SP MANWEB

Reinforcement to the North Shropshire Electricity Distribution Network

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Environmental Statement Appendix 10.1
Socio-Economic Assessment Methodology

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November 2018

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APPENDIX 10.1
SOCIO-ECONOMIC ASSESSMENT METHODOLOGY

Environmental Statement
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The Planning Act 2008

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

Regulation 5(2)(a)

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Environmental Statement: Appendix 10.1 Socio-Economic Assessment Methodology

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APPENDIX 10.1

SOCIO-ECONOMIC ASSESSMENT METHODOLOGY

1.1 INTRODUCTION

1.1.1 This appendix provides the technical methods used to determine what changes to the baseline are likely to occur as a result of the Proposed Development and sets out the significance criteria that has been used for the Environmental Statement (ES). In the socio-economic context receptors are individuals, organisations or groups who are users or beneficiaries of socio-economic resources, for example community facilities, businesses, accommodation providers and so on.

Assessment Guidance and Methods

1.1.2 The methodology adopted for the socio-economic assessment takes into account feedback following a Scoping Opinion[1] from the Planning Inspectorate (April 2017), responses following submission of the Preliminary Environmental Information Report[2] (PEIR) (November 2017) and other representations received as part of ongoing stakeholder engagement. There is no dedicated UK legislation that specifies the detailed scope of socio-economic assessment or that provides appropriate standards and thresholds for determining the significance of impacts. There is however planning policy and best practice guidance of relevance to socio-economic impact assessment in the context of this project, including:

- Requirements for socio-economic considerations listed in "The Overarching National Policy Statement for Energy (EN-1)" (July 2011)[3];

[1] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020021/EN020021-000012-Scoping%20Opinion.pdf
[2] https://www.spenergynetworks.co.uk/userfiles/file/SPM_NSRP_PEIR.pdf
[3] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37046/1938-overarching-nps-for-energy-en1.pdf

- Requirements for socio-economic considerations listed in "National Policy Statement for Electricity Networks Infrastructure (EN-5)" (July 2011)[4]; and
- Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects[5].

Assumptions and Limitations

1.1.3 A number of assumptions and limitations are made in relation to the information presented in Chapter 10 'Socio-Economic' of the ES (**DCO Document 6.10**) and the appendix.

- The baseline data was based on the most up-to-date information at the time of publication of the ES but the nature of socio-economic data means it is not static;
- The baseline data on business was only available at a county level which is larger than required for assessment purposes;
- Where required, judgement included consideration of the worst-case scenario (precautionary principle) on which to base the assessment; and
- Attempts were made to contact a number of stakeholders related to socio-economic issues. Some stakeholders did not respond and therefore, as indicated within the text, some assessment work has been based on professional judgement.

Baseline Data Gathering and Forecasting Methods

1.1.4 Baseline data has been collected largely through desk-based research. To ensure the assessment understands and assesses the effect on socio-

[4] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37050/1942-national-policy-statement-electricity-networks.pdf
[5] Vanclay, F. (April 2015) available at: http://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf [last accessed 25/05/2018]

economic receptors adequately the baseline data has been collated on a number of sub-topics. The sub-topics and reason for their inclusion are explained in Table A10.1.1

Table A10.1.1 – Baseline Sub-Topics

Baseline Sub-Topics	Reason for Consideration
Population demographics	The number of residents is important to identify how many could potentially be affected by the project. The age structure of a population indicates both the current and future requirements of an area. A younger population, for example, may require access to recreation play areas. Aging populations are likely to focus more on social networks and transport issues.
Employment & skills	The employment and skill level of a community can help highlight if there are issues associated with potential investment that may be welcomed or avoided for an area.
Visual baseline	This has been interpreted from a socio-economic perspective.
Tourism	Tourist locations within the Lower Super Output Areas (LSOA) are identified and general data on tourism for the North Shropshire area are collated. In addition, key organisations have been contacted such as the Shropshire Wildlife Trust to gather tourism data.
Recreation resources	Recreation locations within the LSOA are identified and general data on recreation for the North Shropshire area has been collated (this includes aviation facilities).
Business	This is included because of the need to consider the current business baseline and to highlight the future baseline (once the project is operational) that the Local Authority are seeking to implement through policy measures.
Transport	The baseline from the transport chapter was considered from a socio-economic perspective to highlight if there are currently any issues with traffic movements in the region that could affect tourism and recreation infrastructure.

Sources

1.1.5 Available desktop information that has been reviewed includes Census 2011 and Local Authority profile data (https://www.nomisweb.co.uk/), plus information available on the Shropshire Council website. Consultation activities also resulted in two additional sources of information:

- Overview report for North Shropshire and Oswestry Marketing Strategy (including tourism data); and
- Results from Shropshire Wildlife Trust tourism survey (received via email).

Surveys to Date

1.1.6 In March 2017 Shropshire Wildlife Trust was contacted because they were completing a visitor survey on the sites associated with their Meres and Mosses project. The visitor survey was completed over a number of weeks and promoted via social media so it is important to note that respondents are likely to be members of the organisation rather than general visitors or tourists. Shropshire Wildlife Trust kindly agreed to share the results from the survey when completed, the responses (84 in total) received have been incorporated into the tourism and recreation baseline. The location of respondents is shown below in diagram A10.1.1.

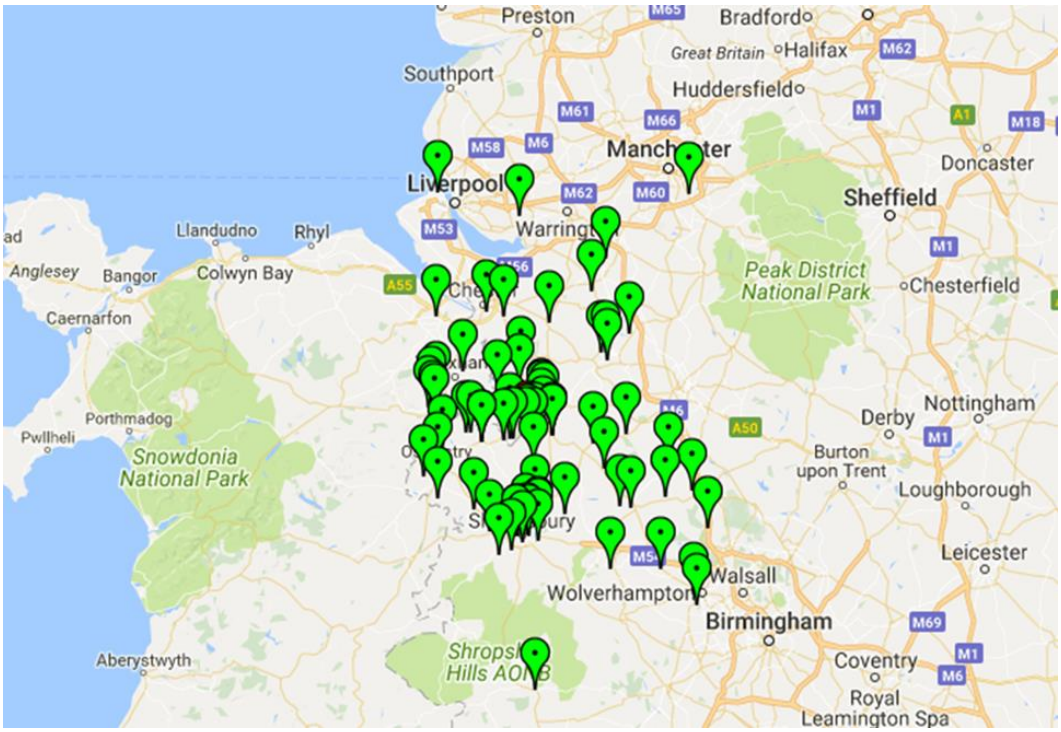


Diagram A10.1.1 Location of Shropshire Wildlife Trust Survey Respondents

Future Baseline

1.1.7 Socio-economic conditions are not static and it is difficult to predict because they are largely influenced by people's personal preferences with their house and career changes and so on. However, future baseline changes are of particular note within this project because of the intentions for growth in the area. A response from the Project Manager at the Economic Growth Service, Shropshire Council highlighted support for the proposed scheme. A letter was also issued to SP Energy Networks from Shropshire Council that is included in below.

Shropshire Council

Malcolm Bebbington
Distribution Networks Manager
SP Energy Networks
3 Prenton Way
Prenton
Merseyside
CH43 3ET

June 2016

Dear Mr Bebbington

Scottish Power Investment in North Shropshire

The provision of additional electricity supply has been a significant infrastructure issue in Whitchurch and North Shropshire for the last 10 years which has impacted on local business growth and inward investment. Discussions with Scottish Power Energy Networks (SPEN), responsible for the supply and distribution of power in the North Shropshire area, have been on-going during this period in order to find a suitable and long term solution.

In 2013 Scottish Power began preparation of their business plan and stake holder consultation as part of the Ofgen Price Review for the period 2015-23 (ED1Business Plan), with Shropshire Council making the case for further investment in the network this area. In response SPEN included plans for a major reinforcement of the 132kv network. This has now evolved into the current proposed 132kv scheme from Oswestry to Wem.

Shropshire Council had initial concerns on the timing of the delivery of the investment as it is understood it could be several years before this scheme was completed. This could impact upon the Council's development strategy aspirations, particularly the housing and employment allocations arising from the Council's Development Plan (2006-2026) at Whitchurch, Oswestry, Wem and Ellesmere outlined in the recently adopted Shropshire Council SAMDev Plan (Site Allocations and Management of Development Plan Document), as well as a number of villages in the surrounding area.

Scottish Power has responded with interim reinforcements to the 33kv network which we acknowledge has resulted in an immediate increase in the capacity for the area. However, there remains a significant need for capacity improvements in the north of the county in the medium to long term to reflect Shropshire's strategic economic growth agenda, and specifically to provide efficient and cost effective infrastructure to residents and businesses over the next 25 years.

Shropshire's SAMDev Plan identifies growth strategies in a number of towns and villages in the north of the County up to 2026 within the area covered by SPEN, and in many cases identify a significant amount of land for both housing and employment uses to achieve these aims. It is crucial that Shropshire can now move forward to deliver these aspirations.

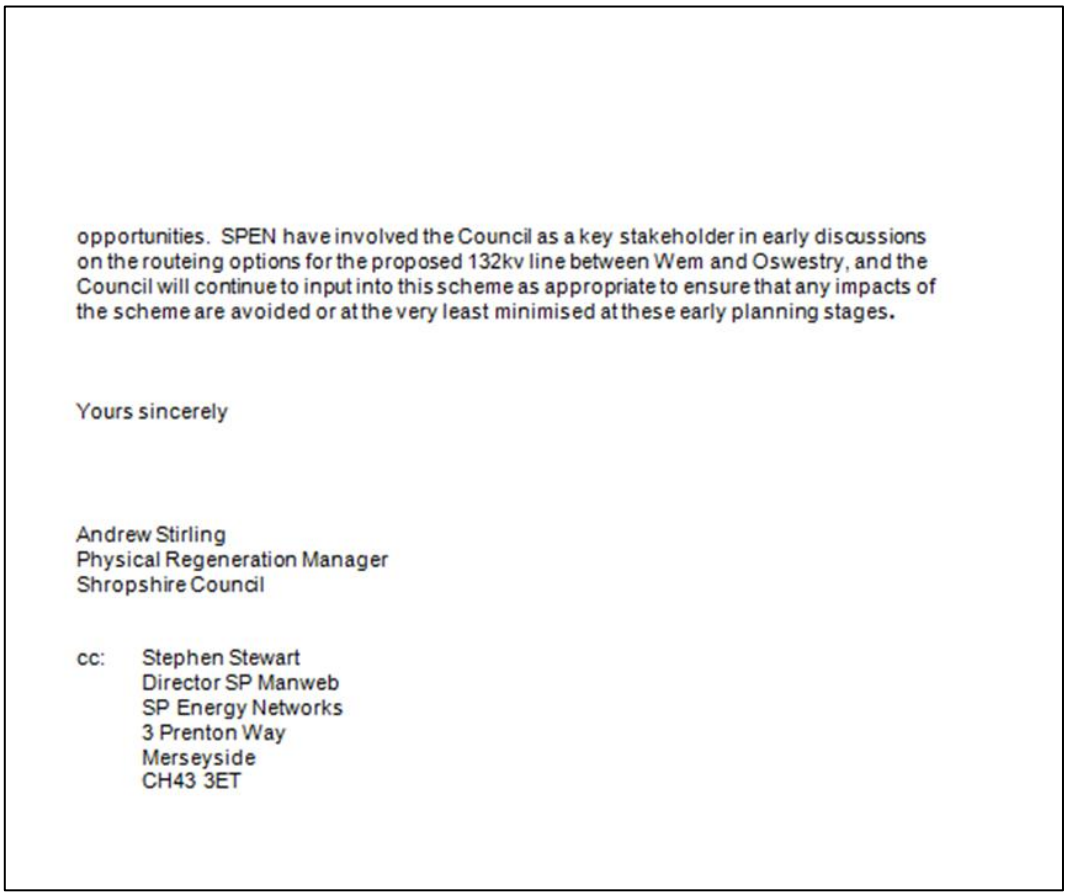
By way of illustration, in Oswestry (Shropshire's second largest town) 2,600 dwellings and 45 hectares of employment are planned to be delivered by 2026. In Whitchurch 1,200 dwellings and 26 hectares of employment land are planned by 2026. In Wem 500 dwellings and 4 hectares of employment land are planned, and in Ellesmere 800 dwellings are proposed. Whilst some of this development has already been built in the early part of the Plan, at 2015 in these four market towns and those villages identified for growth there remains approximately 4,120 dwellings and 63 hectares of employment land to be delivered up to 2026, as well as other windfall development in the wider rural area. It is considered that further investment in infrastructure is required in order for the full extent of these growth strategies to be properly realised. SPEN's proposed capacity improvements will clearly play a major role on this.

These market towns act as service centres serving the local population and a wider rural hinterland. They are the focus of transport networks, employment opportunities and services. Co-ordinated housing and employment development in the market towns supports the rural economy in a sustainable manner by reducing the need for commuting, strengthening local markets and resilience, and reducing carbon emissions. The availability of power is a crucial factor in the delivery of the Council's development plan and specifically the development in the North Shropshire market towns of Oswestry Whitchurch and Ellesmere. There are also a number of villages on the area where growth is proposed, such as Shawbury, Prees and Gobowen, and it is important sufficient capacity is available in these areas to support the Council's approach to improving the sustainability of rural areas such as these.

Looking beyond 2026 the Council is already preparing evidence in support of the next Local Plan review which takes the Plan up to 2036. Whilst specific development proposals and growth strategies for areas will need to evolve through the proper plan-led process and will become clearer during 2017, it is likely there will need to be a continuation of similar levels of economic growth in the County, with market towns continuing to play a key role in these aspirations. The provision of additional capacity with the new line between Oswestry and Wem is key is to supporting this future development post 2026 and providing for resilient growth.

Failure to provide sufficient supply could impact upon the sustainability of the market towns and put at risk their critical role as service centres leading to reduced employment opportunities, increased outward commuting and damaging the economic resilience of the community, as well the Council's wider aspirations for supporting the rural population and economy.

Shropshire Council therefore acknowledges the need for additional electricity supply in the north of the County in order to support planned and future investment and development



opportunities. SPEN have involved the Council as a key stakeholder in early discussions on the routeing options for the proposed 132kv line between Wem and Oswestry, and the Council will continue to input into this scheme as appropriate to ensure that any impacts of the scheme are avoided or at the very least minimised at these early planning stages.

Yours sincerely

Andrew Stirling
Physical Regeneration Manager
Shropshire Council

cc: Stephen Stewart
Director SP Manweb
SP Energy Networks
3 Prenton Way
Merseyside
CH43 3ET

1.2 SOCIO-ECONOMIC ASSESSMENT METHOD

1.2.1 The socio-economic assessment is based on a semi-quantitative comparison of the existing socio-economic conditions in the study area and the conditions likely to prevail during construction and once the Proposed Development is operational. Where relevant, reference is made to other chapters of the ES that cover socio-economic related issues (e.g. landscape and visual assessment). The findings and results of consultation to date have been used to inform the assessment. Analysis is based on information gathered through a combination of comparison to the existing (with consideration of the future) baseline conditions, consultation feedback and professional experience.

1.2.2 An overview of the methodology for this assessment is as follows:

- Stage 1: Study area is identified which is deemed to be appropriate to the scale and location of the Proposed Development.
- Stage 2: baseline data collection involves a number of sub-tasks. Firstly, a desk-based review of information held within the public domain, such as aerial photography, identification of key socio-economic receptors and stakeholders, collation of data from Census material, local reports, internet sites and local knowledge. The socio-economic baseline includes consideration of population, employment and skills, social infrastructure, business, recreation and tourism resources.
- Stage 3: Identification of potential effects based on the project description and comparison to baseline taking into account receptors.
- Stage 4: Assessment through identification of magnitude of effect against sensitivity rating of receptors, to reveal significance. This combines judgements about the likely size and scale of the potential change, the geographical extent of the area over which it is likely to occur, whether it is direct or indirect, positive, negative or neutral. Scrutiny of other key technical chapters from ES (including noise, landscape & visual and transport) to assess whether there is a socio-economic effect from any potential significant effects they have identified. Only those significant residual effects are considered from other technical chapters. This enables the identification of any combined residual effect that may have an impact on socio-economic receptors and thus require further mitigation specific to this topic to minimise the significance.
- Stage 5: Proposal of appropriate and proportionate mitigation measures if significant adverse effects are identified.
- Stage 6: Identification of residual effects taking into consideration the mitigation measures proposed.

- Stage 7: Cumulative impact assessment in relation to socio-economic effects (as required).

Spatial Scope of Study Area

1.2.3 Defining the spatial scope can be complex because of the need to consider individuals and structures at a variety of distances from a proposed development. These individuals and structures may be affected because of a number of potential effects such as economic impact (that is difficult to define categorically) and visual impacts that can vary over distance. In addition, there are a range of spatial levels (e.g. LSOA, ward profiles and local authority administrative boundaries) over which socio-economic information is available. The smallest level of data from census records is at the LSOA. LSOA are a set of geographic areas developed to produce a set of areas of consistent size, whose boundaries would not change (unlike electoral wards). The LSOA have been used for baseline data collection; they typically have a population of 1,500 persons. The Proposed Development has been mapped and LSOA that the route passes through have been identified for baseline data collection purposes. This provides a general overview of the socio-economic context for the Proposed Development. The Shropshire Local Authority boundary has been used for some baseline data (to provide adequate scope for interpretation) for issues such as tourism and recreation because a larger area is needed in keeping with available data and to capture information adequately because of movement of visitors, tourists and residents within the area.

1.2.4 The assessment focuses on those areas that are likely to experience significant effects. The nature of socio-economic effects means the decision was taken to align with the study area for the visual assessment. The design and route of the proposed 132kV overhead line, underground cable, access tracks etc. combined with the screening effects of landform and vegetation, means that its effects on views and visual amenity would generally be limited.

Only those receptors close to the Proposed Development would experience a significant change in their view. Therefore, the 1km study area extends from the Order Limits for the 132kV overhead line only i.e. it does not extend from the Order Limits for the substations, 132kV underground cable, temporary access routes, temporary laydown areas and lower voltage diversions. This is because the potential visual effects resulting from the Proposed Development in these locations would only be related to relatively minor construction works and would be transient and/or very short term in duration. The Transport and Highway Technical Note (**DCO Document 6.1.3**) has also been reviewed with a larger spatial scope to identify if any socio-economic receptors are significantly affected by transport movements associated with the Proposed Development.

1.2.5 Table A10.1.2 includes a description of the socio-economic effects considered and their considered geographic boundaries.

Table A10.1.2 – Potential Socio-Economic Impacts by Study Area

Effect Category	Nature of effects	Geography of effect
Business	Effect on current business activity Effect on business activity based on a future baseline	Shropshire
Tourism	Visual effect on tourism providers Disturbance to tourism providers (noise, traffic) Effect on tourism bed-space availability	Up to 1km either side of Proposed Development with consideration of wider context of North Shropshire
Recreation	Visual effect on recreation providers Disturbance to recreation providers (noise, traffic)	Up to 1km either side of Proposed Development with consideration of wider context of North Shropshire

Table A10.1.2 – Potential Socio-Economic Impacts by Study Area		
Effect Category	Nature of effects	Geography of effect
	Effect on Public Rights of Way (PRoW)	

Temporal Scope

1.2.6 For the purposes of the socio-economic assessment, the line route, underground cable, works at the substations an the underground sections of the lower voltage diversions have been be assessed as permanent and ancillary structures (access tracks etc.) as temporary and the resulting effects are considered in terms of their duration as short-term, medium-term and long-term (this is in keeping with the landscape and visual chapter), as follows:

- Short-term effects are defined as 0 – 3 years;
- Medium term effects are defined as 3 – 15 years; and
- Long term effects are defined as > 15 years.

1.2.7 Short-term effects are typically those which would arise during the construction phase of the Proposed Development.

1.2.8 Medium and long-term effects are typically those which would arise during the operational phase of the Proposed Development. The opening year, when the circuit is energised, has been used as the basis for assessing operational effects. This is anticipated to be 2021.

1.2.9 Long-term residual effects of the Proposed Development are typically those that would remain after a minimum of fifteen years.

Determining Significance

1.2.10 Following identification of potential effects (stage 3 of socio-economic assessment) a level of significance needs to be assigned to that effect. A

three stage approach to the assessment has been adopted:

- Assigning a socio-economic value (or sensitivity of) a resource or receptor;
- Assigning a level of effect (the magnitude); and
- Assigning a level of significance.

1.2.11 The first step in assessing the socio-economic effects is to determine the sensitivity of the socio-economic context to the Proposed Development. Socio-economic sensitivity requires a judgement to be made about the susceptibility of a community or individuals (receptor(s)) to accept or adapt to changing socio-economic conditions caused by a Proposed Development. Table A10.1.3 provides an indication to how the sensitivity is determined. A receptor or resource can experience a socio-economic effect in different ways:

- As an economic gain and / or financial loss; and
- As a gain or loss of a resource or access to a resource.

Table A10.1.3 – Judging Sensitivity of the Effect on Socio-Economic Receptors

Receptor sensitivity / importance	Description / reason
Very high	Very high importance and rarity, international scale and very limited potential for substitution. In terms of this chapter this would refer to a potential effect on an international economy.
High	High importance and rarity, national scale and limited potential for substitution. In terms of this chapter this would refer to the national economy, tourist attractions of national importance, national cycle routes and national trails.

Table A10.1.3 – Judging Sensitivity of the Effect on Socio-Economic Receptors	
Receptor sensitivity / importance	Description / reason
Medium	Medium importance and rarity, regional scale, limited potential for substitution. In terms of this chapter this would refer to the regional economy, tourist attractions of regional importance, etc. Residential housing and settlements, and inhabitants affected. Recreational users and tourists.
Low	Low or medium importance and rarity, local scale. In terms of this chapter this would refer to the local economy, tourist attractions of local importance, rural areas valued for their tranquillity, businesses that could be affected economically. Workers active within study area.
Very low	Very low importance and rarity, local scale. In terms of this chapter this would refer to areas used for rural purposes and non-designated areas used for recreational purposes.

Magnitude of Effect

1.2.12 Table A10.1.4 describes the definition of magnitude considered for this assessment.

Table A10.1.4 – Judging Magnitude of the Effect on Socio-Economic Receptors	
Receptor sensitivity / importance	Description / reason
Very High	Adverse or beneficial irreversible, permanent impacts on the national, regional or local economy, tourism and recreation. Irreversible, permanent social or cultural impacts at national, regional or local level.
High	Adverse or beneficial substantial permanent impacts on the national or regional economy, tourism and recreation. Substantial, permanent impacts on the local economy.

Table A10.1.4 – Judging Magnitude of the Effect on Socio-Economic Receptors	
Receptor sensitivity / importance	Description / reason
	Substantial, permanent national, regional or local social or cultural impacts.
Medium	Adverse or beneficial temporary or permanent impacts on the national and regional economy, tourism and recreation. Permanent impacts on the local economy. Temporary national, regional or local social or cultural impacts.
Low	Adverse or beneficial temporary impacts on local economy. Undetectable impacts on the economy at regional or national scale. Negligible or undetectable social or cultural impacts at all scales.
Very Low	Barely discernible or no loss or alteration of characteristics, features or elements; no observable impact in either direction (i.e. adverse or beneficial).

Effect Significance

1.2.13 Where sufficient information exists to value a receptor and to understand the magnitude of the effect, the assessment uses a matrix to determine the level of significance of the effect, as included in Table A10.1.5.

Table A10.1.5– Socio-Economic Effect Matrix						
		Magnitude of impact				
		Very High	High	Medium	Low	Very Low
Receptor sensitivity	Very High	Major	Major	Moderate	Minor	Minor
	High	Major	Moderate	Minor	Minor	Negligible
	Medium	Moderate	Minor	Minor	Negligible	Negligible
	Low	Minor	Minor	Negligible	Negligible	Negligible

Table A10.1.5– Socio-Economic Effect Matrix						
		Magnitude of impact				
	Very Low	Minor	Negligible	Negligible	Negligible	Negligible

1.2.14 For the purposes of the assessment moderate and major effects are generally deemed to be 'significant'. However, it is important to note that placing a limit on 'moderate' and above when considering cumulative issues could lead to error. Therefore, professional judgement has been used throughout assessment of socio-economic effects from a cumulative perspective.

1.2.15 The socio-economic significance is summarised as in Table A10.1.6 for the purposes of this assessment. The number of people affected has been identified on the basis of the density of population. The average density of persons per hectare for the LSOA is 5.2, so less than this was identified as negligible and then scaled up for minor, moderate and major, taking into account the rural nature of the area. The LSOA with the highest density has 23.6 persons per hectare so 20 was identified as a maximum for major.

Table A10.1.6 – Socio-Economic Definition of Significance	
Classification	Socio-economic Description
Adverse	Detrimental or negative effects on an environmental resource or receptor.
Beneficial	Advantageous or positive effects on an environmental resource or receptor.
Negligible	Imperceptible effects on an environmental resource or receptor. Less than 5 people affected.
Minor	Slight, very short term or highly localised effect of no significant consequence. Less than 10 people affected.

Table A10.1.6 – Socio-Economic Definition of Significance	
Classification	Socio-economic Description
Moderate	More than a slight, very short or localised effect (by extent, duration or magnitude) that may be considered significant. Less than 20 people affected.
Major	Considerable effect (by extent, duration or magnitude) of more than local significance or in breach of recognised acceptability, legislation, policy or standards. More than 20 people affected.

Approach to Mitigation

1.2.16 As set out in Chapter 3 'The Proposed Development' **(DCO Document 6.3)** and Section 4.6 of Chapter 4 'Approach and General Methodology' **(DCO Document 6.4)**, the main strategy for minimising adverse environmental effects of the Proposed Development has been avoidance through careful planning, design and routeing in accordance with the Holford Rules. This has led to the Proposed Development that is the subject of this ES and the application for an Order granting Development Consent.

1.2.17 Standard measures to control and manage the construction effects that are associated with the construction of developments of this nature are as set out in the draft Construction Environmental Management Plan (CEMP) (**DCO Document 6.3.2**).