapter 6** of **Volume 1** 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 will be implemented as part of the proposed development.

**8.5.2** The assessment of likely significant effects of the proposed development assumes that primary and tertiary mitigation measures are in place. For amenity and recreation, these measures are identified in the following sections, with a summary provided on how the measures contribute to the mitigation and management of potentially significant environmental effects.

a) **Primary mitigation**

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

**8.5.4** Some primary mitigation measures described in **Chapter 2** of this volume, and the following chapters also apply to this assessment. These measures are summarised:

- Noise and Vibration, as seen in **Chapter 4** of this volume – landscape bunds, up to 3m high, incorporated in the design of the proposed development would reduce noise levels in surrounding off-site areas during the later stages of the construction phase and during the operational phase.
- Air Quality, as seen in **Chapter 5** of this volume – landscape bunds on-site would be formed by reusing material from the site, reducing the need to transport material for off-site storage. Use of surface covering (such as seeding of earthworks, hardstanding or permeable paving for the car park) to minimise extent of exposed soils and minimise potential resuspension of dust.
- Landscape and Visual Amenity, as seen in **Chapter 6** of this volume – the use of landscape bunds and perimeter planting to reduce visibility of the proposed development, and a best practice approach to lighting to minimise light spill such as provision of demountable shielding to reduce the backward spill of light outside the site. Structures and buildings would be designed to create an unimposing appearance that harmonises with the surroundings, and with the buildings screened as far as possible in line with the **Associated Development Design Principles** (Doc Ref. 8.3) document.

- Transport, as seen in **Chapter 10 of Volume 2** of the **ES** - the northern park and ride facility at Darsham and southern park and ride facility at Wickham Market would intercept construction workforce trips and bus construction workers between the park and ride facilities and the main development site, and direct bus services would be provided to bus construction works to the main development site.
- A new three-arm roundabout would be built to the north of the existing A12/Willow Marsh Lane junction, and Willow Marsh Lane would be closed to vehicular traffic between the existing junction with the A12 and the access into the site; however, this section of Willow Marsh Lane would remain open to pedestrians and cyclists, as well as for vehicular access to and from White House Farm. This would help to safeguard the amenity of people cycling along this part of Willow Marsh Lane to access the Sustrans link to National Cycle Route 1. This new roundabout would be temporary, and would be removed following the operational phase and the land reinstated. The A12 would return to its current alignment.

b) Tertiary mitigation

- 8.5.5 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.
- 8.5.6 Some tertiary mitigation measures that are described in the previous chapters also apply to this chapter, including measures within the **Code of Construction Practice (CoCP)** (Doc Ref. 8.11) to minimise effects during the construction and removal and reinstatement phases. These include measures to minimise noise and dust generation during the construction and removal and reinstatement phases; and minimise the use of and impacts arising from lighting during all phases.
- 8.5.7 During construction, a **Construction Traffic Management Plan** (Doc Ref. 8.7), a **Construction Worker Travel Plan** (Doc Ref. 8.8) and a **Worker Code of Conduct**, found in the **Community Safety Management Plan** (Doc Ref. 8.16) would be implemented to help govern worker behaviour and reduce and manage the effects of traffic generated by the Sizewell C Project as seen in **Chapter 10 of Volume 2** of the **ES**.
- 8.5.8 Measures set out in **Chapter 4** of this volume to control noise during the construction and reinstatement and removal phases include:

- selection of quiet plant and techniques in accordance with good practice in BS5228 (Ref. 8.11) for all construction, demolition and earthwork activities;
- switching off equipment when not required;
- use of reversing alarms that ensure proper warning whilst minimising noise impacts off-site; and
- provision of training and instruction to construction site staff on methods and techniques of working to minimise off-site noise and vibration impacts.

8.5.9 Measures set out in **Chapter 5** of this volume to control dust during the construction and reinstatement and removal phases include:

- avoid direct site run-off of water or mud;
- cover, seed or fence stockpiles to prevent wind whipping;
- ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate;
- display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary; and
- develop and implement a Dust Management Plan, which may include measures to control other emissions as part of the **CoCP**.

8.5.10 Measures set out in **Chapter 6** of this volume to minimise visual impacts during the construction and reinstatement and removal phases include:

- where appropriate, daylight only construction schedules will be adopted to minimise potentially adverse lighting effects;
- minimum light levels for safe working and the minimum number of lighting elements to illuminate the work area safely will be used;
- flood lighting in areas adjacent to sensitive receptors will be avoided;
- lighting will be directed away from site boundaries. 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.

## 8.6 Assessment

### a) Introduction

8.6.1 This section presents the findings of the amenity and recreation impact assessment for the construction, operation, and removal and reinstatement of the proposed development.

8.6.2 This section identifies the amenity and recreation receptors that would be affected by the proposed development, the degree to which they would be affected, and any likely significant effects that are predicted to occur. **Section 8.7** of this chapter highlights the secondary mitigation and monitoring measures that are proposed to minimise any adverse significant effects (if required).

8.6.3 Given the nature of the proposed development, the primary and tertiary mitigation measures proposed and the assessments set out in **Chapters 4, 5 and 6** of this volume and **Chapter 10** of **Volume 2** of the **ES**, it is judged that the following indirect impacts could affect amenity and recreation receptors:

- Changes to the noise environment would be noticeable from the Sustrans link to National Cycle Route 1 during construction, operation, and the removal and reinstatement phases. Changes to the noise environment of other recreational routes would be limited due to distance, intervening vegetation and existing development, and the existing noise generated by traffic on the A12.
- Changes to air quality may be noticeable during construction, and removal and reinstatement for users of the Sustrans link to National Cycle Route 1 due to dust generation, although the potential for dust pollution would be mitigated through management of activities in accordance with the **CoCP**. Changes to the air quality experience on other recreational routes would be limited due to distance and intervening development.
- There is the potential for noticeable, localised visual impacts for users of some PRow and the Sustrans link to National Cycle Route 1. With

the exception of users of Willow Marsh Lane, these impacts are considered unlikely to affect recreational amenity.

- Traffic movements within the proposed development or on surrounding roads would be apparent for users of the PRoW that adjoin the A12 (E-216/008/0, E-216/009/0 and E-216/002/0). Traffic movement on roads outside the site would be experienced in the context of existing traffic movement on roads, and would have limited impact on recreational amenity.
- Traffic movements would be apparent for cyclists using the Sustrans link to National Cycle Route 1.
- Lighting during the construction, operation, and removal and reinstatement phases would form a noticeable change given that there is currently no lighting within the site, or along nearby stretches of Willow Marsh Lane, and the only lighting on the A12 is at its southern end, north of Darsham railway station. However, PRoWs are likely to have very little use after dark due to their unlit nature. The Sustrans link to National Cycle Route 1 along Willow Marsh Lane is likely to have some use after dark, but less than during daylight hours.

**8.6.4** The majority of amenity and recreation resources, including the PRoW within the study area, would likely experience negligible effects and are therefore not considered in further detail and have been scoped out of further assessment.

**8.6.5** Only the Sustrans link to National Cycle Route 1 along Willow Marsh Lane and parallel to the A12 is considered further in light of the potential adverse effects arising from the proposed development, and the change in character to the highway. The Sustrans link to National Cycle Route 1 on Willow Marsh Lane would cross the new access road into the proposed development. Cyclists would potentially be affected by the direct physical change to the route, and also by changes to views, air quality noise and traffic.

**i. Sensitivity of Receptors**

**8.6.6** Sustrans link to National Cycle Route 1 is judged to be of medium value (because it is a local link rather than the National Cycle Route itself), medium susceptibility (because the route is on roads, cyclists would be focused on the road and traffic, and would also appreciate the wider environment), and is therefore considered to be of medium sensitivity.

b) Construction

i. Introduction

8.6.7 The impacts during construction would arise for a period of 12 to 18 months in the early years of the Sizewell C Project. Due to the nature of construction works, which would involve different plant/machinery and types of activity in each phase, effects would vary throughout this time period. Where appropriate, consideration is given to the variable scale of impacts over the duration of construction.

8.6.8 Construction work would take place during Monday to Saturday 07:00 to 19:00 hours, with no working on Sundays or bank holidays. However, some activities may require 24 hour working and these would be notified to East Suffolk Council in advance.

8.6.9 **Chapter 10 of Volume 2 of the ES** indicates that there would be an increase in vehicle movements on the A12 during the early years of construction of the main development site; this has the potential to affect the experience of users of recreational resources adjacent to the A12.

8.6.10 The principal components of the construction phase likely to result in impacts on the amenity and recreation receptors are considered to be:

- noise and movement from the operation of machinery and vehicles including heavy goods vehicles;
- earthworks and excavation, including the clearance of vegetation, removal of soil and the formation of landscape bunds;
- construction and installation of the new roundabout on the A12, the new access road, parking areas, amenity buildings and structures, lighting, CCTV towers, barriers and signage within the site; and
- changes to Willow Marsh Lane affecting the Sustrans link to National Cycle Route 1. This includes the creation of a non-motorised section from the A12, accessed via a dropped kerb, and the construction of the new access road to the proposed development across Willow Marsh Lane, with a crossing created for the Sustrans link to National Cycle Route 1; and
- construction traffic.

## ii. Effects on amenity and recreation receptors

### Sustrans link to National Cycle Route 1

- 8.6.11 Cyclists using Willow Marsh Lane would experience greatest changes between the A12 and the new access road into the site. It is not expected that the route would be closed during construction. Users of the route would experience some disruption associated with the creation of the new access road across Willow Marsh Lane to provide vehicle access into the proposed development. A short, temporary diversion would be provided while construction work is being undertaken on the existing alignment of Willow Marsh Lane to ensure that it remains open to cyclists and pedestrians. The new access road across Willow Marsh Lane would introduce an additional junction on the cycle route, requiring users of the route to slow their speed on the approach, and potentially stop at the junction, introducing a potential delay at this location on the route. The changes to Willow Marsh Lane are shown on the detailed **Access/Rights of Way Plans** (Doc Ref. 2.4).
- 8.6.12 Cyclists would continue to use Willow Marsh Lane and the off-road cycleway parallel to the A12, and would not need to use the carriageway on the A12. Although there would be an increase in traffic on the A12 due to the Sizewell C Project this would be in the context of existing high traffic movements. Additional traffic on the A12 would have negligible effects on cyclists on Willow Marsh Lane or the Sustrans link to National Cycle Route 1 parallel to the A12.
- 8.6.13 The proposed new roundabout on the A12, new access road into the site, and the closure of Willow Marsh Lane between the new access road, and the A12 to vehicular traffic, would be implemented within the first half of the construction phase.
- 8.6.14 The existing visual environment heading north from Darsham railway station is dominated by the A12, and buildings alongside the road, with views of countryside and vegetation beyond. The visual environment from Willow Marsh Lane west of the A12 consists of views across fields above, or at gaps between, the hedgerow vegetation either side of the lane, with trees in the middle distance, and development, vegetation and traffic along the A12.
- 8.6.15 Construction of the proposed development would alter the visual environment. This would be most noticeable during construction of the road crossing of Willow Marsh Lane, which would be in direct line of sight for users of the local Sustrans link to National Cycle Route 1. Cyclists would also have views of construction traffic on the new access road after it has been

constructed. This change would be temporary and last for a period of 12-18 months.

8.6.16 Cyclists would also see construction works where the local Sustrans link to National Cycle Route 1 runs along the cycleway parallel to the A12, for a short length north of the East Suffolk line, where there are gaps in the existing roadside vegetation. This vegetation is located along, but outside, the site boundary. Planting is proposed to infill these gaps, but would not be sufficiently established during the construction phase to screen construction activity from view. They would also see construction traffic on the A12.

8.6.17 Currently, the noise environment changes from west to east along the route. Natural sounds are dominant further to the west on Willow Marsh Lane, with increasing noise from traffic on the A12 on the approach to the A12, and where it runs parallel to the A12 east of the site. Construction noise would alter the noise environment close to the site for temporary periods, but this would be in the context of existing traffic noise from the A12 and would not be substantial from an amenity and recreation perspective.

8.6.18 Some effects on air quality might arise from dust generated while the new road crossing is constructed across the eastern section of the route close to the A12 junction. This would be controlled and managed assuming a requirement for high-risk dust mitigation as a precautionary approach, as described in **Chapter 5** of this volume, and effects would be negligible from an amenity and recreation perspective.

8.6.19 These changes to the environment for users of the Sustrans link to National Cycle Route 1 would affect their recreational amenity. Overall impacts would be of small scale; short-term duration, and would affect a localised extent of the route. The impact on users would be of very low magnitude and taking into consideration the medium sensitivity of route users, would result in a minor adverse effect (**not significant**).

### iii. Inter-relationship effects

8.6.20 The amenity and recreation assessment of construction effects of the proposed development has inherently considered the impacts due to changes in views, noise, lighting, air quality and traffic on receptors. No further inter-relationship effects have been identified.

## c) Operation

## i. Introduction

8.6.21 The principal components of the operational phase likely to result in impacts on the amenity and recreation receptors are considered to be:

- noise from vehicles using the park and ride site and additional traffic on adjacent roads due to the Sizewell C Project;
- views of the park and ride site and moving vehicles; and
- lighting within the park and ride site and lights from vehicles.

8.6.22 **Volume 2, Chapter 10** of the **ES** indicates that there would be an increase in vehicle movements on the A12 during the peak years of construction of the main development site when the proposed development would be operational; this has the potential to affect the experience of users of recreational resources adjacent to the A12.

## ii. Effects on amenity and recreation receptors

## Sustrans link to a National Cycle Route 1

8.6.23 Receptors travelling along the Sustrans link to the National Cycle Route 1 would experience physical changes on Willow Marsh Lane, between the new access road and the A12. The most significant visual changes would occur along this section of route, including from lighting around the proposed new roundabout at night, and also along the part of the southern section of the cycle route parallel to the A12 north of Darsham railway station. Hedgerow planting along the site boundary in both of these locations, would help to reduce visual effects over time. Users of the route would experience some disruption associated with the introduction of the new access road across Willow Marsh Lane to provide vehicle access into the proposed development. This would introduce an additional junction on the cycle route, requiring users of the route to slow their speed on the approach and potentially stop at the junction, introducing a potential delay at this location on the route.

8.6.24 Traffic within the site would mostly be slow moving, and changes to air quality and noise during the operational phase would not be substantial from an amenity and recreation perspective.

8.6.25 Cyclists would continue to use Willow Marsh Lane and the off-road cycleway parallel to the A12, and would not need to use the carriageway on the A12. Additional traffic on the A12 would have negligible effects on cyclists on

Willow Marsh Lane and the Sustrans link to National Cycle Route 1 parallel to the A12.

- 8.6.26 Overall impacts would be of small-negligible scale; medium to long-term duration and would affect a localised extent of the Sustrans link to the National Cycle Route 1. The impact on users would be of very low magnitude, and taking into consideration the medium sensitivity of route users would result in a minor adverse effect **(not significant)**.

iii. Inter-relationship effects

- 8.6.27 The amenity and recreation assessment of effects arising from the operation of the proposed development has considered the impacts due to changes in views, noise, lighting, air quality and traffic on receptors. No further inter-relationship effects have been identified.

d) Removal and reinstatement

- 8.6.28 Once the need for the facility has ceased, the buildings and associated infrastructure would be removed in accordance with a removal and reinstatement plan. The site would be returned to agricultural use and the A12 reinstated back to its original alignment, with Willow Marsh Lane returned to its original condition.

- 8.6.29 It is anticipated that removal and reinstatement phase would follow a programme broadly the reverse of construction, and effects on recreation and amenity receptors are likely to be the same as for construction.

- 8.6.30 This includes disruption associated with traffic accessing the site, changes to the noise and air quality environment arising from on-site demolition, removal of the roundabout and realignment of A12, and potentially works to Willow Marsh Lane that may affect cycle movements. Users of Willow Marsh Lane are also likely to be adversely affected by changes to the visual environment, particularly as some planting around the roundabout and the landscape bunds are to be removed.

- 8.6.31 If the removal and reinstatement was undertaken in one phase, it would take approximately 12 months to complete. Therefore, any impacts would be short-term. A phased approach may be taken, but further detail on the timing and sequence of removal and reinstatement activities will not be known until the proposed development is operational.

- 8.6.32 However, on the basis that activities would essentially reverse the construction phase and are anticipated to be of small scale, short-term

duration and would affect a localised extent of the Sustrans link to National Cycle Route 1, the impact on users of the Sustrans link to National Cycle Route 1 would be of very low magnitude. Taking into consideration the medium sensitivity of route users this would result in a minor adverse effect (**not significant**) during the removal and reinstatement phase.

8.6.33 On completion of the removal and reinstatement phase there would be no permanent effects as the baseline conditions would have been restored.

i. **Inter-relationship effects**

8.6.34 The amenity and recreation assessment of effects arising from the removal and reinstatement phase of the proposed development has inherently considered the impacts due to changes in views, noise, lighting, air quality and traffic on receptors. No further inter-relationship effects have been identified.

## 8.7 Mitigation and monitoring

8.7.1 Where possible, mitigation measures have been proposed where a significant effect is predicted to occur. Primary and tertiary mitigation measures which have been accounted for as part of the assessment are summarised in **section 8.5** of this chapter. Where other mitigation is required to reduce or avoid a significant effect, this is referred to as secondary mitigation.

8.7.2 As the assessment has not identified any significant adverse effects, no further mitigation or monitoring measures are required to minimise effects on amenity and recreation.

## 8.8 Residual effects

8.8.1 The following tables (**Tables 8.4, 8.5 and 8.6**) present a summary of the amenity and recreation impact assessment. These tables identify the receptor/s likely to be impacted, the level of effect and, if the effect is deemed to be significant. The tables also include the mitigation proposed and the resulting residual effect.



**Table 8.4: Summary of effects for the construction phase.**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Willow Marsh Lane (Sustrans cycle link to National Cycle Route 1).	Introduction of new vehicular crossing of Willow Marsh Lane, temporary diversion; short-term impacts from physical diversion, construction noise and changes to views.	Closure of part of Willow Marsh Lane to vehicular traffic, best practice construction approach, as set out within the <b>CoCP</b> .	Minor adverse ( <b>not significant</b> ).	None required.	Minor adverse ( <b>not significant</b> ).

**Table 8.5: Summary of effects for the operational phase.**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Willow Marsh Lane (Sustrans cycle link to National Cycle Route 1).	Crosses access road; changes to views.	Closure of part of Willow Marsh Lane to vehicular traffic other than for private access to White House Farm.	Minor adverse ( <b>not significant</b> ).	None required.	Minor adverse ( <b>not significant</b> ).

**Table 8.6: Summary of effects for the removal and reinstatement phase.**

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Willow Marsh Lane (Sustrans cycle link to National Cycle Route 1).	Short-term impacts from demolition noise, and changes to views. Potential temporary diversion.	Best practice construction approach, as set out within the <b>CoCP</b> .	Minor adverse ( <b>not significant</b> ).	None required.	Minor adverse ( <b>not significant</b> ).

## References

- 8.1 Department of Energy and Climate Change (2011) Overarching National Policy Statement (NPS) for Energy (NPS EN-1)  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/47854/1938-overarching-nps-for-energy-en1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf)  
[Accessed July 2019]
- 8.2 Department of Energy and Climate Change (2011) National Policy Statement for Nuclear Power Generation (NPS EN-6)  
<https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure> [Accessed July 2019]
- 8.3 The Ministry for Housing, Communities and Local Government (MHCLG) (2019) National Planning Policy Framework  
<https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Accessed July 2019]
- 8.4 MHCLG (2019) Planning Practice Guidance – Natural Environment  
<https://www.gov.uk/guidance/natural-environment> [Accessed November 2019]
- 8.5 MHCLG (2019) Planning Practice Guidance – Noise  
<https://www.gov.uk/guidance/noise--2> [Accessed November 2019]
- 8.6 MHCLG (2014) Planning Practice Guidance – Open space, sports and recreation facilities, public rights of way and local green space  
[Accessed July 2019]
- 8.7 MHCLG (2019) Planning Practice Guidance – Light Pollution  
<https://www.gov.uk/guidance/light-pollution> [Accessed November 2019]
- 8.8 East Suffolk Council (2013) Suffolk Coastal District Council Core Strategy and Development Management Policies  
<https://www.eastsuffolk.gov.uk/planning/local-plans/suffolk-coastal-local-plan/existing-local-plan/core-strategy-and-development-management-policies/> [Accessed July 2019]
- 8.9 East Suffolk Council (2019) Suffolk Coastal District Council Final Draft Local Plan  
<https://www.eastsuffolk.gov.uk/planning/local-plans/suffolk-coastal-local-plan/local-plan-review/final-draft-local-plan/> [Accessed July 2019]
- 8.10 Suffolk County Council (2019) Suffolk Green Access Strategy DRAFT - Rights of Way Improvement Plan (ROWIP)

<https://www.suffolk.gov.uk/assets/council-and-democracy/consultations-petitions-and-elections/ROWIP-Suffolk-Green-Access-Strategy.pdf>

[Accessed July 2019]

- 8.11 British Standard BS5228-1 Noise: 2009/2014 – Code of Practice for noise and vibration control at open construction sites – Noise