



Yeargate Limited

LAND NORTH OF BIRCH BUSINESS PARK

Environmental Statement Volume I Chapter 13 –
Socio-Economics and Human Health

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ABBREVIATIONS AND GLOSSARY

ABBREVIATIONS

APS	Annual Population Survey
BRES	Business Register and Employment Survey
DfE	Department for Education
EIA	Environmental Impact Assessment
ES	Environmental Statement
FTE	Full Time Equivalent
GVA	Gross Value Added
HCA	Homes and Communities Agency
IEMA	Institute of Environmental Management and Assessment
IoD	Indices of Deprivation
ISEP	Institute of Sustainability and Environmental Professionals
LIA	Local Impact Area
LSOA	Lower Super Output Area
MHCLG	Ministry for Housing, Communities and Local Government
NHF	National Housing Federation
NIA	Neighbourhood Impact Area
NPPF	National Planning Policy Framework
ONS	Office for National Statistics
PPG	Planning Practice Guidance
RQF	Regulated Qualifications Framework
SOC	Standard Occupational Classification
WIA	Wider Impact Area

GLOSSARY

Deadweight	Deadweight: also referred to as the ‘Reference Case’, deadweight refers to economic outcomes that would occur if the Proposed Development were not implemented.
Direct employment	Refers to jobs created on-site during either construction or operation.
Displacement	Displacement: the extent to which investment in the Proposed Development could lead to existing companies or employees within the target area relocating activities to the site, rather than attracting new investment and employment from businesses located outside of the target area.
Economic activity	Also referred to as the labour market participation rate, economic activity refers to those within the workforce who are either in employment or unemployed but actively seeking work.
Gross Value Added	A measure of the value of goods and services produced in an area, industry, or sector. It is the total output of a producer minus the cost of the intermediate inputs used to create those products.
Indirect employment	Refers to offsite jobs created throughout the wider supply chain as a result of direct employment.
Induced employment	Refers to additional jobs supported throughout the wider economy by both direct and indirect workers spending their wages on local goods and services.
Leakage	Leakage: a measure of the extent to which the benefits accrue outside of the intervention's target area, in this case referring to employment which could be taken up by persons residing outside of the relevant impact area.
Multiplier effects	Multiplier effects: further economic activity associated with additional employment and spending by workers and throughout the supply chain, combining both indirect and induced effects.

13 SOCIO-ECONOMICS AND HUMAN HEALTH

13.1 INTRODUCTION

- 13.1.1. This chapter reports the outcome of the assessment of likely significant effects arising from the Proposed Development upon Socio-Economics and Human Health. This chapter has been produced by WSP UK Ltd.
- 13.1.2. The assessment of Socio-Economics and Human Health has established that no additional mitigation measures are required for any of the receptors assessed for the purposes of this chapter.
- 13.1.3. No additional monitoring requirements have been identified for any of the receptors assessed for the purposes of this chapter.
- 13.1.4. The remainder of this chapter describes the assessment methodology and the baseline conditions relevant to the assessment, which have been used to reach these conclusions, as well as a summary of the likely significant effects leading to the additional mitigation measures required to avoid, prevent, reduce or, if possible, offset any likely significant adverse effects, and the likely residual effects and any required monitoring after these measures have been employed. Opportunities for environmental enhancement, where such opportunities exist, are also discussed.
- 13.1.5. This chapter is intended to be read as part of the wider Environmental Statement.

13.2 CONSULTATION, SCOPE, METHODOLOGY AND SIGNIFICANCE CRITERIA

CONSULTATION UNDERTAKEN TO DATE

- 13.2.1. No consultation activities have been undertaken for the purposes of this assessment of socio-economic and human health effects.

SCOPE OF THE ASSESSMENT

- 13.2.2. The scope of this assessment has been established through an ongoing scoping process. Further information can be found in **Chapter 5: Approach to EIA**.
- 13.2.3. This section provides an update to the scope of the assessment and re-iterates the evidence base for scoping out elements following further iterative assessment.

ELEMENTS SCOPED OUT OF THE ASSESSMENT

- 13.2.4. The elements shown in Table 13-1 are not considered to give rise to likely significant effects as a result of the Proposed Development and have therefore not been considered within this assessment:

Table 13-1 - Elements scoped out of the assessment

Element scoped out	Justification
Provision of new housing	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on housing.
Access to education facilities	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on education facilities.
Access to primary healthcare	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on primary healthcare facilities.
Access to healthy food	The Proposed Development will not include the provision of retail floorspace/food provision so is it not considered relevant for the assessment of impact on access to healthy food.
Access to open space and recreation facilities	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on open space provision.
Access to active travel and sustainable transport options	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on active travel.
Social cohesion, inclusive design and access to community facilities	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on social cohesion and community facilities.
Crime reduction and community safety	The Proposed Development will not include a residential element so is it not considered relevant for the assessment of impact on crime and community safety.
Other human health related effects	This chapter will assess to likely relevant impacts of the Proposed Development on human health but will not assess other human health related effects.

ELEMENTS SCOPED INTO THE ASSESSMENT

Construction Phase

- 13.2.5. The following elements are considered to have the potential to give rise to likely significant effects during construction of the Proposed Development and have therefore been considered within this assessment:
- Direct, indirect and induced employment;
 - Economic productivity generated (Gross Value Added (GVA));
 - Access to skills and training; and
 - Impacts on the human health of potential vulnerable groups affected related to air quality, noise and traffic disruption during the construction phase.

Operational Phase

- 13.2.6. The following elements are considered to have the potential to give rise to likely significant effects during operation of the Proposed Development and have therefore been considered within this assessment:
- Direct, indirect and induced employment supported by commercial uses once operational; and
 - Economic productivity generated (GVA);
 - Access to skills and training; and
 - Impacts on the human health of potential vulnerable groups affected related to the operational phase of the Proposed Development.

EXTENT OF THE STUDY AREA

- 13.2.7. There is no overarching guidance or policy available to inform the definition of appropriate study areas for socio-economic, population and human health effects. Therefore, it is considered reasonable to define study areas based on an understanding of relevant local and wider economic geographies, and the extent to which socio-economic effects are likely to be contained within these geographies.
- 13.2.8. The Office for National Statistics (ONS) provides data according to bounded geographies, including countries, regions and Local Authorities, with the smallest scales being Output Areas and Super Output Areas.
- 13.2.9. The assessment will incorporate the following three impact areas:
- **Neighbourhood Impact Area:** which comprises Lower Layer Super Output Area (LSOA)¹ in which the Proposed Development is located, LSOA Rochdale 020F;
 - **Local Impact Area:** Rochdale Local Authority; and
 - **Wider Impact Area:** North West region

¹ ONS (2026), Lower layer Super Output Areas (LSOAs) comprise between 400 and 1,200 households and have a usually resident population between 1,000 and 3,000 persons.

METHOD OF BASELINE DATA COLLATION

DESK STUDY

13.2.10. In the absence of guidance or policy available to inform the definition of appropriate study areas, it is reasonable to define study areas based on an understanding of relevant local and wider economic geographies, and the extent to which socio-economic, population and human health effects are likely to be contained within the geographies.

- Office for National Statistics (ONS), 2021 Census Data²;
- ONS (2025), Annual Population Survey³;
- ONS (2024), Business Register and Employment Survey⁴;
- Office for Health Improvement and Disparities (OHID) (2025), Local authority profile for Rochdale⁵;
- Ministry of Housing, Communities and Local Government (2025), English Indices of Multiple Deprivation⁶;

SURVEYS

13.2.11. A survey is not required for the purposes of this Socio-Economics and Human Health ES chapter.

ASSESSMENT METHODOLOGY

13.2.12. There is no overarching guidance which sets out the preferred methodology for the preparation of assessments of the likely effects of development proposals in terms of socio-economic disciplines, including population, or human health impact. There are, however, several methodological guides which cover key elements of the assessment, which are referenced in this section.

13.2.13. The assessment methodology is presented below, first for the Construction Stage and secondly for the Operational Stage.

Construction Stage Assessment Methodology

13.2.14. The construction stage assessment has been based on the following methodology.

Employment

Direct employment

13.2.15. Data on the cost of the construction investment is provided by the Applicant for the purposes of this assessment. Cost data is subject to change and inflation.

² ONS (2021), Census 2021

³ ONS (2025), Annual Population Survey

⁴ ONS (2024), Business Register and Employment Survey

⁵ OHID (2025), Local Authority Profiles

⁶ MHCLG (2025), English Indices of Deprivation

- 13.2.16. ONS data on total employment⁷ and total turnover⁸ in the construction sector for the United Kingdom (UK) is analysed. This analysis identifies that the average turnover per full time equivalent (FTE) construction job in 2023 was just under £276,000.
- 13.2.17. Application of the cost estimate and ONS data on average turnover per job in the construction sector in the North West and the direct employment supported by the construction stage is estimated.

Net additional employment

- 13.2.18. Economic impacts are presented as net additional; discounting for leakage and displacement as well as accounting for multipliers to present indirect and induced impacts:
- **Leakage:** a measure of the extent to which the benefits accrue outside of the intervention's target area, in this case referring to employment which could be taken up by persons residing outside of the relevant impact area;
 - **Displacement:** the extent to which investment in the Proposed Development could lead to existing companies or employees within the target area relocating activities to the site, rather than attracting new investment and employment from businesses located outside of the target area;
 - **Deadweight:** also referred to as the 'Reference Case', deadweight refers to economic outcomes that would occur if the Proposed Development were not implemented; and
 - **Multiplier effects:** further economic activity associated with additional employment and spending by workers and throughout the supply chain, combining both indirect and induced effects.
- 13.2.19. Table 13-2 presents additionality assumptions relevant to the assessment of employment effects, for the demolition and construction stage.

Table 13-2 - Additionality assumptions and construction stage employment

Component of additionality assessment	Local Impact Area	Wider Impact Area	Rationale
Leakage	25%	5%	A low level of leakage has been assumed, based on the Homes and Communities Agency (HCA) Additionality Guide, and reflecting that the majority of employment opportunities will be taken up by people living within the target area in the North West region.
Displacement	25%	25%	The estimate for displacement is based on the rationale that employment in the construction industry is relatively flexible. On this basis, a low level of displacement at 25% has been assumed.

⁷ ONS (2024), Annual Population Survey. Accessed at: [JOBS05: Workforce jobs by region and industry - Office for National Statistics](#)

⁸ ONS (2025), Non-financial business economy, UK: Sections A to S. Accessed at: [Non-financial business economy, UK: Sections A to S - Office for National Statistics](#)

Component of additionality assessment	Local Impact Area	Wider Impact Area	Rationale
Deadweight	0%	0%	For this assessment, deadweight is zero for the demolition and construction stage.
Multiplier effects	2.6	2.6	To estimate indirect and induced employment effects, average multipliers have been applied for a local and regional level, based on the National Housing Federation ('NHF') Local Economic Impacts Calculator ⁹ .

Source: WSP (2026)

Economic productivity

13.2.20. Economic productivity effects, measured in Gross Value Added (GVA), is based on an assessment of net additional employment supported by the Proposed Development and application of the latest available ONS data¹⁰ on output per job, for the construction sector, at £68,900 GVA per job in the North West region.

Human health

13.2.21. Assessment of potential vulnerable groups affected by the Proposed Development follows the relevant guidance produced by Institute of Sustainability and Environmental Professionals (ISEP) on determining significance for human health in EIA¹¹.

Operational Stage Assessment Methodology

13.2.22. The operational stage assessment has been based on the following methodology.

Employment

Baseline existing on-site jobs

13.2.23. There are no existing on-site jobs, therefore this baseline is 0. All jobs generated by the Proposed Development will be considered as net additional.

Jobs supported by proposed on-site employment floorspace

13.2.24. The potential employment yield from the proposed employment floorspace is estimated using assumptions about the employment density of different uses, based on several sources of guidance and data:

⁹ National Housing Federation (2026), Local Economic Impacts Calculator

¹⁰ ONS (2025), Regional gross value added (balanced) by industry: all ITL regions. [Regional gross value added \(balanced\) by industry: all ITL regions - Office for National Statistics](#)

¹¹ Institute of Sustainability and Environmental Professionals (formerly IEMA) (2022), Determining Significance For Human Health In Environmental Impact Assessment

- HCA (2015), Employment Density Guide¹²;

13.2.25. The development parameters present a range of Use Classes that could be delivered on-site during the operational stage. The level of employment that could be supported by on-site uses is a reflection of the quantum of floorspace per use class.

13.2.26. Table 13-3 presents the employment assumptions for on-site employment supported by the Proposed Development. It should be noted that these floorspace assumptions are illustrative given the outline nature of the Proposed Development and these would be refined through the Reserved Matters Stages of the application process.

Table 13-3 - Employment assumptions generated by proposed on-site uses

Use class	Description of relevant employment activity	Proposed Development floorspace (sqm, GEA)	Application of employment density or relevant assumption	Assumed proposed on-Site FTE employment (rounded to nearest 5 jobs)
B2/B8	Employment generation in typical industrial/storage and distribution roles including engineering, maintenance, management, logistics, drivers, machine operatives etc.	Up to 11,440 sq.m	36/77 sq.m per job	150-320
E(g) (iii)	Employment generation including management, office and administration staff.	801 sq.m	13 sq.m per job	60
Total:	-	12,241 sq.m	-	210-380

Source: Chapter 3 (Description of Development) and Chapter 5 (Planning Assessment)

Net additional employment

13.2.27. In order to estimate the net additional employment impact of the completed and operational Proposed Development, a series of assumptions have been applied to determine adjustments and account for additionality factors: leakage, displacement, deadweight, and multiplier effects.

13.2.28. The overall approach to assessment of net additional employment impacts is applied to both the demolition and construction stage; and operational stage, though specific assumptions differ.

Table 13-4 - Additionality assumptions, operational stage employment

¹² HCA (2015), Employment Density Guide (3rd edition)

Component of additionality assessment	Local Impact Area	Wider Impact Area	Rationale
Leakage	25%	5%	For this assessment, an average leakage rate of 25% is applied for the Local Impact Area. For the Wider Impact Area, a leakage rate of 5% is applied reflecting that the majority of employment opportunities will be taken up by people living within the North West region.
Displacement	25%	25%	Due to the nature of the Proposed Development, displacement is expected to be low.
Deadweight	0	Deadweight is not applicable as there are no existing employment uses on-site.	
Multiplier effects	1.25	1.45	To estimate indirect and induced employment effects, average multipliers have been applied for a local and regional level, based on the HCA Additionality Guide.

Source: WSP (2026)

Economic productivity

- 13.2.29. The assessment of employment related economic productivity effects is measured in GVA.
- 13.2.30. The approach used to assess economic productivity effects during the operational stage is consistent with the overall methodology applied for the demolition and construction stage, which is based on net additional employment generated by the operational stage of the Proposed Development.
- 13.2.31. ONS data on the all-sector average GVA per filled job, at £51,600 for the Local Impact Area and £61,500 for the Wider Impact Area, is applied to net additional employment estimates, in order to estimate annual GVA generated by the operational stage of the Proposed Development.¹³

Vulnerable groups

- 13.2.32. The identification of vulnerable population groups within this assessment has been informed by the ISEP (2022) publication Effective Scoping of Human Health in Environmental Impact Assessment¹⁴.

¹³ ONS (2025), Regional gross value added (balanced) by industry: all ITL regions. [Regional gross value added \(balanced\) by industry: all ITL regions - Office for National Statistics](#)

¹⁴ ISEP (2022), Effective Scoping of Human Health in Environmental Impact Assessment. Accessed at: [iema-eia-guide-to-effective-scoping-of-human-health-nov-2022.pdf](#)

This guidance outlines a structured approach to understanding how different groups may be disproportionately affected by environmental change, based on factors such as age, health status, disability, income, and access to services. The assessment draws on this framework to ensure that potential impacts on vulnerable groups are appropriately considered in line with best practice.

Table 13-5 - ISEP guidance for vulnerable groups

Vulnerable sub-population group	Consideration guidance
Young age	Consider if there is particular sensitivity associated with vulnerability due to young age. Reference relevant sub-groups or characteristics, including as relevant: children, young adults, unborn children (and their mothers).
Older age	Consider if there is particular sensitivity associated with vulnerability due to older age. Reference relevant sub-groups or characteristics, including as relevant: older people; and frail older people.
Income	Consider if there is particular sensitivity associated with vulnerability due to income (low income or insecure income). Reference relevant sub-groups or characteristics, including as relevant: people who are unemployed, economically inactive, or homeless; people on low incomes or living in poverty; people with shift, part-time or seasonal work; people with low job security or with few progression prospects; people unable to work due to poor health
Health status	Consider if there is particular sensitivity associated with vulnerability due to health status. Reference relevant subgroups or characteristics, including as relevant: people with existing poor physical or mental health (including where related to disabilities); carers of people with existing poor physical or mental health (include parents, especially lone parents and elderly carers). As relevant distinguish physical disability, learning disability, sensory impairment, long term medical conditions, and mental health problems.
Social disadvantage	Consider if there is particular sensitivity associated with vulnerability due to social disadvantage. Reference relevant sub-groups or characteristics, including as relevant: people who experience social isolation; and people who experience discrimination (including people from black and minority ethnic groups and people who identify as being part of faith and belief groups). As relevant if integrating or informing equality impact assessment distinguish reasons that may relate to protected characteristics (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation). Also consider as relevant potential effects to: gypsy/travellers; non-English speakers; people involved in the criminal justice system; refugees and/or asylum seekers; single parent families; and people with low literacy/numeracy.
Access and geographic factors	Consider if there is particular sensitivity associated with vulnerability due to access and geographic factors. Reference relevant sub-groups or characteristics, including as relevant: people experiencing barriers in access to services, amenities or facilities (including barriers

Vulnerable sub-population group	Consideration guidance
	experienced by service providers); people living in areas known to exhibit high deprivation or poor economic and/or health indicators; people in close proximity to the location of changes occurring as a result of the proposal activities. Although these groups may not be 'vulnerable', they are likely to be more sensitive to the changes. Consider as relevant where people live in remote, rural and/or island locations. Or where people live in over-populated areas without sufficient services or amenities

Source: ISEP (2022), *Effective Scoping of Human Health in Environmental Impact Assessment*

Human health

13.2.33. Schedule 4, Paragraph 5(d) of the EIA Regulations requires the EIA to consider the risks to human health as a result of the Proposed Development.

13.2.34. Guidance produced by ISEP¹⁵ identifies health determinants for consideration in EIA:

- **Health Related Behaviours:** physical activity; risk taking behaviour; diet and nutrition.
- **Social Environment:** housing; relocation; open space, leisure and play; transport modes, access and connections; community safety; community identity, culture, resilience and influence and social participation, interaction and support.
- **Economic Environment:** education and training and employment and income.
- **Bio-Physical Environment:** climate change mitigation and adaptation; air quality; water quality or availability; land quality; noise and vibration and radiation.
- **Institutional And Built Environment:** health and social care services; built environment and wider societal infrastructure and resources¹⁶.

13.2.35. The assessment of human health impacts has been undertaken in accordance with the principles set out in guidance produced by ISEP, specifically “Effective Scoping of Human Health in Environmental Impact Assessment”¹⁷ and “Determining Significance For Human Health In Environmental Impact Assessment”¹⁸. This guidance recognises that human health is influenced by a broad range of wider determinants, including social, economic, and environmental factors.

13.2.36. For this ES chapter, human health impacts are considered within each relevant effect that is scoped into this assessment. For example, the assessment of employment effects incorporates consideration of the associated human health impacts, such as changes in wellbeing and health inequalities resulting from variations in access to employment. Similarly, the assessment of housing,

¹⁵ ISEP (formerly IEMA) (2022), Guide to Effective Scoping of Human Health. Accessed at: [iema-eia-guide-to-effective-scoping-of-human-health-nov-2022.pdf](#)

¹⁶ Ibid

¹⁷ ISEP (2022), Guide to Effective Scoping of Human Health. Accessed at: [iema-eia-guide-to-effective-scoping-of-human-health-nov-2022.pdf](#)

¹⁸ ISEP (2022), Determining Significance For Human Health In Environmental Impact Assessment. Accessed at: [iema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf](#)

education, open space, and healthcare provision includes analysis of the human health outcomes associated with changes in these determinants.

- 13.2.37. The significance of human health impacts is determined using the Significance Matrix set out in the 'Significance Criteria' section of this ES chapter, which is based on ISEP guidance¹⁹.
- 13.2.38. This ES chapter includes an assessment of potential in-combination effects, whereby multiple impacts from the Proposed Development and other relevant technical chapters may interact and affect common receptors. This approach recognises that human health outcomes can be influenced by the combined effects of changes in environmental, social, and economic determinants, such as air quality, noise, transport, and access to services. The assessment identifies where receptors, including the local population and vulnerable groups, may be subject to overlapping or cumulative impacts, and evaluates the potential implications for human health. Where relevant, cross-reference is made to other chapters to ensure that the combined effects on human health are appropriately considered and that the assessment reflects the integrated nature of health determinants.
- 13.2.39. To inform the assessment relevant to health determinants, the assessment draws on the assessment outputs from other disciplines within the ES:
- **Chapter 6: Highways, Traffic and Transport;**
 - **Chapter 7: Noise;**
 - **Chapter 8: Air Quality; and**
 - **Chapter 16: Climate Change.**
- 13.2.40. The assessment of human health effects is qualitative and based on professional judgement, and considers the residual impacts identified by the technical disciplines as listed above, taking into account mitigation measures identified by those disciplines.

SIGNIFICANCE CRITERIA

- 13.2.41. The significance level attributed to each effect has been assessed based on the sensitivity/value of the affected receptor(s) and the magnitude of change arising from the Proposed Development, as well as a number of other factors that are outlined in more detail in **Chapter 5: Approach to EIA**. The sensitivity of the affected receptor is assessed on a scale of high, medium, low and negligible, and the magnitude of change is assessed on a scale of large, medium, small, negligible and no change, as set out in **Chapter 5: Approach to EIA**.
- 13.2.42. The assessment of receptor sensitivity is based on professional judgement, taking into account the following factors:
- Comparison with wider regional and national trends. Through observation of a receptors capacity for change relative to wider comparator areas and/or national standards, the sensitivity of receptors locally can be determined.

¹⁹ ISEP (2022), Determining Significance For Human Health In Environmental Impact Assessment. Accessed at: [jema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf](https://www.jema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf)

- Consideration is also given to the priority placed on specific receptors in strategy and policy terms, particularly in the case of more qualitatively based receptors and those where there may be a shortage of quantitative evidence.
- Vulnerable groups, whether the receptor includes vulnerable population groups such as children and older people, and people with health problems and disability.

13.2.43. With specific reference to the consideration of human health effects, the ISEP (2022) guidance titled 'Determining Significance For Human Health In Environmental Impact Assessment' has been taken into account to inform the assessment of sensitive receptors²⁰.

EFFECT SIGNIFICANCE

13.2.44. The following terms have been used to define the significance of the effects identified and apply to both beneficial and adverse effects:

- **Major effect:** where the Proposed Development could be expected to have a substantial improvement or deterioration on receptors;
- **Moderate effect:** where the Proposed Development could be expected to have a noticeable improvement or deterioration on receptors;
- **Minor effect:** where the Proposed Development could be expected to result in a perceptible improvement or deterioration on receptors; and
- **Negligible:** where no discernible improvement or deterioration is expected as a result of the Proposed Development on receptors, including instances where no change is confirmed.

13.2.45. As set out in **Chapter 5: Approach to EIA**, effects that are classified as **moderate or above** are considered to be **significant**. Effects classified as below **moderate** are considered to be **not significant**.

Table 13-6 - Sensitivity criteria

Sensitivity category/level	Indicative criteria Judgement based on most relevant criteria, it is likely in any given analysis that some criteria will span categories) The narrative explains that the population or sub-population's sensitivity is driven by (select as appropriate)
High	High levels of deprivation (including pockets of deprivation); reliance on resources shared (between the population and the project); existing wide inequalities between the most and least healthy; a community whose outlook is predominantly anxiety or concern; people who are prevented from undertaking daily activities; dependants; people with very poor health status; and/or people with a very low capacity to adapt
Medium	Moderate levels of deprivation; few alternatives to shared resources; existing widening inequalities between the most and least healthy; a community whose outlook is

²⁰ ISEP (2022), Determining Significance For Human Health In Environmental Impact Assessment. Accessed at: [jema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf](https://www.jema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf)

	predominantly uncertainty with some concern; people who are highly limited from undertaking daily activities; people providing or requiring a lot of care; people with poor health status; and/or people with a limited capacity to adapt
Low	Low levels of deprivation; many alternatives to shared resources; existing narrowing inequalities between the most and least healthy; a community whose outlook is predominantly ambivalence with some concern; people who are slightly limited from undertaking daily activities; people providing or requiring some care; people with fair health status; and/or people with a high capacity to adapt
Very Low	Very low levels of deprivation; no shared resources; existing narrow inequalities between the most and least healthy; a community whose outlook is predominantly support with some concern; people who are not limited from undertaking daily activities; people who are independent (not a carer or dependant); people with good health status; and/or people with a very high capacity to adapt

Source: ISEP (2022), *Determining Significance For Human Health In Environmental Impact Assessment, Health magnitude methodology criteria*

Significance of Effect

13.2.46. For the purposes of this ES chapter, the ISEP (2022) guidance titled 'Determining Significance For Human Health In Environmental Impact Assessment' has been taken into account to inform the assessment of significant effects²¹.

13.2.47. The significance level attributed to each effect has been assessed based on the sensitivity of the affected receptors and the magnitude of change arising from the Proposed Development, as well as a number of other factors, including:

- Likelihood of occurrence;
- Geographical extent;
- Adherence of the Proposed Development to international, national and local standards;
- Sensitivity/value of the receiving environment or affected receptors;
- Whether the effect is temporary or permanent;
- Whether the effect is short, medium, or long-term in duration;
- Whether the effect is reversible or irreversible; and
- Inter-relationship between effects (both cumulatively and in terms of potential effect interactions).

13.2.48. The assessment of significance is based on professional judgement.

13.2.49. The following terms are used to classify significance of effects:

- Major effect: effects at this level are material in the decision-making process;
- Moderate effect: effects at this level are likely to be material in the decision-making process;
- Minor effect: effects at this level can be material decision-making factors; and

²¹ ISEP (2022), *Determining Significance For Human Health In Environmental Impact Assessment*. Accessed at: [jema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf](https://www.jema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf)

- Negligible effect: effects at this level are not material in the decision-making process.

13.2.50. Effects that are classified as **moderate or above** are considered to be **significant**.

13.2.51. Effects classified as **minor or below** are considered to be **not significant**.

13.2.52. Table 13-7 presents a matrix used to inform the assessment of significance. Cells identified as having potential for significant effects are highlighted, based on the interaction between sensitivity and magnitude of change.

Table 13-7 - Significance Matrix

		Sensitivity			
		High	Medium	Low	Very Low
Magnitude of change	High	Major	Major/moderate	Moderate/minor	Minor/negligible
	Medium	Major/moderate	Moderate	Minor	Minor/negligible
	Low	Moderate/minor	Minor	Minor	Negligible
	Negligible	Minor/negligible	Minor/negligible	Negligible	Negligible

Source: ISEP (2022), *Determining Significance For Human Health In Environmental Impact Assessment*

13.3 POLICY AND GUIDANCE REVIEW

LEGISLATIVE FRAMEWORK

POLICY

National Policy

National Planning Policy Framework (2024)

13.3.1. The National Planning Policy Framework (‘NPPF’)²² sets out the Government’s planning policies for England addressing economic, social and environmental issues. Paragraph 8 of the NPPF states that:

13.3.2. *“Achieving sustainable development means the planning system has three objectives...*

- (1) an economic objective – to help build a strong, responsive, and competitive economy;
- (2) a social objective – to support, strong vibrant and healthy communities; and
- (3) an environmental objective – to protect and enhance our natural, build and historic environment.”

²² MHCLG (2024), National Planning Policy Framework

- 13.3.3. At the heart of the NPPF is the presumption in favour of sustainable development, which states that:
- 13.3.4. *“All plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects...” (paragraph 11).*
- 13.3.5. The NPPF also outlines the importance of delivering a sufficient supply of homes, and for planning to support the delivery of land required to do so. Paragraph 63 highlights that:
- 13.3.6. *“housing needed for different groups in the community should be assessed and reflected in planning policies. These groups should include (but not limited to) those who require affordable housing (including Social Rent), families with children, looked after children, older people, students, people with disabilities, service families, travellers, people who rent their homes and people wishing to commission or build their own homes.”*
- 13.3.7. Paragraph 77 outlines that the delivery of a sufficient supply of homes can often be best achieved by planning for larger-scale developments. In doing so:
- 13.3.8. *“Strategic policy-making authorities should identify suitable locations for such development where this can help to meet identified needs in a sustainable way.”*
- 13.3.9. In promoting healthy and safe communities, the NPPF outlines that planning policies and decisions should achieve developments which:
- (1) “Promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other;
 - (2) Are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion; and
 - (3) Enable and support healthy lives, through both promoting good health and preventing ill health, especially where this would address identified local health and well-being needs and reduce health inequalities between the most and least deprived communities.” (paragraph 96a-c)
- 13.3.10. The NPPF states that planning policies and decisions should “promote an effective use of land in meeting the need for homes and other uses.” (paragraph 124). Further to this, planning policies and decisions should, “encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains.” (paragraph 125a).

National Planning Practice Guidance

- 13.3.11. Updates to the Planning Practice Guidance (‘PPG’)²³ were issued in February 2024.
- 13.3.12. The ‘Housing and Economic Land Availability Assessment’ guidance informs local authorities on how to identify a future supply of land which is suitable for housing and economic development.
- 13.3.13. The Housing and Economic Needs Assessment guidance subsequently informs local authorities about the appropriate way to assess their housing and economic development needs.

²³ MHCLG (2024), Planning Practice Guidance

- 13.3.14. Most importantly, the PPG emphasises the requirement for local authorities to produce a five-year housing land supply plan to take into account the needs of the local population in terms of housing.
- 13.3.15. The 'Open space, sports and recreation facilities, public rights of way and local green space' guidance emphasises the importance of open space, sports and recreational facilities in achieving sustainable development. These facilities provide recreational benefits to local residents whilst contributing to green infrastructure. Local authorities are therefore encouraged to assess the need for these spaces and opportunities to provide new facilities.

Fair Society, Healthy Lives (The Marmot Review) (2010)

- 13.3.16. Published in 2010, the seminal Marmot Review²⁴ found that a person's health is influenced by social determinants of health such as income, education, local environmental quality and employment. To reduce these health inequalities made recommendations in six domains:
- Give every child the best start in life;
 - Enable all children, young people and adults to maximise their capabilities and have control of their lives;
 - Create fair employment and good work for all;
 - Ensure a healthy standard of living for all;
 - Create and develop healthy and sustainable places and communities; and
 - Strengthen the role and impact of ill-health prevention.

Health Equity in England: The Marmot Review 10 Years On, 2020

- 13.3.17. A 10-year review of The Marmot Review was published in February 2020²⁵, The Marmot Review 10 Years On. The report highlighted that public health had been adversely impacted by the austerity policies pursued by the Government over this period. As a result, poverty, poor health and socio-economic inequalities have increased in England. Key findings include:
- Increases in life expectancy have slowed since 2010;
 - There is a strong positive relationship between the level of deprivation and poverty and ill health;
 - The health gap has grown between wealthy and deprived areas; and
 - Where people live matter in terms of health outcomes.
- 13.3.18. The report identifies that a health system based on prevention and health equity would involve a focus on influencing the environment and social and economic conditions of places to improve the health of residents, especially for the most disadvantaged areas.

²⁴ Michael Marmot (2010), Fair Society, Healthy Lives: The Marmot Review

²⁵ Michael Marmot (2020), The Marmot Review 10 years on

NHS Long Term Plan, 2019

- 13.3.19. The 2019 NHS Long Term Plan²⁶ provides a 10-year programme of phased improvement to the NHS services and outcomes. These include making sure everyone gets the best start in life, delivering world-class care for major health problems and supporting people to age well.
- 13.3.20. To achieve these improvements, the long-term plan identifies key challenges that, if overcome, will substantially reduce the pressure on the NHS. These include encouraging people to manage their weight (reduce obesity) and reducing air pollution.

Putting Health into Place, 2019

- 13.3.21. In 2015, NHS England launched the Healthy New Towns programme²⁷ to explore how the development of new places could provide opportunities to create healthier communities. The findings, brought together in the report Putting Health into Place sets out ten principles that should be observed if the built environment is to deliver and contribute to good public health. These include:
- Maximising active travel;
 - Enabling people to eat healthily;
 - Fostering health in homes and buildings; and
 - Enabling play and leisure.

Local Policy

Rochdale Borough – Co-operating for better health and wellbeing: A plan for 2016-2021

The Rochdale health and wellbeing plan²⁸ was published in 2015 and outlined the overall vision for the health of the Borough over the period to 2021. The council's vision for the plan was as follows *“By 2021, we will have reduced health and wellbeing inequalities between our most and least deprived communities and between the Borough and the rest of Greater Manchester.”*

- 13.3.22. The vision was underpinned by six key priorities, which are:
- Reduction in premature mortality in our Borough;
 - Improving health through lifestyle and behaviour change;
 - Early-years, prevention and early intervention;
 - Enabling community resilience, engagement, independence and action;
 - Improving mental health and wellbeing; and
 - Health and social care integration.

²⁶ NHS (2019), NHS Long Term Plan

²⁷ NHS (2019), Putting Health into Place

²⁸ Rochdale Borough Council (2015), Co-operating for better health and wellbeing: A plan for 2016-2021

Rochdale Adopted Core Strategy (2016)

13.3.23. The Rochdale Adopted Core Strategy²⁹ represents the key document as part of the Borough's Local Plan, which was published in 2016 and covers the plan period between 2012 and 2028. The new Local Plan process is currently underway, with formal consultation on the final draft scheduled for summer 2026. The current adopted Local Plan outlines several policies which are relevant to the assessment of both socio-economic and human health impacts. These policies have been summarised below:

S01 – Delivering a more prosperous economy. This will focus on:

- Identifying quality employment sites and areas to increase the number and range of jobs and employment levels;
- Developing the rural and visitor economies particularly in the northern Pennine fringe;
- Establishing strong thriving attractive town centres, particularly Rochdale town centre;
- Ensuring good transport accessibility to jobs and markets within and beyond Greater Manchester; and supporting provision of educational facilities to improve skills; and
- Building on the Borough's assets and improving its image to attract investment.

S02 – To create healthy and successful communities. This will focus on:

- Delivering sufficient housing to meet demand;
- Improving the range of housing to meet everyone's needs and aspirations, including affordable housing and more high value housing;
- Creating well designed desirable housing areas to retain and attract residents;
- Focusing housing growth where it helps to deliver regeneration and economic growth (e.g. inner areas and deprived housing estates);
- Ensuring that new housing is supported by community facilities, service infrastructure, open space etc; and
- Improving the general health and quality of peoples lives through better access to health facilities and services, education, community and cultural facilities and open space.

S04 – To promote a greener environment. This will focus on:

- Minimising Rochdale's contribution to climate change and mitigating and adapting to its adverse effects;
- Ensuring in particular that development is energy efficient and contributes to carbon reduction;
- Reducing the likelihood of flooding through appropriate flood risk management, especially in Rochdale town centre and parts of Littleborough and Heywood;
- Improving our urban open spaces and making them more accessible;
- Maximising the value of our green open areas and countryside to provide opportunities for recreation, amenity, biodiversity and flood management;

²⁹ Rochdale Borough Council (2016), Rochdale Adopted Core Strategy 2012-2028

- Minimising and managing waste and managing minerals resources sustainably; and
- Ensuring no detriment to the conservation interests of European and other protected natural sites.

S05 – To improve accessibility and deliver sustainable transport. This will focus on:

- Directing development to the most accessible locations or those that can be made more accessible by public transport;
- Improving strategic transport connections including links with Manchester city centre and key destinations in and beyond Greater Manchester;
- Improving access to the public transport network;
- Promoting transport improvements that enhance access to town and local centres and employment areas (existing and new) within and outside the borough; and
- Ensuring new development contributes to transport improvements and the use of public and other sustainable transport.

GUIDANCE

13.3.24. The following best practice guidance documents have been used during the preparation of this ES chapter.

- The Green Book³⁰ is guidance issued by HM Treasury on how to appraise policies, programmes and projects;
- Ministry of Housing, Communities and Local Government (MHCLG) has published its Appraisal Guide³¹, which is based Green Book framework (Ref. 14.23) 'Annex D: Estimating Additionality' provides guidance on quantifying the size of the additionality for residential and non-residential developments;
- The Additionality Guide³², published in 2014, by the former Homes and Communities Agency (HCA), now Homes England, provides guidance to justify assumptions on deadweight, displacement, leakage and multipliers;
- The Employment Density Guide, 3rd Edition published by the former Homes and Communities Agency provides advice to practitioners involved in regeneration and economic development projects on employment densities associated with different types of uses;
- ISEP provides guidance titled 'Effective Scoping of Human Health in Environmental Impact Assessment' and 'Determining Significance for Human Health in Environmental Impact Assessment'. The latter of the two, with regard the assessment of significance of potential effects, notes "some groups of individuals may be particularly vulnerable to changes in biophysical and socio-economic factors (adversely or beneficially) whereby they could experience differential or disproportionate effects when compared to the general population. The guidance states: "development has the potential to affect a range of individuals in profoundly different ways. To understand this, it is important to be familiar with the concept of 'wider determinants of health', particularly how health can be affected by:

³⁰ HM Treasury (2013), The Green Book: 2026

³¹ MHCLG (2025), Appraisal Guide

³² HCA (2014), Additionality Guide, 4th Edition

- age, sex and constitutional factors (these cannot be influenced by development);
- individual lifestyle factors;
- social and community networks;
- living and working conditions;
- general socio-economic, cultural and bio-physical conditions”.
- National Health Service (NHS) London Health Urban Development Unit (HUDU) (2019)³³, Health Impact Assessment guidance.

13.4 BASELINE CONDITIONS

- 13.4.1. This section outlines the existing socio-economic baseline context within the relevant impact areas. These areas have been benchmarked against the wider geographical comparators of Rochdale local authority, the North West region and England, where relevant and appropriate, and subject to data availability constraints.

EXISTING BASELINE CONDITIONS

Population

Population size

- 13.4.2. According to the 2021 Census, the Neighbourhood Impact Area (which comprises LSOA Rochdale 020F) has a population of 2,015 residents.³⁴ In comparison, the 2021 Census found that the population of the local authority of Rochdale was 223,773 residents and the population of the North West region was 7,417,397 residents³⁵.
- 13.4.3. Rochdale Local Authority has a population density of 1,416 people per square kilometre whereas the North West region has a significantly lower density of 526 people per square kilometre, and the average for England is 433 people per square kilometre.³⁶

Population growth

- 13.4.4. Table 13-8 below presents a comparison of population estimates for the Study Area over a 10-year period from 2011 to 2021. During this time, the Neighbourhood Impact Area’s population increased by 8.0%, from approximately 1,850 residents in 2011 to approximately 2,000 residents in 2021. This was a much greater growth trend than Rochdale, which grew by 5.7% over the same period.
- 13.4.5. In contrast, the regional population grew by 5.2%, which is slightly lower than Rochdale, and significantly lower than the LSOA Rochdale 020F.

³³ NHS (2019), London HUDU HIA Guidance

³⁴ ONS (2021), Census, Table TS001 – Number of usual residents in households and communal establishments.

³⁵ Ibid.

³⁶ Ibid.

Table 13-8 - Population change from 2011 Census to 2021 Census

Geography	2011 population	2021 population	% Change
LSOA Rochdale 020F	1,866	2,015	+8.0%
Rochdale	211,699	223,773	+5.7%
North West	7,052,177	7,417,397	+5.2%

Source: ONS (2011 and 2021), 2011 Census, Table KS101EW - Usual resident population; and 2021 Census, Table TS001 – Number of usual residents in households and communal establishments.

Age Profile

- 13.4.6. Table 13-9 shows the age profile of the population residing within the Neighbourhood Impact Area and comparator areas in 2021.
- 13.4.7. Estimates indicate that LSOA Rochdale 020F has fewer working age residents than average, making up 59.1% of the population. Comparatively, 61.8% of residents within Rochdale local authority and 62.4% of residents within the North West fall within this working age category of ages 16-64 years.
- 13.4.8. LSOA Rochdale 020F has slightly more children aged up to 15 years old, making up 19.8% of the population, compared to regional trends of 18.8%. This Neighbourhood Impact Area also has a much higher proportion of older residents aged 65 years and older, at 21.0%, compared to 18.7% regionally.
- 13.4.9. In contrast, the Local Impact Area of Rochdale has a higher proportion of children, at 21.8%, and a lower proportion of older residents, at 16.5%.

Table 13-9 - Age profile

Age group	LSOA Rochdale 020F	Rochdale	North West
Age 0-15	19.8%	21.8%	18.8%
Age 16-64	59.1%	61.8%	62.4%
Age 65+	21.0%	16.5%	18.7%

Source: Census 2021, table TS007 – Age by single year

Health Profile

General Health

- 13.4.10. According to ONS 2021 Census data, 86.7% of NIA residents reported themselves as being in 'good' or 'very good' health. This is higher than the equivalent figure across the LIA, the North West and England (79.8%, 80.4% and 82.2%, respectively). In comparison, just 3.3% of people reported themselves as being in 'bad' or 'very bad' health. This was lower than the equivalent figures for the wider comparators of 6.4%, 6.2% and 5.2%, respectively.

Disability

13.4.11. The 2021 Census also provides data on disability and long-term physical and mental health conditions. Across the NIA, 13.6% of people stated that they had a physical or mental health condition that limited their day-to-day activities 'a little' or 'a lot', while 6.5% of people had a condition that did not limit their day-to-day activities. The NIA performs better than the wider comparators in terms of physical and mental health, with 19.1% of people across the LIA stating that they had a condition that limits their activities 'a little' or 'a lot'. This figure stands at 19.4% across the North West and 17.3% across England.

Life Expectancy

13.4.12. Local Authority health profile data from the Department of Health and Social Care³⁷ indicates that in 2024, life expectancy at birth across Rochdale stood at 77.3 years for males and 81.3 years for females. Across the North West, the equivalent figures stood at 77.9 years for males and 81.9 years for females, while across England life expectancy at birth was 79.5 years for males and 83.3 years for females.

Infant Mortality

13.4.13. Between 2022-2024, the prevalence of infant mortality across Rochdale stood at 3.8 per 1,000 live births. This was lower than the equivalent averages for both the North West and England (4.6 and 4.2 per 1,000 live births, respectively).

Child Health

13.4.14. In 2025, 25.2% of year 6 children across Rochdale were classified as overweight or obese. This is higher than the equivalent figures for both the North West (23.6%) and England (22.2%).

13.4.15. In 2022, the teen conception rate across Rochdale stood at 18.4 per 1,000 females (aged 15-17), which was above the equivalent figures for both the North West (16.8 per 1,000 females) and England (13.9 per 1,000 females).

Smoking Prevalence

13.4.16. In 2024, smoking prevalence amongst adults across Rochdale stood at 11.8%. This was above the equivalent figures across both the North West (10.8%) and England (10.4%).

13.4.17. In 2025, 7.3% of new mothers across Rochdale identified as smokers at the time of delivery. This was slightly higher than the equivalent figures across the North West (6.5%) and England (6.1%).

Employment and Economy

Economic Activity and Unemployment

13.4.18. Annual Population Survey³⁸ data indicates that in the 12 months to September 2025, the economic activity rate (also known as the labour market participation rate) for working age residents (16-64)

³⁷ DHSC (2024), Local Authority Health Profiles

³⁸ ONS (2025), Annual Population Survey

across Rochdale stood at 73%, which was lower than the equivalent average across both the North West and England (77.5% and 79.3%, respectively).

- 13.4.19. In the 12 months to September 2025, the unemployment rate for working age residents stood at 6.8%, which was higher than that across both the North West (4.2%) and England (4.4%).

Claimant Count

- 13.4.20. Data relating to claimant counts from the ONS³⁹ indicates that as of February 2026, 1.7% of working age residents within the NIA were claiming unemployment support/universal credit. This is significantly lower than the equivalent averages for Rochdale (6%), the North West (4.2%) and England (4.1%).

Occupations

- 13.4.21. Annual Population Survey data indicates that in the 12 months to September 2025 across Rochdale, 44.8% of employed residents were employed in managerial, professional or associate occupations (SOC groups 1-3). This was lower than the equivalent figures across both the North West (50.7%) and England (53.9%).
- 13.4.22. Over the same period, 23.2% of employed residents across Rochdale were employed in sales, process or elementary occupations (SOC groups 7-9). This was slightly above the equivalent averages across both the North West and England (21.4% and 20%, respectively).

Qualifications

- 13.4.23. In the 12 months to December 2024, 35.7% of working age residents in Rochdale held Regulated Qualifications Framework ('RQF') Level 4 qualifications or above (i.e. degree-level). This was significantly lower than that across both the North West and England (42.3% and 46.8%, respectively).
- 13.4.24. In contrast, 12.9% of working age residents across Rochdale held no formal qualifications, which was higher than that across both the North West (8.2%) and England (6.6%). This aligns with the data on occupations described above, indicating that on average, Rochdale residents tend to be employed in lower-skilled occupations and hold fewer formal qualifications in comparison with the regional and national benchmarks.

Job density

- 13.4.25. As of 2023, job density across Rochdale stood at 0.64 jobs per person, which was lower than that across both the North West and England (0.82 and 0.87, respectively). This indicates that Rochdale exhibits a lower ratio of jobs per person than across the wider geographical comparators.

Employment by Industry

- 13.4.26. According to Business Register and Employment Survey ('BRES') data from 2024⁴⁰, the largest industrial sectors across the NIA were transport and storage (accounting for 57.1% of total

³⁹ ONS (2026), Claimant count

⁴⁰ ONS (2024), Business Register and Employment Survey

employment), motors trades (8.2%) and health (8.2%). In comparison, the largest sectors across Rochdale were education (15.9%), business administration (12.5%), retail (10.2%) and manufacturing (10.2%).

Table 13-10 - Employment by Industrial Sector (2024)

Industry	Rochdale 020F		Rochdale		North West	
Agriculture, forestry & fishing	0	0.0%	300	0.3%	36,000	1.0%
Mining, quarrying & utilities	0	0.0%	900	1.0%	40,000	1.1%
Manufacturing	45	3.7%	9,000	10.2%	312,000	8.5%
Construction	75	6.1%	5,000	5.7%	184,000	5.0%
Motor trades	100	8.2%	1,500	1.7%	58,000	1.6%
Wholesale	30	2.4%	7,000	7.9%	135,000	3.7%
Retail	15	1.2%	9,000	10.2%	320,000	8.7%
Transport & storage	700	57.1%	6,000	6.8%	173,000	4.7%
Accommodation & food services	35	2.9%	4,000	4.5%	274,000	7.5%
Information & communication	10	0.8%	2,000	2.3%	108,000	2.9%
Financial & insurance	0	0.0%	450	0.5%	87,000	2.4%
Property	15	1.2%	1,500	1.7%	75,000	2.0%
Professional, scientific & technical	35	2.9%	3,500	4.0%	351,000	9.6%
Business administration & support services	35	2.9%	11,000	12.5%	314,000	8.6%

Industry	Rochdale 020F		Rochdale		North West	
Public administration & defence	30	2.4%	3,000	3.4%	184,000	5.0%
Education	0	0.0%	7,000	7.9%	297,000	8.1%
Health	0	0.0%	14,000	15.9%	574,000	15.6%
Arts & entertainment	100	8.2%	3,000	3.4%	147,000	4.0%
Total	1,225	100%	88,150	100%	3,669,000	100%

Apprenticeships

13.4.27. Data from the DfE⁴¹ indicates that there were approximately 120 students undertaking apprenticeships within the construction industry across Rochdale in 2024/25, which equates to approximately 2.4% of all construction industry jobs across the Borough. In addition, there were a total of around 1,530 apprentices across all sectors within the Borough during the same period, equating to around 1.7% of total sectoral employment. This indicates that the construction industry has a slightly higher propensity to hire apprentices compared to the wider industrial average. This trend is also evident across the wider geographical benchmarks.

Deprivation and Inequality

Deprivation

13.4.28. According to the 2025 Indices of Deprivation ('IoD')⁴², the Lower Super Output Area ('LSOA') in which the Proposed Development is located falls within the 30% least deprived neighbourhoods nationally in relation to overall levels of deprivation. The Borough of Rochdale ranks as the 19th most deprived local authority area nationally with regards to overall deprivation, falling within the 10% most deprived local authorities nationally, indicating that the NIA is significantly less deprived overall when benchmarked against the local authority as a whole.

13.4.29. In relation to health deprivation, Rochdale 020F falls within the 40% least deprived neighbourhoods across the country. In terms of health, Rochdale ranks as the 20th most deprived local authority nationally, placing it within the 10% most deprived local authority areas nationally. This indicates that the NIA is significantly less deprived than the local authority as a whole in terms of health-related deprivation indicators.

⁴¹ DfE (2025), Apprenticeships dataset

⁴² MHCLG (2025), English Indices of Deprivation

Vulnerable Groups

13.4.30. The preceding baseline analysis has identified several 'priority' groups which may be more vulnerable to changes in the local environment as a result of the Proposed Development, and have the potential to be more adversely impacted by changes to health-related indicators such as access to local services, air quality or local employment opportunities. The following priority/vulnerable groups have been identified based on the existing baseline context, the characteristics of the local area and the nature of the Proposed Development itself;

- Children and young people (0-15);
- Disabled residents and elderly people (65+); and
- Low-income residents and/or those receiving unemployment support.

FUTURE BASELINE

13.4.31. The ONS provides population projections at the local authority level up to the year 2047⁴³. The projected population in 2027 for Rochdale Borough is approximately 257,300 residents, which equates to an increase of 15% over the reported population at the 2021 Census. This is in line with the equivalent increase across the North West over the same period, which is projected to see a population increase of around 14.6%.

13.4.32. The overall economic breakdown and sector mix of employment within the local area is expected to broadly reflect the current position. However, the level of future economic growth is dependent on various factors. Occupational breakdown, economic activity and unemployment changes will depend upon the future strength of the local economy. Therefore, it is not possible to accurately forecast a specific future baseline for the local economy. Instead, this assessment considers the potential impact of the Proposed Development on the current status of relevant labour market indicators, which are taken to represent the future baseline.

13.4.33. Rochdale Borough Council's Growth Plan⁴⁴ was published in 2020 and outlines various employment related targets for the Borough over the period to 2030. These include plans to develop 1 million sq.m of new employment floorspace along the M62 corridor and deliver around 20,000 new jobs. The majority of this floorspace will comprise typical employment uses such as industrial, storage & distribution and office floorspace.

13.5 SENSITIVE RECEPTORS

13.5.1. The following sensitive receptors have been assessed:

- Those in direct or indirect employment during both construction and operation
- Businesses generating economic output during both construction and operation;
- Those undertaking apprenticeships and skills training during both construction and operation; and
- Vulnerable groups within the local population.

⁴³ ONS (2025), Sub-national Population Projections: 2022-based

⁴⁴ Rochdale Borough Council (2020), Rochdale Growth Plan

13.5.2. Table 13-11 below outlines the assessed sensitivity of each of the receptors outlined above

Table 13-11 - Sensitivity of receptors

Receptor	Sensitivity of receptor	Justification
Those in direct or indirect employment during both construction and operation	Medium	The NIA performs well against the wider comparators in relation to claimant count. However, Rochdale performs worse than the wider comparators in relation to economic activity, occupations and qualifications.
Businesses generating economic output during both construction and operation	Medium	The NIA performs well against the wider comparators in relation to claimant count. However, Rochdale as a whole performs worse than the wider comparators in relation to economic activity, occupations and qualifications.
Those undertaking apprenticeships and skills training during both construction and operation	Low	Baseline analysis indicates that construction industry apprenticeships account for 2.4% of total construction employment across Rochdale, while total apprenticeships account for 1.7% of total employment.
Vulnerable groups within the local population	Low	The NIA has a low proportion of young people (0-15) but a higher proportion of elderly residents (65+) than the wider Borough, as well as a lower proportion of claimants.

13.6 ASSESSMENT OF POTENTIAL EFFECTS, MITIGATION AND RESIDUAL EFFECTS

CONSTRUCTION PHASE

Direct, Indirect and Induced Employment

Pathway to effect

- 13.6.1. During the construction phase, the Proposed Development will generate considerable direct construction employment on-site. Using the estimated construction cost and anticipated build period of the Proposed Development provided by the Applicant, as well as estimates of turnover per job

from the ONS⁴⁵, it is possible to estimate the quantum of direct employment supported on Site during the construction phase.

Effect generated by Proposed Development

- 13.6.2. Applying the estimated construction cost to estimates of turnover per job and dividing by the anticipated length of the construction period, it is estimated that the Proposed Development could support approximately 56 direct FTE jobs per annum during the construction phase. It is acknowledged that construction activity comprises several distinct occupations (carpenters, electricians, plumbers, bricklayers, roofers etc) and that actual levels of construction employment on-site will likely fluctuate significantly over the course of the construction phase.
- 13.6.3. Construction also involves the purchase of goods and services from a range of businesses throughout the supply chain, who, in turn, procure goods and services from their own suppliers. The relationship between the initial spending and total economic effects is known as the 'indirect effect'. This demonstrates that an initial expenditure can have an additional economic impact as the initial spending is diffused throughout the economy. In addition, both direct and indirect workers create additional local expenditure in the form of personal spending (such as food, social activities and other goods and services). This additional expenditure supports further 'induced' effects, which further enhance the economic impact and employment generated as a result of the initial investment.
- 13.6.4. Applying employment multipliers to the direct employment described above, indicates that the Proposed Development could support a total of 145 direct, indirect and induced FTE jobs per annum during the course of the construction phase across the LIA.
- 13.6.5. However, displacement of workers from outside of the local area and leakage effects will likely reduce this figure. Applying low leakage and displacement rates of 25%, it is expected that the Proposed Development could support a total of 81 direct, indirect and induced FTE jobs per annum during the course of the construction phase across the LIA. Applying a lower leakage rate (of 5%) for the WIA indicates that across the wider region, a total of 103 direct, indirect and induced FTE jobs per annum could be supported.

Sensitivity of receptor

- 13.6.6. The sensitivity of the receptor is assessed as medium as outlined above. This reflects the poor performance of the LIA across a variety of labour market indicators against the wider comparator areas.

Magnitude of change

- 13.6.7. The total employment generated during construction across the LIA represents approximately 0.02% of total construction employment across Rochdale. Based on this, the magnitude of impact on employment generation during the construction phase is assessed as negligible.

⁴⁵ ONS (2024), Non-financial business economy, UK: Sections A to S

Additional mitigation

- 13.6.8. No additional mitigation is required in relation to employment generation during the construction phase.

Residual effects and monitoring

- 13.6.9. Therefore, there is likely to be a direct, temporary, short-term and minor beneficial effect on the receptor. This is not considered significant in EIA terms.

Economic Output (GVA)

Pathway to effect

- 13.6.10. The direct, indirect and induced employment supported during the course of the construction phase will also generate additional economic output in the form of gross value add ('GVA'), a commonly used measure of economic value and productivity. GVA per job estimates from the ONS⁴⁶ indicate that the average worker in the construction sector across the North West generates a total economic output of approximately £68,900 per annum.

Effect generated by Proposed Development

- 13.6.11. Applying this to the direct, indirect and induced construction employment described above indicates that the Proposed Development could be expected to generate a total of £5.6 million of GVA per annum during the course of the construction phase across the LIA. Across the WIA, a total of £7.1 million of GVA per annum could be supported during construction.

Sensitivity of receptor

- 13.6.12. The sensitivity of the receptor is assessed as medium as outlined above. This reflects the poor performance of the LIA across a variety of labour market indicators against the wider comparator areas.

Magnitude of change

- 13.6.13. ONS data indicates that in 2023⁴⁷, total GVA for the construction industry across Rochdale was approximately £393 million. Hence, the GVA generated across the LIA by the Proposed Development represents approximately 0.01% of total GVA across the Borough. Based on this, the magnitude of effect on economic output during the construction phase is assessed as negligible.

Additional mitigation

- 13.6.14. No additional mitigation measures are required in relation to economic output during the construction phase.

⁴⁶ ONS (2023), Regional gross value added (balanced) by industry: all ITL regions

⁴⁷ ONS (2023), Regional gross value added (balanced) by industry: all ITL regions

Residual effects and monitoring

13.6.15. Therefore, there is likely to be a direct, temporary, short-term and minor beneficial effect on the receptor. This is not considered to be significant in EIA terms.

Access to Skills and Training

Pathway to effect

13.6.16. The creation of additional employment within the construction sector is also likely to improve access to skills and training opportunities for local people, potentially leading to further full-time employment opportunities. This could help to alleviate local deprivation across a variety of indicators and help those currently claiming unemployment support to transition into the workforce.

13.6.17. Contractor organisations are likely to support skills training opportunities such as apprenticeships, as well as educational and vocational courses at local schools and colleges. There are also opportunities for the Proposed Development to enhance the positive effects of local skills training by partnering with local institutions, as well as the potential to boost the local supply chain by partnering with local contractors and suppliers.

Effect generated by Proposed Development

13.6.18. Data from the Department for Education⁴⁸ indicates that as of 2024/25, there were a total of 120 students undertaking a construction-related apprenticeship across Rochdale, compared with a total of 5,000 people employed within the construction industry in Rochdale. This indicates that approximately 2.4% of total construction industry workers across the Borough were apprentices. Applying this to the direct construction jobs supported by the Proposed Development indicates that the proposals could support 1 apprentice per annum during the course of the construction phase.

Sensitivity of receptor

13.6.19. The sensitivity of the receptor is assessed as low as outlined above. This reflects the relatively low number of construction apprenticeships across the borough as a proportion of the total construction workforce.

Magnitude of change

13.6.20. Based on the above, the magnitude of effect on access to skills and training during the construction phase is assessed as negligible.

Additional mitigation

13.6.21. No additional mitigation relating to apprenticeships is required during the construction phase

Residual effects and monitoring

13.6.22. Therefore, there is likely to be a direct, temporary, short-term and **negligible** effect on the receptor. This is not considered to be significant in EIA terms.

⁴⁸ Department for Education (2025), Academic year 2024/25 - Apprenticeships

Impacts on Human Health of Vulnerable Groups

13.6.23. During the construction phase, the Proposed Development has the potential to give rise to a variety of Human Health impacts, particularly for vulnerable groups within the population. To assess these impacts, reference has been made to the results of various other technical chapters as part of this ES. The results are discussed in more detail below.

Air Quality

Pathway to health effect

13.6.24. Air quality is widely recognised as key determinant of human health. The effects on air quality from construction activity and traffic have a variety of impacts on human health outcomes.

Effect generated by Proposed Development

13.6.25. The assessment undertaken within **Chapter 8 – Air Quality** concludes that additional mitigation measures are not required. However, the chapter states that a Construction Environmental Management Plan (CEMP) will be produced to control potential air quality effects during the construction phase. The Chapter outlines that there is likely to be a direct, temporary, short-term adverse residual effect on local human receptors as a result of fugitive dust and particulate matter with an aerodynamic diameter of less than 10µm (PM₁₀) emissions during the construction phase, however this is not considered significant in EIA terms. The Chapter also states that there is likely to be a direct, temporary, short-term negligible residual effect on local human receptors as a result of road vehicle exhaust emissions during the construction phase (not significant).

Sensitivity of receptor

13.6.26. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

13.6.27. Taking into account the conclusions of **Chapter 8 – Air Quality**, the magnitude of effect on vulnerable groups within the population during the construction phase is considered negligible.

Additional mitigation

13.6.28. No additional mitigation is required at this stage, however air quality monitoring as outlined in the Construction Environmental Management Plan will ensure any relevant mitigation measures relating to air quality impacts are undertaken.

Residual effects and monitoring

13.6.29. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

Highways, Traffic and Transport

Pathway to health effect

13.6.30. Highways, traffic and transport are widely recognised as key determinants of human health. The effects of vehicle traffic directly (via road safety) and indirectly (via air quality and noise impacts) impact a variety of human health outcomes.

Effect generated by Proposed Development

- 13.6.31. The assessment undertaken within **Chapter 6 – Highways, Traffic and Transport** concludes that no secondary or tertiary mitigation measures are required in relation to the Proposed Development. The Chapter identifies a direct, temporary, short-term minor adverse residual effect on the local highway network during the construction phase, however this is not considered significant in EIA terms.

Sensitivity of receptor

- 13.6.32. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

- 13.6.33. Taking into account the conclusions of **Chapter 6 – Highways, Traffic and Transport**, the magnitude of effect on vulnerable groups within the population during the construction phase is considered negligible.

Additional mitigation

- 13.6.34. No additional mitigation is required at this stage, however monitoring of construction traffic throughout the construction phase is recommended.

Residual effects and monitoring

- 13.6.35. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

Noise and Vibration

Pathway to health effect

- 13.6.36. Noise and vibration impacts are widely recognised as key determinants of human health. The effects of construction related noise and vibration impact a variety of human health outcomes.

Effect generated by Proposed Development

- 13.6.37. The assessment undertaken within **Chapter 7 – Noise and Vibration** indicates that no additional mitigation measures are required in relation to the Proposed Development. The Chapter states that for construction noise and vibration, there is likely to be a direct, temporary, medium-term negligible adverse residual effect on residential and commercial receptors, however this is not considered significant in EIA terms.

Sensitivity of receptor

- 13.6.38. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

- 13.6.39. Taking into account the conclusions of **Chapter 7 – Noise and Vibration**, the magnitude of effect on vulnerable groups within the population during the construction phase is considered negligible.

Additional mitigation

13.6.40. No additional mitigation relating to noise and vibration is required during the construction phase.

Residual effects and monitoring

13.6.41. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

Climate Change

Pathway to health effect

13.6.42. Climate change is widely recognised as key determinant of human health. The effects of climate change have a variety of direct and indirect impacts on human health outcomes.

Effect generated by Proposed Development

13.6.43. **Chapter 16 – Climate Change** outlines that There is likely to be a direct, permanent, long-term minor adverse residual effect on the global climate as a result of GHG emissions during the construction phase, however this is not considered significant in EIA terms.

Sensitivity of receptor

13.6.44. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

13.6.45. Taking into account the conclusions of **Chapter 16 – Climate Change**, the magnitude of effect on vulnerable groups within the population during the construction phase is considered negligible.

Additional mitigation

13.6.46. The Chapter states that various mitigation measures have been identified for the Proposed Development, including:

- BREEAM Materials credits, including a Life Cycle Assessment (LCA);
- Construction Transport Management Plan (CTMP);
- Passive Electric Vehicle (EV) charging provision;
- Travel Plans; and
- Servicing and Delivery Strategy.

Residual effects and monitoring

13.6.47. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

OPERATIONAL PHASE

Direct, Indirect and Induced Employment

Pathway to effect

13.6.48. Once completed and fully occupied, the Proposed Development will support a variety of jobs both directly (on-site) and off-site as a result of wider indirect and induced effects. For the purposes of

this assessment, a range of on-site jobs has been estimated based on the quantum and type of floorspace provided, as outlined within the indicative masterplan.

- 13.6.49. The Proposed Development will provide a total of approximately 11,440 sq.m of general industrial (B2) and/or storage & distribution (B8) floorspace on-site, alongside approximately 801 sq.m of ancillary office floorspace (E(g)(i/ii)).

Effect generated by Proposed Development

- 13.6.50. Applying typical employment density standards set out within the relevant guidance to the proposed quantum/typology of floorspace described above provides an estimate of the potential operational employment generated on-site. For the B2/B8 floorspace, a range of potential employment generation has been provided, to account for the potential split of B2/B8 floorspace to be provided on-site. These calculations have been outlined within the table below. This indicates that in total, the Proposed Development could be expected to generate between 210-380 direct FTE jobs per annum on-site once completed and fully operational.

Table 13-12 - Direct operational employment estimates

Use Class	Sq.m (GIA)	Density Assumption (sq.m/job)	FTE Jobs (Rounded to nearest 5)
B2/B8	11,440	77	150-320
E(g)(i/ii)	801	13	60
Total	12,241	-	210-380

Source: HCA (2015), Employment Density Guide 3rd edition

Applying low displacement (25%) and leakage rates (25%) to the FTE employment generated above indicates that the Proposed Development could be expected to generate between 120-215 net additional direct FTE jobs per annum across the LIA. Applying a lower leakage rate (of 5%) for the WIA indicates that a total of between 150-270 net additional direct FTE jobs could be supported across the WIA.

- 13.6.51. The direct jobs supported on-site by the Proposed Development will also generate additional employment in the form of wider indirect (supply-chain) and induced (wage spending) effects. Applying typical employment multipliers to the direct employment as described above, indicates that the Proposed Development could be expected to generate between 30-55 indirect/induced FTE jobs per annum across the LIA, and between 67-122 indirect/induced FTE jobs per annum across the WIA once completed and fully operational.
- 13.6.52. Hence, in total, the Proposed Development could be expected to generate a total of between 150-270 direct, indirect and induced FTE jobs across the LIA, and between 217-392 direct, indirect and induced FTE jobs across the WIA once complete and fully operational.

Sensitivity of receptor

13.6.53. The sensitivity of receptor is assessed as medium as outlined above. This reflects the poor performance of the LIA across a variety of labour market indicators against the wider comparator areas.

Magnitude of change

13.6.54. The upper estimate for total employment generated during operation across the LIA (270 jobs) represents approximately 0.003% of total employment across the Borough. Based on this, the magnitude of effect on employment generation during the operational phase is assessed as negligible.

Additional mitigation

13.6.55. No additional mitigation is required in relation to employment generation during the operational phase.

Residual effects and monitoring

13.6.56. Therefore, there is likely to be a direct, permanent, long-term and minor beneficial effect on the receptor. This is not considered to be significant in EIA terms.

Economic Output (GVA)

Pathway to effect

13.6.57. The direct, indirect and induced employment generated by the Proposed Development will also create additional economic output in the form of gross value add ('GVA'), a commonly used measure of economic value and productivity. GVA per job estimates from the ONS indicate that the average full-time worker in Rochdale generates a total economic output of approximately £51,600 per annum.

Effect generated by Proposed Development

13.6.58. Applying this to the direct, indirect and induced employment described above indicates that the Proposed Development could be expected to generate a total of between **£7.6-£13.8 million** of GVA per annum across the LIA, and between £13.4-£24.1 million of GVA per annum across the WIA once complete and fully operational.

Sensitivity of receptor

13.6.59. The sensitivity of the receptor is assessed as medium as outlined above. This reflects the poor performance of the LIA across a variety of labour market indicators against the wider comparator areas.

Magnitude of change

13.6.60. ONS data indicates that in 2023⁴⁹, total GVA across Rochdale was approximately £4.7 billion. Hence, the upper estimate of GVA generated during the operational phase (£13.8 million) equates to

⁴⁹ ONS (2023), Regional gross value added (balanced) by industry: all ITL regions

approximately 0.003% of total GVA across the Borough. Based on this, the magnitude of effect on economic output during the operational phase is assessed as negligible.

Additional mitigation

- 13.6.61. No additional mitigation relating to economic output generation is required during the operational phase.

Residual effects and monitoring

- 13.6.62. Therefore, there is likely to be a direct, permanent, long-term and minor beneficial effect. This is not considered to be significant in EIA terms.

Access to Skills and Training

Pathway to effect

- 13.6.63. The creation of additional employment on-site during operation is also likely to improve access to apprenticeships and other skills training opportunities. This could help to alleviate local deprivation across a variety of indicators and help those currently claiming unemployment support to gain valuable skills and transition into the workforce.
- 13.6.64. The eventual end users active on-site could also support skills training opportunities such as apprenticeships, as well as integrating training with educational and vocational courses at local schools and colleges. There are also opportunities for the Proposed Development to enhance the positive effects of local skills training by partnering with local institutions, as well as the potential to boost the local supply chain by partnering with local contractors and suppliers.

Effect generated by Proposed Development

- 13.6.65. Data from the Department for Education indicates that as of 2024/25, there were a total of 1,530 students undertaking an apprenticeship across Rochdale, compared with a total of 88,200 people employed across the Borough. This indicates that approximately 1.7% of total workers across the Borough were apprentices. Applying this to the direct operational jobs supported by the Proposed Development indicates that the proposals could support between 2-4 apprentices per annum once the scheme is complete and fully operational.

Sensitivity of receptor

- 13.6.66. The sensitivity of the receptor is assessed as low as outlined above. This reflects the relatively low number of apprenticeships across the borough as a proportion of the total workforce.

Magnitude of change

- 13.6.67. Based on the above, the magnitude of effect on access to skills and training during the operational phase is assessed as negligible.

Additional mitigation

- 13.6.68. No additional mitigation measures relating to apprenticeships are required during the operational phase.

Residual effects and monitoring

- 13.6.69. Therefore, there is likely to be a direct, permanent, long-term and negligible effect on the receptor. This is not considered to be significant in EIA terms.

Impacts on Human Health of Vulnerable Groups

13.6.70. During the operational phase, the Proposed Development has the potential to give rise to a variety of Human Health impacts, particularly for vulnerable groups within the population. To assess these impacts, reference has been made to the results of various other technical chapters as part of this ES. The results are discussed in more detail below.

Air Quality

Pathway to health effect

13.6.71. Air quality is widely recognised as key determinant of human health. The effects on air quality from operational activity and traffic have a variety of impacts on human health outcomes.

Effect generated by Proposed Development

13.6.72. The assessment undertaken within **Chapter 8 – Air Quality** concludes that additional mitigation measures are not required. The Chapter outlines that there is likely to be a direct, permanent, long-term negligible residual effect on local human receptors as a result of road vehicle exhaust emissions during the operational phase (not significant). The Chapter also states that there is likely to be a negligible residual effect on local ecological receptors as a result of road vehicle exhaust emissions during the operational phase (not significant).

Sensitivity of receptor

13.6.73. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

13.6.74. Taking into account the conclusions of **Chapter 8 – Air Quality**, the magnitude of effect on vulnerable groups within the population during the operational phase is considered negligible.

Additional mitigation

13.6.75. No additional mitigation relating to air quality is required during the operational phase.

Residual effects and monitoring

13.6.76. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

Highways, Traffic and Transport

Pathway to health effect

13.6.77. Highways, traffic and transport are widely recognised as key determinants of human health. The effects of vehicle traffic directly (via road safety) and indirectly (via air quality and noise impacts) impact a variety of human health outcomes.

Effect generated by Proposed Development

13.6.78. The assessment undertaken within **Chapter 6 – Highways, Traffic and Transport** concludes that no secondary or tertiary mitigation measures are required in relation to the Proposed Development. However, potential highway and non-motorised user infrastructure improvements associated with

the wider Northern Gateway allocation have been considered as part of the wider strategic context, however, the assessment's conclusions do not depend on the delivery of those improvements.

- 13.6.79. The Chapter outlines that there is likely to be a direct, long-term negligible adverse residual effect on operational highway capacity at surrounding junctions (not significant). The Chapter also highlights that there is likely to be a direct, long-term minor beneficial residual effect associated with improved accessibility by sustainable transport modes (not significant).

Sensitivity of receptor

- 13.6.80. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

- 13.6.81. Taking into account the conclusions of **Chapter 6 - Highways, Traffic and Transport**, the magnitude of effect on vulnerable groups within the population during the operational phase is considered negligible.

Additional mitigation

- 13.6.82. The Chapter states that the following environmental enhancement opportunities have been identified:

- Provision of enhanced pedestrian and cycle infrastructure;
- Installation of electric vehicle charging facilities;
- Improvements to public transport accessibility (under the sensitivity (bus gate) scenario);
- Measures to encourage sustainable travel behaviour; and
- Improved connectivity to local walking and cycling networks.

Residual effects and monitoring

- 13.6.83. Therefore, there is likely to be a direct/indirect, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

Noise and Vibration

Pathway to health effect

- 13.6.84. Noise and vibration impacts are widely recognised as key determinants of human health. The effects of operational noise and vibration impact a variety of human health outcomes.

Effect generated by Proposed Development

- 13.6.85. The assessment undertaken within **Chapter 7 – Noise and Vibration** indicates that no additional mitigation measures are required in relation to the Proposed Development. The Chapter states that for operational noise sources, there is likely to be a direct, permanent, long-term negligible adverse residual effect on residential and commercial receptors (not significant).

Sensitivity of receptor

- 13.6.86. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

13.6.87. Taking into account the conclusions of **Chapter 7 – Noise and Vibration**, the magnitude of effect on vulnerable groups within the population during the operational phase is considered negligible.

Additional mitigation

13.6.88. The Chapter states that the following environmental enhancement opportunities have been identified:

- There is potential for environmental enhancement in relation to noise in so far as potentially planting any exposed boundaries to receptors to remove line of sight to noise sources at the development site and to, subjectively, lessen the potential impact of commercial noise.

Residual effects and monitoring

13.6.89. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

Climate Change

Pathway to health effect

13.6.90. Climate change is widely recognised as key determinants of human health. The effects of climate change have a variety of direct and indirect impacts on human health outcomes.

Effect generated by Proposed Development

13.6.91. **Chapter 16 – Climate Change** states that there is likely to be a direct, permanent, long-term minor adverse residual effect on the global climate as a result of GHG emissions during the operational phase (not significant). It also states that the residual consequence of effect is predicted to be direct, permanent, long-term minor adverse on buildings and infrastructure, future occupiers and landscaping and biodiversity within the Site boundary as a result of climate change during the operational phase (not significant).

Sensitivity of receptor

13.6.92. The sensitivity of the receptor (vulnerable groups within the local population) is assessed as low as outlined above. This reflects the low proportion of young people (0-15) and people claiming unemployment support in comparison with the wider Borough.

Magnitude of change

13.6.93. Taking into account the conclusions of **Chapter 16 – Climate Change**, the magnitude of effect on vulnerable groups within the population during the operational phase is considered negligible.

Additional mitigation

13.6.94. The Chapter states that various mitigation measures have been identified for the Proposed Development, including:

- Detailed landscape design and planting to consider drought, extreme weather conditions and wind damage; and
- Landscape Management Plan.

Residual effects and monitoring

13.6.95. Therefore, there is likely to be a direct, temporary, short-term, negligible effect on vulnerable groups within the population (not significant).

CUMULATIVE EFFECTS

13.6.96. As no significant adverse effects have been identified within this assessment during either the construction or operational phases of the Proposed Development, no assessment of cumulative effects is required to be undertaken for the purposes of Socio-Economics or Human Health.#

13.7 SUMMARY

13.7.1. Table 13-12 below provides a summary of the findings of the assessment.

13.7.2. The application seeks outline planning permission for employment development including ancillary infrastructure and associated works.

13.7.3. Permission is sought for a total of 11,440 sq.m GIA of B2/B8 floorspace, alongside 801 sq.m of ancillary office floorspace, as well as vehicular improvements and creation of landscaped buffer areas to the site perimeter

13.7.4. The table below provides a summary of all effects assessed as part of this Socio-Economics and Human Health Chapter, as well as any relevant mitigation and residual impacts.

Table 13-13 - Summary of Socio-Economic and Human Health effects

Receptor	Potential Effects	Significance of Effects Prior to Mitigation/ Enhancement	Additional Mitigation	Residual Effects	Monitoring
Construction Phase					
Employment generation	Minor beneficial	Minor beneficial (Temporary, short-term)	None	Minor beneficial (Temporary, short-term)	None
Economic output generation	Minor beneficial	Minor beneficial (Temporary, short-term)	None	Minor beneficial (Temporary, short-term)	None
Access to skills training	Negligible	Negligible (Temporary, short-term)	None	Negligible (Temporary, short-term)	None
Health of vulnerable groups	Negligible	Negligible (Temporary, short-term)	Industry best practice mitigation measures to reduce adverse impacts during	Negligible (Temporary, short-term)	None

Receptor	Potential Effects	Significance of Effects Prior to Mitigation/ Enhancement	Additional Mitigation	Residual Effects	Monitoring
			construction phase.		
Operational phase					
Employment generation	Minor beneficial	Minor beneficial (Permanent, long-term)	None	Minor beneficial (Permanent, long-term)	None
Economic output generation	Minor beneficial	Minor beneficial (Permanent, long-term)	None	Minor beneficial (Permanent, long-term)	None
Access to skills training	Negligible	Negligible (Permanent, long-term)	None	Minor beneficial (Permanent, long-term)	None
Health of vulnerable groups	Negligible	Negligible (Permanent, long-term)	Industry best practice mitigation measures to reduce adverse impacts during operational phase.	Negligible (Permanent, long-term)	None

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