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**Environmental Statement
Appendix 2.6:
Population and Human Health
Technical Note**

June 2024



**POPULATION AND HUMAN HEALTH
EFFECTS SUMMARY**

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Population and Human Health Effects Summary

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1 Introduction

1.1 Purpose of the Technical Note

This technical note has been prepared on behalf of Enso Green Holdings D Limited (the Applicant) in relation to an application to be made to the Secretary of State (SoS) for the Department for Energy Security and Net Zero under Section 37 of the Planning Act 2008 (as amended) (the PA2008), seeking a Development Consent Order (DCO) for the Helios Renewable Energy Project (the Proposed Development). The application is currently at the pre-application stage, and the Preliminary Environmental Impact Report (PEIR) was made available for Statutory Consultation between 26th October and 21st December.

This technical note has been produced in response to the comments provided by North Yorkshire Council (NYC) during the Statutory Consultation period for the PEIR. In their response, NYC requested that further information be provided regarding the potential effects to human health of the Proposed Development.

NYC's commentary is provided in Table 1.1 and is signposted to where it has been addressed in this technical note and Environmental Statement (ES).



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Table 1.1 Summary of NYC Statutory Consultation response with regard to population and human health

NYC Comment	Addressed
<p><i>'We note that the Scoping Opinion to the Planning Inspectorate in June 2022, scoped out the need for an individual Population and human Health Chapter, instead relying on topic chapter where relevant. This is particularly challenging for professions to assess the application in terms of population health as it is not clearly distinguishable with in each of the chapters. Therefore we recommend that a separate chapter on population and human health be produced to set out clearly how the proposal will impact up on the population.'</i></p>	<p>In their Scoping Opinion, PINS agreed that a <i>'standalone chapter on human health is not required on the basis that the Proposed Development will be designed to minimise any impact on human health and where there are interactions with human health these will be assessed within the Noise and Transport aspect chapters of the ES. Impacts to human health may extend beyond the Traffic and Access and Noise Chapters proposed and the ES should clearly set out potential impacts to human health from the Proposed Development during construction, operation and decommissioning and cross reference where impacts are assessed within the ES e.g. Landscape and Visual, Land Contamination and Socio-Economics.'</i> This was also agreed as a proportionate approach by the UK Health Security Agency in their scoping response. Human health was not identified as a topic likely to result in significant effects in NYC's scoping response.</p> <p>In their response to the Statutory Consultation, NYC requested that an additional chapter be provided within the forthcoming ES to assess the potential effects to human health of the Proposed Development. IEMA's guidance 'Effective Scoping of Human Health in Environmental Impact Assessment ' sets out that an EIA health chapter is <i>'required where:</i></p> <ul style="list-style-type: none"> • <i>either other EIA technical topics have been scoped in to assess likely and potentially significant effects to human receptors, community amenities or services, and there are likely and potentially significant population health implications from such assessments;</i> • <i>or there is likely to be a change due to the project in a wider determinant of health not covered by other EIA technical topics, and this change is potentially significant for population health'.</i>



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NYC Comment	Addressed
	<p><i>The scoping exercise should be proportionate, focusing the assessment to likely and potentially significant population health effects of the project.</i></p> <p><i>If there is not the potential for likely significant population effects, either beneficial or adverse, human health should be scoped out of the EIA. This should include confirmation that mitigation and enhancement measures have been explored and/or secured.'</i></p> <p>The PEIR for the Proposed Development identified no significant potential effects to human health therefore, in line accordance with the IEMA guidance, an additional ES chapter is not considered necessary and will not be provided with the ES. As advised to NYC, this technical note has instead been provided to summarises the health effects as identified in the PEIR and contextualises them within the local health and wellbeing baseline.</p> <p>This approach has been set out in the Draft Statement of Common Ground with NYC.</p>
<p><i>'In addition to the population of the locality we request that vulnerable populations be distinctly addressed, including the ageing population as is present in NY, and sensitive receptors such as schools, nurseries, housing for older people. We need to recognise the degree to which the population living in older age is concentrating geographically in our area. The great majority of people move out of cities and large towns before older age, concentrating geographically in coastal, semi-rural or peripheral areas, often with relatively sparse services and transport links. As the rural and coastal population of North Yorkshire is aging more rapidly than elsewhere it is imperative that as people enter older age, they remain in good health. The chapter should clearly set out how factors such as air quality and visual intrusion and potential distraction will impact on the population and identified vulnerable</i></p>	<p>See Chapter 2 of this technical note for a summary of baseline conditions and Chapter 3 for a summary of the potential effects identified in the ES. No significant effects to population groups have been identified.</p>



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NYC Comment	Addressed
<p><i>population groups as these are not considered in their own right and therefore should be captured here.'</i></p>	
<p><i>'For the general health of the population there is a general lack of accurate baseline health information, including consideration of mental Health and wellbeing. To this end I wish to suggest there is a longitudinal study to consider the health issues of those living within an agreed radius of the Solar Farm development. This needs to be undertaken at the earliest opportunity, by an independently appointment appropriately qualified professional and agreed by North Yorkshire Council Director of Public Health, the study should be repeated at regular intervals to gather evidence over a number of years of the long and short term impact of these large scale environmental developments on people's health and wellbeing.'</i></p>	
<p><i>'In terms of magnitude and sensitivity, within the population health chapter consideration should be given to the cumulative impacts of multiple factor changes cross all potential impacts. These collectively can have the potential be significantly affect the population, and vulnerable population groups, and the combined effect should be identified, considered and appropriately mitigated.'</i></p>	<p>See Chapter 15 Cumulative Effects of the ES for the discussion of cumulative and intra-project effects</p>
<p><i>'The PEIR identifies a number of Public Rights of Way ('PRoW') routes that cross the Site and the wider landscape including the Trans Pennine Trail long-distance walking and cycling route extends south from Selby and in proximity to the western and southern parts of the Site boundary, immediately adjacent to the western boundary at the closest point. The presentence of construction work has the potential to impact upon a person enjoyment or these routes and deter participation in actively utilising these routes. There is a high prevalence of obesity among year 6 children in the Camblesforth & Carlton ward, with 45.2% being classified as obese compared to 35.8% nationally (Source: OHID, using National Child Measurement</i></p>	<p>See response to 'Transport modes, access, and connections' and 'Open space, leisure, and play' in Table 3.1.</p>



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NYC Comment	Addressed
<p><i>Programme, NHS England) Any development that would impact upon being one's ability to enjoy the use or participate in physical activity should implement appropriate mitigation. Where the closure or disturbance of routes cannot be avoided mitigation in the form of a Health fund should be considered. In addition, once construction is completed the visual change on those routes as a result of fencing and large intrusive panels can generate concerns of safety and intimidation on those routes. These potential impacts need to be considered in the population health chapter and appropriately mitigated.'</i></p>	
<p><i>'Whilst the addition of HGVs to the local network is recognised as affecting the relative pleasantness of any pedestrian, cyclist and equestrian journey in the area, the chapter identified that pedestrian, cyclist and equestrian activity on the roads surrounding the Site was very low and therefore reported a minor adverse effect on pedestrian amenity which is not considered to be significant- the national agenda is it to increase active travel routes and provide opportunities to make active travel journeys. Although the baseline may be low the applicant does not take account that an application that generates this amount of traffic may deter the uptake of active lifestyle choices. This should be considered in the application and appropriate mitigation identified, for example a commitment to provide enhanced walking and cycling routes once decommissioning has ceased.'</i></p>	<p>See response to 'Transport modes, access, and connections' in Table 3.1.</p>
<p><i>'The PEIR identifies that the development will "have an effect on visual amenity during the construction phase. Likely significant moderate negative (but not significant) effects to residents, walkers and cyclists, who live and are using roads and PRowS immediately adjacent to the Site are identified due to open partial views of construction activities." this can also have an impact upon the mental and physical health of the population and should be appropriately considered and mitigated.'</i></p>	<p>See response to 'Open space, leisure and play' in Table 3.1.</p>



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NYC Comment	Addressed
<i>'We would consider anxiety and worries about the local environment to be a potential impact on health (mental wellbeing). Meaningful community engagement may alleviate concerns, help to improve community understanding of the project, and alleviate potential impacts upon mental health by providing a sense of control, inclusion and participation.'</i>	See response to 'Community identity, culture, resilience, and influence' in Table 3.1.
<i>'We would like see assurances that the cumulative effects of any dust creation during construction phase combined with other relevant developments in the area has been taken into account. Chapter 15 (Cumulative Effects) does not make reference to air quality.'</i>	See response to 'Air quality' in Table 3.1.
<i>'Fire Safety is a topic we wish to raise as a query, and give the applicant the opportunity to address either in written response or through meetings with the Council, What is the potential for the battery storage facility catching fire and how will the emergency response team will react? Prevailing winds will blow the fumes over Camblesforth and there is a concern that that the fire brigade will let it burn itself out.'</i>	See response to 'Community safety' in Table 3.1.



1.2 Layout of this Technical Note

This technical note is set out as follows:

- Chapter 1 Introduction and Policy Context: sets out the purpose and layout of this technical note, the definition of human health on which this technical note is based, and the policy context;
- Chapter 2 Baseline Conditions: sets out the existing health and wellbeing conditions and priorities within the local area;
- Chapter 3 Summary of Population and Human Health Effects of the Proposed Development: provides a summary of effects for relevant determinants of health, with signposting to, and summaries from, relevant parts of the ES; and
- Chapter 4 Conclusions: concludes the technical note.

1.3 Definition of Human Health

The World Health Organisation defines health as ‘*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*’ⁱ. This definition of health is broad in scope and includes and our interactions with the natural and built environment it through lifestyle, community, activity, and economy.

Similarly, in their guide to ‘Effective Scoping of Human Health in Environmental Impact Assessment’ⁱⁱ, IEMA advise the following wider determinants of health should be reviewed when scoping an assessment of human health.

- Health-related behaviours;
- Social environment;
- Economic environment;
- Bio-physical environment; and
- Institutional and built environment.

The definitions for these determinants are provided in Table 3.1.

1.4 Policy Context

The relevant national and local policy requirements to health and wellbeing have been considered where determining priorities for health, and potential sensitive receptors. As health and wellbeing are multi-faceted and, by nature, have many indirect links to other issues contained within policy, only those policies which explicitly mention health and/ or wellbeing are referred to.



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1.4.1 NATIONAL PLANNING POLICY

Overarching National Policy Statement for Energy (EN-1)

The Overarching National Policy Statement (NPS) EN-1 considers the potential direct impacts to health as from:

- Increased traffic;
- Air or water pollution;
- Dust, odour;
- Hazardous waste and substances;
- Noise;
- Exposure to radiation; and
- Increase in pests.

NPS EN-1 considers the indirect effects of energy infrastructure as those that may impact the composition and size of the local population and their ability to access key public services and amenity such as healthcare facilities or open space for recreational use and exercise.

The NPS EN-1 requires that *'where the proposed project has an effect on humans, the ES should assess these effects for each element of the project, identifying any potential adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate.'*

Opportunities should be taken to mitigate indirect impacts, by promoting local improvements to encourage health and wellbeing, this includes potential impacts on vulnerable groups within society and impacts on those with protected characteristics under the Equality Act 2010.

National Planning Policy Framework (NPPF)ⁱⁱⁱ

The revised NPPF adopted in December 2023 identifies the key principles in relation to health that local planning authorities should consider. In particular, Chapter 8 of the NPPF *'Promoting healthy and safe communities'* states that decisions should aim to achieve developments which:

a) Promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;

b) Are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of beautiful, well-designed, clear and legible pedestrian and cycle routes, and high quality public space, which encourage the active and continual use of public areas; and

c) Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and



accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.

1.5 Local Planning Policy

Selby District Core Strategy^{iv}

Whilst no policies are provided that are specific to health, the Selby District Core Strategy discusses measures to 'Improving the Quality of Life' in Policy SP15. This comprises the promotion of sustainable development, and use of design and layout.

Policy SP15 and SP16 Improving Resource Efficiency recognise the possibility to improve energy security through '*creating a healthy diversity of energy supply*' by '*promoting renewable energy (which will also combat fuel poverty and improve our energy security in the longer term)*'.^v

Joint Health and Wellbeing Strategy 2015 – 2020^v

The North Yorkshire Joint Health and Wellbeing Strategy is an assessment of the current and future health and social care needs of the local community. The Strategy follows a life-course approach which recognises that the conditions in which people are born, grow, live, work and age can lead to health inequalities. The Strategy considers the life stages of an individual within the following life themes; the key needs identified for each theme are summarised below:

- **Theme 1 – Connected Communities:** this theme highlights that people in North Yorkshire '*live longer, healthier lives compared to England as a whole, but there are significant variations between districts, communities and population groups*'. The Strategy highlights the importance of strong local communities in supporting people to make healthy choices, cope and recover from illness, and reduce loneliness and depression.
- **Theme 2 – Start Well:** this theme focuses on the importance of a good start in life for children, and the importance of reducing inequalities in starting well. This theme identifies the key needs for children and young people as excellent education, early intervention and identifying specific needs, an improvement in mental wellbeing, reduction in the incidences of risky behaviour, and improvement in safeguarding against becoming victims of abuse.
- **Theme 3 - Live Well:** the Strategy highlights that whilst people in North Yorkshire are overall '*healthier and live longer*' than the average for England, there is still improvement required to reduce the number of people affected by conditions that can be prevented or delayed such as heart disease, stroke, and cancer which account for the greatest proportion of deaths within North Yorkshire. This theme identifies the key needs for living well as improving emotional resilience and mental health, providing the opportunities for everyone to have a healthy body and health mind, and ensuring people are active, involved and free from isolation and loneliness.
- **Theme 4 - Age Well:** this theme identifies that people in North Yorkshire are living longer now, than they were previously, within the same area. Whilst this points to a greater proportion of older people in good health, this also means that those living to greater ages are living longer with chronic health conditions such as dementia, arthritis, heart problems, or osteoporosis. In response to people living longer, the strategy finds that the number of



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families caring for loved ones continues to rise, particularly among those providing the most dedicated levels of care. This theme highlights the need for the appropriate allocation of health and social care resources, in addition to ensuring older people and their carers are able to seek advice and support, and are able to adapt their homes to enable older people to keep their independence for longer.

- **Theme 5 - Dying Well:** the strategy finds that approximately half of those who die in North Yorkshire do so in hospital. This theme highlights the need and encouragement for open and frank discussions, at all ages, regarding quality of life and preparation for end of life to ensure appropriate, and desired, treatment and care plans are implemented.



2 Baseline Conditions

BASELINE CONDITIONS

This chapter considers the existing health and wellbeing baseline within the Selby District¹ and is informed by Chapter 13 Socio-Economics of the PEIR, Public Health England (PHE) Local Authority health profile for the area^{vi}, Census data^{vii}, and the Indices of Multiple Deprivation^{viii}. Comparisons are made to the national average (England) and the regional average (Yorkshire and The Humber).

2.1.1 DEMOGRAPHIC PROFILE

The age profile exhibited in Selby is most represented by those between the ages of 45 and 59 years and exceeds the averages of England and Yorkshire and The Humber, from ages 45 to 90+ years. The ages least represented within Selby are those from 15 to 24 years (which fall well below the national and regional averages), and 80+ years (similar to the national and regional averages). The age profiles for females and males within Selby is similar at all ages, excluding ages 75+ where females make up a greater proportion of the population.

2.1.2 DEPRIVATION

At the local level, the baseline conditions of deprivation are identified for the local area using the English Index of Multiple Deprivation (IMD) at small areas (or neighbourhoods) which are also known as lower super output areas (LSOAs) which on average contain around 1,500 people. There are 32,844 of these neighbourhoods across England.

The Site sits across three Lower Super Output Areas (LSOA): Selby 008A, Selby 007E, and Selby 010B. As the greatest proportion of the Site sits within LSOA Selby 008A, this has been chosen as the representative LSOA for the Site. Table 2.1 presents the IMD for Selby 008A.

Table 2.1 Indices of Multiple Deprivation

Domain of Deprivation (Rank out of 32,844 where 1 is the most deprived)	Selby 008A
Overall IMD Rank	17,993
IMD Percentage	50% least deprived
Income Rank	16,291
Income Percentage	50% most deprived
Employment Rank	13,840
Employment Percentage	50% most deprived
Education, Skills and Training Rank	16,101
Education Percentage	50% most deprived
Health Deprivation and Disability Rank	20,014
Health Percentage	40% least deprived
Crime Rank	20,600
Crime Percentage	40% least deprived
Barriers to Housing and Services Rank	9,619

¹ Although no longer the Local Planning Authority, Selby provides the smallest study area to show greater granularity of data than if data for NYC were used.



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Barriers to Housing and Services Percentage	30% most deprived
Living Environment Rank	22,668
Living Environment % Percentage	40% least deprived

Table 2.1 demonstrates an area that ranks 17,993 out of 32,844 LSOAs (where 1 is the most deprived), within the 50% least deprived neighbourhoods nationally. Of the indicators, Selby 008A ranks best for health deprivation and disability, crime and living environment, and ranks worst for barriers to housing and services.

2.1.3 LIFE EXPECTANCY AND MORTALITY

As shown in Table 2.2, physical health and mortality statistics relating to Selby perform better or significantly better than the regional and national averages.

The life expectancy at birth for males is significantly better than the national average, whilst all other indicators are better than the regional and national averages, but not significantly so.

Table 2.2 Life Expectancy and Mortality

Indicator	Year	Selby	Yorkshire and The Humber	England
<i>Life expectancy</i>				
Life expectancy at birth for males	2018-20	80.2	78.4	79.4
Life expectancy at birth for females	2018-20	83.9	82.2	83.1
<i>Morbidity</i>				
Killed and seriously injured (KSI) casualties on England's roads (per billion vehicle miles)	2021	75.4*	110.8	95.6
Hip fractures in people aged 65 and over (per 100,000)	2021/22	498	546	551
<i>Mortality</i>				
Under 75 mortality rate from all cardiovascular diseases (per 100,000)	2021	65.8	86.8	76.0
Under 75 mortality rate from cancer (per 100,000)	2021	102.7	131.0	121.5
Infant Mortality Rate (per 1,000)	2019 - 21	3.7	4.4	3.9
Key				
Significantly better than the England average				
Better than the England average (but not significantly so)				
Worse than the England average (but not significantly so)				
Significantly worse than the England average				
Not Compared				
* NYC used as proxy, as insufficient numbers for Selby				



2.1.4 MENTAL HEALTH AND BEHAVIOURAL RISK FACTORS

As shown in Table 2.3, the mental health insight for Selby is varied compared to the national and regional averages.

Indicators that perform significantly worse than the national average are the estimated dementia diagnosis rate, and the prevalence of obesity in children aged 10-11 years (measured at the regional scale due to unavailability of data for Selby).

Indicators that perform significantly better than the national average comprise emergency hospital admission rate for intentional self-harm, and hospital admission rate for alcohol-related conditions.

Selby performs better, but not significantly so, than the regional and national average, with lower rates of suicide and smoking prevalence in adults, and higher rates of physically active adults. The percentage of overweight or obese adults in Selby is lower than the regional rate, but greater than the national rate, although not significantly so.

Table 2.3 Mental Health and Behavioural Risk Factors

Indicator	Year	Selby	Yorkshire and The Humber	England
<i>Mental health</i>				
Emergency hospital admission rate for intentional self-harm (per 100,000)	2021/22	94.5	146.7	163.9
<i>Suicide Rate (per 100,000)</i>	2020 – 22	9.5	12.1	10.3
Estimated dementia diagnosis rate (65+ years) (%)	2023	51.2	65.1	63.0
<i>Lifestyle and behavioural risk factors</i>				
Percentage of physically active adults (%)	2021/22	68.8	66.1	67.3
Percentage of overweight or obese adults aged 18+ (%)	2021/22	65.0	66.5	63.8
Year 6 prevalence of obesity (including severe obesity) (10-11 years) (%)	2022/23	Not available	24.1	22.7
Smoking prevalence in adults aged 18+ - current smokers (%)	2022	10.7	13.1	12.7
Hospital admission rate for alcohol-related conditions (per 100,000)	2021/22	424	533	494
Key				
Significantly better than the England average				
Better than the England average (but not significantly so)				
Worse than the England average (but not significantly so)				
Significantly worse than the England average				
Not Compared				

2.1.5 SENSITIVE RECEPTOR GROUPS

A mapping exercise of the local sensitive community receptors has been undertaken and is provided at Figure 1 Sensitive Community Receptors. The following receptors were searched for within a 1km radius of the Site's boundary, as being those which would be the most likely to face significant effect to human health:

- Educational facilities such as nurseries, schools and colleges;
- Healthcare services;



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- Care homes;
- Retirement homes;
- Religious amenities;
- Public Rights of Way (PRoWs) and bridleways;
- National Cycle Route
- Allotments or community growing spaces; and
- Park/ recreation grounds and sports facilities.

As demonstrated in Figure 1, the following potential sensitive receptors were identified within 1km of the Site:

- Educational Facilities
 - Kids Corner Nursery
 - Camblesforth Community Primary School
 - Carlton-in-Snaith Community Primary School
 - Read School
 - Holy Family Catholic High School
- Religious amenities
 - The Parish Church of Saint Peter and Saint Paul Drax
 - St Mary's Catholic Church
 - Carlton Cemetery
- Play space and sports amenities
 - Drax Bowling Green
 - Drax Golf Club
 - Hirst Courtney Cricket Club
 - Hirst Courtney Play Space
 - Cammy Play Park
- Unnamed allotments
- PRoW network
- National Cycle Route network

No healthcare facilities, care homes, or retirement facilities were identified in this exercise within 1km of the Site.



3 Summary of Population and Human Health Effects of the Proposed Development

Table 3.1 defines each determinant of health per the IEMA guidance 'Effective Scoping of Human Health in Environmental Impact Assessment' and establishes the following:

- Whether the determinant is relevant to the Proposed Development; and
- If it is relevant, whether it is already considered in the ES within the relevant technical chapter, or is discussed in this technical note.



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3 Summary of Population and Human Health Effects of the Proposed Development

Table 3.1 Summary of Population and Human Health Effects of the Proposed Development

Determinant of Health	Definition	Relevant to Proposed Development	Discussion
<i>Health-related behaviours</i>			
Physical activity	<i>'How the project affects physical activity levels, including opportunities to promote physical activity through: education; transportation and planning; sport, parks and recreation; and in health promotion initiatives and services. Where physical activity effects relate most directly to 'open space' or 'transport' discussed below, avoid duplication and cross-refer in the scoping decision.'</i>	No	A solar farm would have very little influence on physical activity levels given that it is not a development accessible to the public and will only have a small number of people accessing it from time to time for maintenance. Per IEMA's guidance, this is discussed under transport and open space effects, therefore this determinant of health is scoped out of further consideration as an item in this technical note.
Risk-taking behaviour	<i>'How the project affects behaviours, including opportunities to reduce risk taking behaviours for its workforces and end users. Reference how this can be reflected within the construction / operational management plans in relation to markets created by the presence of the workforces, as well as in terms of operational opportunities introduced by the project as determined by its land use mix alternatives and types of commercial outlets proposed. Issues include use of alcohol, cigarettes, non-prescribed drugs, problem gambling and communicable illness (including STIs and other infections).'</i>	Yes	<p>In the context of IEMA's guidance in relation to the Proposed Development, risk-taking behaviour refers to the introduction of the workforces associated with the Proposed Development and risky behaviours that they might engage in such as the consumption and spread of 'alcohol, cigarettes, drugs, non-prescribed drugs, problem gambling and communicable illness'.</p> <p>Chapter 13 Socio-Economics of the ES finds that up to 200 direct full-time equivalent (FTE) jobs (refer to Table 13.1 in Chapter 13 of the PEIR) and 80 indirect FTE jobs (paragraph 13.5.8) could be supported during the construction and decommissioning phases of the Proposed Development, and assumes that the direct job opportunities will be sourced from outside of Yorkshire and The Humber region, therefore introducing a temporary workforce of up to 200 people into the local area (paragraph 13.5.11). The behaviours of the workforce will be managed through their contractual obligations to the Contractor which will set out restricted areas and services within the local area and restricted behaviours. Should an individual engage in behaviours in discord with their contract during their employment term, and within a restricted area, they will be subject to a disciplinary process which may result in termination of their employment. The potential for risk-taking behaviour is therefore not considered significant.</p> <p>During the operational phase, employment opportunities will be limited to maintenance visits which will not exceed five visits per month (as identified in paragraph 10.6.51 of Chapter 10 Transport and Access). These</p>



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			<p>visits will be conducted during a shift, and therefore do not require temporary accommodation or for the workers to move to the area. The potential for risk-taking behaviour is therefore not assumed to be significant, however the same contractual obligations will apply in order to manage behaviours during the operational phase. The potential for risk-taking behaviour is therefore not considered significant.</p> <p>No significant effects are identified.</p>
Diet and nutrition	<p><i>'How the project affects access to food, including opportunities to promote good nutrition; support production and/or access to affordable healthy food options, including changes in availability or quality of agricultural / growing land. This may also include learning and skills initiatives as well as access to allotments, new retail outlets and markets. Where relevant consider how the project may influence diet related elements to reduce obesogenic environments.'</i></p>	No	<p>As stated at paragraph 14.5.15 of Chapter 14 Soils and Agricultural Use, the Site is currently in arable use for crop-production, fertilised with inorganic fertiliser, with low levels of organic matter. As a result of the Proposed Development, the Site will be sown to grassland and managed over the modelled operational lifespan of 40 years, and will be grazed by sheep for the duration of this operational phase. This is expected to have a beneficial effect to the quality of the soils and therefore a beneficial effects on the potential for growing crops following the decommissioning phase.</p> <p>As discussed in Chapter 14 Soils and Agricultural Land paragraphs 14.5.41 to 14.5.52, and the accompanying Appendix 14.1 Analysis of UK Food Security, there is currently no Governmental concern regarding national food security, with no requirements or incentives to manage or increase the proportion of land for food production. Chapter 14 finds that the Proposed Development would have a neutral, and therefore not significant, effect on food security (paragraph 14.5.52).</p> <p>No significant effects are identified.</p> <p>As the Proposed Development is not introducing a new population to the area, it is not considered that the provision of skills initiatives relating to diet and nutrition, and their effect on obesity, is relevant for consideration, nor is the provision of allotments or outlets; these items are therefore not discussed further.</p>
<i>Social environment</i>			
Housing	<p><i>'How the project affects housing need, e.g. construction workforce, and provision, including opportunities to provide good quality new or regenerated housing that responds to local needs. Where housing is proposed reference how the project can provide: a dwelling mix relative to community need; housing that meets</i></p>	No	<p>Chapter 13 Socio-Economics of the ES assumes a worst-case scenario for construction and decommissioning employment whereby all of the direct workers will originate from outside of the Wider Study Area² (Table 13.1 of Chapter 13); it is therefore anticipated that the construction workforce will require temporary accommodation within proximity of the Site. The chapter (Tables 13.9 and 13.10 of Chapter 13) finds that there are 18,240 business enterprises located within the Wider Study Area that are related to accommodation and food services, with 275 of these located within Selby District. A total of nine hotels have</p>

² Comprising the whole of the Yorkshire and The Humber region.



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	<p><i>high build quality and internal space standards to avoid overcrowding; appropriate and equitably located affordable housing and social housing provision; homes that are designed to be adaptable to different life stages and care needs; inclusion of homes specifically adapted to support independent living for older and disabled people; a layout and movement that promotes cohesion and connects with existing communities to avoid physical barriers, residential segregation or gated communities; a design that promotes a sense of safety and neighbourliness and reduces the risk of social isolation; a good quality indoor environment (e.g. air quality, efficient thermal comfort, noise insulation and natural light); high quality safe outdoor space, including public green space, including maintenance; land uses and spaces which encourage social interaction; the inclusion, retention or re-provision of an appropriate mix of community facilities, public amenities and social infrastructure; inclusion where appropriate of day-care for dependent children or adults; homes that are protected from flood risk and sustainable drainage systems avoid increasing flood risk for others; and where temporary accommodation is proposed, such as for construction workforces, how appropriate standards, legacy opportunities and community implications are addressed.'</i></p>		<p>been identified within the Local Study Area³. Furthermore, the baseline conditions also identify that serviced accommodation within the Wider Study Area typically operates at between 66% and 84% occupancy across a 12-month period⁴, thereby indicating that there is stock, with capacity, to accommodate the Proposed Development's construction workforce. On this basis, there will not be a significant effect to local housing provision and accessibility.</p> <p>No significant effects are identified.</p> <p>As the Proposed Development will not be providing permanent housing, the remaining items included within IEMA's definition are not relevant and are therefore scoped out of further consideration.</p>
Relocation	<p><i>'Does the project involve population relocation, and include opportunities to safeguard people's health, including mental health, during any loss</i></p>	No	<p>The Proposed Development would not require the relocation of existing residents, therefore this determinant of health is scoped out of further consideration.</p>

3 Comprising the wards of Camblesforth and Carlton; Brayton and Barlow; and, Thorpe Willoughby and Hambleton.

4 The construction and decommissioning periods are anticipated to be 12 months each.



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	<p><i>of housing and community support or connections (noting that mental health effects may commence even before the planning decision); how protocols for communication have been set up and how they handle uncertainty; how hard-to-reach and seldom-heard groups are engaged with; how individual needs are being understood and responded to; how people are supported to maintain continuity with schools, social networks and employment; how the support package responds to affordability, which influences alternative housing quality and overcrowding; how support is provided irrespective on tenure; how the remaining community may be affected (e.g. their identity and viability of retained services and amenities).'</i></p>		<p>The IEMA guidance does not refer to the relocation of the construction workforce, therefore this is addressed under 'Housing'.</p>
<p>Open space, leisure, and play</p>	<p><i>'How the project affects places and spaces, including opportunities to encourage physical activity, use of space and social networking. Reference: existing, new and improved opens spaces (green and blue); natural habitats; sports, leisure and recreational amenities and facilities; and play facilities. Note how the project takes into account quality, safety, age, sensory and mobility considerations. Consider how well these spaces link to communities and the public realm in ways that are safe, welcoming and accessible for all. Consider the location and timing of re-provision in terms of its ability to positively influence physical activity, social interaction and supports the mental health benefits of exposure to greenspace. Identify how the project reduces an obesogenic (obesity enabling) environment in terms of equitable access to physical activity opportunities.'</i></p>	<p>No</p>	<p>The existing Site is within arable use, and is therefore not a publicly accessible site for leisure or play, beyond the available PRoWs that cross the Site. As advised in Chapter 10 Transport and Access (paragraphs 10.5.1 to 10.5.3), access to the existing PRoWs will be maintained through all phases of the Proposed Development; should temporary closures be required to ensure the safety of PRoW users, these will be for a short period during construction and decommissioning and alternate routes will be provided. The Proposed Development will also provide additional, permissive footpaths during the operational lifetime of the Proposed Development, so as to formalise access routes between PRoWs on-Site and therefore encourage use of the Site by pedestrians, cyclists and equestrians. The Proposed Development will not have a significant adverse effect to the use of PRoWs.</p> <p>The Applicant also recognises the importance of creating an environment that feels safe, and pleasant, in order to mitigate the perception of crime and to encourage use. Chapter 7 Landscape and Views (paragraph 7.5.5) advises that the Landscape Strategy uses screening planting to minimise the visual impact of the Proposed Development on visual receptors including the users of PRoW, within the Site and those with visual links to the Site. In some instances, screening planting has not been provided alongside PRoW to maintain a degree of openness within and/ or across the Site. In such locations, the Proposed Development's solar PV arrays have been set back a minimum distance of 15m from the PRoW, and the buffers will be planted with a tussock forming grassland mix that will be allowed to grow to a substantial sward, helping to integrate the Proposed Development within the landscape (paragraph 7.5.19). The landscaping proposals will also avoid the creation of hidden spaces along the PRoW; this, in addition to the use of CCTV and fencing to discourage crime (as identified in Chapter 3) and foster feelings of safety for users of the Site.</p>



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			<p>The baseline information considered in Chapter 2 of this technical note highlights childhood obesity as performing worse than the regional and national averages for Selby, which was also reiterated in NYC's statutory consultation response; it is considered that the retention of the PRoW network, and addition of permissive footpaths will provide opportunities for walking and cycling. The Proposed Development will also not have any significant adverse effect on the local play and sports facilities, identified in section 2.1.5 of Chapter 2 of this technical note, in terms of effects to accessibility or environmental health factors such as air quality and noise, as the ES does not identify any significant effects to environmental health or transport modes.</p> <p>No significant effects are identified.</p>
<p>Transport modes, access, and connections</p>	<p><i>'How the project affects the way people travel, including opportunities to promote active, safe and sustainable transport and access. Reference how it can support: prioritisation and promotion of walking and cycling; road and route safety, including traffic management, travel planning and/or calming measures; use of good quality public transport with suitable access and connectivity. Discuss as relevant how the project has had regard to: new transport infrastructure connectivity to places, spaces, services and facilities; healthy streets; connections to strategic walking and cycling routes; and quality, safety, age, sensory and mobility considerations. Explain how it avoids or minimises adverse effects on: routine journey times, access to health, social care and education; emergency service response times; and community severance. Set out the effect on existing routes, including public rights of way, parking provision and pedestrian or cycling infrastructure, that may be affected by diversions or capacity changes, including how changes are communicated and alternatives are equitable.'</i></p>	<p>Yes</p>	<p>As advised in Section 10.5 of Chapter 10 Transport and Access of the PEIR, access will be maintained to all existing PRoWs within the Site during construction, operation, and decommissioning; should temporary closures be required to ensure the safety of PRoW users, these will be for a short period during construction and decommissioning and alternate routes will be provided. Chapter 10 also identifies that effects to pedestrian delay would be negligible during all project phases (see Table 10.27 for a summary of all effects).</p> <p>Chapter 10 (Section 10.8) finds the effects to Pedestrian Delay (including Cyclist and Equestrian Delay) and Pedestrian Amenity (including fear and intimidation, Cyclist Amenity, and Equestrian Amenity) are negligible to minor adverse, which are not significant. The minor adverse effects stated are identified during the construction and decommissioning phases only, and are therefore temporary; effects are negligible during operation. Significant adverse effects to the pedestrian and cycle access are therefore not anticipated.</p> <p>As stated in Chapter 10 (paragraph 10.5.4), several mitigation measures are proposed which include a Construction Traffic Management Plan and a Travel Plan. A Public Right of Way Management Plan and a Stage 1 Road Safety Audit at all access junctions will be secured through DCO requirements. These will be implemented and enforced throughout the construction and decommissioning phases to ensure potential effects to pedestrians, cyclists and equestrians are mitigated. The Landscaping Strategy, as described in Chapter 7 Landscape and Views, will enhance the PRoW network on-Site, to encourage uptake by non-motorised users, through the provision of screening planting or by offsetting the proposed PV arrays by 15m from the PRoW, with a buffer of grassland grown to a substantial sward to integrate the Proposed Development within the landscape. The Proposed Development will also provide additional, permissive footpaths so as to formalise access routes between PRoWs on-Site and therefore encourage use of the Site by pedestrians, cyclists and equestrians.</p> <p>No significant effects are identified.</p>



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<p>Community safety</p>	<p><i>'How the project affects crime and injury risk, including opportunities for its design and management to incorporate elements to minimise both actual crime and fear of crime. Explain how it has had regard to: police/security and emergency response requirements, including avoiding consequent local capacity challenges; policies on modern slavery; and practices to safeguard vulnerable adults and children. Explain how the project minimises injury risk (e.g. falls and drowning) to the public during all phases. Consider if the project may affect discrimination, harassment or relations between groups.'</i></p>	<p>Yes</p>	<p>As discussed above, the use of landscaping to create a pleasant space, and the use of fencing and CCTV, will ensure the creation of a space in which crime and anti-social behaviour is discouraged. Effects to community safety are therefore not considered to be significant.</p> <p>IEMA's guidance requests that practices and policies to regulate modern slavery, and for safeguarding vulnerable adults are included; the working practices of any contractor employed for the construction, operational management, and decommissioning phases of the Proposed Development will be scrutinised at the tender stage to ensure these safeguards are in place.</p> <p>Best practice measures will be implemented during the construction and decommissioning phases to ensure the risk of injury to the employees on-Site and the public are mitigated. An outline Construction Environmental Management Plan (oCEMP) and outline Decommissioning Management Plan (oDEMP) are provided at Appendix 5.1 and Appendix 5.3 of the ES respectively; a detailed CEMP and detailed DEMP will be secured through DCO requirement, which will secure the health and safety measures required to mitigate the potential risk to human health from construction and decommissioning plant and activity.</p> <p>With regard to operational safety, as discussed in Appendix 3.1 Outline Battery Safety Management Plan of the ES, the local fire service has been engaged and consulted with regarding the proposals for the management of potential fire events. A detailed Battery Safety Management Plan will be secured as a DCO requirement; significant adverse effects to major accidents and disasters from potential fire events are therefore not anticipated.</p> <p>As the Proposed Development will not introduce a new population to the local area, the capacity requirements of the local police force have not been considered in the ES. As discussed previously, during the construction and decommissioning phases, the workers employed will be bound by contractual requirements to behave in a responsible and legal manner; a significant effect to the demand of the local police force is therefore not expected.</p> <p>No significant effects are identified.</p>
<p>Community identity, culture, resilience and influence</p>	<p><i>'How the project affects the way people feel about their community, including opportunities to contribute to a positive community identity, sense of belonging and sense of control. Consider how it can positively respond to its influence on the physical, economic, cultural and/or social landscape of communities. May include project related change due to: population in-migration and out-migration; visual landscape/townscape change; changes to the</i></p>	<p>Yes</p>	<p>The Applicant has conducted two engagement periods to encourage opportunities for engagement with the local community. The non-statutory engagement period ran in July 2022, in which the local community was informally consulted on the initial proposals. The statutory engagement period ran from 26th October to 7th December 2023, before being extended to 21st December 2023 to enable consultees that required further time to review the proposals the opportunity to comment. During this time, statutory consultees under section 42, 47, 48 and 49 of the Planning Act 2008 were engaged.</p> <p>Chapter 4 Alternatives and Design Evolution of the ES, the Planning Statement that accompanies the DCO application, and the Design and Access Statement that accompanies the DCO application, detail feedback received from these consultation periods, and how the design proposals have been amended in response.</p>



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	<p><i>extent or setting of ecological or cultural assets; lighting changes, including night-lighting, overshadowing and reflections; and the attractiveness of the area, public spaces and buildings. Consider how it can support community engagement at all stages of development. Consider influences on local pride and wellbeing; cultural and spiritual ethos and community sense of control over their living environments and workplaces.'</i></p>		<p>The technical chapters of the ES (chapter 6 to 14) also discuss in the Assessment Methodology sections, how the technical assessments have responded to the scoping process (during which the Planning Inspectorate consulted with stakeholders), the non-statutory consultation process, and the statutory consultation process.</p> <p>No significant effects are identified.</p>
<p>Social participation, interaction and support</p>	<p><i>'How the project affects opportunities for community participation and interaction, and for social and family support. Explain how it may affect indoor or outdoor community assets and meeting places, for voluntary, social, cultural or spiritual participation. Consider influences on social support and social networks; volunteering and social enterprise; and the ability to provide family support.'</i></p>	<p>No</p>	<p>The Proposed Development will not remove or provide community spaces, and therefore this determinant of health is not considered further in this technical note.</p>
<p><i>Economic environment</i></p>			
<p>Education and training</p>	<p><i>'How the project affects the educational and skills attainment, including opportunities to provide good quality education and training opportunities. How it can maintain or improve school availability, capacity and quality. Consider as relevant primary school, secondary school, further/higher education/training, adult education and specialist educational need providers. Discuss as relevant the project's provision for workforce related skills development, apprenticeships and career advice, including any targeted access for particular geographic or vulnerable groups. Consider as relevant where any re-training is provided for people whose jobs are displaced by the project. Where changes in educational</i></p>	<p>Yes</p>	<p>The discussion of school availability, capacity and quality is not relevant to the Proposed Development and is therefore scoped out of further consideration.</p> <p>Appendix 13.1 Employment and Skills Plan of the ES discusses the Applicant's ambitions for providing upskilling and employment opportunities in the context of NYC's targets for the local community. The suggestions identified in the Employment and Skills Plan will be formalised by the employed contractor prior to the commencement of the construction phase.</p>



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	<p><i>facilities are proposed consider the location and timing of new or re-provided facilities, transitional arrangements and staffing implications.'</i></p>		
<p>Employment and income</p>	<p><i>'How the project affects socio-economic status and working conditions, including opportunities to provide economic opportunities and resources that protect and promote good health. Reference how it can influence: the type, quality and quantity of employment during each phase; unemployment, including from displacement of existing businesses or services or following completion of a project phase; particular features of employment, such as shift work, job security, working conditions, or occupational hazards; targeted recruitment, procurement and investment within an area that may raise standards of living, including for areas that experience the adverse effects of the project. Consider how the project's employment profiles may affect: family structures, roles or relationships; poverty, social exclusion, social status or income disparities; and/or levels of economic activity/inactivity. Describe where it makes provision for new employment land uses (e.g. new office space) including any managed and affordable workspace for local businesses and voluntary/social enterprises.'</i></p>	<p>Yes</p>	<p>As referred to above, Chapter 13 Socio-Economics of the ES advises that the Proposed Development will generate employment directly associated with the construction of the Proposed Development (up to 200 jobs) and employment indirectly associated with the construction (up to 80 jobs) which could be within supporting supply chains across the Wider Study Area and nationally (paragraph 13.5.7). Whilst these effects are considered beneficial, they are of a negligible significance in EIA terms.</p> <p>The jobs created by the construction phase of the Proposed Development will generate approximately £14.9 million per annum in Gross Value Added (GVA)⁵; whilst this is considered to be significant within the Yorkshire and The Humber study area, the assessment assumes the worst-case scenario that all construction workers are employed from outside of this area, therefore effects will be negligible (not significant) to economic output in Yorkshire and The Humber (paragraph 13.5.11). Chapter 13 also finds that the direct construction workforce will spend approximately £156,000 per annum over the duration of the construction period in the region (for example on food for lunch) (not significant).</p> <p>The operational phase of the Proposed Development will require up to five maintenance visits per month (as advised in Chapter 10 Transport and Access, paragraph 10.5.60) and as such an assessment of potential effects to employment and income has not been undertaken.</p> <p>The effects identified over the construction period are anticipated to be the same during decommissioning.</p> <p>No significant effects are identified.</p> <p>The discussion of family structures, roles or relationships; poverty, social exclusion, social status or income disparities; and/or levels of economic activity/ inactivity is not considered relevant, as this is not a large-scale employment development.</p>

⁵ A measurement of economic impact distributed through retained project and wages



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<i>Bio-physical environment</i>			
Climate change mitigation and adaptation	<p><i>'How the project affects climate altering pollutant emissions and climate adaptation strategies, including opportunities to positively respond the challenges of climate change and global health inequalities. Reference how it contributes to an increase or decrease in incremental but long-term and escalating climatic change impacts that affect the current and future global populations in terms of: extreme weather, heat stress and flood risk and fire injury risk; exacerbation of chronic cardiovascular and respiratory conditions; exposure to food-, water- and vector-borne infection or toxins; food production and malnutrition; population displacement, labour productivity and economic loss. Consider effects to more sensitive populations, potentially geographically distant, including in low- and middle-income countries. Discuss sustainable design and management measures that support elimination or reduction in climate altering pollutant emissions (see IEMA Greenhouse Gas Management Hierarchy), including through renewable energy sources, agricultural practices, transports choice, materials selection, construction techniques and procurement. Consider adaptation that increases reliance to climate change, including how buildings and public spaces are designed for efficient thermal comfort and resilience to flooding.'</i></p>	Yes	<p>The purpose of the Proposed Development is to provide the infrastructure with which to generate solar renewable electricity in order to reduce the generation of greenhouse gas (GHG) emissions from the generation of electricity from non-renewable sources such as the combustion of fossil fuels. As identified in Chapter 12 Climate Change of the ES, Section 12.7, the effects of the Proposed Development in relation to climate change mitigation are as follows:</p> <ul style="list-style-type: none"> No significant effects resulting from the GHG emissions from construction vehicles; Significant beneficial effects to the provision of renewable energy to the National Grid from the operation of the Proposed Development. The generation of electricity from renewable energy would reduce the emissions of carbon dioxide from Selby's residential emissions by 24.6% per year over the modelled operational lifespan of the Proposed Development, which equates to a saving of 3.3% in domestic GHG emissions per year; and Chapter 13 Socio-economics also identifies that the operation of the Proposed Development will have a significant beneficial effect on renewable energy generation in the Yorkshire and The Humber region during the operational phase. <p>The effects identified in relation to climate change resilience are as follows:</p> <ul style="list-style-type: none"> Negligible to significant beneficial effects to the infrastructure of the Proposed Development from future climate change; Negligible effects to future Site users as a result of future climate change; No significant effects to the natural environment (ecology and landscaping) as result of the Proposed Development; and Significant beneficial effect to the surface water drainage scheme as a result of the proposed drainage strategy in response to the potential effect of climate change on flood risk.
Air quality	<p><i>'If the EIA is scoping in air quality as a technical chapter with the prospect of human receptor impacts, then also scope in air quality as a determinant of health. Consider the contribution and impact that point source and fugitive emissions to air from the project will make to</i></p>	Yes	<p>Air Quality was scoped out of the PEIR and ES. See Chapter 2 of the PEIR and ES, Appendix 2.1 Scoping Report, Appendix 2.2 Scoping Opinion and Appendix 2.3 Qualitative Dust Assessment for further information.</p>



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	<p><i>local air pollution, including opportunities to contribute to maintaining a good standard of air quality. How it affects exposure to: dust, aerosols, odour, coarse particulate matter, particulate matter (e.g. PM10 and PM2.5), nitrogen dioxide and other relevant air pollutants. Consider the distribution and duration of exposures (short-term and long-term, including where more sensitive population or sub-populations may be present. or features of pollutants that may affect toxicity, such as particulate matter composition or size. Include peak events due to project activities (including combined impacts of all pollutants/activities) and/ or meteorological conditions. Explain the level of change with reference to relevant statutory health protection standards, and have regard to the degree of change relative to the baseline situation and advisory guide values (e.g. WHO global air quality guidelines). Consider the project's application of the 'as low as reasonably practicable' principle given the non-threshold health effect nature of some air pollutants.'</i></p>		
<p>Water quality or availability</p>	<p><i>'If the EIA is scoping in the water environment as a technical chapter with the prospect of human receptor impacts, then also scope in water quality and availability as a determinant of health. If it is very likely that any pollutant linkage pathways would be broken by normal good practice mitigation, provide clear text that the findings of the EIA water chapter will be kept under review and will be scoped into the health chapter if there are significant effects to the water environment that relate to human receptors, drinking or bathing water. Reference as relevant how the project can affect: drinking water quality (from ground or surface water sources), including biological and chemical agents; drinking water quantity or access; and</i></p>	<p>Yes</p>	<p>Chapter 9 Water Environment assesses the following potential effects during the construction and decommissioning phases, for which no significant effects were identified:</p> <ul style="list-style-type: none"> • Disruption to surface water runoff rates and volumes and the associated flood risk; • Construction of new watercourse crossings and associated flood risk; • Potentially polluting construction activities and spillage/ leakage of polluting substances affecting on-Site watercourse/ drainage ditches via direct flow; • Potentially polluting construction activities and spillage/ leakage of polluting substances affecting water quality of Eskamhorn Meadows Site of Special Scientific Interest (SSSI), River Derwent Special Area of Conservation (SAC) & SSSI, and Barlow Common Local Nature Reserve (LNR);



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	<p><i>recreational/bathing water quality, including biological and chemical agents and disease vectors. Explain the level of change with reference to relevant statutory health protection standards, having regard to the degree of change relative to the baseline situation and advisory guide values. Consider application of the as low as reasonably practicable principle.'</i></p>		<ul style="list-style-type: none"> • Potentially polluting construction activities and spillage/ leakage of polluting substances affecting water quality of the River Ouse and River Aire via direct flow; • Potentially polluting construction activities and spillage/ leakage of polluting substances affecting water quality of the Humber Estuary designated sites via direct flow; and • Potentially polluting construction activities and spillage/leakage of polluting substances affecting groundwater bodies via direct flow. <p>Chapter 9 Water Environment assesses the following potential effects during the operational phase for which no significant effects were identified:</p> <ul style="list-style-type: none"> • Disruption to drainage regime (surface water runoff and volume) and resultant elevated flood risk; • Disruption to flood hazards (combined fluvial and tidal, surface water and emergent groundwater); • Operation of new watercourse crossings and resultant elevated flood risk; • Potentially polluting operational activities and spillage/ leakage of polluting substances affecting on-Site watercourse / drainage ditches via direct flow; • Potentially polluting operational activities and spillage/ leakage of polluting substances affecting water quality of the River Ouse and River Aire and Humber Estuary and its nature designations via direct flow via direct flow; and • Potentially polluting construction activities and spillage/ leakage of polluting substances affecting groundwater bodies via direct flow. <p>As discussed in Chapter 9 Water Environment, the flood risk and potential effects to water quality will be managed as per the oCEMP, oOEMP, and oDEMP to ensure potential effects will be mitigated.</p>
<p>Land quality</p>	<p><i>'If the EIA is scoping in ground conditions as a technical chapter with the prospect of human receptor impacts, then also scope in land quality as a determinant of health. Or if it is very likely that any pollutant linkage pathways would be broken by normal good practice mitigation, provide clear text that the findings of the EIA ground condition chapter will be kept under review and a health assessment will only scope this in if there are significant effects to the soil</i></p>	<p>No</p>	<p>Ground conditions is scoped out of the PEIR and ES, therefore is not considered further. See Chapter 2 of the PEIR and ES, Appendix 2.1 Scoping Report, Appendix 2.2 Scoping Opinion and Appendix 2.4 Phase 1 Ground Conditions Assessment for further information.</p>



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	<p><i>environment that relate to human receptors. How the project affects: mobilisation of historic pollution; risk of new ground pollution (e.g. industrial agents or accidental spills); and food resources and safety (e.g. availability of or contamination on agricultural land, and allotments). Consider potential for ground pollutants (new or historic) to migrate off-site and if appropriate consider such effects proportionately within the air quality or water quality determinants depending on the relevant health pathway.'</i></p>		
<p>Noise and vibration</p>	<p><i>'If the EIA is scoping in noise (and vibration) as a technical chapter with the prospect of human receptor impacts, then also scope in noise as a determinant of health. Consider how the project affects the existing sound environment, including opportunities to maintain a standard of sound environment that is conducive to health, including mental health. Reference as relevant how the project affects exposures to noise and vibration, including if information is available, an indication of the likely number of people affected. Consider the distribution and duration of exposures (including to any sensitive subpopulations), or exposures at more sensitive locations such as hospitals or schools. Consider any particular features of the noise that mediate its effect, such as frequency, tone or character; how both short-term and long-term exposures may affect health outcomes, with reference to both peak event metrics and averaged noise metrics (referencing scientific evidence such as the 2018 WHO Environmental Noise Guidelines and underpinning systematic reviews). Explain the level of change with reference to relevant standards set by, or commonly adopted in relation to, government noise policy, and have regard to the degree of change relative to the baseline situation and advisory guide values.</i></p>	<p>Yes (construction phase only)</p>	<p>Chapter 11 Noise and Vibration assesses the following noise sources for the generation of potential significant effects across the phases of the Proposed Development to the identified Noise Sensitive Receptors (NSRs):</p> <ul style="list-style-type: none"> • Construction and decommissioning noise from plant and activity; • Construction decommissioning noise from road traffic; • Construction decommissioning vibration; and • Operational plant noise. <p>Chapter 11 finds that there will be no significant adverse effects from these sources of noise and vibration.</p> <p>As set out at paragraph 11.3.1 of Chapter 11, the NSRs used for this assessment comprise those located adjacent to the Site and those sections of the surrounding road network anticipated to experience a significant change in traffic flow as a result of the construction and decommissioning of the Proposed Development. The assessment considers receptors within Temple Hirst, Hirst Courtney, Camblesforth, Drax and surrounding areas. The study area for the construction, operational and decommissioning phase assessments incorporates the area within, and up to, approximately 400m from the Site boundary, where residential properties have been identified to be potentially sensitive receptors.</p>



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	<i>Consider the project's application of the 'as low as reasonably practicable' principle. Consider for indoor spaces, including housing quality, as well as outside spaces (private and public) in relation to tranquillity and opportunities for respite. Consider relevant interdependencies between indoor noise, air quality and overheating that could arise from mitigation or adaptive behaviours.'</i>		
Radiation	<i>'How the project affects actual and perceived exposure to electromagnetic and ionising radiation risks, including opportunities to adopt exposure guidelines and design measures that avoid or minimise actual risks. Consider the mental health effects of widespread concerns about exposure from major electrical infrastructure or radiation sources. Note where there is the potential for high and/or prolonged exposure in close proximity to places where people spend extended periods of time.'</i>	Yes	As discussed in Chapter 2 EIA Methodology of the ES (Table 2.6), the consideration of Electric, Magnetic and Electromagnetic Fields (EMF) is scoped out of the ES as no significant effects are anticipated. The infrastructure implemented for the Proposed Development will be below the relevant guidance thresholds, and as such is not discussed further in this technical note.
<i>Institutional and built environment</i>			
Health and social care services	<i>'How the project affects provision or use of health and social care services, including opportunities to extend capacity and quality standards. How it affects the accessibility, capacity and quality of: primary care; secondary care (including hospitals); ambulance services; social services, including use of community centres; dental services; pharmacy services; sexual health services; and mental health services. Consider when appropriate how its provision of occupational healthcare services for its workforces can avoid or reduce pressures on community services. Consider any challenges relating to recruitment and retention of staff, as well as the role of health and social care</i>	No	As identified in Chapter 13 Socio-Economics, a worst-case scenario approach to the assessment of the potential socio-economic effects of the construction and decommissioning phases of the Proposed Development assume that up to 200 construction worker roles will be sourced from outside of the Yorkshire and The Humber area, and will require temporary accommodation within the area local to the Site for the anticipated construction and decommissioning programmes (up to 12 months). As identified in Section 2 of this technical note, there are no healthcare facilities within a 1km vicinity of the Site. As discussed, a detailed CEMP and DEMP will be implemented during the construction and decommissioning phases respectively to mitigate the risk of major accidents on-Site, through ensuring best practice health and safety protocols are followed. Should an accident occur on-Site, the emergency services will be contacted and appropriate actions followed, such as visiting the nearest Accident and Emergency department. The effect to local health and social care service provision is not anticipated to be significant due



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	<p><i>services in preparedness for emergency scenarios (major accidents and/or disasters). Whilst projects are not expected to subsidise or fund public services where there is entitlement, it may support routine health and social care planning through information provision and will often make a financial contribution where there is a need to support transitional arrangements, step changes in demand or temporary demand peaks. For both project workers and end users, reference may be made to: usual place of residence / primary care registration location; and expected profile of service use when away from their usual place of residence, e.g. travelling. Explain where it includes the provision, or replacement of facilities and how these meet appropriate service provider requirements. Consider the project risk profile in terms of transmission of infectious disease and any measures to share information or otherwise support disease prevention services, or equivalent occupational provision, including screening, vaccination and epidemic response.'</i></p>		<p>to the proposed mitigation and the temporary nature, and low numbers of workers in the context of the local population.</p> <p>During the operational phase, employment opportunities will be limited to maintenance visits which will not exceed five visits per month (as identified in paragraph 10.6.51 of Chapter 10 Transport and Access). These visits will be conducted during a shift, and therefore do not require temporary accommodation or for the workers to move to the area. The potential for accidents is therefore not assumed to be significant, however contractual obligations will apply in order to manage health and safety of employees.</p>
<p>Built environment</p>	<p><i>'How the project affects the built features of the environment that contribute to health, including opportunities to contribute to local or neighbourhood design that fits positively into the wider spatial planning context to support physical, mental and social wellbeing. Explain as relevant: the project's use classes (land uses) and how these relate to need without over supply that promotes risk taking behaviours or unhealthy lifestyles; how buffer zones are used and maintained (e.g. between industrial uses or transport corridors and residential or public space uses); how it extends or complements existing community provision of local retail, financial and commercial services, community assets, social infrastructure and green space; how it minimises susceptibility to major</i></p>	<p>No</p>	<p>This determinant of health has been scoped out of further discussion as it is not considered relevant to this technical note; the Proposed Development will not provide residential, employment or commercial facilities to the local community.</p>



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	<p><i>accidents or disasters; how it promotes recycling and manages waste to avoid nuisance or hazards; how it extends or operates within capacity of communications and sanitation systems and water and energy resources; how any utilities diversions or interruptions minimise disruption to end users; how it incorporates principles of inclusive and age-friendly / life course design including in connecting to existing street, route and places; and how any new built environment features due to the project will be managed and maintained.'</i></p>		
<p>Wider societal infrastructure and resources</p>	<p><i>'The wider societal effects of the project for public health. Reference as relevant how the project contributes to: energy infrastructure; transport infrastructure; waste management infrastructure; water infrastructure; communication and IT infrastructure; or other infrastructures on which society depends for good population health. Also consider its wider contribution to: economic development or GDP; climate change mitigation or adaption (including improved air quality and preparedness for extreme weather events such as heatwaves, storms and flooding); and protection or enhancement of the natural environment (e.g. biodiversity, access to natural spaces and habitats).'</i></p>	<p>No</p>	<p>These determinants are considered to have been addressed in responses provided to the previous determinants, therefore this item is not considered further.</p>



4 Conclusion

4.1 Construction

There are no significant beneficial or adverse effects identified during construction in relation to population and human health.

4.2 Operation

There are no significant adverse effects identified during operation in relation to population and human health.

The Proposed Development will have the following significant beneficial effects in relation to population and human health during operation:

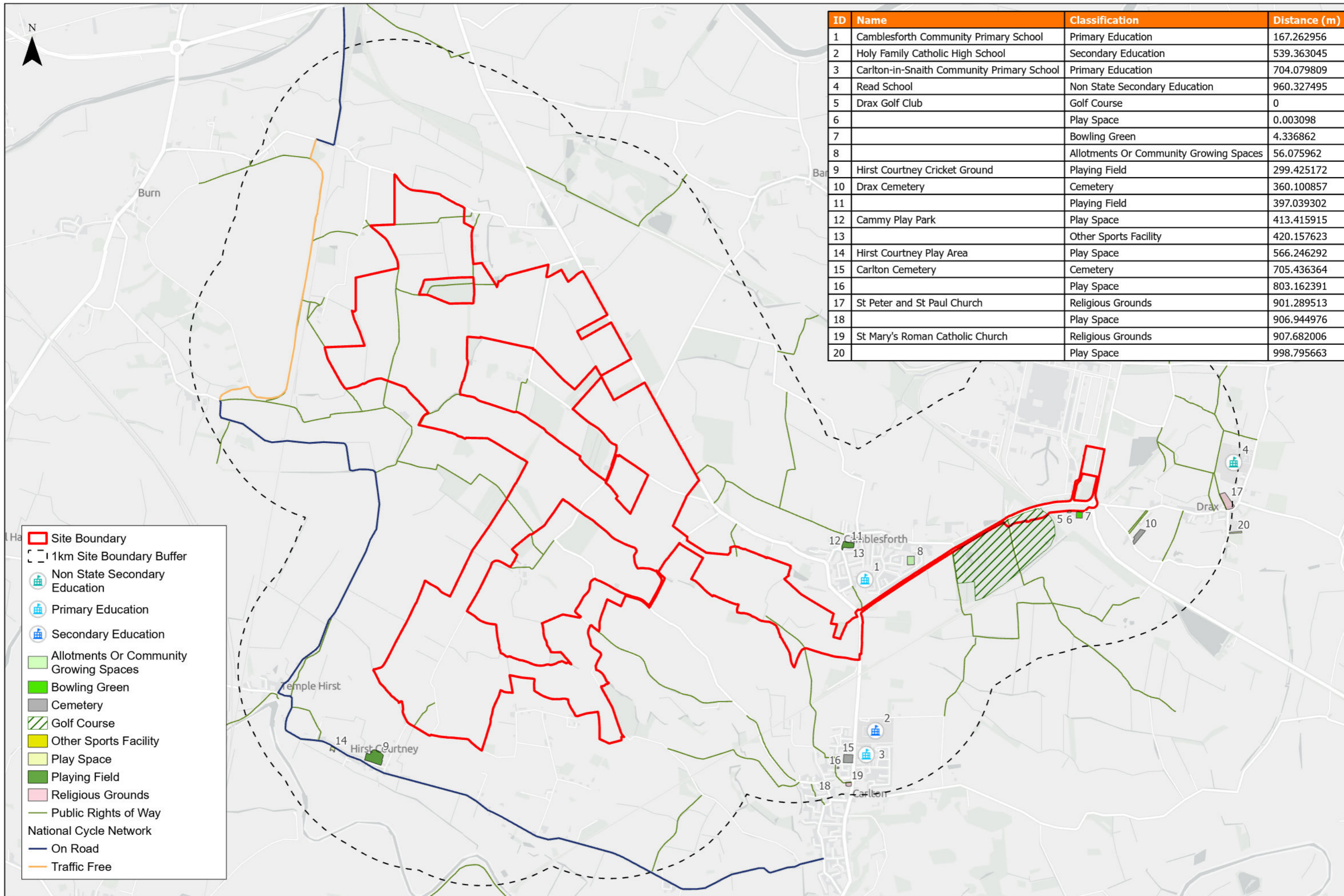
- The Proposed Development will result in the offset of carbon emissions through the generation of renewable electricity at a local level, resulting in a significant beneficial effect; and
- The Proposed Development will have a significant beneficial effect on renewable energy generation in the Yorkshire and Humber region during the operational phase.

The significant beneficial effects of the Proposed Development will benefit the health and wellbeing of the community through contributing to the mitigation of climate change through the offset of carbon emissions through the generation of renewable energy. This will contribute towards ensuring a habitable community into the future, and easing climate anxiety and the psychological effects of climate change.

4.3 Decommissioning

There are no significant beneficial or adverse effects identified during decommissioning in relation to population and human health.





ID	Name	Classification	Distance (m)
1	Camblesforth Community Primary School	Primary Education	167.262956
2	Holy Family Catholic High School	Secondary Education	539.363045
3	Carlton-in-Snaith Community Primary School	Primary Education	704.079809
4	Read School	Non State Secondary Education	960.327495
5	Drax Golf Club	Golf Course	0
6		Play Space	0.003098
7		Bowling Green	4.336862
8		Allotments Or Community Growing Spaces	56.075962
9	Hirst Courtney Cricket Ground	Playing Field	299.425172
10	Drax Cemetery	Cemetery	360.100857
11		Playing Field	397.039302
12	Cammy Play Park	Play Space	413.415915
13		Other Sports Facility	420.157623
14	Hirst Courtney Play Area	Play Space	566.246292
15	Carlton Cemetery	Cemetery	705.436364
16		Play Space	803.162391
17	St Peter and St Paul Church	Religious Grounds	901.289513
18		Play Space	906.944976
19	St Mary's Roman Catholic Church	Religious Grounds	907.682006
20		Play Space	998.795663

- ▭ Site Boundary
- 1km Site Boundary Buffer
- 🏫 Non State Secondary Education
- 🏫 Primary Education
- 🏫 Secondary Education
- Allotments Or Community Growing Spaces
- Bowling Green
- Cemetery
- Golf Course
- Other Sports Facility
- Play Space
- Playing Field
- Religious Grounds
- Public Rights of Way
- National Cycle Network
- On Road
- Traffic Free

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