



**Galloper Wind Farm Project**  
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Drafted by	Dave Morgan	
Checked by	Pete Gaches and Jon Allen	
Date/initials check	PG and JA	27.09.2011 and 13.10.11
Approved by	Dr. Martin Budd (Royal Haskoning)	
Date/initials approval	MB	14.10.2011
GWFL Approved by	Kate Harvey	
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## 29 INTER-RELATIONSHIPS

### 29.1 Introduction

29.1.1 This Chapter of the Environmental Statement (ES) considers the inter-relationships between the aspects of the environment that are likely to be affected by the construction, operation and decommissioning of the Galloper Wind Farm (GWF). The preceding technical Chapters (**Chapters 8 to 28**) have identified the potential impacts arising from the proposed GWF project in respect of specific environmental parameters. Where relevant, reference has been made to indirect and cumulative impacts as well as impact inter-relationships. This Chapter acts as the 'sign-post' (i.e. directing the reader to where inter-relationships are discussed in more detail within this ES) to these inter-relationships in order to provide easy indication of their existence and coverage.

### 29.2 Guidance and Consultation

#### Legislation, policy and guidance

29.2.1 The specific assessment requirements for inter-relationships, as detailed within the National Policy Statements (NPS), are repeated in the following paragraphs. Where any part of the NPS guidance has not been followed within this assessment, it is stated after the NPS text and a justification provided. In all other cases the assessment requirements suggested within the NPSs have been applied to this assessment.

29.2.2 Section 4.2.6 of EN-1 states that: "*The Infrastructure Planning Commission (IPC) should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place*".

29.2.3 Further advice is provided in the Rochdale Envelope Guidance Note (IPC, 2011), which states: "*The ES should not be a series of separate unrelated topic reports. The inter-relationship between aspects of the proposed development should be assessed and careful consideration should be given by the applicant to explain how inter-relationships have been assessed in order to address the environmental impacts of the proposal as a whole. It need not necessarily follow that the maximum adverse impact in terms of any one topic impact would automatically result in the maximum potential impact when a number of topic impacts are considered collectively. In addition, individual impacts may not be significant but could become significant when their inter-relationship is assessed. It will be for the applicant to demonstrate that the maximum significant adverse impacts for the project as it will be constructed have been properly assessed.*"

29.2.4 The consideration of inter-relationships is required under Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (the EIA Directive). Inter-relationships are referenced in Annex III of the EIA Directive where it states

that an ES should include: “A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.”

### 29.3 Consultation

29.3.1 The requirement for undertaking an assessment of inter-relationships was first identified by the IPC in their formal Scoping Opinion (IPC, 2010). **Table 29.1** provides detail of where inter-relationships have been raised during consultation and where they have been addressed within this Chapter.

**Table 29.1 Summary of consultation and issues relevant to inter-relationships**

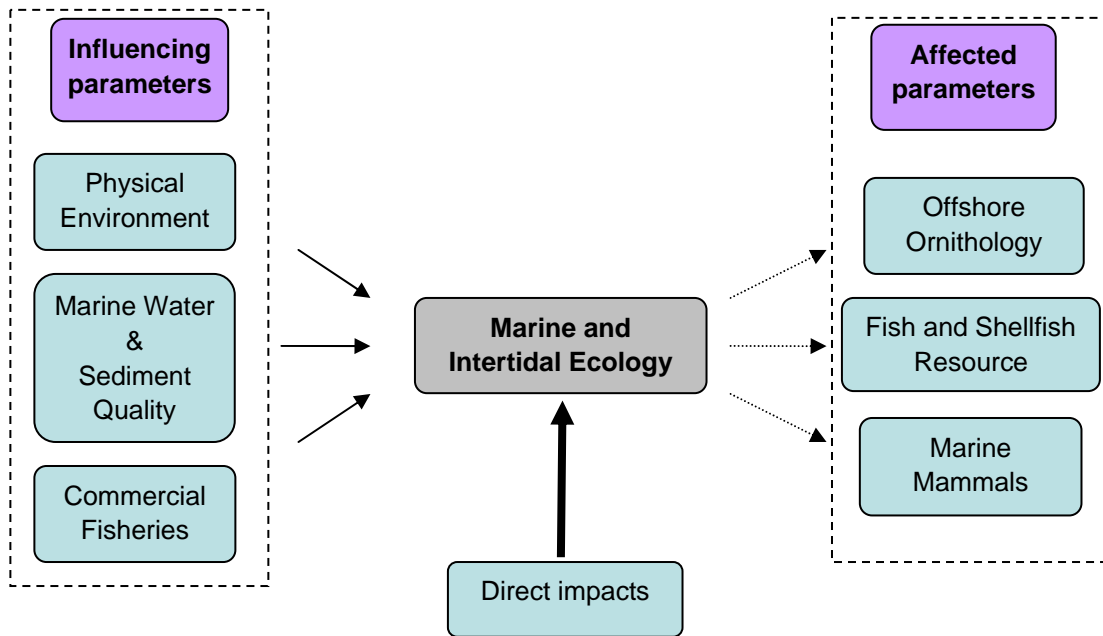
Date	Consultee	Summary of issue	Section where addressed
August 2010	IPC (Scoping Opinion)	Combined impacts should refer to multiple impacts on the same receptor. These occur where a number of separate impacts, such as noise and air quality, affect a single receptor, for example people. The inter-relationship between specialist topics is a requirement of the Regulations. The ES should not be a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the proposed development as a whole.	Section 28.4
July 2011	Royal Society for the Protection of Birds (RSPB) (Section 42)	The assessment of inter-relationships on ornithological receptors is incomplete and the approach to the assessment is questionable in a number of respects.	The inter-relationships for ornithological receptors are considered within Chapter 11 Offshore Ornithology.
July 2011	Joint Nature Conservation Committee	JNCC/NE suggest that the assessment (presented within the Preliminary Environmental Report) may require	The inter-relationships for ornithological

Date	Consultee	Summary of issue	Section where addressed
	(JNCC) / Natural England (NE) (Section 42)	amending prior to the finalisation of the ornithological impacts assessment.  This chapter does not appear to have ‘... considered the inter-relationships between the aspects of the environment likely to be affected by the construction, operation and decommissioning of the GWF project. We recommend that the potential inter-relationships between environmental receptors e.g. prey species and predators (bird/marine mammals) are presented here’.	receptors are considered within Chapter 11.

## 29.4 Methodology

- 29.4.1 The assessment methodology utilised within this ES has taken account of combined residual impacts as they relate to the identified key sensitive receptors. The assessment has identified both beneficial and adverse impacts and makes reference to the degree of impact as identified within the technical studies. The objective has been to identify where the accumulation of impacts on a single receptor, and the relationship between those impacts, may give rise to a need for additional mitigation.
- 29.4.2 When considering the potential for impacts to inter-relate it has been assumed that any residual effect determined as having no impact will not result in a significant inter-relationship when combined with other effects on receptors. However, where a series of negligible residual impacts are identified these have been considered further. This is consistent with the purpose of the EIA Regulations in the identification of significant impacts, and in keeping with IPC guidance to consider if a series of individual impacts may become significant when their inter-relationship is assessed.
- 29.4.3 To assist in the identification of potential inter-relationships, **Table 29.2** summarises the various parameters studied as part of this ES. The rows on the left (Y axis) show the primary ES parameter and the columns on the right (X axis) show the secondary ES parameter. Where a primary parameter has the potential to be influenced by a secondary parameter (i.e. an inter-relationship exists) it is identified through the use of an ‘x’.
- 29.4.4 **Figure 29.1** provides an example (for **Chapter 12 Marine and Intertidal Ecology**) of how inter-related impacts may manifest for each ES parameter.

**Figure 29.1 Identification of inter-relationships for Marine and Intertidal Ecology (as an example)**





**Table 29.2 Inter-relationships between the ES parameters**

	8 - Nature Conservation Designated Sites	9 - Physical Environment	10 - Marine and Water Sediment Quality	11 - Ornithology	12 - Marine Intertidal Ecology	13 - Fish and Shellfish Resource	14 - Marine Mammals	15 - Commercial Fisheries	16 - Shipping and Navigation	17 - Military and Civil Aviation	18 - Other Human Activities	19 - Archaeology and Cultural Heritage	20 - Seascape, Landscape and Visual Character	21 - Socio Economics	22 - Geology, Hydrogeology, Land Quality and Flood Risk	23 - Terrestrial Ecology	24 - Land Use, Tourism and Recreation	25 - Traffic and Transport	26 - Noise	27 - Air Quality	28 - Electric and magnetic fields	
9 - Physical Environment																						
10 - Marine and Water Sediment Quality		X																				
11 - Ornithology		X			X	X		X		X												
12 - Marine Intertidal Ecology		X	X					X														
13 - Fish and Shellfish Resource		X	X		X			X														
14 - Marine Mammals		X			X	X																
15 - Commercial Fisheries						X			X													

	8 - Nature Conservation Designated Sites	9 - Physical Environment	10 - Marine and Water Sediment Quality	11 - Ornithology	12 - Marine Intertidal Ecology	13 - Fish and Shellfish Resource	14 - Marine Mammals	15 - Commercial Fisheries	16 - Shipping and Navigation	17 - Military and Civil Aviation	18 - Other Human Activities	19 - Archaeology and Cultural Heritage	20 - Seascape, Landscape and Visual Character	21 - Socio Economics	22 - Geology, Hydrogeology, Land Quality and Flood Risk	23 - Terrestrial Ecology	24 - Land Use, Tourism and Recreation	25 - Traffic and Transport	26 - Noise	27 - Air Quality	28 - Electric and magnetic fields	
16 - Shipping and Navigation																						
17 - Military and Civil Aviation																						
18 - Other Human Activities									X													
19 - Archaeology and Cultural Heritage		X											X									
20 - Seascape, Landscape and Visual Character												X										
21 - Socio Economics																	X					
22 - Geology, Hydrogeology, Land Quality																						

	8 - Nature Conservation Designated Sites	9 - Physical Environment	10 - Marine and Water Sediment Quality	11 - Ornithology	12 - Marine Intertidal Ecology	13 - Fish and Shellfish Resource	14 - Marine Mammals	15 - Commercial Fisheries	16 - Shipping and Navigation	17 - Military and Civil Aviation	18 - Other Human Activities	19 - Archaeology and Cultural Heritage	20 - Seascape, Landscape and Visual Character	21 - Socio Economics	22 - Geology, Hydrogeology, Land Quality and Flood Risk	23 - Terrestrial Ecology	24 - Land Use, Tourism and Recreation	25 - Traffic and Transport	26 - Noise	27 - Air Quality	28 - Electric and magnetic fields	
and Flood Risk																						
23 - Terrestrial Ecology															X			X	X	X		
24 - Land Use, Tourism and Recreation													X				X	X	X	X		
25 - Traffic and Transport																				X		
26 - Noise																		X				
27 - Air Quality																		X				
28 - Electric and magnetic fields																						

### Chapters 9-19 and Chapter 23

- 29.4.5 **Chapters 9 to 19 and 23** are all receptor-based chapters (e.g. marine mammals and ornithology) and where there is the potential for inter-relationships these have been fully considered therein. A summary of the inter-relationships from these chapters is captured in **Section 29.5** and the reader is directed to the technical receptor based Chapter for the assessment discussion itself.
- 29.4.6 **Chapter 8 Nature Conservation Designations** is receptor led, however, the assessment undertaken has been wholly informed from other receptor led Chapters of the ES (**Chapter 9, 11, 13, 14, 20, 23**) as well as the GWF Habitats Regulations Assessment (HRA) Report. It is, therefore, considered that as part of the assessment undertaken in these Chapters, the interrelationships have been captured and sufficiently assessed and therefore **Chapter 8** does not feature further in the assessment of inter-relationships.

### Chapters 20-22 and Chapters 24-28

- 29.4.7 **Chapters 20 to 22 and 24 to 28** are all topic based Chapters (e.g. noise and air quality) which have the potential to affect the same receptor (e.g. human beings / local residents) and are considered in more detail in **Section 29.6**.
- 29.4.8 The following receptors, of specific relevance to GWF, have been identified:
- Beach users (including recreational angling / diving);
  - Other footpaths / Public Rights of Way;
  - Nearest properties:
    - Rosery Cottages;
    - Home Farm;
    - Coastguard Cottages;
    - Halfway Cottages;
    - Sizewell Village; and
  - Wider community / Leiston.
- 29.4.9 **Table 29.3** summarises the issues considered within **Chapters 20-22 and 24-28** against these human receptors and identifies where particular receptors may be subject to an inter-relationship of residual environmental impacts.

**Table 29.3 Inter-relationships between remaining ES parameters and identified human receptors**

ES Parameter / Human Receptor	Beach users	Other footpath users	Nearest properties	Wider community / Leiston
20 - Seascape, Landscape and Visual Character	X	X	X	X
21 - Socio Economics				X
22 - Geology, Hydrogeology, Land Quality and Flood Risk	X	X		
24 - Land Use, Tourism and Recreation	X	X		X
25 - Traffic and Transport		X	X	X
26 - Noise	X	X	X	
27 - Air Quality	X	X	X	
28 - Electric and Magnetic Fields	X	X	X	

29.4.10 For each of the potential inter-relationships identified within **Table 29.3**, an assessment of the residual impacts acting upon each receptor is presented.

## 29.5 Summary of findings from receptor-led chapters

29.5.1 **Chapters 9-19** and **Chapter 23** are all receptor-based chapters. Where a potential for inter-relationships has been identified these have been fully considered within each Chapter.

29.5.2 Each of the key natural and human environment parameters of relevance to the proposed scheme have been discussed in its specific technical Chapter. However, there are a variety of interactions within the study area, some being one-way interactions, others being two-way interactions and others resulting in multiple-phase interactions, which may be influenced by GWF. The following paragraphs identify the key interactions within the study area, and provide an indication of the strength of those interactions.

29.5.3 One way interactions occur when a physical or physico-chemical source (activity or influence) influences a receptor through a pathway, and the interaction only flows one way (i.e. there is no feedback to the source). The following are the one-way interactions within the ES:

- Direct impacts may occur on Marine Water and Sediment Quality (see **Chapter 10**) from accidental spillages and during the installation (and potentially removal, during decommissioning) of structures and or cables;
- Direct impacts on offshore ornithological receptors include habitat loss, direct disturbance, displacement, barrier effects and collision risk (see **Chapter 11 Offshore Ornithology**);
- Direct impacts on marine ecology are associated with physical disturbance, loss of habitat and alteration of habitat as discussed in detail in **Chapter 12**;
- Direct impacts on fish and shellfish resource are associated with noise and vibration, disturbance of habitats, loss of fish as prey resource, EMF and aggregation effects (see **Chapter 13**);
- Direct impacts on marine mammals are associated with noise and vibration (injurious and behavioural effects), disturbance from geophysical survey, collision risk, barrier effects and EMF. The significance of this is discussed in **Chapter 14**;
- Direct impacts on Commercial Fisheries are associated with disturbance, displacement of vessels, increased steaming times, damage to gear from dropped objects and vessel collision risk. The significance of the potential impacts are detailed in **Chapter 15**;
- Direct impacts on shipping and navigation are primarily associated with collision risk (ship to ship and ship to structures), re-routing of shipping, interactions with the cable route, impact on fishing vessels, impact on recreational craft, interference with marine radar and implications for Search and Rescue operations. The impacts are detailed and discussed in **Chapter 16**;
- Aggregate extraction (specifically Licence Area 498 and 507/5) has the potential to be impacted upon through disturbance to activities during construction and decommissioning and risk of interaction with the wind farm export cable during operation (see **Chapter 17**);
- Unexploded Ordnance has the potential to be directly disturbed during construction, operation and decommissioning (see **Chapter 18**);
- Direct impacts Archaeology and Cultural Heritage are associated with disturbance to statutory and local designations, disturbance to archaeological resource and historic landscaped and Impact on setting and perception of historic character. These potential impacts are discussed in detail in **Chapter 19**; and

- Direct impacts on terrestrial ecology are associated with direct disturbance of species and loss of habitat. The significance of this is discussed in **Chapter 23**.

29.5.4 Two-way interactions occur when two physical, physico-chemical or social sources (activity or influence) produce an interaction that reflects back to the other, this can occur as the result of one source altering but when it influences a receptor, that receptor then produces a physical, chemical or social influence which reflects back. Often the source of origin of the interaction cannot be determined, as the sources can be extremely closely linked. However, it is not often that the interaction is strong. The following are the key two-way interactions identified within the ES:

- The marine water and sediment quality has the potential to be affected (indirectly) by changes to the Physical Environment (see **Chapter 9**) during the operation phase of the project;
- Indirect effects on offshore ornithology resulting from inter-relationships with other receptors include loss of prey resource and changes to seabed habitats, attraction to lit structures and changes in prey resource and or roosting opportunities (see **Chapter 11**);
- The fish and shellfish resource also has the potential to be affected (indirectly) by changes to the physical environment (**Chapter 9**), effects on water quality (**Chapter 10**) and loss of prey resource / benthic habitat (**Chapters 12 and 15**). These inter-relationships are captured within **Chapter 13**;
- Marine mammals have the potential to be affected (indirectly) by loss of prey resource and associated habitat (**Chapters 9, 12 and 13**). These inter-relationships are captured within **Chapter 14**; and
- The offshore archaeology and cultural heritage resource has the potential to be affected (indirectly) by changes to the physical environment (**Chapter 9**). This interrelationship is discussed further within **Chapter 19**.

29.5.5 Multiple-phase interactions occur when a physical or physico-chemical source (activity or influence) produces an interaction that influences one receptor, which then reacts and in reacting produces a different interaction with different strengths. These multiple-phase (or indirect) interactions are often the hardest to ascertain, especially where there are multiple links in the interactive 'chain'. The following are the key multiple-phase interactions within the study area:

- The offshore physical environment has the potential to affect a number of other parameters, including conservation designated sites (**Chapter 8**), marine water and sediment quality (**Chapter**

10), offshore ornithology (**Chapter 11**), marine and intertidal ecology (**Chapter 12**), fish and shellfish resource (**Chapter 13**), marine mammals (**Chapter 14**) and archaeology and cultural heritage (**Chapter 19**) and these are discussed accordingly within the identified technical chapters;

- As detailed in **Section 11.7** of **Chapter 11**, the collision risk assessments for offshore ornithology have taken the potential interactions into account (such as the indirect consequence of a redistribution in commercial fishing activity outwith the wind farm area and the knock on effect for those species that scavenge on discards, notably gulls and gannets);
- Multi-phase interactions occur on the marine and intertidal ecology with the inter-relationships that exist with the physical environment, marine water and sediment quality and commercial fisheries. These are discussed further in **Chapter 12**;
- The inter-relationships that exist between Terrestrial Ecology with noise (**Chapter 26**), air quality impacts (**Chapter 27**) and any alteration in surface water drainage (**Chapter 22**) has the potential to have multiple interactions and these are discussed further within **Chapter 23**; and
- Commercial fisheries also has the potential to be affected (indirectly) by changes in target fish resource (**Chapter 13**) and disruption due to re-routing of existing shipping and navigation routes (**Chapter 16**). When multi-phase interactions occur, impacts are often difficult to quantify but these are discussed with the relevant technical chapters.

## 29.6 Assessment of inter-relationships (where not already captured within individual chapters)

29.6.1 As described within **Section 29.3** and **Table 29.3**, the remaining ES Chapters (**Chapters 20-22** and **24-28**) all have potential inter-relationships that are related to human receptors. **Table 29.6** presents a summary of the residual impacts reported within those chapters, upon human receptors.

### *Human receptors summary*

**Table 29.6 Residual impacts to human receptors**

Aspect	Development phase		
	Construction	Operation	Decommissioning
20 - Seascape, Landscape and Visual Character	Negligible to major adverse	Negligible to major-moderate adverse	Negligible



	Development phase		
Aspect	Construction	Operation	Decommissioning
21 – Socio-economics	Negligible (potentially beneficial)	Negligible (potentially beneficial)	Negligible (potentially beneficial)
22 - Geology, Hydrogeology, Land Quality and Flood Risk	No impact	No impact	No impact
25 - Land Use, Tourism and Recreation	Negligible	No impact	No impact
26 – Traffic and Transport	Negligible to minor adverse	No impact	Negligible
27 – Noise	Negligible	Negligible	No impact
28 - Air Quality	Negligible	No impact	Negligible
29 – Electric and Magnetic Fields	No impact	No impact	No impact

Greyed out boxes indicate areas where there is no adverse impact and therefore inter-relationships are not anticipated

- 29.6.2 The following sections include a summary table for each of the identified human receptors and potential inter-relationships presented in **Table 29.3**. Each summary table captures those residual impacts identified in **Table 29.6** where there is the potential for an inter-relationship (i.e. where no impact has been identified to human receptors these are not discussed further).

### Beach users

- 29.6.3 **Table 29.7** identifies the residual impacts presented within **Table 29.6** that may affect beach users.

**Table 29.7 Residual impacts for beach users**

	Development phase		
Aspect	Construction	Operation	Decommissioning
21 - Seascape, Landscape and Visual Character	Negligible to major adverse	Negligible to major-moderate adverse	Negligible
25 - Land Use, Tourism and Recreation	Negligible	No impact	No impact

	Development phase		
Aspect	Construction	Operation	Decommissioning
27 – Noise	Negligible	Negligible	No impact
28 - Air Quality	Negligible	No impact	Negligible

Greyed out boxes indicate areas where inter-relationships are not anticipated

### Construction

- 29.6.4 Impacts to people using the beach will be limited to the cable laying exercise, which will be relatively short-term. (a 5 month window within the overall construction period). Access along the beach will be maintained and the negligible impact associated with land-use, tourism and recreation represents the time required for vehicles and plant to access the beach compound from Sizewell Gap and may require a crossing control point to ensure that people using the beach are not at risk when these vehicles require access. This represents a potential delay of minutes to beach users and is not considered to be of significance with regard to a potential inter-relationship.
- 29.6.5 Works on the beach are not expected to generate significant fugitive dust, given that excavation is proposed within shingle around Mean High Water Springs (MHWS). As such, air quality impacts for beach users are not considered to be significant.
- 29.6.6 Noise impacts will be limited to the 5 month window during the cable land fall and directional drilling works and combined with the visual intrusion of the works represent a significant impact upon the amenity value of the beach area. As such, a **short-term inter-related impact** upon beach users is predicted during construction.

### Operation

- 29.6.7 Although noise is identified as a negligible residual impact within **Table 29.6** this actually relates to noise associated with the substation. No noise impacts are predicted for the beach area during the operation of GWF. As such, there are **no inter-related impacts** predicted to beach users during the operation of GWF

### Decommissioning

- 29.6.8 Although air is identified as a negligible residual impact within **Table 29.6** this actually relates to air quality impacts associated with the substation site, as the cables through the beach area are expected to remain in situ. As such, there are **no inter-related impacts** predicted to beach users during the decommissioning of GWF.

### Other footpath users

- 29.6.9 **Table 29.8** identifies the residual impacts presented within **Table 29.6** that may affect other footpath users.

**Table 29.8 Residual impacts for other footpath users**

Aspect	Development phase		
	Construction	Operation	Decommissioning
21 - Seascape, Landscape and Visual Character	Negligible to major adverse	Negligible to major-moderate adverse	Negligible
25 - Land Use, Tourism and Recreation	Negligible	No impact	No impact
26 – Traffic and Transport	Negligible to minor adverse	No impact	Negligible
27 – Noise	Negligible	Negligible	No impact
28 - Air Quality	Negligible	No impact	Negligible

Greyed out boxes indicate areas where inter-relationships are not anticipated

### *Construction*

- 29.6.10 The other footpaths potentially affected as a result of the GWF construction (excluding coastal footpaths that were captured in the ‘beach users’ receptor) are the bridleway (Sandy Lane); Sizewell Gap itself and Sandlings Walk.
- 29.6.11 Traffic impacts relate to the potential for pedestrian severance along Sizewell Gap and both Sandlings Walk and Sandy Lane connect to Sizewell Gap. The minor impact represents the peak construction period associated with continuous concrete pours and accounts for only two days in the overall construction programme. Outside of this the remaining residual traffic impacts are considered to be negligible and more representative of those occurring throughout the construction phase.
- 29.6.12 Noise, air quality and traffic residual impacts are assessed as negligible and are considered to be fully mitigated through the measures proposed in each Chapter. However, combined with the visual intrusion of the works there is the potential for these to inter-relate and further reduce the amenity value of the area. As such, a **short-term inter-related impact** upon other footpath users is predicted during construction.

### *Operation*

- 29.6.13 Noise impacts during operation are based on night time noise levels of the operating substation and are assessed as negligible. During the day, when background noise is significantly higher, there are not assessed to be any operational noise impacts. Given that noise impacts would be experienced at night and visual impacts would only be experienced during daylight hours there are **no inter-related impacts** predicted to other footpath users during the operation of GWF.

### Decommissioning

- 29.6.14 Views to the substation during decommissioning will be very limited due to the maturation of the proposed woodland planting. This extensive area of woodland will also serve to completely separate users of the nearest footpath (Sandy Lane) from potential air quality impacts. As such, there are **no inter-related impacts** predicted to other footpath users during the decommissioning of GWF

### Nearest properties

- 29.6.15 **Table 29.8** identifies the residual impacts presented within **Table 29.6** that may affect the nearest properties to GWF.

**Table 29.8 Residual impacts for nearest properties**

Aspect	Development phase		
	Construction	Operation	Decommissioning
21 - Seascape, Landscape and Visual Character	Negligible to major adverse	Negligible to major-moderate adverse	Negligible
26 – Traffic and Transport	Negligible to minor adverse	No impact	Negligible
27 – Noise	Negligible	Negligible	No impact
28 - Air Quality	Negligible	No impact	Negligible

Greyed out boxes indicate areas where inter-relationships are not anticipated

### Construction

- 29.6.16 Noise, air quality and traffic residual impacts are assessed as negligible and are considered to be fully mitigated through the measures proposed in each Chapter. However, combined with the visual intrusion of the works there is the potential for these to inter-relate and further reduce the amenity value of the area. As such, a **short-term inter-related impact** upon the nearest properties is predicted during construction.

### Operation

- 29.6.17 Noise impacts during operation are based on night time noise levels and are assessed as negligible. During the day, when background noise is significantly higher, there are not assessed to be any operational noise impacts. As such, there are **no inter-related impacts** predicted to the nearest properties during the operation of GWF.

### Decommissioning

- 29.6.18 Views to the substation during decommissioning will be very limited due to the maturation of the proposed woodland planting. This extensive area of woodland will also serve to completely separate the nearest properties from

potential air quality impacts. As such, there are **no inter-related impacts** predicted to the nearest properties during the decommissioning of GWF

### Wider community / Leiston

29.6.19 **Table 29.9** identifies the residual impacts presented within **Table 29.6** that may affect the wider community, such as people living in Leiston.

**Table 29.9 Residual impacts for the wider community / Leiston**

Aspect	Development phase		
	Construction	Operation	Decommissioning
21 - Seascape, Landscape and Visual Character	Negligible to major adverse	Negligible to major-moderate adverse	Negligible
25 - Land Use, Tourism and Recreation	Negligible	No impact	No impact
26 – Traffic and Transport	Negligible to minor adverse	No impact	Negligible

Greyed out boxes indicate areas where inter-relationships are not anticipated

### Construction

29.6.20 The construction of GWF will not be visible beyond approximately 1km from the site and therefore there are not considered to be any landscape impacts on the wider community.

29.6.21 Land use, tourism and recreation impacts within the wider community are limited to negligible residual impacts upon tourism related to increased congestion on the road network affecting visitors to the area. Traffic impacts relate to the potential for pedestrian severance along the proposed construction vehicle route. These are considered to be different receptors. As such, **no inter-related impacts** upon the wider community are predicted.

### Operation

29.6.22 Only one aspect has been identified for operation. As such, there are **no inter-related impacts**.

### Decommissioning

29.6.23 The decommissioning of GWF will not be visible beyond approximately 1km from the site and therefore there are not considered to be any landscape impacts on the wider community. As such, there are **no inter-related impacts** predicted upon the wider community during the decommissioning of GWF

## 29.7 Summary

- 29.7.1 This Chapter of the ES has ‘sign-posted’ the inter-relationships between the aspects of the environment likely to be affected by the construction, operation and decommissioning of the GWF project. The preceding technical Chapters (**Chapters 8 to 28**) have identified the potential impacts arising from the scheme within the specific environmental aspects, which have then been assessed to identify where there is potential for inter-relationships between these impacts and key receptors.
- 29.7.2 For onshore human receptors potential inter-relationships have been considered within this Chapter. During construction it has been identified that there is the potential for inter-related impacts upon:
- Beach users (visual disturbance combined with construction noise associated with the cable landfall and HDD operations);
  - Other footpath users (visual disturbance, construction noise, air quality and increased traffic); and
  - Nearest properties (visual disturbance, construction noise, air quality and increased traffic)
- 29.7.3 No inter-related impacts have been identified for onshore human receptors during the operation and decommissioning of GWF.

## 29.8 References

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