



**POWER
FOR GOOD**

Chapter 18: Summary

Preliminary Environmental Information Report

Volume 1

Steeple Renewables Project

Land at Sturton le Steeple, Nottinghamshire

18. Summary and Residual Effects

18.1 Introduction

18.2 This chapter of the PEIR provides a summary of the various technical assessments which have been undertaken as part of the Environmental Impact Assessment (EIA) process.

18.3 The likely residual effects pertaining to the Proposed Development are set out. The residual effects are defined as those effects that remain following the implementation of mitigation measures. Residual effects and mitigation measures are discussed in full in the relevant technical chapters of this PEIR (Chapters 6 to 17).

18.4 The assessment of effects are preliminary and likely to be revised in the ES for the DCO application as further clarity of the potential environmental effects as a result of the Proposed Development will be gained as the EIA process progresses alongside the development of the project design.

18.5 Each technical chapter contains detailed consideration of both the beneficial and adverse residual effects identified as likely to arise from the Proposed Development. The criteria applied to define the significance of residual effects are outlined within Chapter 2: EIA Methodology and Public Consultation of this PEIR, with further detail provided within the individual technical chapters

18.6 The residual effects listed within the technical chapters of this PEIR (Chapters 6 to 17) are described with reference to the scale of effect (i.e., moderate or major) and whether this is significant or not, and the nature of the effect (i.e., adverse, negligible or beneficial). Residual effects that are significant are identified in bold a rating of ‘major’ or ‘moderate’ are considered as significant and are identified in this summary chapter.

18.7 The design of the Proposed Development is an iterative process and will continue to develop with consultation with statutory and non-statutory consultees. The final design parameters will be considered in detail by technical chapter authors and the results of the assessments will be reported in the individual topic chapters of the ES.

18.8 Summary of Residual Effects

18.8.1 A summary of the identified significant residual effects for each topic are presented in Table 18.1 below. A description of the effect on the resource or receptor, initial

- significance of effect, proposed mitigation measure(s) and remaining residual effect with mitigation measure(s) implemented is outlined in Table 18.1.
- 18.8.2 Prior to the implementation of mitigation measures, significant adverse effects are anticipated in relation to the following disciplines:
- Chapter 6: Landscape and Visual Impact and Residential Amenity;
 - Chapter 7: Ecology and Biodiversity (receptor specific – see **Table 18.1**);
 - Chapter 11: Noise and Vibration;
 - Chapter 15: Land Use and Agriculture; and
 - Chapter 16 Glint and Glare.
- 18.8.3 Prior to the implementation of the proposed mitigation measures, significant adverse effects are not anticipated in relation to the following topics, and these are therefore not discussed further in this chapter:
- Chapter 8: Hydrology, Hydrogeology, Flood Risk and Drainage;
 - Chapter 9: Cultural Heritage
 - Chapter 10: Socioeconomics;
 - Chapter 12: Climate Change;
 - Chapter 13: Transport and Access; and
 - Chapter 14: Air Quality; and
 - Chapter 17: Miscellaneous Issues.

18.9 Conclusions

18.10 The PEIR explains the interim findings of the EIA process that has been undertaken for the Proposed Development.

18.11 A number of environmental impact avoidance, design and mitigation measures have been identified to mitigate and control environmental effects during construction, operation (including maintenance) and decommissioning of the Proposed Development. It is proposed that these will be secured through appropriate requirements and other controls within the DCO application, should this be granted.

Feedback from the formal consultation process will be taken into account when preparing the DCO application and in undertaking the EIA process. Assessment work will continue and progress for the submission of the ES to accompany the DCO application. It is expected with further assessment work most of the anticipated significant effects in the PEIR will be mitigated for and are likely to be not significant following further assessment work. The ES will present the final findings and conclusions associated with the EIA process, based on the proposed layout and design.

Table 18.1: Summary of Significant Effects, Mitigation Measures and Residual Effects of the Proposed Development

Receptor/ Environment of Effect	Receiving Development	Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
Chapter 6: Landscape and Visual Impact and Residential Amenity					
'Mid Notts Farmlands' and 'Trent Washlands' Character Areas		Construction, operation, and decommissioning	Major/Moderate (for a highly localised area only)	Outline Landscape Strategy Plan; to be confirmed following the final layout of the Proposed Development.	To be confirmed in the subsequent ES chapter
Landscape Character of the Site			Major / Moderate (for a highly localised area only)		
Residential Receptors			None to Major/Moderate (for a small number only, as a predicted worst-case scenario)		
Users of publicly accessible bridleways and footpaths			None to Major (for a small number only, as a predicted worst-case scenario)		
Users of the Transport Network			None to Major/Moderate (for a small number only, as a predicted worst-case scenario)		
Chapter 7: Ecology and Biodiversity					
Non-statutory designated sites		Construction (and decommissioning)	Significant adverse at the County Level	Measures for pollution prevention, dust suppression,	Significant beneficial at the level of the Site.

Receptor/ Environment of Effect	Receiving	Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
				soil erosion and run off, facilitated via the CEMP.	
Habitats		Construction (and decommissioning)	Significant adverse at the Site level	Wildflower seeding, replacement of lost hedgerow (to facilitate construction accesses), soil compaction avoidance measures, and measures for pollution prevention and dust management (facilitated via the CEMP).	Significant beneficial at the level of the Site.
Breeding Birds General Assemblage		Construction (and decommissioning)	Significant adverse at the Site level	Clearance of the Site to be avoided during bird nesting season. Any habitat clearance being undertaken on the Site during nesting season would only be done so following the confirmation of the absence of birds by a suitably experienced ecologist. These measures would be formalised via the CEMP.	Neutral

Receptor/ Environment of Effect	Receiving Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
Skylark	Construction (and decommissioning)	Significant adverse at the District level.	A draft Skylark mitigation strategy has been prepared (see Appendix 7.13), which shows further details and the locations of proposed mitigation measures at the Site.	Significant adverse at the local level.
Barn Owl	Construction (and decommissioning)	Significant adverse at the Site level	Sensitive timing of construction works near rest / roost locations outside of the main barn nesting period.	Significant beneficial at the Local level.
	Operation		Habitat creation forming part of the Proposed Development, increasing the number of prey items. Prior to the commencement of works that could give rise to disturbance impacts on barn owls, the features, should be inspected by a barn owl-licensed ecologist to ensure that no nesting behaviour, or dependant young are present; should they be present, the risk	

Receptor/ Environment of Effect	Receiving Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
			to barn owls, and the need for further mitigation, should be reviewed by a suitably experienced ecologist. Barn owl nest boxes will be installed on retained mature trees around the Site in order to provide enhanced nesting opportunities.	
Wintering Birds – Assemblage	Construction (and decommissioning)	Significant at the Site level	Habitat enhancement within the Eastern and Western Biodiversity mitigation areas.	Neutral
Bats	Construction (and decommissioning)	Significant at the Site level	Habitat creation associated with the Proposed Development. Bat roost boxes will be installed on retained mature trees at the Site to provide enhanced roosting opportunities.	Neutral
	Operational	Significant at the Site level		Neutral

Receptor/ Environment of Effect	Receiving Development	Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
				Where artificial lighting is required, the lighting scheme for the Proposed Development would be designed such that new bat roosting features are not directly illuminated and that retained on and off-Site bat foraging habitat remains sufficiently dark.	
Water Vole (if present)	Construction (and decommissioning)		Significant at the level of the Site	An update check for water vole presence will be undertaken in advance of certain construction works commencing near to watercourses to determine any presence. Appropriate mitigation measures (if required) would be implemented to avoid the potential for significant effects.	Neutral
Great Crested Newt	Construction (and decommissioning)		Significant at the level of the Site.	The extent and approach to mitigation for this species is still	To be confirmed in the subsequent ES.

Receptor/ Environment of Effect	Receiving Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
			to be determined. As the design of the Proposed Development progresses, the approach to mitigation will be presented in the subsequent ES.	
Aquatic Invertebrates	Construction (and decommissioning)	Significant at the County level	Pollution prevention and soil erosion and runoff measures will be set out in the CEMP, which will be implemented on the Site prior to any construction works taking place. Any further mitigation measures will be set out in the subsequent ES.	Beneficial – albeit not significant.
Reptiles (if present)	Construction (and decommissioning)	Significant at the Site level (if present)	Sensitive timing of works and progressive removal of any vegetation. Woody material felled during hedgerow section removal (if required) will be retrained and used to create log / brash piles	Neutral / Beneficial albeit not significant.

Receptor/ Environment of Effect	Receiving Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
			within habitat buffers comprising part of the Proposed Development.	
Fish	Construction (and decommissioning)	Significant at the Local level	Implementation of standard measures for pollution prevention and soil erosion and run-off, detailed within a CEMP and implemented on the Site prior to construction works taking place.	Neutral
Fish	Operation	Significant at the Site level	Opportunities for further aquatic / wetland habitats suitable for fish are being considered as part of the evolving design of the Proposed Development. Further detail will be set out in the subsequent ES.	Potentially beneficial albeit not significant
SPI Animals	Construction (and decommissioning)	Significant at the Site level	The installation of mammal gaps in security fencing, precautionary methods of habitat clearance, escape	Neutral

Receptor/ Environment of Effect	Receiving Development	Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
				measures from excavations and pollution control, facilitated via the CEMP.	
Chapter 11: Noise and Vibration					
Residences		Construction	Major / Moderate Adverse	Best practicable means, enhanced mitigation where necessary and via a CEMP.	Minor / Moderate Adverse
PROWs		Construction	Major / Moderate Adverse		Minor / Moderate Adverse
Chapter 15: Land Use and Agriculture					
BMV Land		Operation	Major Adverse (for the lifetime of the Proposed Development)	Outline Soil Resource Management Plan. Land is to be taken out of agricultural rotation for the duration of the Proposed Development.	Major Adverse (for the lifetime of the Proposed Development). Further assessment will follow within the ES when a detailed layout is available to assess.
Chapter 16: Glint and Glare					
Users of Local Roads (i.e., Main Street, Leverton Road and Wheatley Road) and Regional Roads (200m section of A156 / Gainsborough Road)		Operation	Moderate Adverse	The retention of and appropriate management of existing vegetation around the Site (where feasible), and provision of screening (vegetation) along the	Negligible

Receptor/ Environment of Effect	Receiving Phase of the Proposed Development	Significance of Effect	Mitigation	Residual Effect
			boundary of the Site to obstruct views of potentially reflecting panels.	
Aviation (West Burton Airfield, Grove Farm Airfield, and Forward Farm Airfield)	Operation	Moderate Adverse	The Applicant has begun to engage with the relevant stakeholders to identify mitigation measures (if required)	Any mitigation measures (if required) would ensure a satisfactory level of protection and be such that any residual effects would not be significant.