



HELIOS RENEWABLE
ENERGY
PROJECT

Preliminary Environmental Information Report

Volume 2: Main Text and Figures

Chapter 13: Socio-Economics

October 2023

13. Socio-Economics

13.1. Introduction

13.1.1. This chapter of the PEIR reports on the preliminary assessment of the likely significant effects of the Proposed Development on the environment with respect to socio-economics that has been undertaken.

13.1.2. The following Figures support this chapter:

- Figure 13.1: Local and Wider Study Area; and
- Figure 13.2: Non-Domestic Rateable Properties in the Local Study Area.

13.2. Planning Policy Context

National Planning Policy

National Policy Statement (NPS) for Energy (EN-1)

13.2.1. The Overarching National Policy Statement for Energy (EN-1) (July 2011)¹ ('NPS EN-1') and the more recently published Revised (Draft) Overarching NPS for Energy (EN-1) (March 2023)² ('Revised (Draft) NPS EN-1') recognises that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels, which may include:

- *'The creation of jobs and training opportunities...;*
- *The contribution to the development of low-carbon industries at the local and regional level as well as nationally;*
- *The provision of additional local services and improvements to local*

¹ Department of Energy & Climate Change (July 2011) Overarching National Policy Statement for Energy (EN-1), [Available at 1938-overarching-nps-for-energy-en1.pdf (publishing.service.gov.uk)https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015233/en-1-draft-for-consultation.pdf]. Accessed June 2023.

² Department for Energy Security & Net Zero (March 2023) Revised (Draft) Overarching National Policy Statement for Energy (EN-1), [Available at EN-1 Overarching National Policy Statement for Energy (publishing.service.gov.uk)]. Accessed June 2023.

infrastructure, including the provision of educational and visitor facilities;

- *Any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains;*
- *Effects on tourism; and*
- *The impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development.'*

13.2.2. The socio-economic impacts assessed within this chapter meet the requirements of NPS EN-1 and the Revised (Draft) NPS EN-1.

13.2.3. Paragraph 5.13.5 of the Revised (Draft) NPS EN-1 states that '*Applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies.*' This chapter outlines baseline socio-economic conditions for an identified local and wider study area (defined later in this chapter) and relates the assessment to local planning policies.

13.2.4. Paragraph 5.13.6 recognises that '*socio-economic impacts may be linked to other impacts, for example visual impacts*' which may have an impact on tourism and local businesses. This chapter cross-references the assessments presented in PEIR Chapters 7, 10 and 11 that relate to socio-economic receptors.

National Planning Policy Framework ('NPPF')

13.2.5. The NPPF (July 2021)³ is underpinned by the principle of sustainable development, with three overarching objectives: economic, social and environmental.

³ Ministry of Housing, Communities & Local Government (July 2021) National Planning Policy Framework. [Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf]

- 13.2.6. The economic objective seeks *‘to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure’* (paragraph 8).
- 13.2.7. The social objective seeks to *‘support strong, vibrant and healthy communities’ and ‘by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being’* (paragraph 8).
- 13.2.8. Paragraph 38 of the NPPF requires planning authorities to work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Furthermore, paragraph 81 states that:
- ‘Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential’.*
- 13.2.9. Specifically in relation to the rural economy, paragraph 84(b) of the NPPF states that planning policies and decisions should enable *‘the development and diversification of agricultural and other land-based rural businesses.’*

Local Planning Policy

- 13.2.10. Although North Yorkshire Council (‘NYC’) is now the administrative authority in which the Site is located, the relevant local planning policy for this assessment remains the Selby District Core Strategy Local Plan (adopted 2013)⁴ and the emerging Selby District Local Plan, Publication Version Consultation 2022⁵.

⁴ Selby District Council (October 2013) Selby District Core Strategy Local Plan. [Available at <https://www.northyorks.gov.uk/planning-and-conservation/planning-policy/planning-policy-your-local-area/selby-planning-policy/selby-development-plan/selby-core-strategy-2013/selby-district-core-strategy-local-plan>]. Accessed June 2023.

⁵ Selby District Council (2022) Local Plan Publication Version Consultation. [Available at <https://democracy.selby.gov.uk/documents/s16614/Appendix%201%20Publication%20Local%20Plan.pdf>]. Accessed June 2023.

Selby District Core Strategy Local Plan (2013)

- 13.2.11. The adopted Selby District Core Strategy Local Plan identifies a number of key issues and challenges across Selby District that the Plan seeks to address up to 2027. It acknowledges that Selby District provides a high-quality environment for those living and working in the area, and for visitors, and such elements which contribute to this character need to be safeguarded whilst at the same time ensuring that development needs are met (paragraph 2.54).
- 13.2.12. It also states that the *‘Council wishes to ensure that future development is ‘sustainable’ – that is to enable all people to enjoy a better quality of life, without compromising the quality of life for future generations; as well as ensuring that the potential impacts of climate change are managed in line with the Government’s overarching aims.’* (paragraph 3.3)
- 13.2.13. Objectives of the Selby District Core Strategy Local Plan relevant to socio-economics are:
- Objective 2: ‘Supporting rural regeneration in ways which are compatible with environmental objectives, and which deliver increased prosperity for the whole community.’
 - Objective 3: ‘Concentrating new development in the most sustainable locations, where reasonable public transport exists, and taking full account of local needs and environmental, social and economic constraints.’
 - Objective 9: ‘Developing the economy of the District by capitalizing on local strengths, nurturing existing business, supporting entrepreneurs and innovation, and promoting diversification into new growth sectors.’
 - Objective 10: ‘Protecting and enhancing the existing range of community facilities and infrastructure and ensuring additional provision is made to meet changing requirements and to support new development.’
- 13.2.14. The Selby District Core Strategy Local Plan’s objectives are carried forward into local policies. Its policies relevant to this socio-economic assessment are as follows:
- Policy SP12: Access to Services, Community Facilities and Infrastructure, seeks to ‘protect, enhance and better join up existing Green Infrastructure, as well as creating new Green Infrastructure will be strongly encourages, in

addition to the incorporation of other measures to mitigate or minimize the consequences of development.’

- Policy SP13: Scale and Distribution of Economic Growth, seeks to develop and revitalize the local economy. In rural areas, Policy SP13 states *that ‘sustainable development which brings sustainable economic growth through local employment opportunities or expansion of businesses and enterprise will be supported’ including ‘the diversification of agriculture and other land based rural businesses.’* The policy also states that *‘in all cases, development should be sustainable and be appropriate in scale and type to its location, not harm the character of the area, and seek a good standard of amenity.’*
- Policy SP15: Sustainable Development and Climate Change, outlines a number of requirements to ensure development is sustainable and contributes to reducing carbon emissions, including *‘sustainable design and construction techniques, including for example, solar water heating storage, green roofs and re-use and recycling of secondary aggregates and other building materials, and use of locally sourced materials.’*
- Policy SP17: Low Carbon and Renewable Energy requires all development proposals for new sources of renewable energy to meet the following criteria:
 - i. *‘Are designed and located to protect the environment and local amenity or*
 - ii. *Can demonstrate that the wider environmental, economic and social benefits outweigh any harm caused to the environment and local amenity, and*
 - iii. *Impacts on local communities are minimized.’*
- Policy SP18: Protecting and Enhancing the Environment, seeks to conserve *‘assets which contribute most to the distinct character of the District and realizing the potential contribution that they can make towards economic regeneration, tourism, education and quality of life.’*

Selby District Council Publication Local Plan (2022)

13.2.15. Prior to its abolishment and incorporation into the NYC unitary authority, Selby District Council had commenced work on a new local plan, publishing a consultation

version of the Local Plan in 2022. Whilst this emerging Local Plan has not been formally adopted, it provides an indication of the spatial approach for new growth in the District up to 2040.

- 13.2.16. The emerging Local Plan echoes the same aims and objectives as the adopted Selby District Core Strategy Local Plan (2013) but recognises that there has been ‘*a significant shift in employment sectors as a result of the District’s role as a key driver in the reduction of carbon emissions through carbon capture technologies and the skills in the local workforce from mining and energy production will be built upon to support the success and expansion of clean industries and jobs in the local carbon and renewable energy sectors.*’ (page 27).
- 13.2.17. The emerging Local Plan aligns with the ‘Local Industrial Strategy for York and North Yorkshire’⁶ which recognizes the potential the region has to deliver a nationally significant contribution to the UK’s ambition to be carbon neutral by 2050.
- 13.2.18. The emerging Local Plan’s objective for the economy includes supporting ‘*the importance of agriculture and rural diversification;*’ and ‘*positively respond to opportunities for growth and promote new emerging sectors which will build a strong and sustainable local economy, with a focus on clean growth and low carbon sectors.*’
- 13.2.19. The emerging Local Plan’s objective for the natural environment includes ensuring that ‘*development pressures do not threaten the green assets of the District which contribute to the attractive, tranquil and rural nature of the countryside and the setting of its settlements with benefits to health and well-being, climate change mitigation and flood resilience.*’
- 13.2.20. Emerging policies of relevance to the socio-economic assessment include:
- Policy SG4 – Development in the Countryside, seeks to ensure that ‘Selby District remains a special place to live by supporting development which protects and enhances the intrinsic character and beauty of the countryside, recognizing the important role it plays in the local economy, for the health and well-being of local residents and as a biodiversity resource.’

⁶ York and North Yorkshire Local Enterprise (March 2020) Local Industrial Strategy for York and North Yorkshire. [Available at <https://www.ynylep.com/Portals/0/adam/HtmlNewApp/ZOtLSXVWiUWotGAd9HROiQ/Body/LIS-YNLY-BOARD-SIGN-OFF-13032020.pdf>] Accessed June 2023.

- Policy SG10 – Low Carbon and Renewable Energy states that proposals should demonstrate *‘the delivery of environmental, social and economic benefits and how concerns will be addresses/mitigated.’*
- Policy EM3 – Economic Development, requires new employment development to not cause harm to local amenity.
- Policy IC3 – Protection and Creation of New Open Space, Sport and Recreation Provision.
- Policy IC7 – Public Rights of Way, states that development which *‘may have an impact on a Public Right of Way network will only be supported where it can be demonstrated that a) satisfactory and alternative routes are provided, with adequate signage and the new access is of the same or better standard; and b) where appropriate and viable, all reasonable opportunities for enhancement have been taken up.’*
- Policy NE4 – Protecting and Enhancing Landscape Character, supports development which *‘protects, enhances or restores the landscape character of Selby District and the setting of settlements for its own intrinsic value and benefit to the economic, environmental and social well-being of the District.’*

13.3. Assessment Methodology

Technical Scope

- 13.3.1. The scope of this socio-economic assessment is in accordance with the EIA Scoping Report submitted by the Applicant to the Planning Inspectorate (‘PINS’) (refer to Appendix 2.1 of the PEIR), and the subsequent EIA Scoping Opinion adopted by PINS (refer to Appendix 2.2 of the PEIR).
- 13.3.2. Likely significant effects during the construction, operational and decommissioning phases of the Proposed Development on the following social and economic receptors have been assessed:

Construction and decommissioning phases:

- Job creation (direct and indirect);
- Economic contribution (measured in Gross Value Added (‘GVA’));

- Workforce expenditure; and
- Local amenities (residential properties, tourism, recreation and businesses).

Operational phase:

- Contribution to renewable energy generation; and
- Local amenities (residential properties, tourism, recreation and businesses).

Consultation

13.3.3. Table 13.1 summarises the consultation undertaken in respect of the socio-economic assessment.

Table 13.1: Consultation Summary

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
PINS	EIA Scoping Opinion (14 th July 2022)	Agreed that impacts on energy generation during the construction and decommissioning phases can be scoped out of the assessment.	Noted, scoped out.
		Subject to confirmation of the number and types of jobs created during operation, content to scope out operational phase employment and associated workforce expenditure on the basis that effects are unlikely to be significant.	Once the Proposed Development is complete and operational, it is anticipated that employment will be limited to a maximum of five part-time jobs to monitor the Proposed Development and undertake maintenance and cleaning of the solar PV panels and landscape management of the Site.
		Content to scope out of the assessment the likely significant effects on PRoWs given that no existing PRoWs are proposed to be closed or diverted and that the amenity value of the PRoWs will still be	Noted, scoped out.

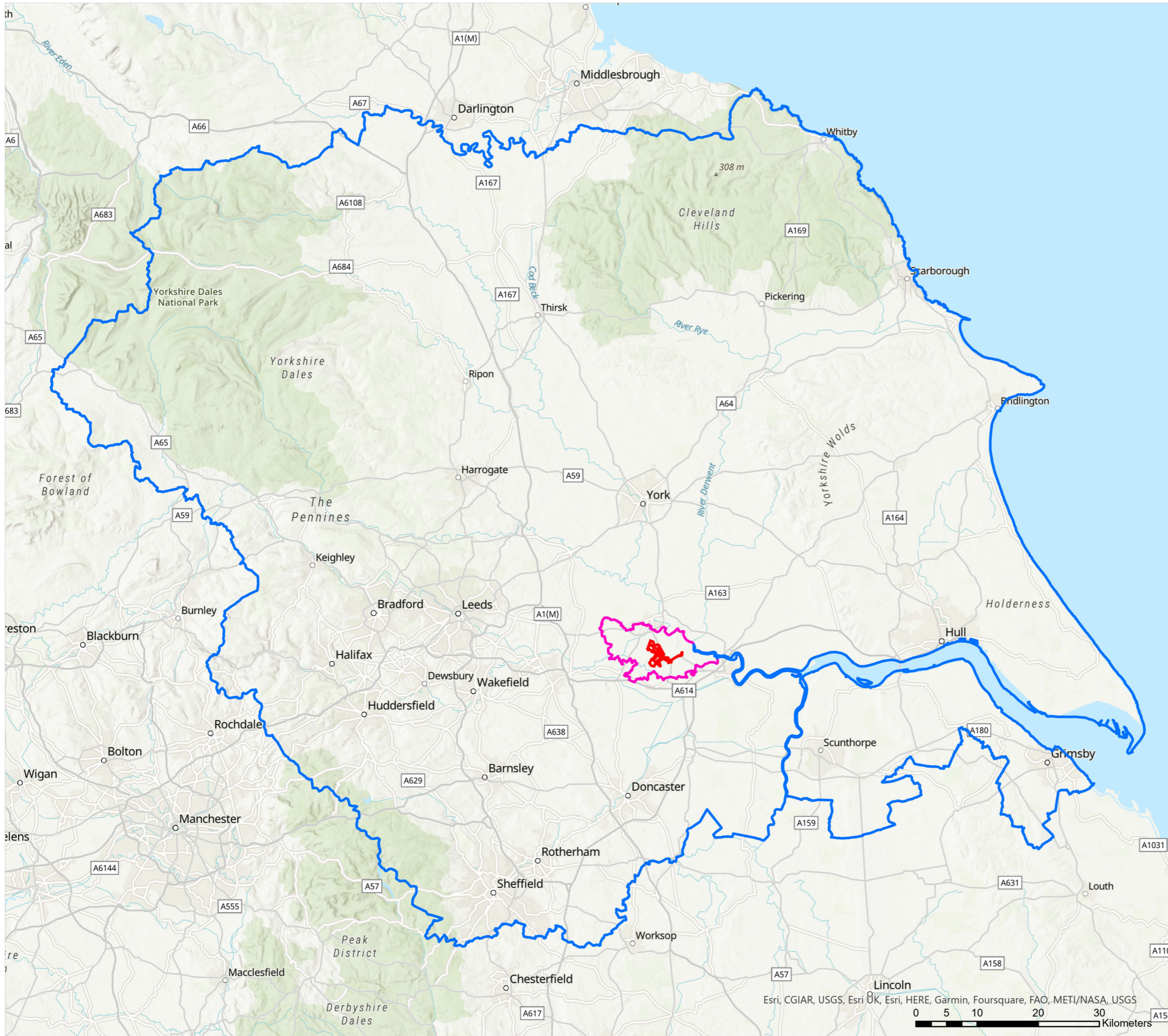
Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
		<p>considered in the Landscape and Views chapter.</p>	
		<p>Stated that new census data was published on 28th June 2022 and this should be used to inform baseline data and the ES assessment.</p>	<p>The 2021 Census data published on 28th June 2022 was headline findings only (population by age and total household) for local authority districts. However, since 28th June 2022, further 2021 Census data has been published and is presented in the baseline and has subsequently been used to inform this assessment.</p>
		<p>Accepts that mitigation measures described in other chapters will reduce the potential for adverse socio-economic effects. However, requires the ES to explain whether such measures avoid what would otherwise be significant socio-economic effects and how they are secured by the DCO.</p>	<p>PEIR chapters 7 Landscape and Views, 10 Transport & Access and 11 Noise and Vibration have not identified any significant adverse effects which require mitigation; however, these chapters refer to a number of 'best practice' measures that will be implemented to ensure adverse effects are limited. These include: the implementation of a CEMP, landscape planting, and traffic management measures, including signage and Road Safety Audit.</p>
		<p>A worst-case scenario for construction worker numbers should be presented and the potential impacts on the availability of local accommodation and services should be described.</p>	<p>It is anticipated that up to 200 direct full time equivalent ('FTE') jobs could be supported by the Proposed Development during the construction phase as detailed within this assessment. Until a contractor is appointed, it is not known where the labour will be sourced from. A realistic, yet worst-</p>

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
			case scenario for assessing employment effects is to assume that the labour will not be sourced from within the Wider Study Area. This worst-case scenario has been adopted within this assessment and as a result, the potential impacts on the availability of local accommodation is now incorporated (refer to section 13.5 'Likely Significant Effects' of the chapter).

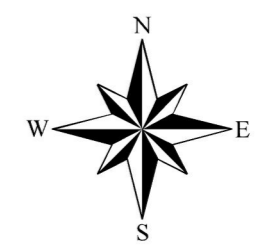
Spatial Scope

- 13.3.4. The likely significant effects of the Proposed Development have been assessed at varying spatial levels, dependent on the socio-economic receptor.
- 13.3.5. A Wider Study Area comprising the whole of the Yorkshire and The Humber ('YTH') region has been used to assess economic related effects of the Proposed Development (comprising employment, economic and renewable energy generation and workforce expenditure).
- 13.3.6. A Local Study Area comprising the three electoral wards of: Camblesforth and Carlton; Brayton and Barlow; and Thorpe Willoughby and Hambleton, has been used to assess social related effects of the Proposed Development (comprising effects on local amenities including residential properties, tourism, recreation and businesses). These three electoral wards have been selected because they encompass the main settlements within closest proximity to the Site, including Camblesforth, Drax, Carlton, Hirst Courtney, Temple Hirst and Barlow, which provide such local amenities.
- 13.3.7. Figure 13.1 illustrates the Wider and Local Study Areas used within the socio-economic assessment.

Figure 13.1 Local and Wider Study Area



- Key**
- Site Boundary
 - Local Study Area
 - Wider Study Area



Project Title		
Helios Renewable Energy Project		
Drawing Title		
Figure 13.1: Local and Wider Study Area		
DRWG No	Rev	Sht no
333133627	A	1
Drawn by	Checked by	
AW	DM	
Scale	Date	
1:600,000 @ A3	24/08/2023	

Baseline Data Sources

13.3.8. The data sources used to establish the existing socio-economic baseline are detailed in Table 13.2.

Table 13.2: Baseline Socio-Economic Data Sources

Socio-Economic Indicator	Data Source
Homes	Office for National Statistics ('ONS'), 2021 Census Table RM204 ⁷
Resident Population	ONS, 2021 Census Table TS007 ⁷ ONS, 2018-based Sub National Population Projections ('SNPP') ⁸
Economic Activity of Residents	ONS, 2021 Census Table TS066 ⁷
Skills and Occupation Profile of Residents	ONS, 2021 Census Tables TS063 and TS0067 ⁷
Commuting (Travel to Work Patterns)	ONS, 2011 Census Table WU01UK ⁷
Jobs by Industrial Sector (Workplace-based)	ONS, 2021 Business Register and Employment Survey ('BRES') ⁷
Business Enterprises	ONS, 2022 UK Business Counts ⁷ Valuation Office Agency ('VOA'), Non-domestic Rating: Stock of Properties as of 31 st March 2021 ⁹
GVA	Oxford Economics, UK Local Area District Forecasts April 2023 ¹⁰
Convenience Expenditure	Experian, Retail Planner 2021, Total Convenience Expenditure Per Person ¹¹
Renewable Energy Generation	Former Department for Business, Energy & Industrial Strategy ('BEIS'), Renewable Electricity by Local Authority 2014-2021 ¹²
Tourism	Visit Britain, Domestic Overnight Survey (GBTS) and Domestic Day Visits Survey (GBDVS) 2017-2019 ¹³ Visit Britain, Accommodation Occupancy 2023 ¹⁴

⁷ Available at: Dataset Selection - Query - Nomis - Official Census and Labour Market Statistics (nomisweb.co.uk). Accessed June 2023.

⁸ Available at: Subnational population projections for England: 2018-based - Office for National Statistics. Accessed June 2023.

⁹ Available at: <https://www.gov.uk/government/statistics/non-domestic-rating-stock-of-properties-including-business-floorspace-2021>. Accessed June 2023.

¹⁰ Available at: <https://www.oxfordeconomics.com/>. Accessed June 2023.

¹¹ Available at: <https://www.experian.co.uk/economics/economic-forecasts/index.html>. Accessed June 2023.

¹² Available at: <https://www.gov.uk/government/statistics/regional-renewable-statistics-2>. Accessed June 2023.

¹³ Available at: <https://www.visitbritain.org/destination-specific-research>. Accessed July 2023.

¹⁴ Available at: <https://www.visitbritain.org/accommodation-occupancy-latest-results>. Accessed July 2023

Topic Specific Methodologies

13.3.9. The methodology used for each identified effect is as follows:

Job Creation

13.3.10. The number of direct on-site jobs anticipated to be supported during the construction phase has been informed by the transport assessment (Chapter 10 Transport and Access of the PEIR) and the number sense-checked against employment reported for other solar projects across the UK.

13.3.11. Guidance from the Homes and Communities Agency ('HCA') Additionality Guide¹⁵ and the more recently published HM Treasury's Green Book for Economic Appraisal and Evaluation¹⁶ ('the Green Book') establishes that direct jobs created by developments may be subject to a degree of 'displacement' (the level of existing employment likely to be lost, moved or adversely affected by the employment created as a result of the Proposed Development); 'leakage' (referring to the number of jobs likely to be taken up by people who live outside of the Wider Study Area), and; 'multiplier effects' (the additional economic benefit that will be created as a direct result of the income earned by the new employment as an indirect result of the supply chain linkages). These factors are collectively known as 'additionality' factors and have been applied to the total number of direct jobs created by the Proposed Development. This has enabled the quantification of the employment effect to the Wider Study Area, comprising the net increase in the number of employed Wider Study Area residents attributable to the Proposed Development.

13.3.12. For this assessment, displacement has been assumed to be zero, as it is not anticipated that the Proposed Development would displace existing jobs from elsewhere in the Wider Study Area due to the specialised nature of the Proposed Development. Furthermore, existing employment on the Site related to the current agricultural uses will not be displaced or lost as detailed later within this chapter.

13.3.13. Labour containment within the Wider Study Area is 94% (as established in section

¹⁵ HCA (2014), *Additionality Guide, 4th Edition*. Accessed June 2023.

¹⁶ Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf. Accessed June 2023.

13.4 'Baseline Conditions' of this chapter), identifying a leakage factor of 6% from the Wider Study Area (representing the proportion of jobs in the Wider Study Area that are undertaken by people who live outside of the Wider Study Area). Until a contractor is appointed, it is not known where the construction workforce will be sourced from. Whilst there is the potential for a proportion of the construction workforce to be sourced from the Wider Study Area, it is unlikely that 94% of the Proposed Development's construction workforce will be sourced from the Wider Study Area, given the specialised nature of the Proposed Development. A more realistic scenario would be for the appointed contractor to bring in its own team of workers for the duration of the construction period who are likely to originate from outside of the Wider Study Area. A realistic, yet 'worst-case' scenario for assessing employment effects is to therefore assume that the labour will not be sourced from within the Wider Study Area. On this basis, a leakage factor of 100% has been applied to calculate the likely significant effects on construction employment.

- 13.3.14. With regards to multipliers, the Green Book classifies employment sectors as either tradable (their outputs are delivered mainly outside the Wider Study Area) and non-tradeable (their outputs are delivered mainly inside the Wider Study Area). Outputs delivered by the Proposed Development will be 'tradeable'. For example, the energy created by the Proposed Development will feed into the national grid. High, central and low place-based employment multipliers are provided by the Green Book to reflect a different extent of supply-chain 'spin-off' employment effects. The reasonable 'worst-case' scenario has been derived from application of the 'low' employment multipliers for the tradable sector (applying 0.1 to establish non-tradeable indirect jobs and 0.3 to establish tradeable indirect jobs supported by the Proposed Development), those being the multipliers that result in the lowest level of 'spin-off' employment in the supply chain and in turn, results in the lowest representation of indirect job creation.

Economic Contribution

- 13.3.15. Economic contribution is measured through the creation of GVA. GVA is a measure of economic impact, distributed through retained profit and wages. All GVA estimates are sourced from Oxford Economics, as detailed in Table 13.2.
- 13.3.16. GVA resulting from the net additional employment effect to the Wider Study Area

from the Proposed Development has been calculated by applying the average GVA per worker for the Wider Study Area, to net additional employment supported in the Wider Study Area that is created by the Proposed Development.

Workforce Expenditure

- 13.3.17. Workforce expenditure is based on convenience good expenditure per person for Selby District (as expenditure data for the Local Study Area is not available) sourced from Experian (refer to Table 13.2), applied to the number of direct jobs created by the Proposed Development. Based on professional judgement, it is assumed that approximately 10% of this annual spend per person could be spent by employees in the local area (for example, buying lunch etc.).

Contribution Towards Renewable Energy Generation

- 13.3.18. The Proposed Development's contribution towards energy generation has been assessed using the capacity (MW) of the proposed development within the context of the existing installed capacity (MW) of solar PV across the Wider Study Area and England, according to the BEIS data (refer to Table 13.2) established in section 13.4 'Baseline Conditions' of the chapter.

Local Amenities

- 13.3.19. The Proposed Development's effect on local amenities has primarily been assessed in other chapters of the PEIR; the effects of noise have been assessed in PEIR Chapter 11; visual effects have been assessed in PEIR Chapter 7; and traffic effects have been assessed in PEIR Chapter 10. However, these are appropriately considered in this chapter to assess the socio-economic effect on local amenities that could be caused by these effects in-combination.

Determining the Significance of Effects

- 13.3.20. There are no technical significance criteria relating to the assessment of socio-economic effects from a proposed development on human populations other than those that relate specifically to other technical areas such as noise, etc. and these are dealt with in separate ES chapters and cross-referenced within this chapter where appropriate.

- 13.3.21. Accordingly, the approach adopted for the socio-economic assessment has been based on professional experience, having regard to the existing baseline position and the planning policy context described within this chapter.
- 13.3.22. The identified sensitivity of the socio-economic receptors takes account of the importance attached to each receptor in policy terms and draws on measurable indicators such as the scale of these receptors identified in the baseline, to gauge the receptor’s sensitivity. Table 13.3 details the sensitivity criteria that have been applied to this socio-economic assessment.

Table 13.3: Sensitivity Criteria for Socio-Economic Receptors

Sensitivity	Criteria
High	Evidence of direct and significant socio-economic challenges relating to receptor. The receptor is of significant importance to the Wider/Local Study Area economy and/or accorded a high priority in local or national policy.
Medium	Some evidence of socio-economic challenges linked to receptor, which may be indirect. The receptor is of some importance to the Wider/Local Study Area economy and/or has medium priority in local or national policy.
Low	Little evidence of socio-economic challenges relating to receptor. The receptor is of little/no importance to the Wider/Local Study Area economy and/or accorded a low priority in local or national policy.
Very Low	No socio-economic issues relating to receptor. Receptor is not considered a priority in local and national policy.

- 13.3.23. The magnitude of change upon each receptor has been determined by considering the change experienced from the baseline conditions. The criteria used for the assessment of magnitude of change, which can either be positive (beneficial) or negative (adverse) is detailed in Table 13.4.

Table 13.4: Magnitude of Change Criteria for Socio-Economic Receptors

Magnitude	Criteria
High	The Proposed Development would cause a large change to existing socio-economic conditions in terms of absolute and/or percentage change.
Medium	The Proposed Development would cause a moderate change to existing socio-economic conditions in terms of absolute and/or percentage change.
Low	The Proposed Development would cause a minor change to existing socio-economic conditions in terms of absolute and/or

Magnitude	Criteria
	percentage change.
Very Low	The Proposed Development would cause minimal/no change to existing socio-economic conditions in terms of absolute and/or percentage change.

13.3.24. The level of effect attributed to each socio-economic receptor has been assessed based on the evaluation of the sensitivity of the affected receptor (set out in Table 13.3) and the magnitude of change due to the Proposed Development (set out in Table 13.4) and using the significance of effect matrix detailed in Table 13.5.

Table 13.5: Significance of Effect Criteria (Socio-Economics)

Magnitude	Sensitivity			
	High	Medium	Low	Very Low
High	Major Adverse / Beneficial	Major Adverse / Beneficial	Moderate Adverse / Beneficial	Minor Adverse / Beneficial
Medium	Major Adverse / Beneficial	Moderate Adverse / Beneficial	Minor Adverse / Beneficial	Negligible
Low	Moderate Adverse / Beneficial	Minor Adverse / Beneficial	Negligible	Negligible
Very Low	Minor Adverse / Beneficial	Negligible	Negligible	Negligible

13.3.25. Effects which are moderate or major beneficial or adverse are considered as significant and where effects are established as significant adverse, appropriate mitigation measures have been identified to inform the assessment of the Proposed Development’s residual effects.

Limitations and Assumptions

13.3.26. The assessment relies on secondary survey data published by various third parties as detailed in Table 13.2. Each data source has methodological limitations related to data collection and surveys only represent the socio-economic context at a specific point in time.

13.3.27. Although Selby District no longer exists as an administrative authority (now incorporated within NYC), the ‘Baseline Conditions’ section of this chapter presents data for the former Selby District given that the relevant local planning policy for this

assessment remains the Selby District Core Strategy Local Plan (adopted 2013).

- 13.3.28. Decommissioning of the Proposed Development will generate further direct and indirect socio-economic effects similar to those during the construction phase. However, the scale of these impacts is not possible to assess quantitatively due to the uncertainty over the nature and costs of this activity, particularly as the energy sector and associated engineering technologies are expected to evolve over the lifetime of the Proposed Development. Effects during the decommissioning phases are therefore assumed to be the same as those assessed during the construction phase.

13.4. Baseline Conditions

Homes

- 13.4.1. The 2021 Census reported that there are 2,477,946 homes within the Wider Study Area, of which 41,179 are in the former Selby District and of those 8,361 are in the Local Study Area.
- 13.4.2. There are no homes on the Site but there are a number of residential properties located in close proximity to the Site which have been assessed as Noise Sensitive Receptors ('NSRs') in Chapter 11 Noise and Vibration of the PEIR (refer to Figure 11.3 Noise Sensitive Receptors).

Resident Population

- 13.4.3. According to the 2021 Census, circa 5.48 million people reside in the Wider Study Area, which is equivalent to 10% of England's population. Of those people, 91,990 reside in the former Selby District and of those, 18,800 reside in the Local Study Area.
- 13.4.4. The Local Study Area has an older age profile than the Wider Study Area and England, with a higher proportion of the population aged 65+ years (24% compared to 19% and 18% respectively) and a lower proportion of children (17% compared to 19% respectively) as shown in Table 13.6.
- 13.4.5. Within the Wider Study Area there are circa 3.42 million aged 16 to 64 years (of working age) which is equivalent to 62% of the total population. The working age

population represents 59% of the total population of the Local Study Area and 63% of England’s total population.

- 13.4.6. The population age profile of the former Selby District, the Wider Study Area and England are comparable.

Table 13.6: Resident Population Profile by Broad Age Group

Age (years)	Local Study Area	Wider Study Area		England
		Total	Within Former Selby District	
0 to 15	3,173 (17%)	1,020,475 (19%)	16,556 (18%)	19%)
16 to 64	11,143 (59%)	3,419,312 (62%)	56,662 (62%)	63%
65+	4,485 (24%)	1,040,987 (19%)	18,772 (20%)	18%
Total	18,801 (100%)	5,480,774 (100%)	91,990 (100%)	100%

Economic Activity of Residents

- 13.4.7. The 2021 Census recorded that there are circa 2.61 million residents in the Wider Study Area aged 16 years and over who were classified as economically active (this includes all those people in employment or available to work, for example the unemployed). This is equivalent to 59% of the population aged 16 and over in the Wider Study Area, which is marginally lower than the average for England (61%). The equivalent rate for the former Selby District is 63% (47,832 people) and the Local Study Area is 61% (9,466 people).
- 13.4.8. Of those economically active residents in the Wider Study Area, circa 2.46 million are in employment which is equivalent to 55% of 16+ year olds; again, lower than the national average (57%). The equivalent rate for the former Selby District is 61% (46,121 people) and the Local Study Area is 59% (9,173 people).
- 13.4.9. 151,379 economically active residents of the Wider Study Area are unemployed. This represents 3.4% of all residents aged 16+ years, which is marginally lower than the proportion of unemployed residents in England (3.5%). The equivalent rate for the former Selby District is 2.2% (1,711 people) and the Local Study Area is 1.9% (293

people).

Skills and Occupational Profile of Residents

- 13.4.10. A higher proportion of residents of the Wider Study Area (21% of all 16+ year olds) have no qualifications compared to the national average (18%) according to the 2021 Census. However, the proportion of residents with no qualifications is smaller in the former Selby District (16%) and the Local Study Area (15%).
- 13.4.11. Similarly, a smaller proportion of residents of the Wider Study Area are also educated to degree level or higher (30%) compared to the average for England (34%). Furthermore, despite being lower than the national average, the proportion of residents aged 16+ years in the former Selby District (32%) and the Local Study Area (31%) educated to degree level or higher, is greater than the proportion in the Wider Study Area (30%).
- 13.4.12. The occupational profile of residents in employment in the Wider Study Area is comparable to the national average, the former Selby District and the Local Study Area, as shown in Table 13.7. The largest proportion of residents in all four comparator areas work in professional occupations, although the proportion is marginally lower in the Wider Study Area, the former Selby District and the Local Study Area (all 18% respectively) compared to the national average (20%).

Table 13.7: Occupational Profile of Residents

Occupation	Local Study Area	Wider Study Area		England
		Total	Within Former Selby District	
Managers, directors and senior officials	1,402 (15%)	275,517 (11%)	6,840 (15%)	13%
Professional occupations	1,638 (18%)	445,150 (18%)	8,419 (18%)	20%
Associate professional and technical occupations	1,334 (15%)	302,214 (12%)	6,274 (14%)	13%
Administrative and secretarial occupations	918 (10%)	222,600 (9%)	4,263 (9%)	9%
Skilled trades occupations	1,063 (12%)	272,789 (11%)	5,162 (11%)	10%

Occupation	Local Study Area	Wider Study Area		England
		Total	Within Former Selby District	
Caring, leisure and other service occupations	732 (8%)	239,674 (10%)	3,713 (8%)	9%
Sales and customer service occupations	626 (7%)	204,822 (8%)	3,360 (7%)	7%
Process, plant and machine operatives	726 (8%)	207,067 (8%)	3,794 (8%)	7%
Elementary occupations	733 (8%)	291,535 (12%)	4,302 (9%)	10%
Total	9,172 (100%)	2,461,368 (100%)	46,127 (100%)	100%

13.4.13. Overall, residents of the Local and Wider Study Areas have a varied skill set. However, residents of the Local Study Area and Selby District tend to work in higher skilled occupations, such as managers, directors and senior officials (both 15% respectively) than the Wider Study Area and national average (11% and 13% respectively). In contrast, a smaller proportion of residents of the Local Study Area and the former Selby District (8% and 9% respectively) work in lower skilled elementary occupations (consisting of simple, routine tasks) compared to the Wider Study Area and national average (12% and 11% respectively).

Number of Jobs by Industrial Sector (Workplace-based)

13.4.14. The 2021 BRES estimates there to be circa 2.52 million jobs in the Wider Study Area, of which 37,675 are within the former Selby District and 5,430 within the Local Study Area. Table 13.8 provides a breakdown of these jobs by broad industrial sector.

Table 13.8: Employment by Broad Industrial Sector

Occupation	Local Study Area	Wider Study Area		England
		Total	Within Former Selby District	
Agriculture, forestry and fishing	10 (>1%)	37,000 (1%)	1,750 (5%)	1%
Mining, quarrying and	1,015	26,000	1,250	1%

Occupation	Local Study Area	Wider Study Area		England
		Total	Within Former Selby District	
utilities	(19%)	(1%)	(3%)	
Manufacturing	600 (11%)	289,000 (11%)	8,000 (21%)	7%
Construction	535 (10%)	117,000 (5%)	2,250 (6%)	5%
Motor trades	100 (2%)	46,000 (2%)	600 (2%)	2%
Wholesale	50 (1%)	89,000 (4%)	1,000 (3%)	4%
Retail	210 (4%)	206,000 (8%)	2,000 (5%)	9%
Transport and storage (including postal)	320 (6%)	142,000 (6%)	3,500 (9%)	5%
Accommodation and food services	275 (5%)	181,000 (7%)	2,500 (7%)	7%
Information and communication	55 (1%)	77,000 (3%)	600 (2%)	5%
Financial and insurance	10 (>1%)	67,000 (3%)	175 (>1%)	4%
Property	40 (1%)	40,000 (2%)	400 (1%)	2%
Professional, scientific and technical	325 (7%)	163,000 (6%)	2,500 (7%)	9%
Business administration and support services	660 (9%)	219,000 (9%)	3,500 (9%)	9%
Public administration and defence	40 (2%)	114,000 (5%)	900 (2%)	4%
Education	780 (8%)	238,000 (9%)	3,000 (8%)	8%
Health	325 (7%)	363,000 (14%)	2,500 (7%)	13%
Arts, entertainment, recreation and other services	80 (3%)	106,000 (4%)	1,250 (3%)	4%
Total	5,430 (100%)	2,520,000 (100%)	37,675 (100%)	100%

13.4.15. The largest employing industrial sector in the Wider Study Area and England is health (14% and 13% respectively). In the former Selby District, it is manufacturing (21%) and in the Local Study Area, it is mining, quarrying and utilities (19%).

- 13.4.16. The key industries that are relevant to the assessment of the likely significant effects of the Proposed Development comprise construction; accommodation and food services; and mining, quarrying and utilities.
- 13.4.17. Construction accounts for 5% of all employment in the Wider Study Area (circa 117,000 jobs), which is marginally higher than the national average (4.8%). Of the 117,000 construction jobs in the Wider Study Area, 2,250 are within the former Selby District and of those, 535 are within the Local Study Area.
- 13.4.18. Accommodation and food services accounts for 7% of all employment in the Wider Study Area (circa 181,00 jobs), which is comparable to the national average (7%). Of these 181,000 jobs, 2,500 are within the former Selby District and of those, 275 are within the Local Study Area.
- 13.4.19. Mining, quarrying and utilities accounts for 1% of employment in the Wider Study Area (circa 26,000 jobs), which is again, comparable to the national average (1%). Of these 26,000 jobs, 1,250 are within the former Selby District and of those, 1,015 are within the Local Study Area.
- 13.4.20. The Site is currently predominantly agricultural farmland and represents 15% of the total land held by the existing farmers that farm the land within the Site. In total, 19 labourers are currently employed by the existing farmers, comprising a mix of full-time (nine people) and part-time/seasonal/contract workers (10 people minimum).

Commuting (Travel to Work Patterns)

- 13.4.21. Whilst the 2021 Census has been undertaken and some travel to work statistics published, the detail on the origin and destination (i.e. where people live and work) is still yet to be published. For this reason, such data from the 2011 Census has been utilised.
- 13.4.22. Data from the 2011 Census identifies that 94% of jobs within the Wider Study Area are undertaken by people who also live in the Wider Study Area, indicating a high level of labour self-containment. The remaining 6% of jobs are taken up by people who live elsewhere.
- 13.4.23. Labour self-containment is less prominent within Selby District, as only 52% of jobs within the former Selby District are undertaken by people who also live in the former

Selby District. The remaining 48% of jobs are taken up by people who live elsewhere, including East Riding of Yorkshire (9%), Wakefield (9%), Leeds (7%) and York (7%).

Businesses

13.4.24. Employment across the Wider Study Area is supported by 229,245 business enterprises, according to the ONS 2022 estimate. Table 13.9 provides a count of business enterprise by broad industrial sector. Data for the Local Study Area is not available from this source. However, data from the VOA provides data on businesses within the Local Study Area and is presented in Table 13.10.

Table 13.9: Business Enterprises by Broad Industrial Sector

Industry	Wider Study Area		England
	Total	Within Former Selby District	
Agriculture, forestry & fishing	11,180 (5%)	450 (10%)	3%
Mining, quarrying & utilities	1,710 (1%)	65 (1%)	1%
Manufacturing	13,915 (6%)	270 (6%)	5%
Construction	26,560 (12%)	515 (12%)	12%
Motor trades	8,160 (4%)	170 (4%)	3%
Wholesale	9,520 (4%)	180 (4%)	4%
Retail	24,415 (11%)	330 (7%)	10%
Transport & storage (inc postal)	14,245 (6%)	315 (7%)	5%
Accommodation & food services	18,240 (8%)	275 (6%)	7%
Information & communication	9,450 (4%)	190 (4%)	7%
Financial & insurance	4,680 (2%)	80 (2%)	2%
Property	8,240 (4%)	150 (3%)	4%
Professional, scientific & technical	26,295 (11%)	575 (13%)	15%
Business administration & support services	17,890 (8%)	325 (7%)	9%

Industry	Wider Study Area		England
	Total	Within Former Selby District	
Public administration & defence	2,010 (1%)	70 (2%)	1%
Education	5,575 (2%)	110 (2%)	2%
Health	12,830 (6%)	170 (4%)	5%
Arts, entertainment, recreation & other services	14,330 (6%)	220 (5%)	6%
Total	229,245 (100%)	4,455 (100%)	100%

13.4.25. Circa 12% of all business enterprises in the Wider Study Area are within the construction industry, comparable to the former Selby District and the national average (12%); however, the construction industry represents the highest proportion of enterprises in the Wider Study Area whereas in the former Selby District and England, professional, scientific and technical industries represent the higher proportion of enterprises (13% and 15% respectively). It is of importance to note that the agriculture, forestry and fishing industry represents 10% of all enterprises in the former Selby District; significantly higher than the average for the Wider Study Area (5%) and England (3%).

13.4.26. Across the Wider Study Area there are a total of 32,570 enterprises associated with the ‘tourism’ industry (defined as comprising of the accommodation and food services and arts, entertainment and recreation industries). Of those, 495 tourism enterprises are located within the former Selby District. Tourism enterprises represent 14% of all enterprises in the Wider Study Area; a high proportion than compared to the former Selby District (11%) and the national average (13%).

13.4.27. Data from the VOA provides data of businesses within the Local Study Area. According to the VOA, in 2021, there were 226 non-domestic rateable properties in the Local Study Area. Table 13.10 provides a breakdown of these properties by the VOA detailed description and Figure 13.2 shows the location of these properties in relation to the Site. Please note that the dots on Figure 13.2 may represent more than one property.

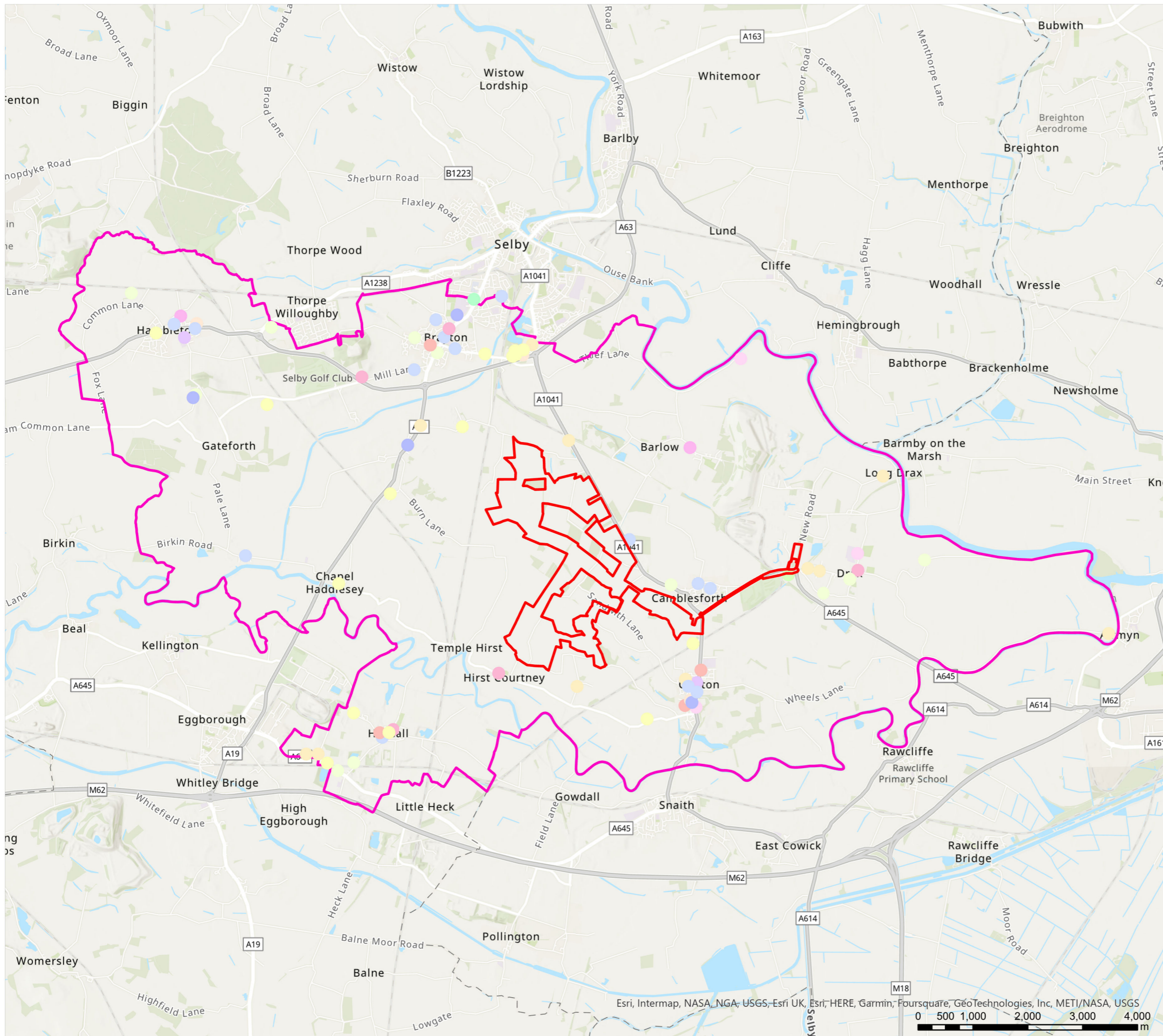
13.4.28. Nearly half of the non-domestic rateable properties in the Local Study Area consist

of either warehouses & stores (30%) or offices (18%). These categories include trade workshops and land used for storage related to farming activities.

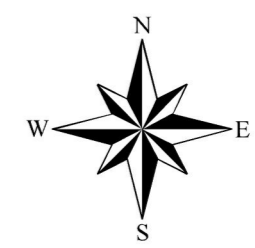
Table 13.10: Non-Domestic Rateable Properties in the Local Study Area

Description	Number of properties	% of Properties in the Local Study Area
Warehouses & stores	68	30%
Factories, mills & workshops	40	18%
Other Shops	27	12%
Offices	21	9%
Other commercial	17	8%
Garages & petrol stations	9	4%
Hotels etc.	9	4%
Community centres & halls	8	4%
Other educational, training and cultural	7	3%
Sports grounds, golf courses etc	7	3%
Other Properties	5	2%
Advertising rights	2	1%
Medical facilities	2	1%
Other leisure	2	1%
Pubs & wine bars	2	1%
Total	226	100%

Figure 13.2 Non-Domestic Rateable Properties in the Local Study Area



- Key**
- Site Boundary
 - Local Study Area
- VOA Description**
- Advertising rights
 - Community centres & halls
 - Factories, mills & workshops
 - Garages & petrol stations
 - Hotels etc.
 - Medical facilities
 - Offices
 - Other Properties
 - Other Shops
 - Other commercial
 - Other educational, training and cultural
 - Other leisure
 - Pubs & wine bars
 - Sports grounds, golf courses etc
 - Warehouses & stores



Project Title		
Helios Renewable Energy Project		
Drawing Title		
Figure 13.2: Non-Domestic Rateable Properties in the Local Study Area		
DRWG No	Rev	Sht no
333133627	A	1
Drawn by	Checked by	
AW	DM	
Scale	Date	
1:67,054 @ A3	10/10/2023	

GVA

13.4.29. Average GVA in the Wider Study Area between 2016 and 2020 was £123,255 million per annum contributing 6% of the UK’s total GVA. This equates to an average GVA per worker of £45,366 per annum, which is lower than the national average GVA per worker of £54,192 per annum. Average GVA per worker in the former Selby District is £51,856 per annum. GVA data for the Local Study Area is not available.

13.4.30. Average GVA (total and per worker) for industries relevant to the Proposed Development are detailed in Table 13.11.

Table 13.11: Average GVA (2016 to 2020) Per Annum

Industry	Former Selby District		Wider Study Area		UK
	Total GVA	GVA per worker	Total GVA	GVA per worker	GVA per worker
Electricity, gas, steam and air conditioning supply	£382.2m	£278,721	£2,239.5m	£226,091	£197,433
Construction	£147.9m	£32,624	£7,831.3m	£44,127	£52,499
Accommodation and food services	£38.9m	£17,797	£3,268.6m	£19,108	£22,675
Arts, entertainment and recreation	£11.0m	£18,951	£1,377.9m	£20,203	£27,140
‘Tourism’*	£49.9m	£18,039	£4,646.6m	£19,420	£23,993
All industries	£2,189.4m	£51,856	£123,254.9m	£45,366	£54,192

Note: * Tourism industry defined as accommodation and food services, and arts, entertainment and recreation combined.

13.4.31. Average GVA per worker generated by the electricity, gas, steam and air conditioning sector is significantly higher than the average for all industries. This sector has the second highest GVA per worker of all sectors in both the Wider Study Area and Northern Ireland (real estate activities have the highest), indicating it is a valuable sector to the economy. The electricity, gas, steam and air conditioning supply sector contributes 1.8% of the Wider Study Area’s total average GVA; higher than the proportion the sector contributes to the national average (1.5%).

13.4.32. Similarly, the construction sector is also an important sector to the Wider Study Area and national economies, contributing 6.4% and 6.5% to the total average GVA in

both areas respectively. Average GVA per worker for the construction industry is £44,127 per annum in the Wider Study Area, lower than the national average of £52,499 per worker per annum.

- 13.4.33. The tourism sector in the Wider Study Area generates a lower average GVA per worker compared to the UK average (£19,420 compared to £23,993 per worker), and the value per worker is one of the lowest of all sectors.

Expenditure

- 13.4.34. Retail expenditure data published by Experian, estimates that in the year 2021, residents of the Wider Study Area on average spent £2,577 per annum on convenience goods (including items bought frequently such as staples for example, food, drink and newspapers). Convenience expenditure in the Wider Study Area is lower than the national average (£2,723 per person per annum).
- 13.4.35. Based on professional judgement, it has been assumed that approximately 10% of this annual spend per person could be spent by employees on buying lunch etc. This equates to an annual workforce expenditure of £257 per worker in the Wider Study Area.
- 13.4.36. On the basis that the BRES estimates there to be circa 2.52 million jobs in the Wider Study Area, this would suggest a current workforce expenditure of £647.6m per annum in the Wider Study Area, of which £9.7m is within the former Selby District (on the basis of 37,675 jobs) and £1.4m within the Local Study Area (on the basis of 5,430 jobs).

Renewable Energy Generation

- 13.4.37. BEIS reports that in 2021, solar PV capacity in the Wider Study Area was circa 638MW, contributing 5% of the UK's solar PV capacity (13,965MW). The former Selby District provides 26MW of the solar PV capacity in the Wider Study Area (equivalent to 4%).
- 13.4.38. Solar PV represents 10% of all renewable energy capacity in the Wider Study Area (6,314MW); lower than the national average (28%).

Tourism

- 13.4.39. In addition to the tourism economy data already presented within this section (within business enterprises and GVA analysis), data published by Visit Britain identifies that between 2017 and 2019 (the latest date for which data is available), 12.5 million trips were taken each year to the Wider Study Area, which equates to 36.4 million nights per year. The annual value of these trips to the Wider Study Area’s economy was £2,061 million.
- 13.4.40. Of those trips to the Wider Study Area, 97,000 were to Selby District (equivalent to 0.8%), which equates to 240,000 nights per year. The value of these trips to the economy of Selby District is £7 million per annum.
- 13.4.41. Visit Britain data also identifies that in June 2023 (the latest date for which data is available) serviced accommodation within the Wider Study Area was operating at 80% occupancy. This compares to the national average of 83%. There is seasonal fluctuation, with occupancy rates varying different months of the year as illustrated in Table 13.12. Over the last 12-months, the serviced accommodation occupancy rate in the Wider Study Area peaked at 84% (in July 2022) with a low of 66% (in January 2023).

Table 13.12: Serviced Accommodation Occupancy Rates

	Wider Study Area	England
July 2022	84%	83%
August 2022	79%	78%
September 2022	81%	80%
October 2022	81%	80%
November 2022	80%	78%
December 2022	71%	71%
January 2023	66%	65%
February 2023	75%	73%
March 2023	76%	75%
April 2023	80%	77%
May 2023	77%	78%
June 2023	80%	83%

Future Baseline Conditions

- 13.4.42. In the absence of the Proposed Development being implemented, the Site would remain in its existing condition (predominantly arable farming with a small proportion of cattle/sheep grazing).

- 13.4.43. Construction of the Proposed Development is anticipated to commence in 2026. The ONS, 2018-based SNPP project that from the current baseline year (2021), the Wider Study Area's population will increase by +2.9% by 2026. This is a slower rate of population growth than projected for England (+3.2% by 2026). The SNPP are not available for the Local Study Area. However, the SNPP suggest that the former Selby District's population will grow by +4.5% by 2026.
- 13.4.44. The SNPP also indicate that the population is projected to age over the coming years. This is a trend seen locally and nationally. The Wider Study Area's population aged 65+ years is projected to increase by +11% between 2021 and 2026, which is a lower rate of growth than the national (+12%) and former Selby District (+15%) averages.
- 13.4.45. In contrast, the working age population in the Wider Study Area is projected to increase by just +1.0% between 2021 and 2026, but nonetheless, this rate of growth is higher than both the average for England (+0.8%) and former Selby District (+0.7%).
- 13.4.46. Oxford Economics forecast that employment in the Wider Study Area will increase by +4.7% from the current baseline to 2026, lower than the national average (+5.7%) but higher than the decline forecast for the former Selby District (-1.9%). Forecasts for the Local Study Area are not available.
- 13.4.47. Similarly, Oxford Economics forecast that GVA within the Wider Study Area will increase over the coming years. The average GVA per worker across all sectors is forecast to increase by +6.7% from the current baseline to 2026, higher than the national average (+5.8%) but lower than the rate forecast for the former Selby District (+10.9%).
- 13.4.48. Without the Proposed Development, the future baseline in respect of tourism and recreation by 2026 is anticipated to remain the same as the current baseline.

13.5. Likely Significant Effects

Embedded Mitigation

- 13.5.1. Relevant measures described in other chapters of the PEIR (for example, Landscape and Views, Noise and Vibration, and Transport and Access) will serve to reduce the

potential for adverse effects on socio-economic aspects, such as the amenity impact of the Proposed Development and are not repeated here.

Construction Phase

Effects on Job Creation

- 13.5.2. Baseline conditions identified that the Site currently supports employment for 19 people, with further contract labourers during the peak season. Appendix 14.2 Farm Reports of the PEIR identifies that existing employment on the Site will not be lost as a result of the Proposed Development. The Site comprises circa 15% of the total land owned by the existing farmers and therefore existing employees will be retained in employment to farm the remainder of the wider land holding.
- 13.5.3. The construction phase will generate employment directly associated with the construction of the Proposed Development. It is estimated within Chapter 10 Transport and Access of the PEIR that employment for 200 construction workers will be supported during the construction phase (direct jobs).
- 13.5.4. As explained in section 13.3 'Assessment Methodology' of this chapter, it is not considered that the Proposed Development will displace jobs from elsewhere in the Wider Study Area.
- 13.5.5. The direct on-site construction jobs would be required for land preparation, installation and grid connection and therefore will provide employment for a range of occupation and skill levels. The Applicant advises that contractors will endeavour to source local labour where possible and baseline conditions identified that there is a resident labour supply within the Wider Study Area with a range of skills, occupations and industries to meet this demand. However, a realistic 'worst-case' scenario for construction employment assumes that all of the construction workforce will be sourced from outside of the Wider Study Area and therefore a 100% leakage factor is applied within this assessment.
- 13.5.6. In addition to those jobs created as a direct effect of the construction and management of the Proposed Development, further indirect employment will be supported as a result of spin-off and multiplier effects in the supply-chain, for

example, in the manufacturing and supply of the solar PV panels. Whilst it is acknowledged that the solar PV panels themselves will be produced and imported perhaps from outside of the UK, there will be further indirect employment effects within the Wider Study Area once the panels arrive in the UK, associated with transportation, for example.

- 13.5.7. Application of the Green Book low employment multipliers, detailed earlier in section 13.3 'Assessment Methodology' of this chapter, to the direct number of jobs created by construction of the Proposed Development, estimates that a further 80 indirect jobs will be supported during the construction phase within the Wider Study Area.
- 13.5.8. It is therefore considered that the net employment effect to the Wider Study Area from the Proposed Development during the construction phase is 80 FTE jobs.
- 13.5.9. The sensitivity of construction employment in the Wider Study Area is considered to be moderate, noting that there are 117,000 construction jobs in the Wider Study Area currently, representing 5% of all employment, of which 2,250 are within Selby District and 535 within the Local Study Area. The magnitude of change is considered to be very low in the context of the net employment effect to the Wider Study Area of 80 FTE jobs, representing less than 0.1% of all employment in the Wider Study Area currently. In light of this, the Proposed Development is considered to have a temporary negligible effect on employment in the Wider Study Area during the construction phase, which is **not considered significant**.

Effects on GVA (Economic Output)

- 13.5.10. Employment supported by the Proposed Development during the construction phase will generate GVA.
- 13.5.11. Whilst this assessment has identified that 280 jobs (direct and indirect) will be supported by the Proposed Development during the construction phase, the construction phase will only create net additional employment of 80 FTE jobs in the Wider Study Area, with the remaining 200 jobs sourced from outside of the Wider Study Area. The 80 jobs are indirect jobs that will be supported through the supply chain and therefore could be in any industry. GVA creation in the Wider Study Area is therefore estimated to be £3.6m per annum, through application of the Wider Study

Area average GVA per worker (for all industries) of £45,366 per annum (as reported in Table 13.11), throughout the duration of the construction period.

- 13.5.12. The sensitivity of economic output during the construction phase is considered to be moderate in the Wider Study Area, noting that the construction industry contributes 6.4% of the Wider Study Area's total GVA. The magnitude of change is considered to be very low in the context of the Proposed Development's creation of GVA of £3.6m per annum increasing annual GVA in the Wider Study Area by less than 0.1%. On this basis, the Proposed Development is considered to have a negligible effect on economic output in the Wider Study Area during the construction phase, which is **not considered significant**.

Effects on Workforce Expenditure

- 13.5.13. The Proposed Development's construction workers will spend wages on food, fuel and potentially leisure activities.
- 13.5.14. Baseline conditions identified that an individual worker in the Wider Study Area, could generate convenience expenditure of £257 per annum. Applied to the 280 direct and indirect jobs supported by the Proposed Development, this equates to a workforce expenditure of £71,960 per annum over the duration of the construction period.
- 13.5.15. It is anticipated that expenditure generated by the 200 direct jobs (£51,400 per annum) will predominantly be spent in the Local Study Area as workers purchase food and drink for example, whilst working on the Site.
- 13.5.16. The sensitivity of workforce expenditure is considered to be moderate, noting that convenience expenditure per person in the Wider Study Area is lower than the national average. The magnitude of change is considered to be low in the context of the Proposed Development's creation of £71,960 of expenditure per annum, increasing current workforce expenditure in the Wider Study Area of £647.6m per annum by just 0.01% and increasing current workforce expenditure in the Local Study Area of £9.7m per annum by just 0.5%. On this basis, the Proposed Development is considered to have a temporary minor beneficial effect on workforce expenditure in the Wider and Local Study Areas during the construction phase, which is **not considered significant**.

Effects on Local Amenity

- 13.5.17. Given that the realistic worst-case scenario for construction employment is to assume that all of the direct construction workers will originate from outside of the Wider Study Area, it is anticipated that the construction workforce will have to temporarily relocate to within proximity of the Site, thereby placing demand on accommodation within the Local Study Area. Baseline conditions (Tables 13.9 and 13.10) identified that there are 18,240 business enterprises located within the Wider Study Area related to accommodation and food services, with 275 of these located within Selby District. A total of nine hotels have been identified within the Local Study Area. Furthermore, baseline conditions also identified that serviced accommodation within the Wider Study Area typically operates at between 66% and 84% occupancy across a 12-month period, thereby indicating that there is stock, with capacity, to accommodate the Proposed Development's construction workforce. On this basis, there is considered to be a negligible effect on local amenity in the Local Study Area from the construction workforce, which is not considered significant.
- 13.5.18. Chapter 11 Noise and Vibration of the PEIR reports predicted construction sound levels at a statistically representative selection of NSRs which lie adjacent to the Site. The chapter identified (Table 11.10) that noise levels at these NSRs are not predicted to exceed the adopted 65 dB(A) limit and reported a negligible to minor adverse effect from construction noise which is not considered significant. As the NSRs which lie adjacent to the Site are considered to represent a worst-case, being that noise levels will be greatest at these NSRs, it is therefore also considered that there will be a negligible to minor adverse effect on local amenity in the Local Study Area from construction noise, which is not considered significant.
- 13.5.19. Chapter 10 Transport and Access of the PEIR assesses the likely significant effects on pedestrian amenity (including cyclists and equestrian users). Whilst the addition of HGVs to the local network is recognised as affecting the relative pleasantness of any pedestrian, cyclist and equestrian journey in the area, the chapter identified that pedestrian, cyclist and equestrian activity on the roads surrounding the Site was very low and therefore reported a minor adverse effect on pedestrian amenity which is not considered to be significant.
- 13.5.20. Chapter 7 Landscape and Views of the PEIR considers changes to the landscape

that will have an effect on visual amenity during the construction phase. Likely significant moderate negative (but not significant) effects to residents, walkers and cyclists, who live and are using roads and PRowS immediately adjacent to the Site are identified due to open partial views of construction activities. However, significant visual effects diminish rapidly with distance from the Site.

13.5.21. Chapter 7 Landscape and Views of the PEIR has identified a moderate negative (but not significant) effect on visual receptors (and therefore for the socio-economic assessment, local amenity), effects are identified as impacting amenity immediately adjacent to the Site. Furthermore, the implementation of best practice measures in accordance with the CEMP will seek to reduce the visual effects.

13.5.22. Therefore, in light of the findings of PEIR chapters 7 Landscape and Views, 10 Transport and Access and 11 Noise and Vibration, it is considered that the effect of the Proposed Development on local amenity in the Local Study Area during the construction phase will be negligible to minor adverse, which is **not considered significant**.

Operational Phase

Effects on Renewable Energy Generation

13.5.23. The Proposed Development will have an export capacity of 190MW.

13.5.24. Baseline conditions identified that currently the solar PV capacity in the Wider Study Area is circa 638MW. Therefore, the Proposed Development will increase solar PV capacity in the Wider Study Area by 30% and will increase all types of renewable energy generation in the Wider Study Area by 3%.

13.5.25. The sensitivity of renewable energy in the Wider Study Area is considered to be high, noting the UK government's commitment towards renewable energy generation. The magnitude of change is considered to be medium in the context of the Proposed Development increasing renewable electricity generation (across all forms of generation) in the Wider Study Area by 3%. On this basis, it is considered that the Proposed Development will have a moderate beneficial effect on renewable energy generation in the Wider Study Area during the operational phase, which is considered **significant**.

Effects on Local Amenity

- 13.5.26. Chapter 11 Noise and Vibration of the PEIR reports that the during the operational phase noise will be generated from the Proposed Development's equipment. However, the chapter assesses a 'low impact' at the NSRs during both the daytime and night-time periods and therefore reports a negligible effect.
- 13.5.27. Chapter 10 Transport and Access of the PEIR reports that traffic movements to and from the Site during the operational phase will be limited (less than one trip per day on average) and therefore there will be a negligible effect on pedestrian amenity which is not significant.
- 13.5.28. Chapter 7 Landscape and Views of the PEIR identifies a likely significant moderate negative (but not significant) effect to residents, walkers and cyclists, who live and are using roads and PRowS immediately adjacent to the Site due to open partial views of the Proposed Development.
- 13.5.29. Whilst Chapter 7 Landscape and Views of the PEIR has identified a moderate negative (but not significant) effect on visual receptors (and therefore for the socio-economic assessment, local amenity), immediately adjacent to the Site. As with the construction phase, negative visual effects diminish rapidly with distance from the Site. Furthermore, planting proposals and their ongoing maintenance will seek to reduce the visual effects on local amenity over the lifetime of the Proposed Development.
- 13.5.30. In light of the findings of PEIR chapters 7 Landscape and Views, 10 Transport and Access and 11 Noise and Vibration, it is considered that the effect of the Proposed Development on local amenity in the Local Study Area during the operational phase will be negligible, which is **not considered significant**.

Decommissioning Phase

- 13.5.31. As stated in the 'limitations and assumptions' section of this chapter, decommissioning of the Proposed Development is assumed to generate the same socio-economic effects to those during the construction phase.
- 13.5.32. Direct jobs will be created on-Site through the requirement to remove all of the solar PV infrastructure, including modules, mounting structures, cabling inverters and

transformers. There is also the potential for indirect jobs to be created resulting from the disposal/recycling of the solar PV infrastructure, dependent on the good practice requirement/market conditions at that time. Whilst it is not possible to quantify job creation during the decommissioning phase, it is not anticipated that the number of jobs will be higher than the number created during the construction phase. On this basis, it is considered that there will be a temporary, negligible effect on job creation in the Wider Study Area during the decommissioning phase which is **not significant**.

13.5.33. On the basis that the number of jobs created during the decommissioning phase will be comparable to the construction phase, it is anticipated that the effects on economic contribution (GVA) and workforce expenditure will be the same during the decommissioning phase and in the construction phase; for economic contribution (GVA) this is a temporary, negligible effect in the Wider Study Area which is not significant; and for workforce expenditure, this is a temporary, minor beneficial effect in the Local Study Area which is **not significant**.

13.5.34. Effects on local amenity during the decommissioning phase will be negligible to minor adverse, which is **not considered significant**, as accommodation, noise, traffic and visual effects will again be comparable in the decommissioning to the construction phase.

13.6. Mitigation Measures

13.6.1. No significant adverse socio-economic effects have been identified during the construction, operational or decommissioning phases and therefore no further mitigation beyond the mitigation identified in other technical ES chapters (noise and vibration, landscape and views and transport and access) is required.

13.7. Residual Effects

13.7.1. The residual effects for all socio-economic receptors remain as follows:

Construction phase:

- Negligible effect on job creation which is **not significant**;
- Negligible effect on economic output which is **not significant**;
- Minor beneficial effect on workforce expenditure which is **not significant**;

- Negligible to minor adverse effect on local amenity which is **not significant**;

Operational phase:

- Major beneficial effect on renewable energy generation which is **significant**;
- Negligible effect on local amenity which is **not significant**;

Decommissioning phase:

- Negligible effect on job creation which is **not significant**;
- Negligible effect on economic output which is **not significant**;
- Minor beneficial effect on workforce expenditure which is **not significant**; and
- Negligible to minor adverse effect on local amenity which is **not significant**.

13.8. Cumulative Effects

Construction Phase

- 13.8.1. There is likely to be a beneficial cumulative effect associated with direct and indirect employment opportunities, economic output and workforce expenditure during the construction phase from the identified cumulative schemes and the Proposed Development combined. Further details on the cumulative schemes are set out in Chapter 15 Cumulative Effects of the PEIR.
- 13.8.2. A review of the supporting documentation submitted alongside the planning application or DCO application for each of the cumulative schemes identifies that such socio-economic effects are not quantified consistently (or in some cases, at all) within the documentation. For this reason, it is not possible to quantify the cumulative effect on job creation, economic output and workforce expenditure.
- 13.8.3. Furthermore, it is not known whether the construction phase of the cumulative schemes will overlap with each other or the Proposed Development. To provide a worst-case assessment for employment, economic output and workforce expenditure (that being the scenario which results in the fewest jobs created and the least economic output and workforce expenditure), it is assumed that the construction phases do not overlap and therefore the same construction workforce could work on the Proposed Development and the cumulative schemes. On this basis, it is

considered that the cumulative schemes and the Proposed Development combined during the construction phase will have a temporary, negligible cumulative effect on job creation and economic output and a temporary, minor beneficial cumulative effect on workforce expenditure in the Wider Study Area, which is **not considered significant**.

- 13.8.4. However, there may be temporary adverse cumulative effects on local amenity resulting from noise, traffic and visual impacts of the cumulative schemes and Proposed Development combined. However, it is expected that any potential adverse effects related to this will be mitigated by each individual scheme and therefore any adverse effects would **not be significant**.

Operational Phase

- 13.8.5. 10 of the 14 identified cumulative schemes will produce renewable energy and therefore when combined with the Proposed Development there will be a **significant** major beneficial cumulative effect on renewable energy generation in the Wider Study Area during the operational phase.
- 13.8.6. The potential for adverse cumulative effects on local amenity resulting from noise and visual impacts of the cumulative schemes and Proposed Development combined, will be mitigated by each individual scheme and therefore any adverse effects would **not be significant**.

Decommissioning Phase

- 13.8.7. Similar to the assessment of the construction phase for the Proposed Development, it is anticipated that the socio-economic cumulative effects during the decommissioning phase will be the same as those assessed for the construction phase, that being: a temporary, negligible cumulative effect on job creation and economic output and a temporary, minor beneficial cumulative effect on workforce expenditure in the Wider Study Area, which is **not considered significant** and the potential for temporary adverse cumulative effects on local amenity resulting from noise, traffic and visual impacts but which would **not be significant**.

13.9. Summary

- 13.9.1. The socio-economic assessment has considered the likely significant effects of the

Proposed Development on: job creation; economic contribution (measured through the creation of GVA); workforce expenditure; and local amenity (residential properties, local businesses, tourism and recreation uses).

- 13.9.2. The existing agricultural use of the Site will temporarily cease for the 40-year modelled operational lifespan of the Proposed Development. However, the Site only represents 15% of the total land held by the existing farmers that farm the land within the Site and therefore the 19 labourers currently working on the Site will be retained by the farmers to work on the wider land holding. No existing employment will therefore be lost as a result of the Proposed Development.
- 13.9.3. Additional employment opportunities will be created by the Proposed Development. During construction, 200 FTE jobs will be supported directly through construction of the Proposed Development related to land preparation, installation and grid connection. Such roles will require a varied occupation and skill set. However, it is anticipated that the majority, if not all, of these jobs will be sourced from outside of the Wider Study Area by the appointed contractor. Nonetheless, it is considered that a further 80 indirect jobs will be supported in the Wider Study Area as a result of spin-off and multiplier effects in the supply chain. Whilst the solar PV panels themselves will be produced and imported perhaps from outside the UK, indirect employment will be supported once the panels arrive in the UK, associated with transportation to the Site, for example. In the context of the number of jobs created and existing employment levels, it is considered that the Proposed Development will have a temporary, negligible effect on job/employment creation at the Wider Study Area level during the construction phase which is not considered significant.
- 13.9.4. The additional jobs/employment created in the Wider Study Area by the construction of the Proposed Development will generate economic output in the form of GVA. It is estimated that the Proposed Development would create GVA of £3.6m per annum over the 12-month construction period within the context of £7,831.1m total GVA per annum across the construction sector the Wider Study Area. On this basis, it is considered that construction of the Proposed Development will have a temporary, negligible effect on economic output at the Wider Study Area level during the construction phase which is not considered significant.
- 13.9.5. The construction workforce is estimated to generate expenditure of £71,960 per

annum through spending on food, fuel and potentially leisure activities. Such spending will also support local services to the Site, including shops and eating establishments. The Proposed Development will therefore have a minor beneficial effect on workforce expenditure during the construction phase.

- 13.9.6. It is anticipated that the construction workforce will temporarily relocate to the area whilst working on the Proposed Development, placing additional demand on local accommodation. However, effects on local amenity in respect of accommodation services are not anticipated to be significant, given that an extensive stock of accommodation facilities, operating with capacity, has been identified.
- 13.9.7. Effects on local amenity during the construction phase from noise and traffic will be negligible to minor adverse in light of the technical assessments presented in Chapters 10 Transport and Access and 11 Noise and Vibration of the PEIR. Visual effects on local amenity are anticipated to be moderate negative (but not significant), immediately adjacent to the Site. However, negative visual effects rapidly diminish with distance from the Site and therefore within the Local Study Area there is not considered to be any likely significant negative effects on local amenity.
- 13.9.8. Once operational, the Proposed Development will have a moderate beneficial effect on renewable energy generation in the Wider Study Area increasing the solar PV capacity in the Wider Study Area by 30% and increasing all types of renewable energy generation in the Wider Study Area by 3%.
- 13.9.9. Decommissioning of the Proposed Development will generate similar socio-economic effects to those during the construction phase.
- 13.9.10. Table 13.13 contains a summary of the preliminary assessment of the likely significant effects of the Proposed Development.

Table 13.13: Table of Significance –Socio-Economics

Potential Effect	Nature of Effect*	Significance **	Secondary mitigation/ Enhancement Measures	Geographical Importance ***						Residual Effects ****
				I	UK	E	R	UA	L	
Construction Phase										
Job Creation	Temporary	Negligible	Not required				X			Negligible (not significant)
Economic Output	Temporary	Negligible	Not required				X			Negligible (not significant)
Workforce Expenditure	Temporary	Minor beneficial	Not required					X	X	Minor beneficial (not significant)
Local Amenity	Temporary	Negligible to minor adverse	Not required						X	Negligible to minor adverse (not significant)
Operational Phase (accounting for Embedded Mitigation)										
Renewable Energy Generation	Permanent	Moderate beneficial	Not required				X			Moderate beneficial (significant)
Local Amenity	Permanent	Negligible	Not required						X	Negligible (not significant)
Decommissioning Phase										
Job Creation	Temporary	Minor beneficial	Not required				X			Minor beneficial (not significant)
Economic Output	Temporary	Minor beneficial	Not required				X			Minor beneficial (not significant)

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Potential Effect	Nature of Effect*	Significance **	Secondary mitigation/ Enhancement Measures	Geographical Importance ***						Residual Effects ****
				I	UK	E	R	UA	L	
Workforce Expenditure	Temporary	Minor beneficial	Not required					X		Minor beneficial (not significant)
Local Amenity	Temporary	Negligible to minor adverse	Not required						X	Negligible to minor adverse (not significant)
Cumulative Effects										
<i>Construction Phase</i>										
Job Creation	Temporary	Negligible	Not required				X			Negligible (not significant)
Economic Output	Temporary	Negligible	Not required				X			Negligible (not significant)
Workforce Expenditure	Temporary	Minor beneficial	Not required					X		Minor beneficial (not significant)
Local Amenity	Temporary	Negligible to minor adverse	Not required						X	Negligible to minor adverse (not significant)
<i>Operational Phase</i>										
Renewable Energy Generation	Permanent	Major beneficial	Not required				X			Major beneficial (significant)
Local Amenity	Permanent	Negligible	Not required						X	Negligible (not significant)
Nature of Effect *	Permanent or Temporary Short-term, Medium-term, or Long-term									
Significance**	Major/ Moderate/ Minor/ Negligible Beneficial/ Adverse									
Geographical Importance ***	I = International; UK = United Kingdom; E = England; R = Regional; UA = Unitary Authority; L = Local									
Residual Effects ****	Major / Moderate / Minor / Negligible Beneficial / Adverse									