

Tillbridge Solar

PEI Report Volume I Chapter 18: Summary of Significant Environmental Effects
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18. Summary of Significant Environmental Effects

18.1 Introduction

- 18.1.1 This chapter of this Preliminary Environmental Information (PEI) Report summarises the significant residual effects of the Scheme.
- 18.1.2 Each technical chapter contains detailed consideration of both the beneficial and adverse effects identified as likely to arise from the Scheme. The criteria applied to define the significance of effects are defined within **PEI Report Volume I Chapter 5: EIA Methodology**, with further detail provided within the individual technical chapters. Where technical chapters have deviated from this standard methodology, this is explained in the respective chapters and justification for the deviation provided (for example to align with industry-standard guidance for that discipline).
- 18.1.3 The preliminary Environmental Impact Assessment (EIA) for the Scheme has been undertaken in parallel with the design process and development of the embedded and additional mitigation identified within **PEI Report Volume I: Chapters 6-16**. A number of measures have been embedded within the design of the Scheme to mitigate potential adverse environmental effects.
- 18.1.4 Residual effects are defined as those effects that remain following the implementation of mitigation measures.

18.2 Summary of Significant Effects

- 18.2.1 A summary of the identified significant residual effects (i.e. moderate and major (adverse and beneficial) effects) for each topic is presented in Table 18-1 for the construction phase, Table 18-2 the operational phase, and Table 18-3 for the decommissioning phase.
- 18.2.2 The conclusions are based on preliminary information available at the time of preparing the PEI Report. In some cases, the assessment is necessarily conservative at this stage and may therefore overestimate the impact and identify significant effects where none may occur as a result of the Scheme (i.e. provide for the 'worst-case' scenario in terms of potential effects). Some assessments may be revised for the ES that will be prepared to accompany the Development Consent Order (DCO) application in light of further baseline information or in response to design changes and consultation feedback.

Table 18-1: Significant Residual Effects during the Construction Phase

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<i>Air Quality</i>			
No significant residual effects on Air Quality are predicted during construction of the Scheme.			
<i>Climate change</i>			
No significant residual effects on Climate Change are predicted during construction of the Scheme.			
<i>Cultural Heritage</i>			
No significant residual effects on Cultural Heritage are predicted during construction of the Scheme.			
<i>Ecology and Nature Conservation</i>			
Temporary loss of hedgerow habitat through construction of the Scheme.	Up to medium	Up to medium	Up to Moderate Adverse
Temporary loss of Skylark habitat through construction of the Scheme.	Medium	Up to high	Up to Moderate Adverse
<i>Water Environment</i>			
Crossing of watercourses within the Principal Site (Eau, Fillingham Beck and River Till) by access tracks using culvert construction. There will be temporary impacts on the hydromorphology of watercourses from open-cut watercourse crossings or temporary vehicle access as may be required.	High	Low	Moderate Adverse
Crossing of watercourses along the Cable Route Corridor (WFD channel features (Seymoor Drain, Marton Drain, Skellingthorpe Main Drain, Trib of Till, Till (Witham) and Fillingham Beck) by access tracks using culvert construction.	High	Low	Moderate Adverse

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<p>There will be temporary impacts on the hydromorphology of watercourses from open-cut watercourse crossings or temporary vehicle access as may be required.</p>			
Human Health			
<p>No significant residual effects on Human Health are predicted during construction of the Scheme.</p>			
Landscape and Visual Amenity			
<p>Temporary impact on the setting of Local Landscape Character Areas (LLCAs) during construction period at the Principal Site. Effects on the following LLCAs: LLCA 2B: Lincoln Cliff – High Harpswell LLCA 3: Till Vale – Open Low Farmland</p>	Low to High	Low to High	Moderate Adverse
<p>Temporary impact on viewpoints during the construction period at the Principal Site. Effects on the following Representative Viewpoints (VP):</p> <ul style="list-style-type: none"> • VP1 Access track to Harpswell Grange, off A631 • VP2a Common Lane, east of Hermitage Low Farm (looking east) • VP2b Common Lane, east of Hermitage Low Farm (looking west) • VP4 B1398 Middle Street, above Harpswell • VP7 B1398 Middle Street, Glentworth Cliff • VP8 B1398 Middle Street, above Fillingham • VP9 Kexby Road, west of Glentworth Grange: junction with bridleway Glw/85/1 • VP13 Public footpath (Hems/787/82), Millfield, Hemswell 	Medium to High	Low to High	Moderate to Major Adverse

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
Temporary impact on visual amenity during the construction period at the Cable Route Corridor. Effects on recreational receptors on Cottam Road and Floss Lane, Cottam.	High	Low	Moderate Adverse
<i>Noise and Vibration</i>			
No significant residual effects on Noise and Vibration are predicted during construction of the Scheme.			
<i>Socio-economics and Land Use</i>			
No significant residual effects on Socio-economics and Land Use are predicted during construction of the Scheme.			
<i>Transport and Access</i>			
No significant residual effects on Transport and Access are predicted during construction of the Scheme.			
<i>Other Environmental Topics</i>			
No significant residual effects on Other Environmental Topics are predicted during construction of the Scheme.			

Table 18-2: Significant Residual Effects during the Operational Phase

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<i>Air Quality</i>			
No significant residual effects on Air Quality are predicted during operation of the Scheme.			
<i>Climate change</i>			
In accordance with the Institute of Environmental Management and Assessment (IEMA) significance criteria the Scheme causes GHG emissions to be avoided from the atmosphere. The Scheme is therefore anticipated to have a major beneficial (significant) effect on the climate.			Major Beneficial
<i>Cultural Heritage</i>			
Change of setting and alteration of views for Harpswell Hall (NHLE 1019068) scheduled monument	High	Low	Moderate adverse
Change of setting and alteration of views Church of St Chad, Grade I listed (NHLE 1309029)	High	Low	Moderate adverse
<i>Ecology and Nature Conservation</i>			
No significant residual effects on Ecology and Nature Conservation are predicted during operation of the Scheme.			
<i>Water Environment</i>			
No significant residual effects on Water Environment are predicted during operation of the Scheme.			
<i>Human Health</i>			
No significant residual effects on Human Health are predicted during operation of the Scheme.			
<i>Landscape and Visual Amenity</i>			

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<p>Long term impact on the setting of LLCAs during operation period at the Principal Site. Effects on the following LLCAs:</p> <ul style="list-style-type: none"> • LLCA 2B: Lincoln Cliff – Harpswell • LLCA 3A: Till Vale – Open Farmland 	Low to High	Low to High	Moderate Adverse
<p>Long term impact on viewpoints during the operation period at the Principal Site. Effects on the following VP:</p> <ul style="list-style-type: none"> • VP1 Access track to Harpswell Grange, off A631 • VP2a Common Lane, east of Hermitage Low Farm (looking east) • VP2b Common Lane, east of Hermitage Low Farm (looking west) • VP3 Local Green Space, Harpswell Hall Farm • VP4 B1398 Middle Street, above Harpswell • VP7 B1398 Middle Street, Glentworth Cliff • VP9 Kexby Road, west of Glentworth Grange: junction with bridleway Gltw/85/1 • VP13 Public footpath (Hems/787/82), Millfield, Hemswell 	Medium to High	Low to High	Moderate to Major Adverse
<p>Long term impact on visual amenity during the operation period at the Cable Route Corridor. Effects on recreational receptors on Cottam Road and Floss Lane, Cottam.</p>	High	Low	Moderate Adverse

Noise and Vibration

No significant residual effects on Noise and Vibration are predicted during operation of the Scheme.

Socio-economics and Land Use

No significant residual effects on Socio-economics and Land Use are predicted during operation of the Scheme.

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<i>Transport and Access</i>			
No significant residual effects on Transport and Access are predicted during operation of the Scheme.			
<i>Other Environmental Topics</i>			
No significant residual effects on Other Environmental Topics are predicted during operation of the Scheme.			

Table 18-3 Significant Residual Effects during the Decommissioning Phase

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<i>Air Quality</i>			
No significant residual effects on Air Quality are predicted during decommissioning of the Scheme.			
<i>Climate change</i>			
No significant residual effects on Climate Change are predicted during decommissioning of the Scheme.			
<i>Cultural Heritage</i>			
No significant residual effects on Cultural Heritage are predicted during decommissioning of the Scheme.			
<i>Ecology and Nature Conservation</i>			
No significant residual effects on Ecology and Nature Conservation are predicted during decommissioning of the Scheme.			
<i>Water Environment</i>			
<p>Crossing of watercourses within the Principal Site (Eau, Fillingham Beck and River Till) by access tracks using culvert construction.</p> <p>There will be temporary impacts on the hydromorphology of watercourses from open-cut watercourse crossings or temporary vehicle access as may be required.</p>	High	Low	Moderate Adverse
<p>Crossing of watercourses along the Cable Route Corridor (WFD channel features (Seymoor Drain, Marton Drain, Skellingthorpe Main Drain, Trib of Till, Till (Witham) and Fillingham Beck) by access tracks using culvert construction.</p> <p>There will be temporary impacts on the hydromorphology of watercourses from open-cut watercourse crossings or temporary vehicle access as may be required.</p>	High	Low	Moderate Adverse

Description of resource/receptor and effect	Sensitivity (Value)	Magnitude of Impact	Residual Effect
<i>Human Health</i>			
No significant residual effects on Human Health are predicted during decommissioning of the Scheme.			
<i>Landscape and Visual Amenity</i>			
No significant residual effects on Landscape and Visual Amenity are predicted during decommissioning of the Scheme.			
<i>Noise and Vibration</i>			
No significant residual effects on Noise and Vibration are predicted during decommissioning of the Scheme.			
<i>Socio-economics and Land Use</i>			
No significant residual effects on Socio-economics and Land Use are predicted during decommissioning of the Scheme.			
<i>Transport and Access</i>			
No significant residual effects on Transport and Access are predicted during decommissioning of the Scheme.			
<i>Other Environmental Topics</i>			
No significant residual effects on Other Environmental Topics are predicted during decommissioning of the Scheme.			