

Harston Neighbourhood Plan Strategic Environmental Assessment (SEA)

Scoping report

Harston Parish Council

April 2024

Quality information

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Figure 1.1: Map of the Harston neighbourhood area

1. Introduction

Background

- 1.1 AECOM has been commissioned to undertake an independent Strategic Environmental Assessment (SEA) in support of the emerging Harston Neighbourhood Plan (HNP).
- 1.2 The HNP is being prepared under the Localism Act 2011 and the Neighbourhood Planning (General) Regulations 2012, and in the context of the local planning framework of South Cambridgeshire District Council.
- 1.3 The neighbourhood area (Figure 1.1), designated in 2022, covers the parish of Harston, located in the central part of South Cambridgeshire. Harston is a civil parish and village, located around 8km south of Cambridge.
- 1.4 The Parish is within the South Cambridgeshire and is being prepared in the context of the South Cambridgeshire Local Plan (2018)¹ and due regard is given to the emerging Greater Cambridge Local Plan².

SEA explained

- 1.6 SEA is a mechanism for considering and communicating the potential impacts of an emerging plan, and potential alternatives in terms of key environmental issues. The aim of SEA is to inform and influence the plan-making process with a view to avoiding and mitigating potential negative impacts and maximising the potential for positive effects. Through this approach, SEA seeks to maximise the emerging plan's contribution to sustainable development.
- 1.7 SEA is undertaken to meet the specific requirements prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations).
- 1.8 The HNP has been screened in as requiring SEA³. The HNP is seeking to allocate land to meet housing requirements set by South Cambridgeshire District Council. The Parish contains some significant constraints (including Local Nature Reserves, SSSIs, an SAC, scheduled monuments, listed buildings, and priority habitats) providing a sensitive context for undertaking of the neighbourhood plan review. There is potential for the HNP to lead to significant effects and as such it has been determined that SEA is required to assess the potential for significant environmental effects.
- 1.9 The next stage of SEA (this report) seeks to establish a suggested scope for the assessment. A key procedural requirement of the SEA Regulations is to present this scope for the SEA, so that the statutory consultees (Historic England, Natural England, and the Environment Agency) can provide timely comment.

¹ South Cambridge District Council (2018) 'South Cambridge Local Plan' can be accessed [here](#).

² Greater Cambridge Shared Planning (2023) 'Greater Cambridge Local Plan' 2023 can be accessed [here](#).

³ Place Services (2024) 'Harston Neighbourhood Plan SEA & HRS Screening Report and AA' can be accessed [here](#).

SEA scoping explained

1.10 The scope is explored and presented under a series of key environmental themes as follows:

- Air quality
- Biodiversity
- Climate change and flood risk
- Community wellbeing
- Historic environment
- Land, soil, and water resources
- Landscape
- Transportation and movement

1.11 The selected environmental themes incorporate the 'SEA topics' suggested by Annex I (f) of the SEA Directive. These were refined to reflect a broad understanding of the anticipated scope of plan effects.

1.12 Developing the draft scope for the SEA as presented in this report has involved the following steps:

- Exploring the policy context for the neighbourhood plan and SEA to summarise the key messages arising. Overarching plans and the strategic policy context are presented in the first chapter (as part of the context for the plan), whilst localised plans and strategies are explored under each environmental theme.
- Establishing the baseline for the SEA (i.e., the current and future situation in the area) to help identify key sensitive receptors. Baseline information is presented as a series of maps, key statistics, and cited evidence sources, with additional supporting commentary, for each environmental theme. The future baseline (in the absence of the plan) is explored in the first chapter (as part of the context for the plan).
- Identifying particular problems or opportunities ('issues') that should be a particular focus of the SEA. Key issues are explored for each environmental theme; and
- Considering this information, developing a SEA framework comprising SEA objectives and assessment questions, which can then be used as a guiding framework for the subsequent assessment. Objectives are explored for each environmental theme scoped in as part of the assessment, and then brought together as a whole (the SEA framework) in the final chapter.

1.13 Options and proposals within the emerging HNP will be assessed consistently using this framework.

2. Context

- 2.1 This section presents the strategic planning policy context provided by the National Planning Policy Framework (NPPF) and the Local Development Framework for South Cambridgeshire. It also identifies plans and strategies of distinct relevance to the interests of statutory consultees, and other broad national strategies of relevance. Finally, a narrative is provided which considers the future baseline, in the absence of the emerging HNP.

Strategic policy context

Document title	Year of publication
National Planning Policy Framework (NPPF)	2023
Levelling-up and Regeneration Act	2023
Greater Cambridge Local Plan	Emerging
Environment Act	2021
Planning Practice Guidance	2021
South Cambridgeshire Local Plan 2018	2018

- 2.2 The National Planning Policy Framework (NPPF) provides an overarching framework for development in England. It sets out the government’s planning policies for England and how these are expected to be applied. It is supported by planning practice guidance, which is a suite of policy papers covering a broad range of topics, including SEA. Neighbourhood plans must be in general conformity with the NPPF.
- 2.3 The strategic policy context is also set by South Cambridgeshire’s Local Development Framework, which consists predominantly of the South Cambridgeshire Local Plan (SCLP), adopted 2018. This is further supported by Area Action Plans, one of which (the HPC Action Plan) covers the neighbourhood area⁴.
- 2.4 Greater Cambridge has an emerging Local Plan – the first joint Local Plan for Cambridge and South Cambridgeshire. Both councils have existing Local Plans which were adopted (individually) in 2018. Work on the emerging Greater Cambridge Local Plan has been ongoing since 2019, with public consultations taking place in 2020, and late 2021, ahead of both councils agreeing the ‘Development Strategy Update’ in early 2023. The Greater Cambridge Local Plan (hereafter referred to as the GCLP) will seek to guide development across the joint authority area in the period up to 2041.
- 2.5 Harston is defined in South Cambridgeshire Local Plan’s settlement hierarchy (Policy S/10) and falls into the ‘Group Villages’ category. The Local Plan does not set a housing target for Group Villages; housing is expected to come forward through neighbourhood plans.

⁴ Harston Parish Council (2022) ‘Harston Parish Council Action Plan 2022-2023’ can be accessed [here](#).

Historic England

Document title	Year of publication
National Planning Policy Framework (NPPF)	2023
Historic England Advice Note 11 (Second Edition): Neighbourhood Planning and the Historic Environment	2022
Historic England: Heritage and Climate Change	2022
Historic England Advice Note 11: Neighbourhood Planning and the Historic Environment	2022
Historic England Advice Note 4: Tall Buildings Advice Note	2022
National Model Design Code	2021
The National Design Guide	2019
Historic England Advice Note 1: Conservation Area Appraisal Designation and Management	2019
A Green Future: Our 25 Year Plan to Improve the Environment	2018
Historic England Good Practice Advice: The Setting of Heritage Assets	2017
Historic England Advice Note 8: Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA)	2016
Historic England Advice Note 3: The Historic Environment and Site Allocations in Local Plans	2015

2.6 Historic England champions England's heritage. The key high-level principles for the conservation and enhancement of the historic environment are:

- The historic environment is a shared resource
- Everyone should be able to participate in sustaining the historic environment
- Understanding the significance of places is vital
- Significant places should be managed to sustain their values
- Decisions about change must be reasonable, transparent, and consistent
- Documenting and learning from decisions are essential.⁵

2.7 The significance of places is the key element which underpins the conservation and enhancement of the historic environment. Significance is a collective term for the sum of all the heritage values attached to a place, be it a building, an archaeological site, or a larger historic area such as a whole village or landscape.

⁵ Historic England: Conservation Principles, Policies and Guidance

Natural England and the Environment Agency

Document title	Year of publication
Environmental Improvement Plan 2023	2023
Natural England Green Infrastructure Framework	2023
UK Climate Change Risk Assessment	2022
Net Zero Strategy: Build Back Greener	2021
Environment Act	2021
National Model Design Code	2021
Changes to the Habitats Regulations 2017	2021
The National Design Guide	2019
A Green Future: Our 25 Year Plan to Improve the Environment	2018
Space for people: Targeting action for woodland access	2017
Natural England's Green Infrastructure Guidance	2009
The Water Environment (Water Framework Directive) (England and Wales) Regulations	2017
Flood and Water Management Act 2010	2010
Climate Change Act 2008	2008

- 2.8 The interests of Natural England and the Environment Agency span a range of SEA themes, including landscape, biodiversity, land, soil, and water resources (including waste), community wellbeing, and climate change and flood risk. Key documents which link to these interests are outlined above.

Other national strategies

Document title	Year of publication
UK Climate Change Risk Assessment	2022
Decarbonising Transport: A Better, Greener Britain	2021
National Infrastructure Assessment	2021
Net Zero Strategy: Build Back Greener	2021
Waste Management Plan for England	2021
Blueprint for a resilient economy	2020
National Infrastructure Strategy	2020
Health Equity in England: The Marmot Review 10 Years On	2020

Document title	Year of publication
The UK Sixth Carbon Budget	2020
The Clean Air Strategy	2019
Future of Mobility: Urban Strategy	2019
Planning Practice Guidance	2019
Healthy High Streets	2018

Future baseline

- 2.9 In the context of SEA, there is a need to consider the future baseline. The future baseline is the expected continuation and/ or evolution of aspects of the baseline, based on what we know today. The future baseline is inevitably uncertain and predicted.
- 2.10 In the future, development (housing, employment, and wider infrastructure) will continue to come forward without a neighbourhood plan. This will either be allocated through the Local Plan, or speculatively through the planning system. In this respect a 'business as usual' approach means that development in line with Local Plan policies and the NPPF is likely to continue as a natural evolution of the baseline.
- 2.11 In accepting a 'business as usual' approach, we also accept that increases in absolute carbon emissions are likely to continue (in the absence of strategic, including global, action). A focus is therefore paid to per capita emissions, whereby planning can influence root behaviours and support lifestyle changes which have a recognisable and measurable localised impact.
- 2.12 It is assumed that development would be delivered alongside suitable, and widely accepted, mitigation in line with Local Plan and national policies. This would include sustainable drainage systems, efficiency standards, sequential and exception testing etc. More recently (February 2024), all new developments in England for ten or more homes are required to provide a 10% biodiversity net gain, with the same rules applying to small sites from April 2024⁶. This is in accordance with the Environment Act (2021).
- 2.13 Furthermore, it is recognised that assets are afforded a level of protection, according to their significance, through the planning system (with internationally and nationally designated features afforded greater weight in planning decisions). It is assumed that existing national and local planning and policy protections will remain in the future as a key consideration for the development management process.
- 2.14 These assumptions will be considered throughout the assessment process, whilst recognising that uncertainty remains, and a precautionary principle will still be required.

⁶ UK Government (2024) 'Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021) can be accessed [here](#).

3. Air quality

3.1 This section seeks to summarise any air pollution issues, in particular; exceedances in air pollution objectives/ declared Air Quality Management Areas (AQMAs) and air quality issues associated with the main road network.

Map

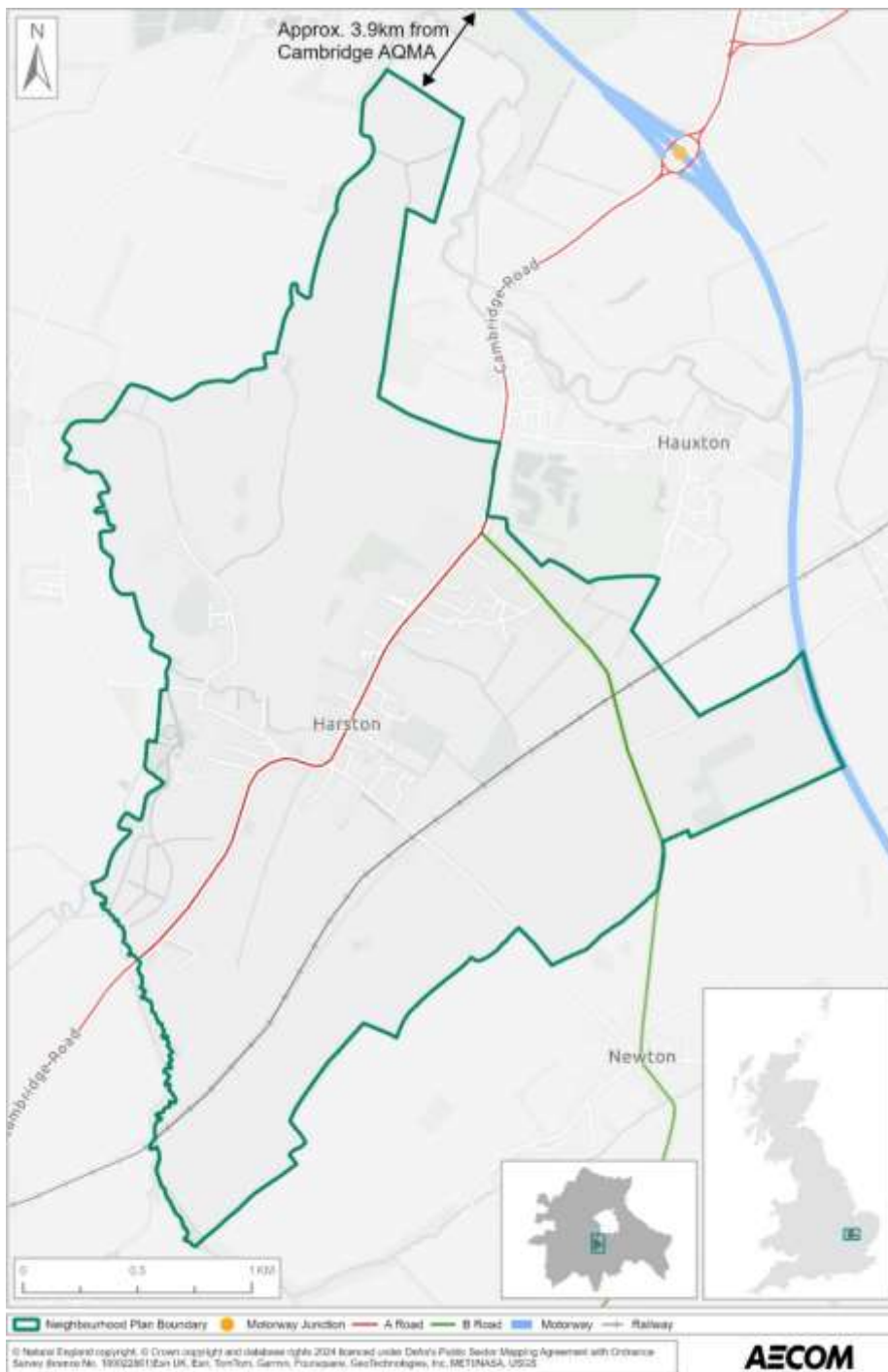


Figure 3.1: Proximity of neighbourhood area to AQMAs

Key evidence sources

3.2 Evidence sources which have informed the development of key issues include:

- [DEFRA UK AIR - Air Information Resource - AQMAs interactive map](#)
 - [AQMA Details \(Cambridge AQMA, South Cambridgeshire Council\)](#)
- [South Cambridgeshire Council – Air Pollution](#)
 - [Air Quality Annual Status Report 2023](#)

Policy context

Table 3-1: Additional plans and strategies relating to air quality

Document title	Year of publication
Harston Parish Council Action Plan	2024
Greater Cambridge Local Plan	Emerging
Local Transport and Connectivity Plan - Cambridgeshire & Peterborough Combined Authority	2023
South Cambridgeshire District Council Air Quality Strategy 2021-2025	2021
Greater Cambridge Sustainable Design and Construction Supplementary Planning Document	2020
South Cambridgeshire Local Plan 2018	2018

Commentary

- 3.3 The Local Transport and Connectivity Plan sets out a number of policies for how transport within South Cambridgeshire can be improved to make the area a more accessible and environmentally friendly place. The Transport Plan's 'Vision' states: "*The transport network must protect our environment and **clean up our air**, and it must be the backbone of sustainable economic growth in which everyone can prosper.*"
- 3.4 There are no AQMAs within the neighbourhood area, however there is one AQMA within proximity. This is the Cambridge AQMA, approximately 3.9km to the northeast of the neighbourhood area (see **Figure 3.1** above). Declared in 2004 by Cambridge City Council for exceedances of Nitrogen Dioxide (NO₂) air quality objectives, the AQMA covers the inner ring road of the city and all the land within it (including a buffer zone around the ring road and its junctions with main feeder roads).

Key issues

- 3.5 The neighbourhood area is approximately 3.9km southwest of the Cambridge AQMA, designated due to high NO₂ emissions. As Cambridge is

the nearest city to the neighbourhood area, it is likely that most residents will access key services and facilities there.

- 3.6 The HNP is seeking to allocate sites for housing, potentially leading to increased traffic generation. Whilst this could have potential impacts on local congestion, the scale of likely development proposed within the HNP would not be expected to lead to significant additional impacts upon air pollution. As such, it is proposed that air quality is not a consideration in this SEA and is accordingly **scoped out** of the SEA for the HNP.

4. Biodiversity

- 4.1 This section seeks to summarise nature conservation designations, habitats, and species within and surrounding the neighbourhood area.

Maps

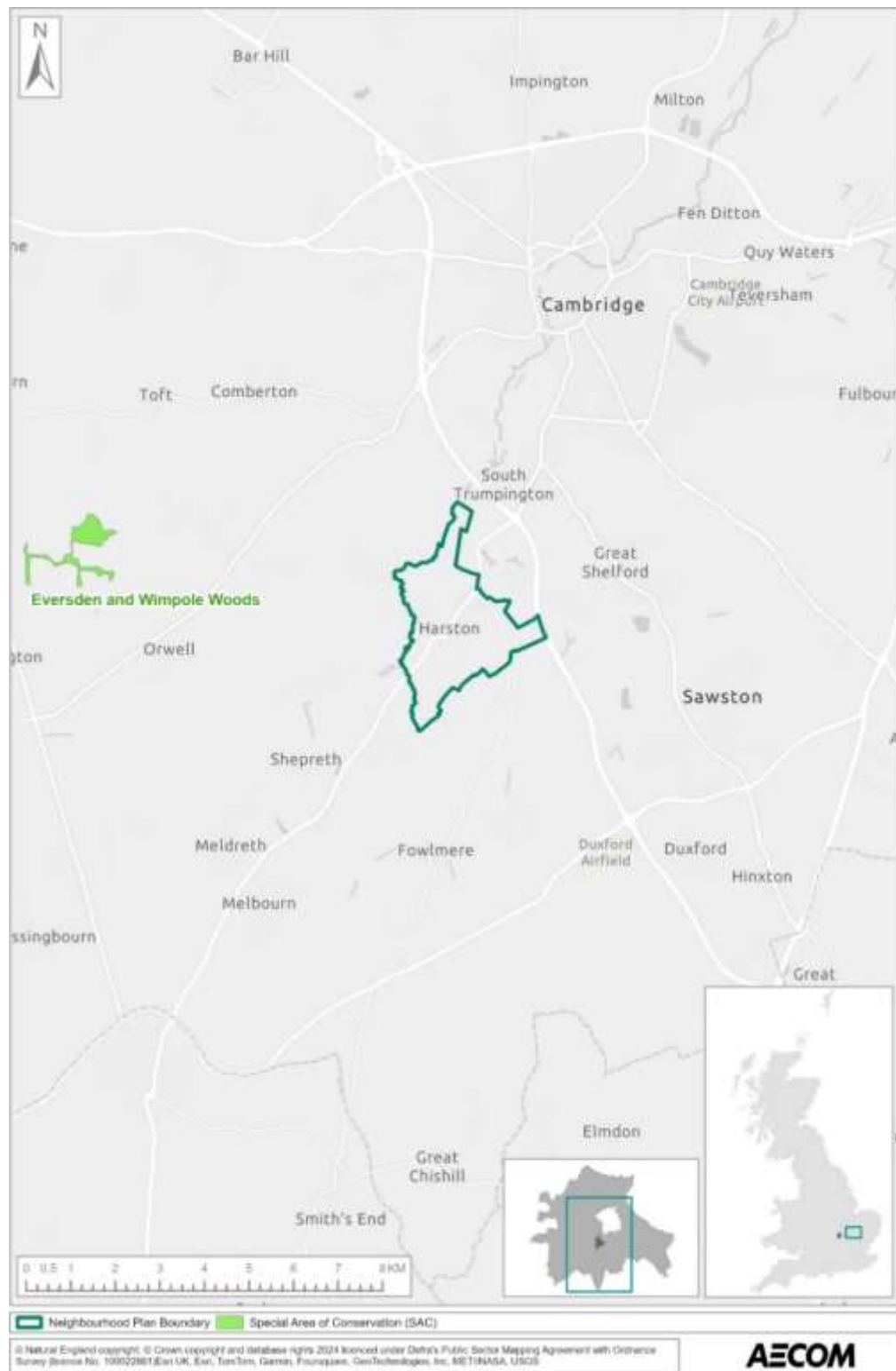


Figure 4.1: European biodiversity designations within proximity to the neighbourhood area

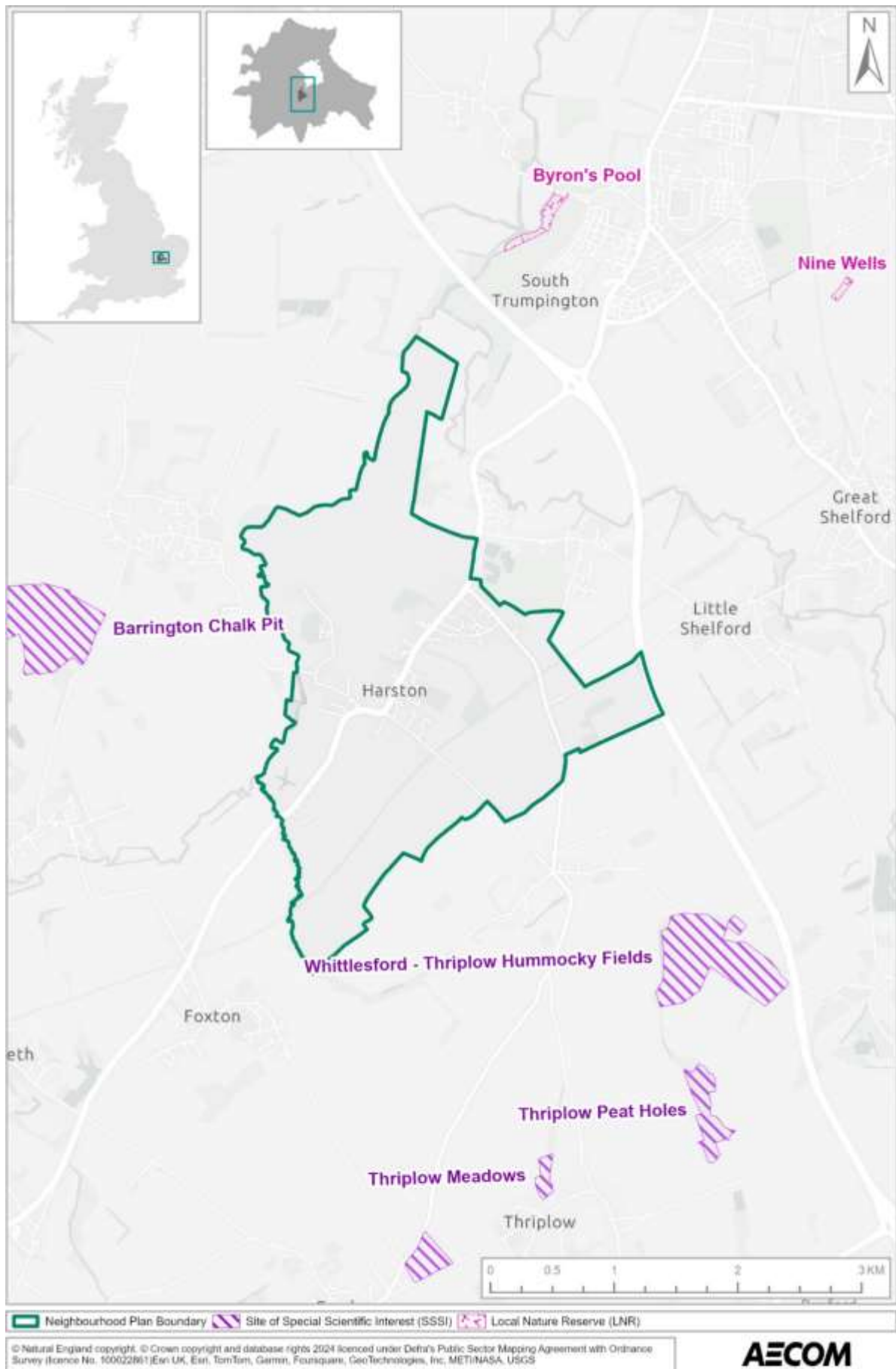


Figure 4.2 National and local biodiversity designations within proximity to the neighbourhood area



Figure 4.3 Priority habitats within and adjacent to the neighbourhood area

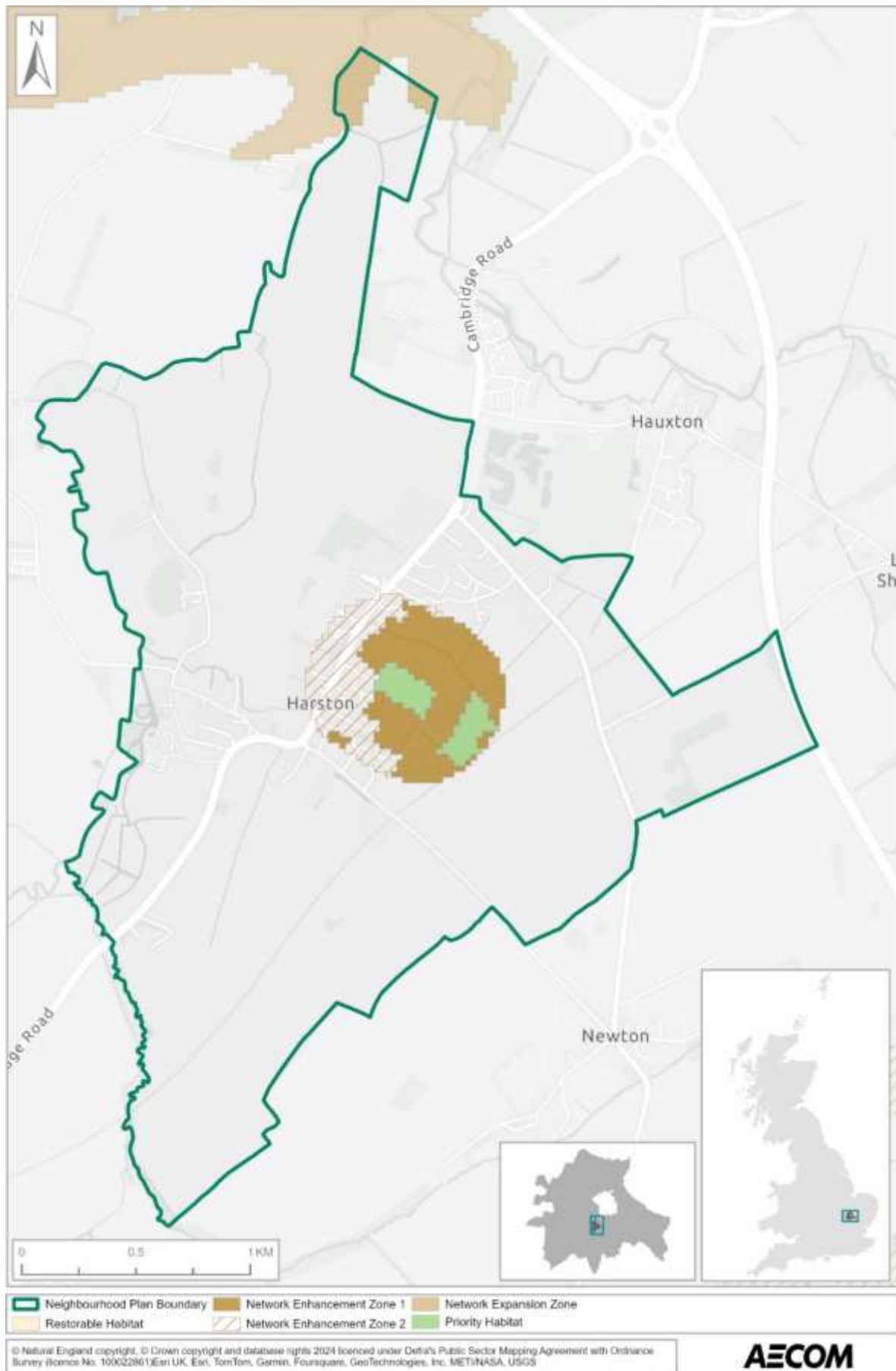


Figure 4.4: Potential Habitat Network enhancement opportunities within the neighbourhood area

Key evidence sources

4.2 Evidence sources which have informed the development of key issues include:

- [DEFRA's Magic Map](#)
- [Cambridgeshire and Peterborough Biological Records Centre \(CPBRC\)](#)
- [Cambridge City Council – Byron's Pool Local Nature Reserve](#)
- [Joint Nature Conservation Committee \(JNCC\)](#)
 - [Eversden and Wimpole Woods SAC](#)
- [Natural England](#)
 - [National Habitat Network Maps](#)
 - [Protected sites and species](#)
 - [Wildlife and habitat conservation](#)
 - [SSSI Citation - Barrington Chalk Pit](#)
 - [SSSI Citation – Whittlesford – Thriplow Hummocky Fields](#)

Policy context

Table 4-1: Additional plans and strategies relating to biodiversity

Document title	Year of publication
Cambridgeshire and Peterborough Local Nature Recovery Strategy - Cambridgeshire County Council	2023
Greater Cambridge Local Plan	Emerging
Greater Cambridge Shared Planning - Biodiversity Supplementary Planning Document	2022
South Cambridgeshire District Council - Doubling Nature Strategy	2021
Harston Parish Council Action Plan	2022
South Cambridgeshire Local Plan 2018	2017

4.3 Policies such as NH/4: Biodiversity in the South Cambridgeshire Local Plan outline the importance of achieving positive biodiversity gain through the form and design of development. They highlight that measures may include creating, enhancing and managing wildlife habitats and networks, and natural landscape.

4.4 The Greater Cambridge - Biodiversity Supplementary Planning Document provides sets out guidance on how biodiversity net gain can be delivered in South Cambridgeshire.

Commentary

European Designations

- 4.5 Whilst there are no European designated sites for biodiversity in the neighbourhood area, the **Eversden and Wimpole Woods Special Area of Conservation (SAC)**, which is located approximately 6.3km to the east of the neighbourhood area, as shown in **Figure 4.1**.
- 4.6 **Eversden and Wimpole Woods SAC** (66.22 hectares) comprises a mixture of ancient coppice woodland (Eversden Wood) and high forest woods likely to be of more recent origin (Wimpole Woods). A colony of **barbastelle bats (*Barbastella barbastellus*)** have been recorded in Wimpole Woods. These trees are used as a summer maternity roost where the female bats gather to give birth and rear their young. Most of the roost sites are within tree crevices. The bats also use the site as a foraging area. Some of the woodland is also used as a flight path when bats forage outside the site. The current threats to the site are high ranked and include changes in biotic conditions, forest and plantation management & use, and pollution to groundwater (point sources and diffuse sources).

National Designations

- 4.7 There are two Sites of Special Scientific Interest (SSSIs) within a 2km buffer of the neighbourhood area, shown in **Figure 4.2**. Specifically, the **Barrington Chalk Pit SSSI**, and the **Whittlesford – Thriplow Hummocky Fields SSSI**.
- 4.8 **Barrington Chalk Pit SSSI** (97.23 hectares) is renowned as the last exposure of the Cretaceous 'Cambridge Greensand', characterized by phosphatic nodules and fossils in a chalky matrix. While the fauna primarily includes brachiopods and fish teeth, the site's significance lies in its stratigraphic importance for studying the Upper Cretaceous in eastern England. Resting on Upper Gault Clay, the Greensand provides insights into the region's geological history, especially regarding vertebrate remains and indigenous faunal elements. Additionally, it offers exceptional exposures of the Cambridge Greensand, with overlying Lower Chalk formations, including Chalk Marl and Tottenhoe Stone.
- 4.9 **Whittlesford- Thriplow Hummocky Fields SSSI** (7.9, 47.74 hectares) host the nationally rare grass poly *Lythrum hyssopifolia*, confined to a small area in south Cambridgeshire due to its unique habitat in shallow depressions within arable fields. These depressions, formed after the last glaciation, support a diverse plant community including grass poly, toad rush *Juncus bufonius*, and uncommon liverworts such as *Riccia cavernosa*. The site's significance is further highlighted by the presence of the nationally uncommon fairy shrimp *Chirocephalus diaphanus*, which thrives in temporary freshwater pools, facing decline due to habitat alterations like improved drainage and infilling.

Locally Important Sites

- 4.10 In terms of Biodiversity Action Plan (BAP) Priority Habitats, there are medium sized areas of coastal and floodplain grazing marsh along the

western boundary of the neighbourhood, as well as a smaller area centrally. There are also some small areas of deciduous woodland in the west of the area, as well as a number of these centrally, and three small areas in the east, adjacent to the border of the neighbourhood area. There are also two areas of traditional orchard central to the neighbourhood area, and one area of lowland fens in the northwest of the neighbourhood area (as shown in **Figure 4.3** above).

- 4.11 There is one local nature reserve (LNR) in proximity to the neighbourhood area, which is **Byron's Pool**, approximately 960m to the north of the boundary of the area. Byron's Pool LNR is a 4.5 hectare densely wooded area on the north bank of the River Cam. The woodland comprises a variety of trees that include beech, ash, hazel, wych elm, sycamore, horse chestnut, oak, and maple. The reserve attracts a variety of birds, such as kingfishers, as well as various species of bats and fish.
- 4.12 With regard to the National Habitat Network, there is a small area of Network Enhancement Zone 1 centrally, surrounding the priority habitat areas (as shown in **Figure 4.4** above). This is land that can be used to expand and join existing habitat patches and improve connectivity. A small area to the west of this Network Enhancement Zone 1 in the centre is within Network Enhancement Zone 2. Network Enhancement Zone 2 refers to land within close proximity to the existing habitat components that are unlikely to be suitable for habitat re-creation but where other types of habitat may be created, or land management may be enhanced including delivery of suitable Green Infrastructure. There is also a large area of Network Expansion Zone partially within the neighbourhood area in the north. Network Expansion Zone refers to land within close proximity to the Network Enhancement Zones 1 & 2 that are more likely to be suitable for habitat creation for the habitat and identifying possible locations for connecting and linking up networks.

Key issues

- 4.13 Harston is in proximity of some European and nationally designated biodiversity sites within and surrounding the neighbourhood area. New development that comes forward within the neighbourhood area has the potential to directly and indirectly impact designated sites for biodiversity.
- 4.14 Ecological networks, including BAP Priority Habitats, may be impacted by new development which comes forward within the neighbourhood area, which may result in the fragmentation of important natural corridors.

SEA Framework

- 4.15 It is recognised that the HNP is allocating sites for development; the nearby habitats and species may see some pressures relating to any additional growth and as such the baseline may be affected by the Plan. As such, the biodiversity theme is therefore **scoped in** to the SEA for the HNP.

Table 4-2 SEA objective and assessment questions

SEA theme

SEA objective

Biodiversity and geodiversity

Protect and enhance biodiversity and geodiversity.

4.16 Supporting assessment questions include (will the option / proposal...):

- Protect and enhance nationally and locally designated sites, including supporting habitats and mobile species that are important to the integrity of these sites?
- Protect and enhance semi-natural habitats as well as priority habitats and species, including ancient woodland?
- Achieve biodiversity and environmental net gains and support the delivery of ecosystem services and multifunctional green infrastructure networks?
- Increase the resilience of biodiversity in the area to the effects of climate change, including through enhancements to ecological networks?
- Support access to, interpretation and understanding of biodiversity?

5. Climate change and flood risk

- 5.1 This section seeks to summarise existing and future flood risk and the wider impacts of climate change, activities in the district which contribute to climate change, and measures to mitigate the effects of climate change and increase resilience.

Key evidence sources

- 5.2 Evidence sources which have informed the development of key issues include:

- [Environment Agency's Flood risk information for planning in England](#)
- [Check the long-term flood risk for an area in England](#)
- [UK Climate Projections \(UKCP\)](#)
- [UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2021](#)

Policy context

Table 5-1: Additional plans and strategies relating to climate change and flood risk.

Document title	Year of publication
Greater Cambridge Local Plan	Emerging
Cambridgeshire County Council - Net Zero Cambridgeshire 2045	2022
Cambridgeshire Flood Risk Management Strategy 2021-2027	2021
Fairness, nature, and communities: addressing Climate Change in Cambridgeshire and Peterborough	2021
South Cambridgeshire District Council - Doubling Nature Strategy	2021
Harston Parish Council Action Plan	2020
South Cambridgeshire District Council - Zero Carbon Strategy	2020
Greater Cambridge Sustainable Design and Construction Supplementary Planning Document	2020
South Cambridgeshire Local Plan 2018	2017
Cambridgeshire Flood and Water Supplementary Planning Document	2016
Cambridgeshire green infrastructure strategy	2011

Contributions to climate change

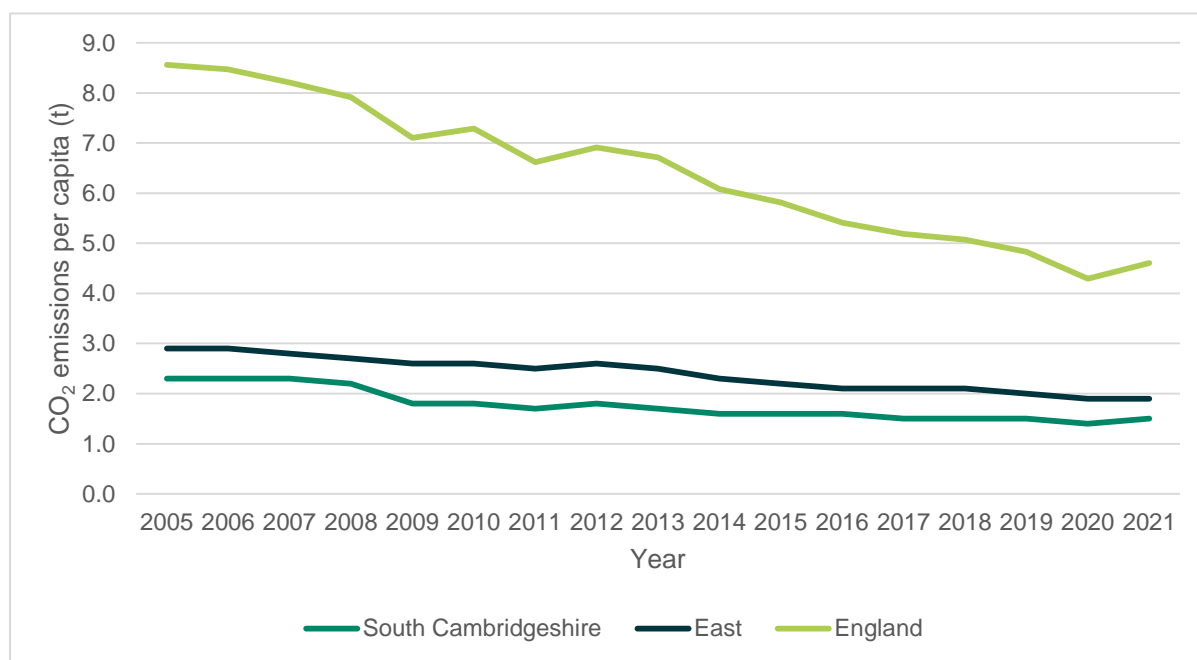


Figure 5.1 All sources of CO₂ emissions (2005-2021) in South Cambridgeshire, the East, and England

Commentary

- 5.3 The South Cambridgeshire Local Plan contains a range of policies which seek to ensure resilience to the adverse effects of climatic changes, including Policy CC/1: Mitigation and Adaptation to Climate Change. Further to this, the Plan seeks to support measures which would reduce human contributions to the causes of climate change. Policies which are directly linked to these include: Policy CC/3: Renewable and Low Carbon Energy in New Developments and Policy CC/4: Water Efficiency.
- 5.4 As shown in **Figure 5.1** and **Figure 5.2**, emissions overall have been on a downward trend since 2005. Overall emissions in South Cambridgeshire are comparative to the East, however generally sitting slightly lower per capita than the average in the East. Industry has seen the overall largest decrease in South Cambridgeshire, decreasing from 538.7 kt of CO₂ per year in 2005, to 217.9 kt of CO₂ per year in 2021. Transport is the highest emitting sector overall in South Cambridgeshire.
- 5.5 The introduction and uptake of Ultra Low Emission Vehicles (ULEVs) will contribute positively towards the reduction of road transport related emissions. In line with assumptions made by the Department for Transport's 'Road to Zero' report (2018)⁷, it is assumed that ULEV uptake will increase rapidly in the coming decade. Therefore, a majority of vehicles could be ultra-low emission (powered either by hydrogen or electricity) by 2030, thus the CO₂ emissions from the transport sector have the potential to decrease.
- 5.6 Similarly, technological advancements over the coming years are likely to see developments surrounding greenhouse gas (GhG) reduction measures; this could result in declines in GhG emissions from all sources.

⁷ Department for Transport (2018) 'The Road to Zero' can be accessed [here](#).

5.7 As shown in **Figures 5.3 and 5.4**, Harston does not show signs of having especially high or low domestic usage rates of gas or electricity, when compared to national trends. In both cases, the usage in the built-up area is slightly less than the more rural area to the north, and this aligns with spatial consumption patterns nationally.

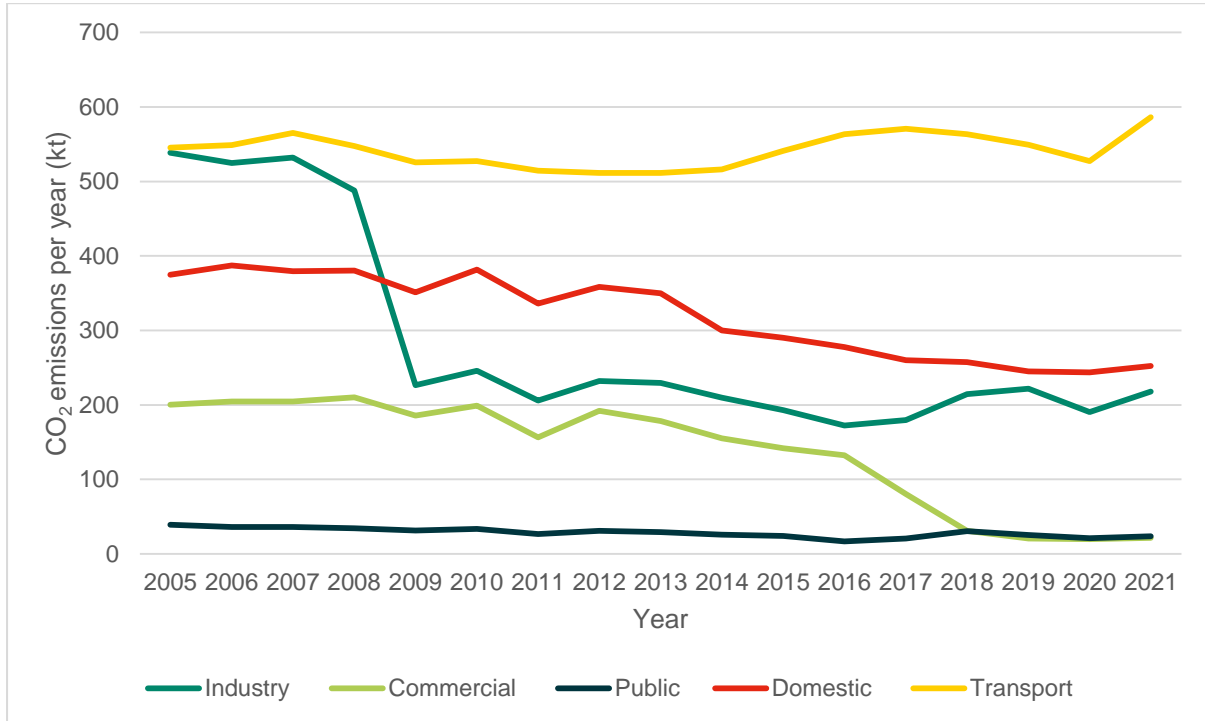


Figure 5.2 CO2 emissions in kilotons per year for each sector in South Cambridgeshire (2005-2021).

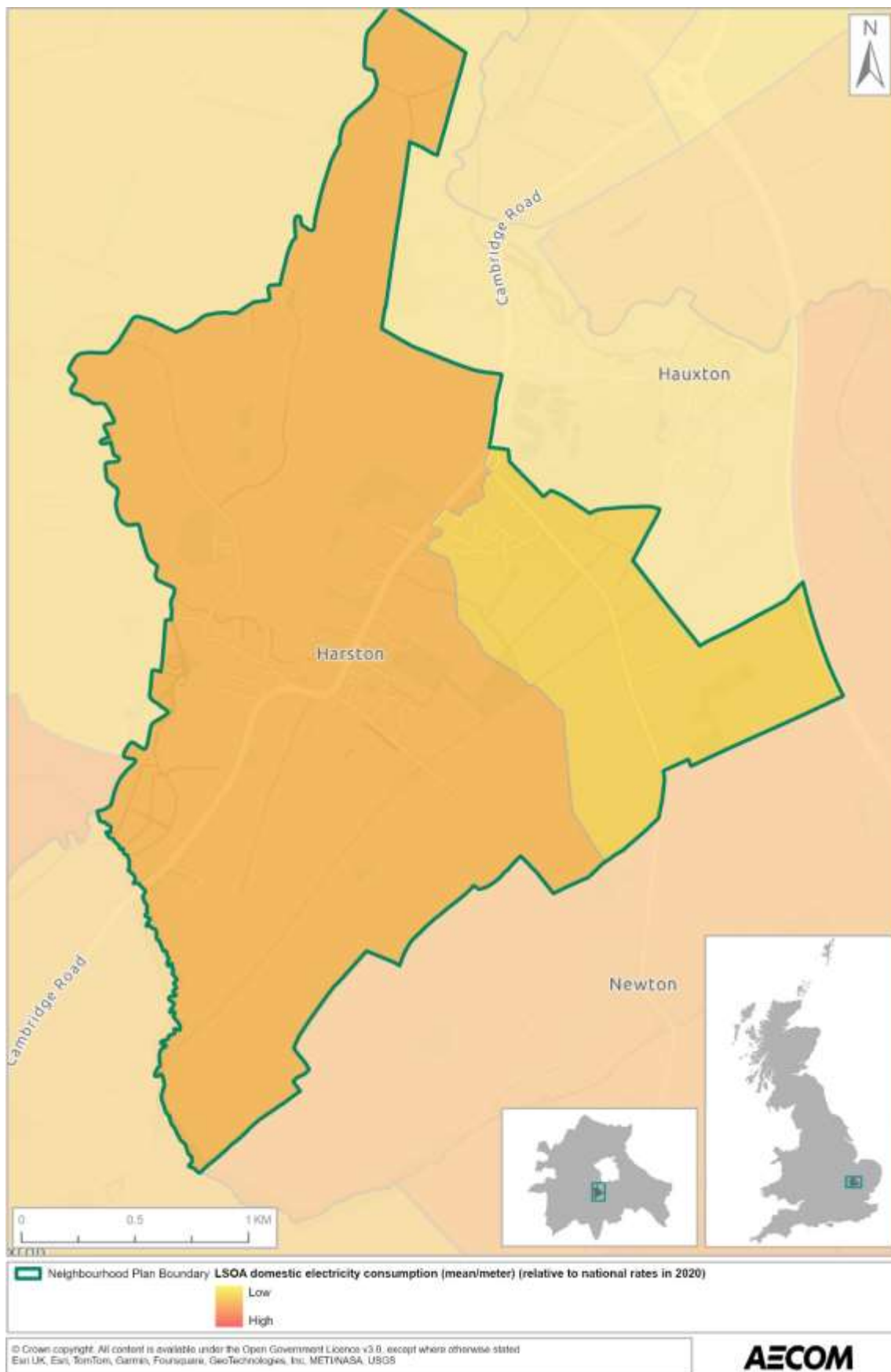


Figure 5.3: Domestic electricity consumption within the neighbourhood area

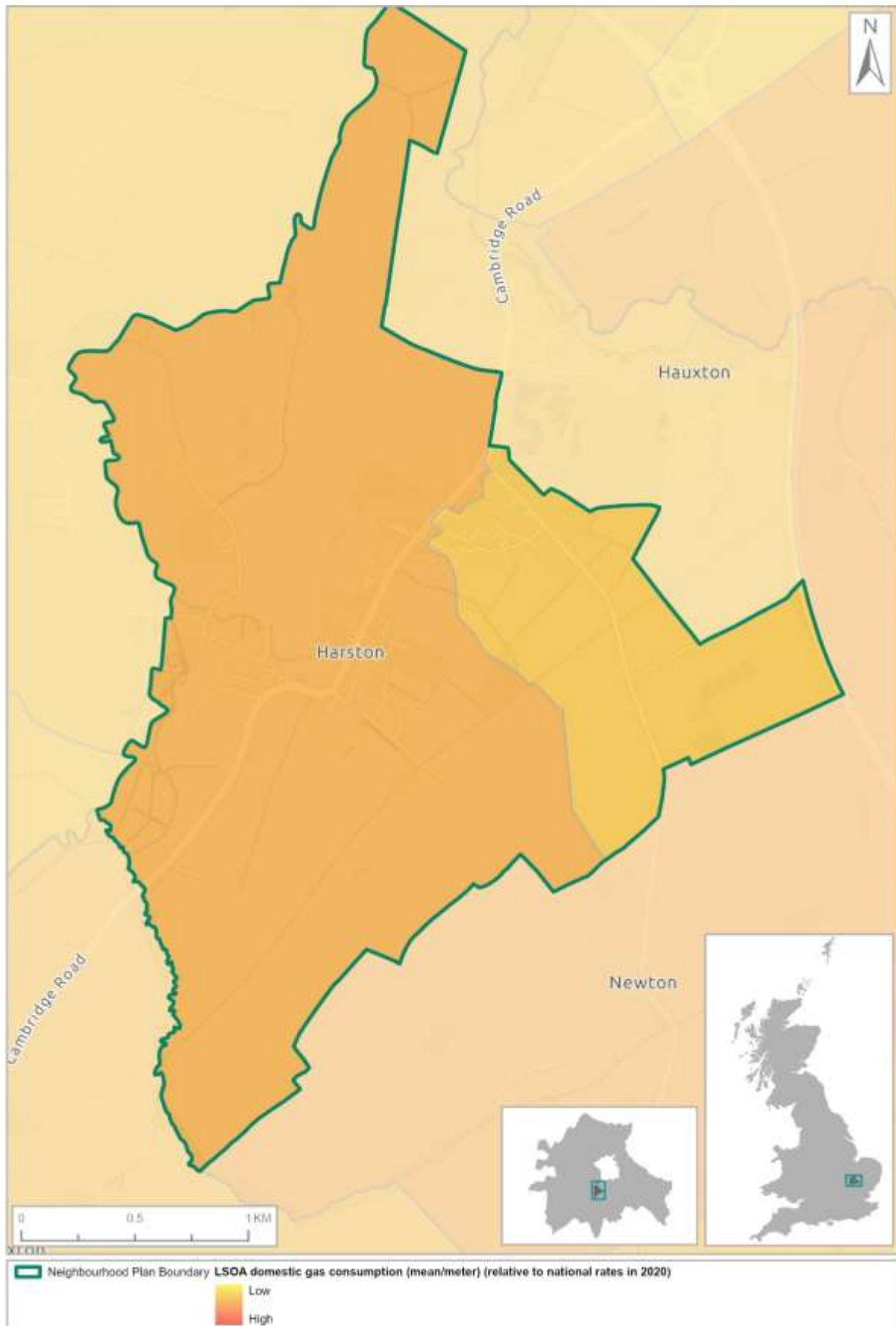


Figure 5.4: Domestic gas usage within the neighbourhood area

Climate change resilience

Commentary

Table 5.2 Average changes in climate variables during winter and summer periods for the East region under the ‘business as usual’ climate model

Period	Mean Average Air Temperature (°C)		Mean Precipitation Rate (mm/day)		Mean Relative Humidity (%)	
	Winter	Summer	Winter	Summer	Winter	Summer
1981-2000	4.23	15.80	2.47	1.95	87.40	73.87
2021-2040	5.52	18.06	2.55	1.76	87.02	69.88
2061-2080	7.34	20.88	2.89	1.34	86.54	66.08

5.8 **Table 5.2** above indicates that under a ‘business as usual’ (i.e., ‘do nothing’) scenario:

- There could be a 3.11°C increase in mean average winter air temperatures between 1981 and 2080, and an increase of 5.08°C in summer air temperatures over the same period.
- By the 2061-2080 period there could be a 0.42mm / day increase in winter precipitation compared to the 1981-2000 baseline, and a 0.61 mm / day decrease in summer precipitation.
- Winter mean relative humidity could decrease by 0.86%, and summer humidity by 7.79% between 1981 and 2080.

5.9 Climate change is also likely to bring more extreme weather events. Associated with extreme rainfall events, flooding is likely to become more common and more severe. **Figure 5.5** shows the fluvial flood risk in the neighbourhood area. There are areas of medium to high risk of flooding (Flood Zone 2 and Flood Zone 3) associated with the River Rhee in the northern tip of the area, as well as the area along the western boundary. This river also impacts upon surface water risk along its course (see **Figure 5.6**). Due to the drainage pattern in the neighbourhood area, there is also medium levels of flood risk especially centrally to Harston, mainly adjacent to Royston Road.

5.10 In line with the UK Government’s target of achieving carbon neutrality by 2050, a climate emergency was declared by South Cambridgeshire Council in November of 2019. Cambridgeshire County Council’s ‘Net Zero Cambridgeshire 2045’ document identifies the need to both reduce carbon emissions and the dependence on fossil fuels and will be informed by future delivery plans.

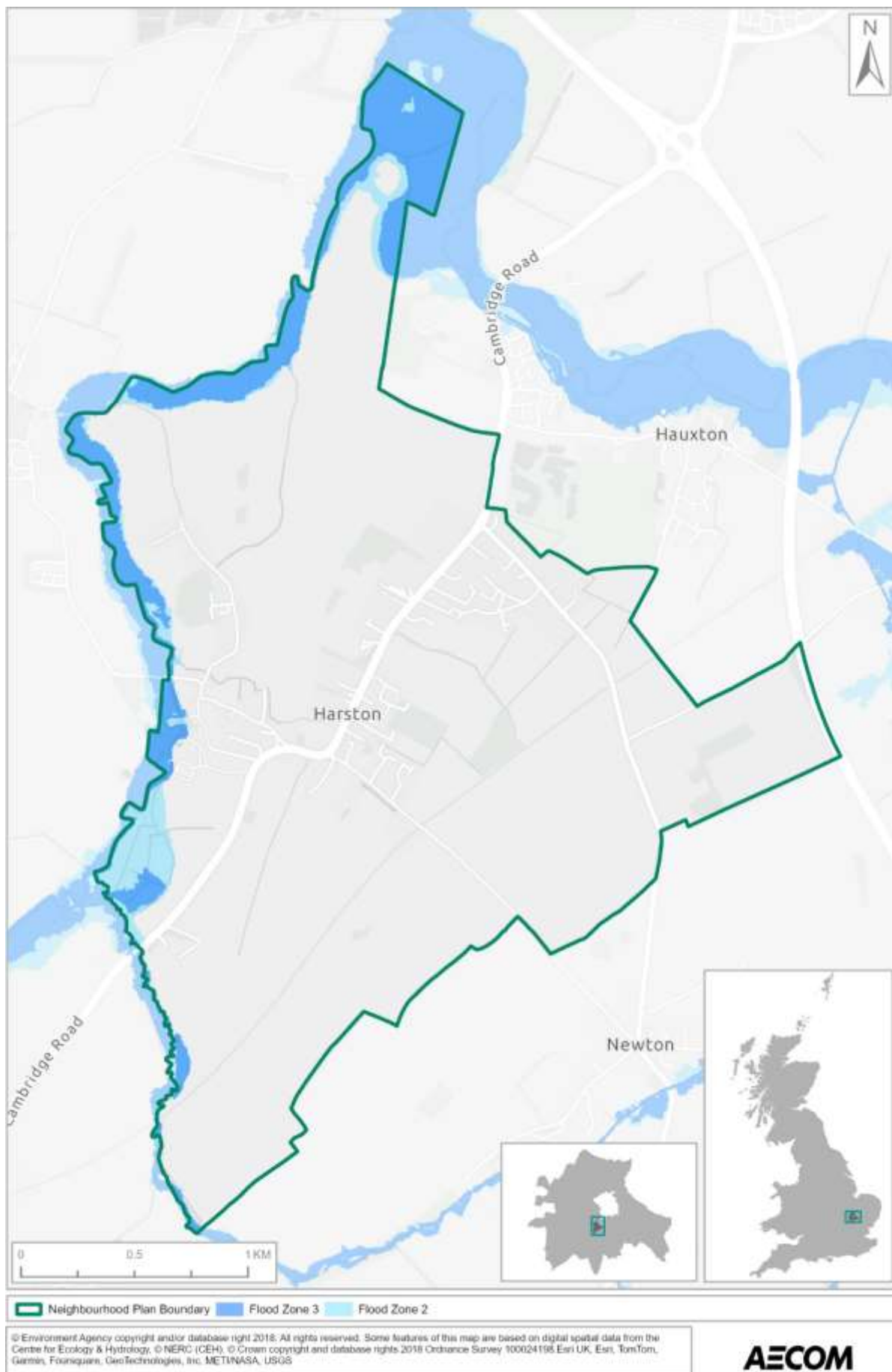


Figure 5.5: Fluvial flood risk within the neighbourhood area

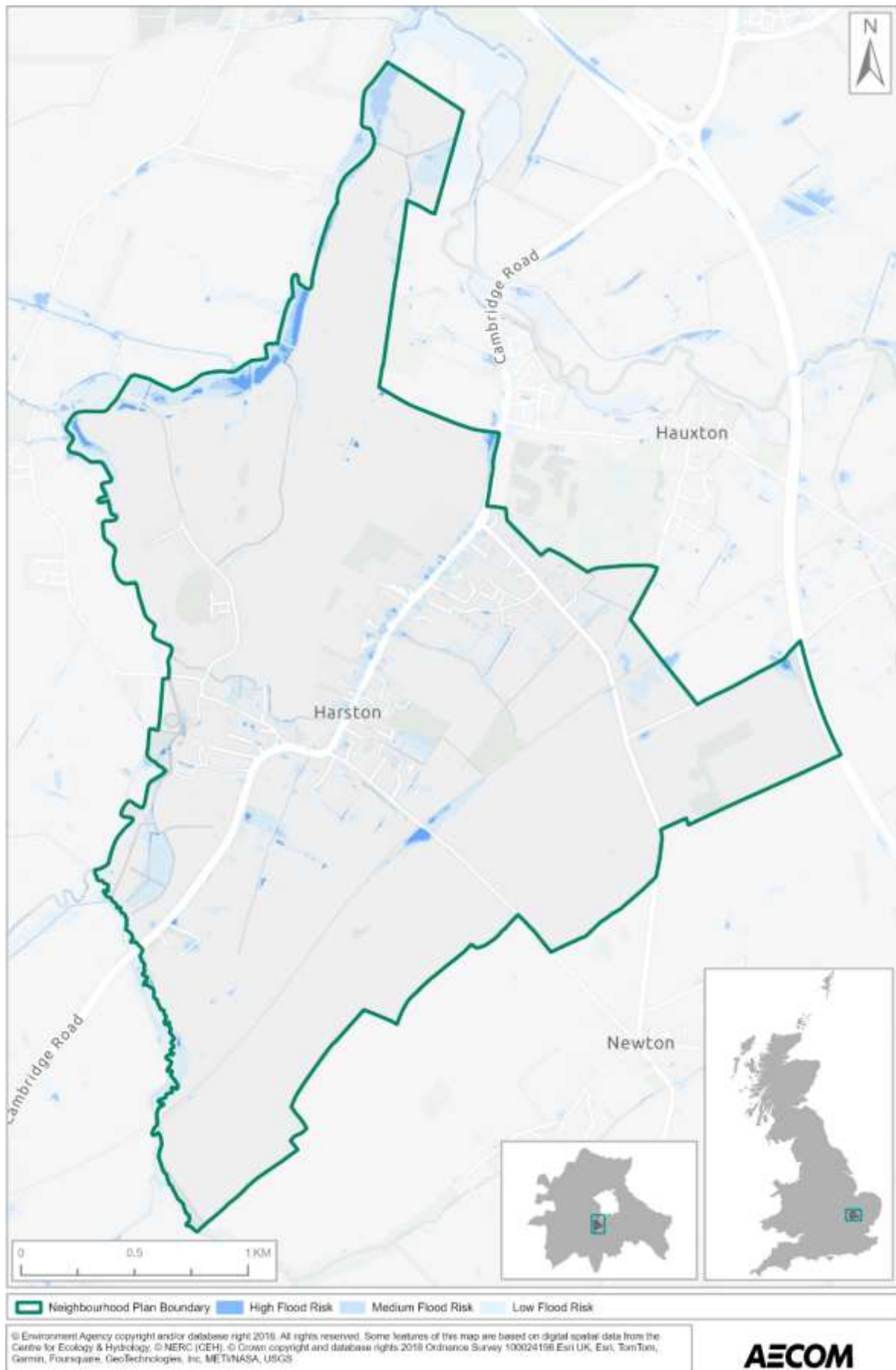


Figure 5.6: Surface water flood risk within the neighbourhood area

Key issues

- 5.11 It is likely CO₂ emissions originating from the neighbourhood area will increase as the population grows. It will be important for any new development to adopt best building practices to limit the increase in emissions, such as using sustainable materials and incorporating renewable energy infrastructure.
- 5.12 CO₂ emissions associated with the transport sector remain higher than other sectors in South Cambridgeshire. This highlights the importance of accessible development and the delivery of sustainable transport infrastructure.
- 5.13 Following South Cambridgeshire designating a climate emergency, a precedent has been set to proactively respond to the climate crisis through plan making. Therefore, the HNP should acknowledge this, and take decisive action in addressing the climate emergency within its own framework.
- 5.14 New development in the HNP neighbourhood area has the potential to exacerbate flood risk if built in areas at high risk of fluvial and surface water flooding. In line with sequential testing, development should be focused away from these areas where possible.

SEA Framework

- 5.15 The HNP is seeking to allocate sites for housing, potentially leading to changes to local emissions from transport and domestic sources. Further to this, the development of land could exacerbate existing flood risk or increase local vulnerabilities. As such, it is proposed that climate change and flood risk is a consideration in this SEA and is accordingly **scoped in** to the SEA for the HNP.

Table 5-3 SEA objective and assessment questions

SEA theme	SEA objective
Climate change and flood risk	Reduce the contribution to climate change made by activities within the neighbourhood area and increase resilience to the potential effects of climate change.

5.16 Supporting assessment questions include (will the option / proposal...):

- Promote the use of sustainable modes of transport, including walking, cycling, public transport, and electric vehicle (EV) infrastructure?
- Increase the number of new developments meeting or exceeding sustainable design criteria?
- Generate energy from low or zero carbon sources, or reduce energy consumption from non-renewable resources?
- Improve or extend local footpath, cycle path or strategic green infrastructure networks in the neighbourhood area?
- Avoid inappropriate development in areas at risk of flooding, considering the likely future effects of climate change?

- Sustainably manage water run-off, and reduce runoff where possible?
- Increase the resilience of the local built and natural environment?
- Improve and extend green infrastructure networks in the neighbourhood area?
- Ensure the potential risks associated with climate change are duly considered in the design of new development in the neighbourhood area?

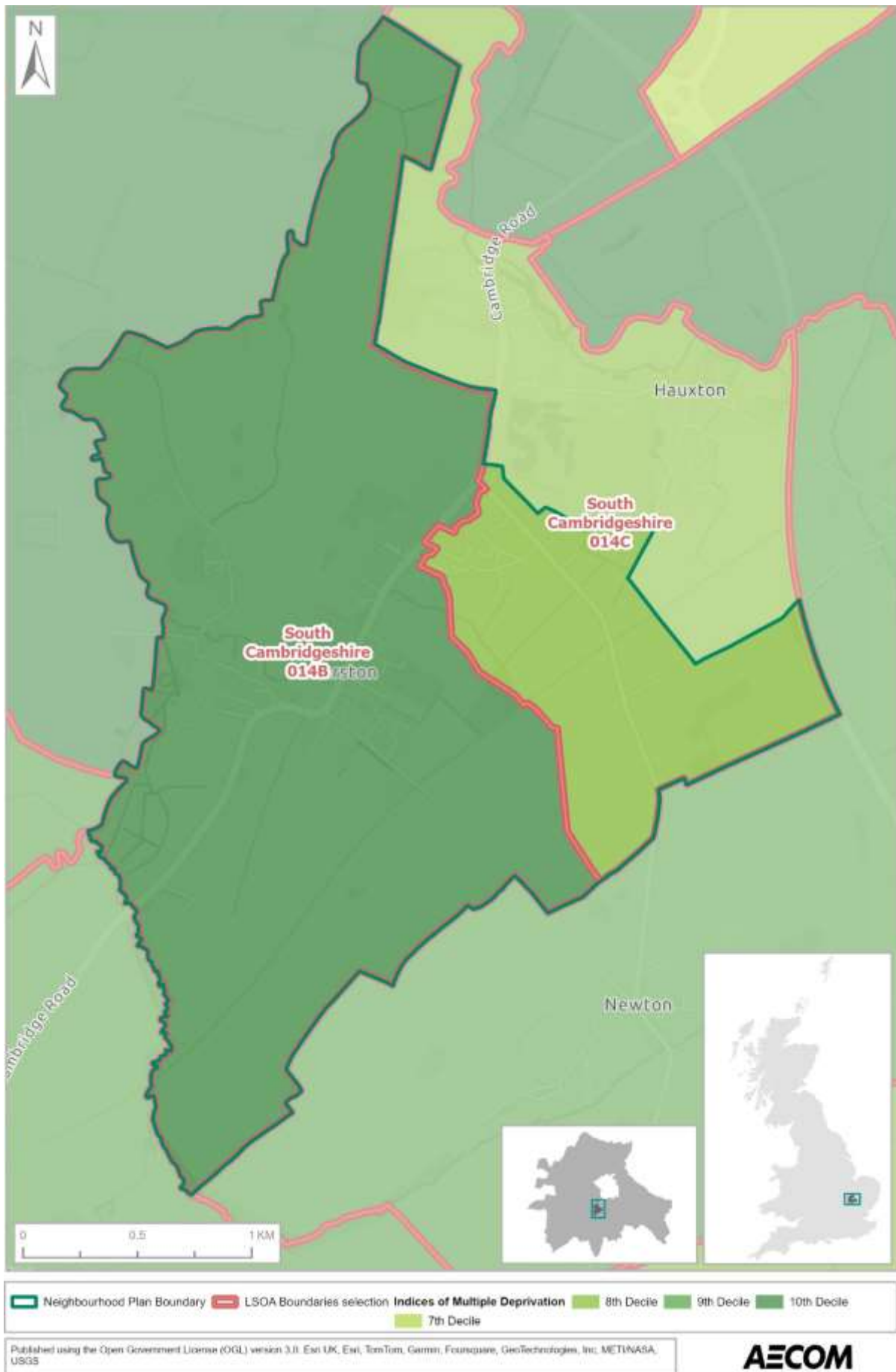


Figure 6.2: Map showing the Index of Multiple Deprivation (2019)

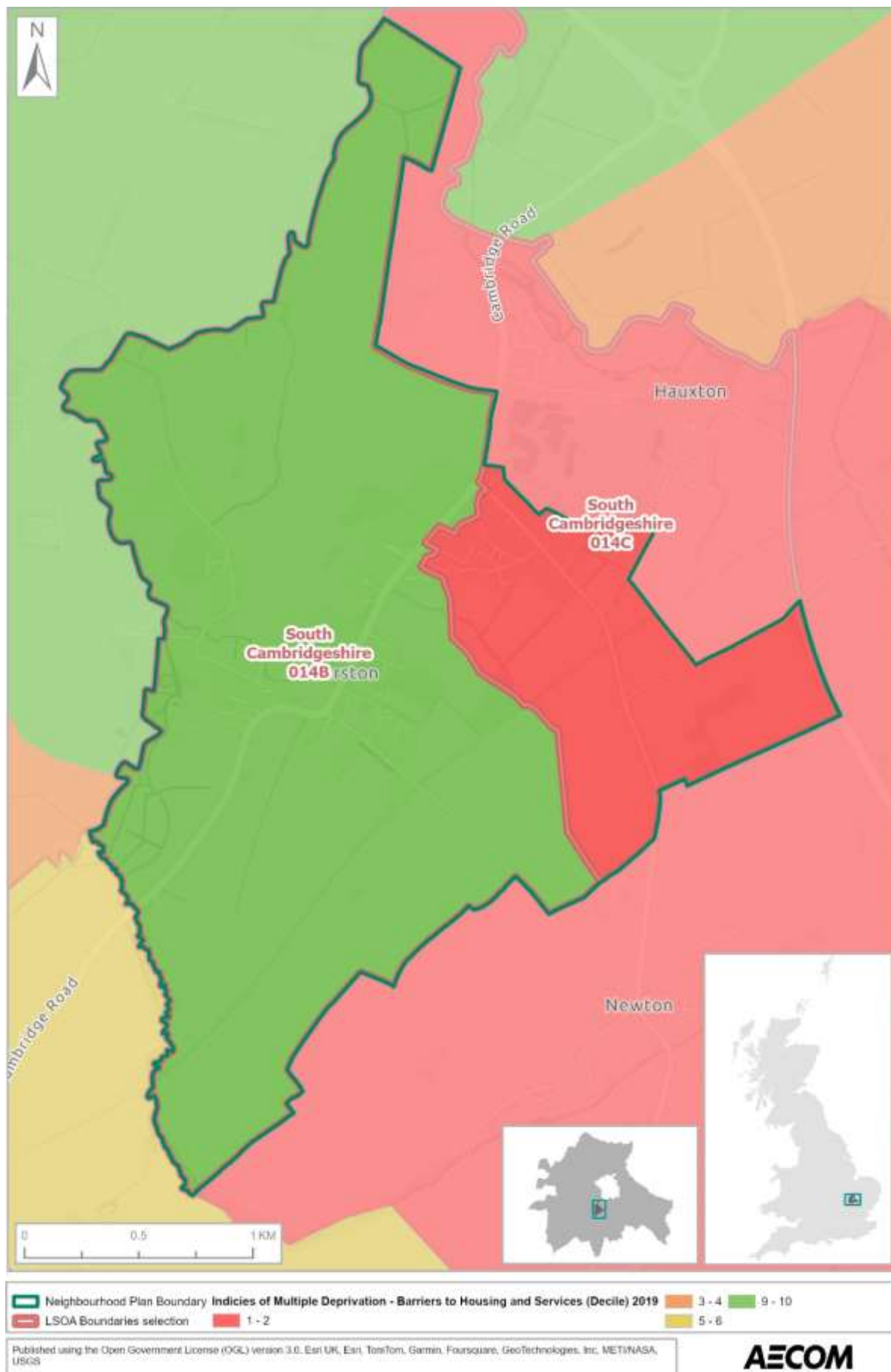


Figure 6.3: Map showing Index of Multiple Deprivation (2019)- barriers to housing and services domain.

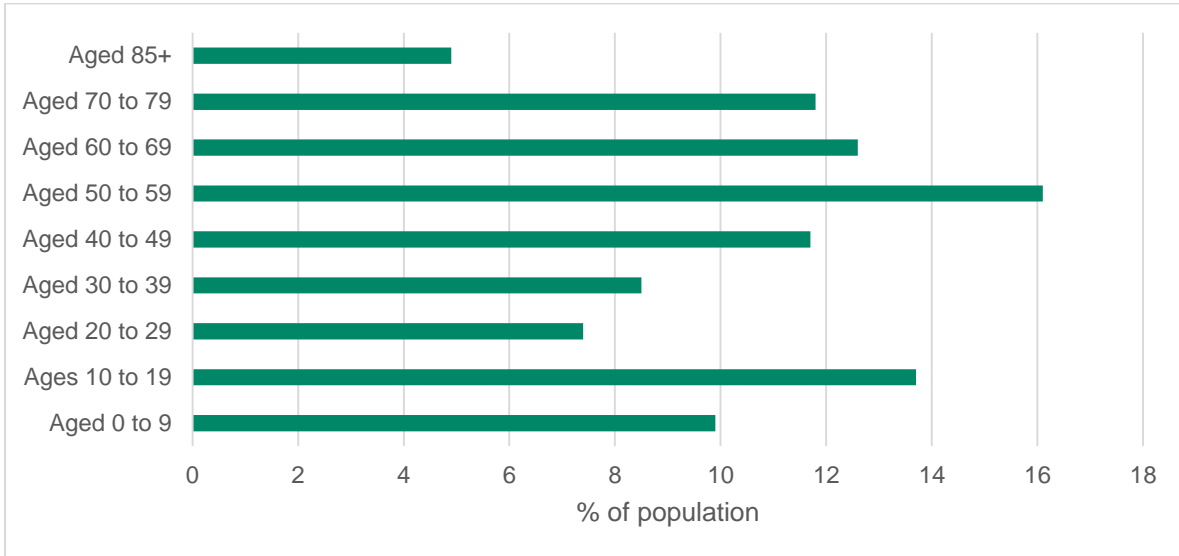


Figure 6.4 Population age structure in the neighbourhood area (Census 2021)

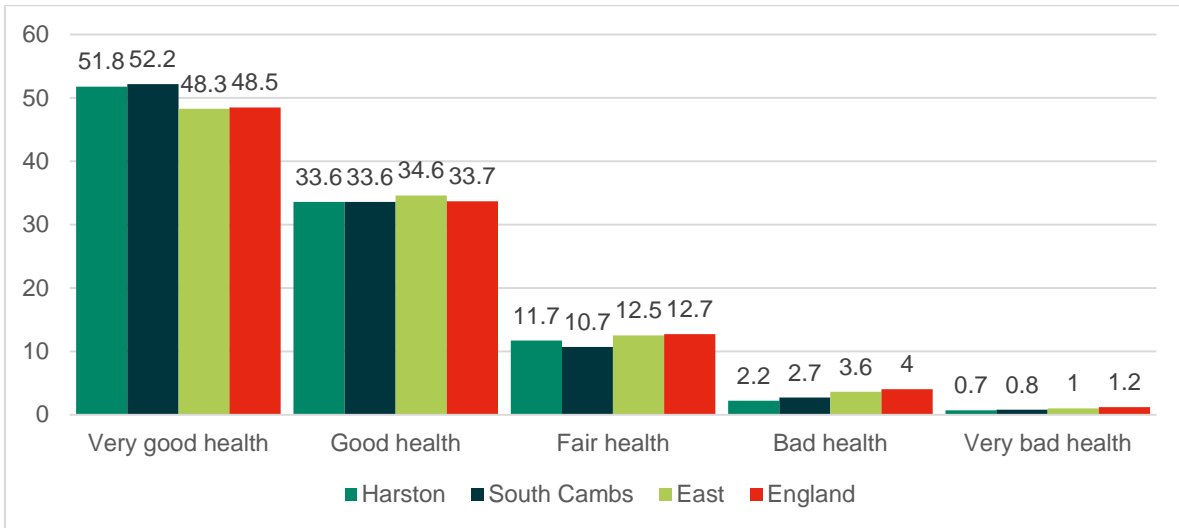


Figure 6.5 Health of residents in the neighbourhood area in comparison to the regional and national averages (Census 2021)

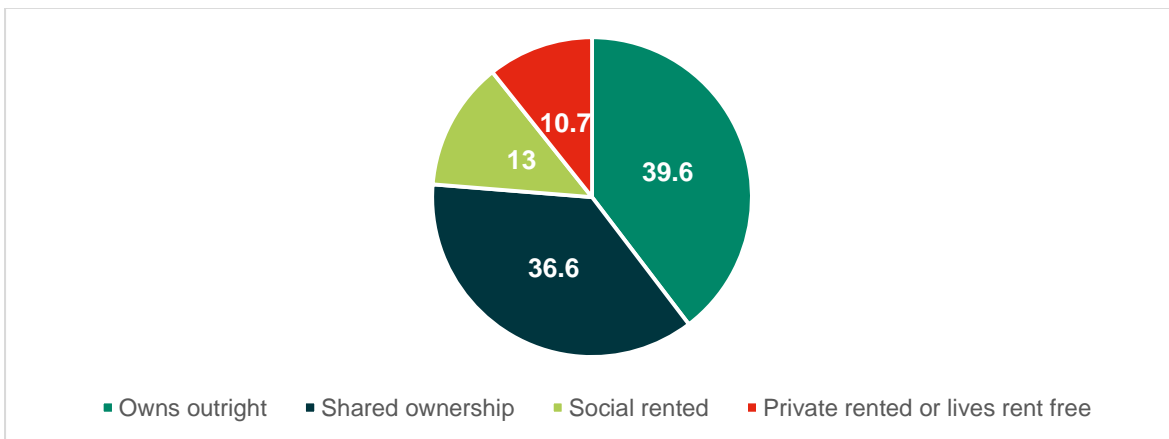


Figure 6.6 Housing tenure in the neighbourhood area (Census 2021)

Key evidence sources

6.2 Evidence sources which have informed the development of key issues include:

- [Indices of Deprivation: 2019 and 2015](#)
- [Office for National Statistics - NOMIS](#)
 - [Topic Summary - TS007A: Age by five-year age bands](#)
 - [Topic Summary - TS037: General health](#)
 - [Topic Summary - TS054: Tenure](#)

Policy context

Table 6-1: Additional plans and strategies relating to community wellbeing.

Document title	Year of publication
Greater Cambridge Local Plan	Emerging
New Build Council Housing Strategy 2020 to 2025	2020
Harston Parish Council Action Plan	2019
Greater Cambridgeshire Housing Strategy 2019 to 2023	2019
South Cambridgeshire Local Plan 2018	2017

- 6.3 Local Plan policy (NH/11: Protected Village Amenity Areas; E/15: Established Employment Areas; E/21: Retail Hierarchy; SC/3: Protection of Village Services and Facilities; and SC/4: Meeting Community Needs) seek to ensure that areas within South Cambridgeshire are adequately serviced with community infrastructure, including shops, services, facilities and open and natural green spaces. Further to this, policy provisions such as HQ/1: Design Principles, seek to ensure that locally relevant houses are delivered, using evidence to ensure appropriate housing types and tenures are delivered.
- 6.4 Policy NH/12: Local Green Space of the Local Plan identifies green areas of particular importance to local communities. Within Harston, land is protected through the requirements of this Policy under designation NH/12-035 - Recreation Ground, Harston.
- 6.5 The Harston Action Plan sets out our current schedule of priorities, activities and aspirations within the neighbourhood area. The Action Plan is regularly reviewed to reflect matters identified by residents. Priorities include: “*To maintain play area and recreation ground, to update and provide new equipment as required*” and “*To ensure that the orchard remains accessible to the public*”.

Commentary

Community Facilities

6.6 The neighbourhood area has a number of other community services and facilities to its residents. These include Harston Village Hall, All Saints’

Church, and Harston Baptist Church, as well as Harston & Newton Community Primary School.

- 6.7 Other amenities include a Post Office, as well as Harston Surgery, multiple pubs such as the Pemberton Arms, and the Queens Head, as well as a microbrewery called Brewboard. Sports and recreation options include Harston Recreation Ground, and as shown in **Figure 6.1**, the neighbourhood area has good access to local green space.
- 6.8 While the neighbourhood area provides some amenities, it is likely that residents will travel further afield to larger settlements (including to Great Shelford 1.9km to the northeast, and Cambridge 4.6km north) for a greater range of services and facilities. This includes, but is not exclusive to, secondary schools, medical facilities such as GPs and hospitals, supermarkets and a wider range of pubs and restaurants.

Economic and Employment Opportunities

- 6.9 There is one industrial estate within the Harston neighbourhood area, the Button End Industrial Estate. However, this estate is more commercial than industrial, according to residents.
- 6.10 According to the Census (2021), 72.4% of people in Harston are not in employment, that haven't been in the last 12 months, which is much higher than the national average of 61.1%. This likely correlates with the ageing population in Harston, as shown in **Figure 6.4**.
- 6.11 **Figure 6.7** below shows occupations within the neighbourhood area. The predominate occupations are managerial and professional occupations, which are far more common than the national average. There are far people with service, plant operations, skilled trade, and elementary roles proportionally in comparison to nationally.

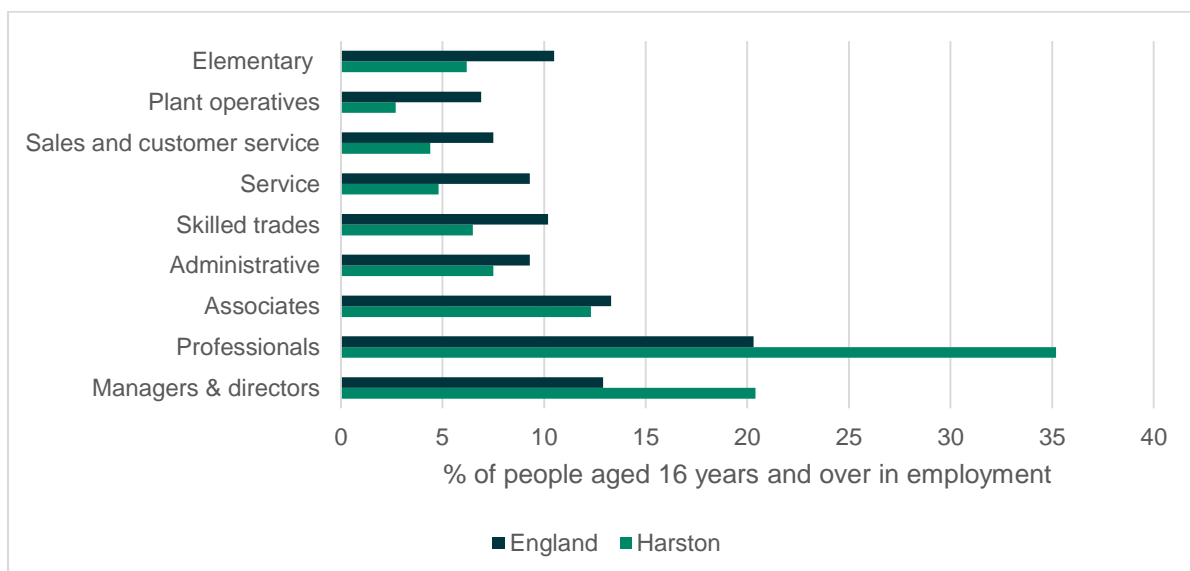


Figure 6.7 Occupations in the neighbourhood area and nationally

Level of Deprivation

- 6.12 When considering levels of deprivation, it is recognised that the neighbourhood area falls within two different Lower Super Output Areas (LSOAs): South Cambridgeshire 014B, and South Cambridgeshire 014C. LSOAs are designed to improve the reporting of small area statistics in England and Wales. They are standardised geographies intended to be as consistent as possible, with each LSOA containing approximately 1,000 to 1,500 people. In relation to the Index of Multiple Deprivation 2019, LSOAs are ranked out of the 32,844 in England and Wales, with 1 being the most deprived.
- 6.13 South Cambridgeshire 014B covers the majority of the neighbourhood area, with South Cambridgeshire 014C covering a smaller area to the east. South Cambridgeshire 014B is 32,777 ranked out of 32,844 LSOAs in England with regards to the overall Index of Multiple Deprivation (IMD), where 1 is the most deprived. This is amongst the 10% least deprived neighbourhoods in England as of 2019 (see **Figure 6.2** above), and marks a small decrease in deprivation since 2015, when it was ranked 32,562 in England. South Cambridgeshire 014C is more deprived than the wider neighbourhood area, ranking 23,459, which is amongst the 30% least deprived neighbourhoods. This is small decrease in deprivation since 2015, where it was ranked 26,319.
- 6.14 Broadly speaking, the South Cambridgeshire 014C LSOA is not considered to be particularly deprived, however it is more deprived than South Cambridgeshire 014B under the barriers to housing and living environment deprivation domains (see **Figure 6.3**). Significantly, the South Cambridgeshire 014C LSOA area is within the 20% most deprived neighbourhoods for the barriers to housing and services deprivation domain. This likely reflects the rural nature of the area.

Key Census Statistics

- 6.15 As seen in **Figure 6.4**, the largest age group in the neighbourhood area is 50 to 69. This indicates the neighbourhood area is experiencing an ageing population. **Figure 6.5** shows that residents in the neighbourhood area experience slightly higher levels of very good and good health in comparison to the East and national trends. However, a lower percentage of residents report fair health in comparison to the rest of the East and England. Finally, **Figure 6.6** shows that small majority of households (39.6%) in the neighbourhood area are owned, either outright or with a mortgage. Shared ownership accounts for 36.6% of the households in the neighbourhood area – socially rented houses total 13%, and privately rented 10.7%.

Key issues

- 6.16 Barriers to housing and services within the neighbourhood area is a key concern, including with respect to housing affordability and availability (in terms of types and tenures to meet local needs). The HNP presents an opportunity to reduce deprivation by supporting accessibility, connectivity and the delivery of housing that meets local needs (type and tenure).
- 6.17 The neighbourhood area is limited in terms of access to some essential community infrastructure, services, and facilities – for example healthcare and education. The HNP provides an opportunity to encourage the delivery of new/ improved provision in the area and support accessibility to neighbouring centres.
- 6.18 Any new development in the area could exacerbate capacity of existing facilities and should be supported by necessary infrastructure delivery/ upgrades where necessary; particularly given the ageing nature of the population.

SEA Framework

- 6.19 The HNP is seeking to allocate sites for housing, potentially leading to pressures on local services and housing, with future designs of developments likely to influence factors such as health, wellbeing, and the social inclusion of local residents. On this basis, and in the context of the key issues discussed above it is proposed that Community Wellbeing is **scoped in** to the SEA for the HNP.

Table 6-2 SEA objective and assessment questions

SEA theme	SEA objective
Community wellbeing	Ensure growth in the neighbourhood area is aligned with the needs of all residents, improving accessibility, anticipating future needs and specialist requirements, and supporting cohesive and inclusive communities.

6.20 Supporting assessment questions include (will the option / proposal...):

- Provide everyone with the opportunity to live in good quality, affordable housing?
- Support the provision of a range of house types and sizes?
- Support opportunities to enhance the resilience and diversity of the local economy?
- Meet the needs of all sectors of the community?
- Provide flexible and adaptable homes that meet people's needs, particularly the needs of an ageing population?
- Improve the availability and accessibility of key local facilities, including health infrastructure?

- Encourage and promote social cohesion and active involvement of local people in community activities?
- Facilitate green infrastructure enhancements, including improved access to open space?
- Maintain or enhance the quality of life of existing residents?

7. Historic environment

7.1 This section seeks to summarise designated and non-designated heritage assets (including archaeology) and their settings, within and surrounding the neighbourhood area.

Map

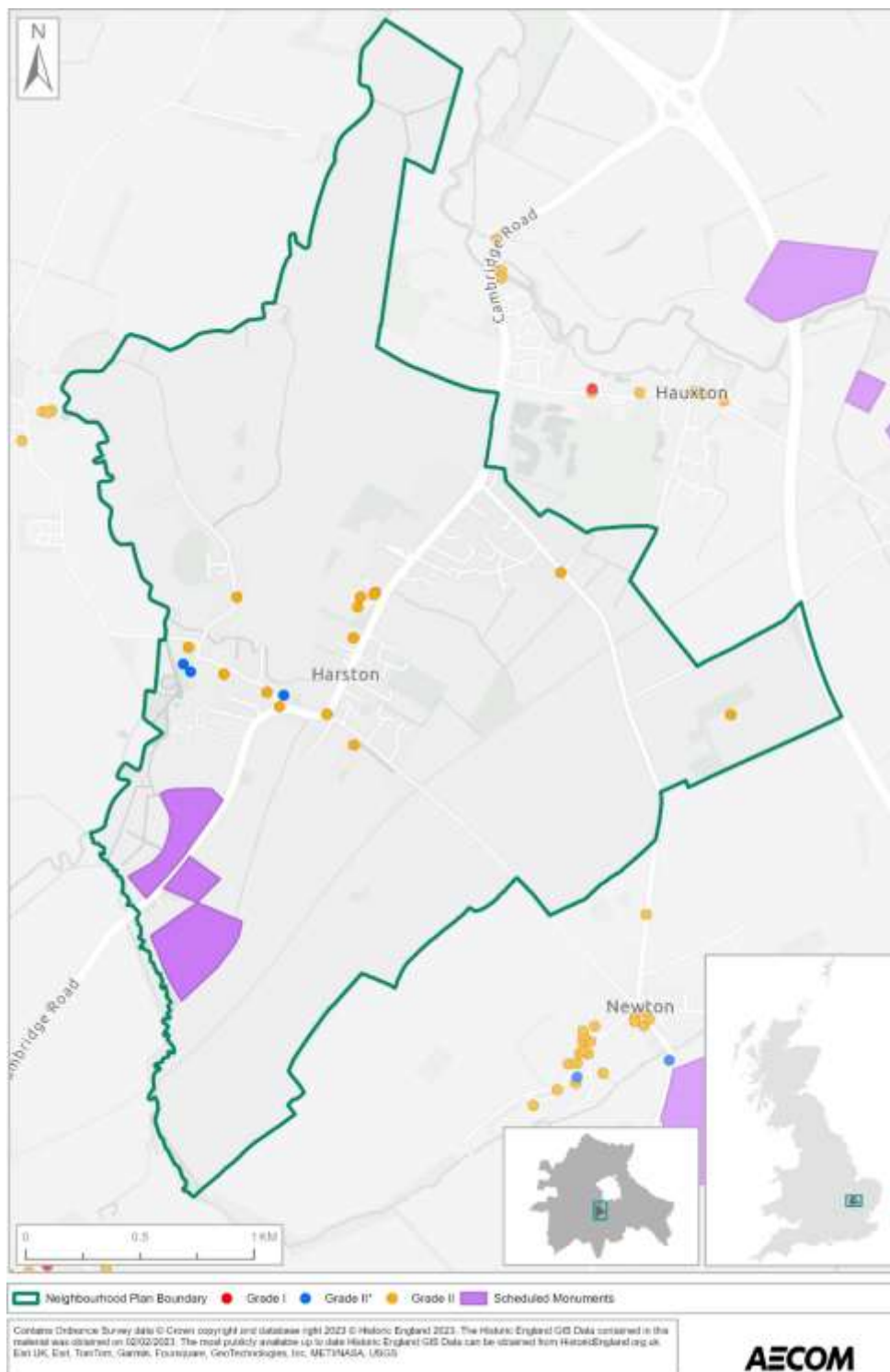


Figure 7.1: Map of heritage assets in the neighbourhood area.

Key evidence sources

7.2 Evidence sources which have informed the development of key issues include:

- [DEFRA's Magic Map](#)
- [South Cambridgeshire Council Online Map](#)
- [Heritage Gateway](#)
- [Historic Environment Record | Cambridgeshire County Council](#)
- [Historic England](#)
 - [Heritage at Risk Register 2023 – East](#)
 - [Search the List - Advanced Search](#)
 - [Settlement site at Manor Farm, Harston - 1006809](#)

Policy context

Table 7-1: Additional plans and strategies relating to historic environment.

Document title	Year of publication
Greater Cambridge Local Plan	Emerging
Harston Parish Council Action Plan	2020
South Cambridgeshire Local Plan 2018	2018
Harston's Heritage Policy	2017
South Cambridgeshire District Council - Development Affecting Conservation Areas Supplementary Planning Document	2009

Commentary

7.3 Harston's Heritage Policy (Produced by Harston Local History Group after consultation with Harston Residents Group and Harston Parish Council) identifies measures to preserve the neighbourhood area's rich variety of historic assets, including the protection of Harston's artesian wells & pumps – 7 identified to date. This is further supported by Local Plan policy NH/14: Heritage Assets.

7.4 There are 17 listed buildings in the neighbourhood area (see **Figure 7.1** above). These notably include three Grade II* listed buildings, which are the Church of All Saints, located in the west of the area close to the neighbourhood area boundary, Manor House, to the south of this, and Harston House and Part of Garden Wall, more centrally to Harston. There is also one scheduled monument, which is the settlement site at Manor Farm in the southwest of the neighbourhood area.

7.5 The Historic Environment Record for Cambridgeshire shows 102 local records within the Parish. During the subsequent stages of the SEA process,

the HER shall be explored in further detail to consider the potential impacts associated with HNP proposals on these assets.

- 7.6 There are no historic assets on the Heritage at Risk Register. However, it is important to recognise that Heritage at Risk registers for areas outside of London do not contain information about the status of Grade II listed buildings. As such, it is currently not possible to determine whether any of the Grade II listed buildings within the neighbourhood area are at risk.

Key issues

- 7.7 There are several designated heritage assets in the neighbourhood area, all of which present a constraint to future development due to the need to avoid impacts to the features and their settings. The HNP can help maintain and enhance the historic environment by ensuring that any new development in the area is sensitive to the historic setting of these assets in terms of design and layout.
- 7.8 The HNP presents an opportunity to provide policy and guidance that protects the key historic characteristics of the neighbourhood area, which could extend to protecting non-designated assets and their settings.
- 7.9 Planning for future growth through the HNP will support the delivery of development that is appropriate to its surroundings. This is likely to be underpinned by detailed design and masterplanning in accordance with local and national policy (including the National Design Guide). Planned growth further provides an opportunity for public realm improvements, and accessibility improvements which can indirectly benefit access to and enjoyment of the historic environment.

SEA Framework

- 7.10 The HNP is proposing to allocate sites for development (which ultimately holds the greatest significance in relation to the historic environment). It is also seeking to develop design guidance which has the potential to impact upon the setting and significance of assets. On this basis, and in the context of the key issues discussed above it is proposed that Historic Environment is **scoped in** to the SEA for the HNP.

Table 7-2 SEA objective and assessment questions

SEA theme	SEA objective
Historic environment	Protect, conserve, and enhance the historic environment within and surrounding the neighbourhood area.

7.11 Supporting assessment questions include (will the option / proposal...):

- Conserve and enhance buildings and structures of architectural or historic interest, both designated and non-designated, and their settings?
- Conserve and enhance the special interest, character and appearance of locally important features and their settings?

- Protect the integrity of the historic setting of key monuments of cultural heritage interest as listed in the Cambridgeshire HER?
- Support the undertaking of early archaeological investigations and, where appropriate, recommend mitigation strategies?
- Support access to, interpretation and understanding of the historic evolution and character of the neighbourhood area?

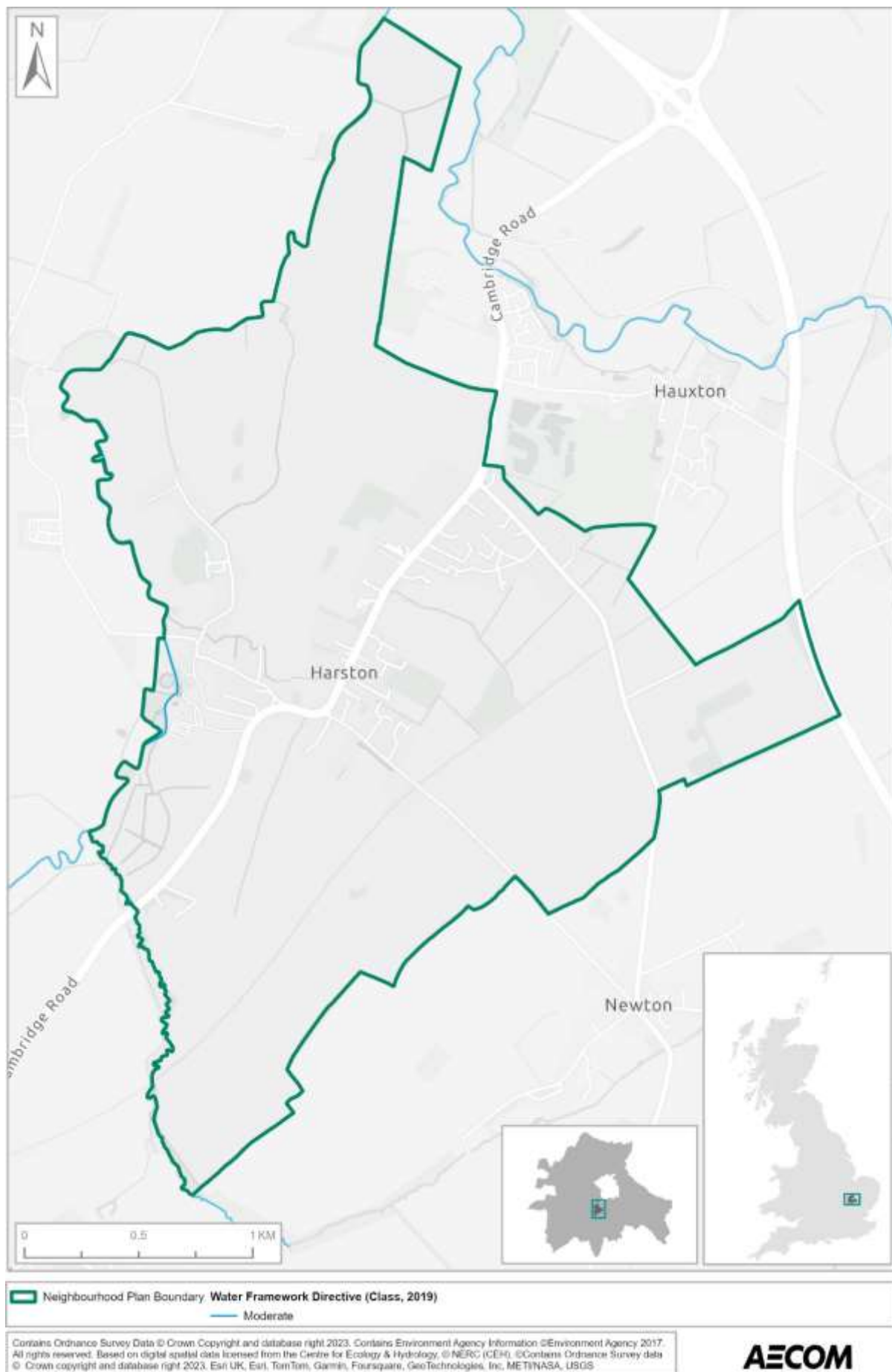


Figure 8.2: Map of water quality in Harston

Key evidence sources

8.2 Evidence sources which have informed the development of key issues include:

- [DEFRA's Magic Map](#)
- [Environment Agency - Check for Drinking Water Safeguard Zones and NVZs](#)
- [Environment Agency Catchment Data Explorer – Cam Rhee and Granta Operational Catchment](#)
 - [Rhee \(DS Wendy\) Water Body](#)
- [Natural England](#)
 - [Agricultural Land Classification Map East Region](#)
 - [Likelihood of Best and Most Versatile \(BMV\) Agricultural Land – Strategic Scale Map East Region](#)

Policy context

Table 8-1: Additional plans and strategies relating to land, soil, and water resources

Document title	Year of publication
Greater Cambridge Local Plan	Emerging
Cambridgeshire and Peterborough Mineral and Waste Local Plan	2021
Harston Parish Council Action Plan	2022
Cambridge Water's Water Resource Management Plan	2019
South Cambridgeshire Local Plan 2018	2017

Commentary

- 8.3 South Cambridgeshire Local Plan policies NH/5: Sites of Biodiversity or Geological Importance; SC/11: Contaminated Land; and SC/13: Hazardous Installations, all seek to encourage developments to protect and enhance natural resources within and around the NA, including focusing on various forms of pollution, waterbodies, and agricultural land.
- 8.4 The majority of the neighbourhood area is covered by Grade 2 agricultural land (**Figure 8.1**), meaning that it is considered the most flexible, productive, and efficient and is most capable of delivering crops for food and non-food uses. However, some of land directly adjacent to the northwest boundary of the area, as well as to the southern boundaries of the area is classified as Grade 3. The Provisional survey (pre-1988) does not split Grade 3 land using a more granular lens, and as such it is not possible to determine which areas of Grade 3 land is classified as BMV (Grade 3a) or not (Grade 3b) without further surveys..
- 8.5 One Water Framework Directive monitored body of water run through the neighbourhood area, the name, ecological, and chemical statuses can be

seen in Table 8-2 and Table 8-3. Whilst there has been no 2022 data for chemical and partly for ecological statuses, trends show no change in water quality in the area. **Figure 8.2** shows that overall Water Framework Directive waterbody classes are moderate for water resources in the area.

- 8.6 Water is supplied to the neighbourhood area by Cambridge Water, with Anglian Water responsible for sewerage services. Cambridge Water's Water Resources Management Plan (WRMP) identifies how they expect to balance the demand for water with available supplies over a 25-year plan period. The WRMP indicates that there is adequate supply over this period without a need to develop new sources of water.

Table 8-2: Ecological status classification of waterbodies overlapping the neighbourhood area

Name of Water Body	2016	2019	2022
Rhee (DS Wendy)	Moderate	Moderate	Moderate

Table 8-3: Chemical status classification of waterbodies overlapping the neighbourhood area

Name of Water Body	2016	2019	2022
Rhee (DS Wendy)	Good	Fail	No assessment

Key issues

- 8.7 New development in the neighbourhood area could influence changes to land, soil and water resources. Development in Harston may lead to the loss of productive agricultural land, especially if it were to come forward on land identified as Grade 2 or 3a agricultural land. It will be important for development to be focused away from BMV land and consider potential impacts on the overlapping waterbody catchments and water quality. This could include implementing mitigation measures to ensure water pollution does not occur throughout the development phases.
- 8.8 The HNP provides an opportunity to improve the waterbody quality of the River Rhee, and therefore should seek to enhance and protect waterbodies from pollution. This could include implementing mitigation measures to ensure water pollution does not occur throughout the development phases.

SEA Framework

- 8.9 The HNP is proposing to allocate sites for development which has the potential to impact upon the area's agricultural land and water resources. On this basis, and in the context of the key issues discussed above it is proposed that Land, soil, and water resources is **scoped in** to the SEA for the HNP.

Table 8-4 SEA objective and assessment questions

SEA theme	SEA objective
Land, soil, and water resources	Ensure the efficient and effective use of land, and protect and enhance water quality, using water resources in a sustainable manner.

8.10 Supporting assessment questions include (will the option / proposal...):

- Promote the use of previously developed land wherever possible?
- Identify and avoid the development of BMV agricultural land?
- Support the minimisation, reuse, and recycling of waste?
- Avoid any negative impacts on water quality and support improvements to water quality?
- Ensure appropriate drainage and mitigation is delivered alongside proposed development?
- Protect waterbodies from pollution?
- Maximise water efficiency and opportunities for water harvesting and/or water recycling?

9. Landscape

9.1 This section seeks to summarise designated and protected landscapes within or near the neighbourhood area, as well as landscape and villagescape character, landscape quality, and visual amenity.

Maps

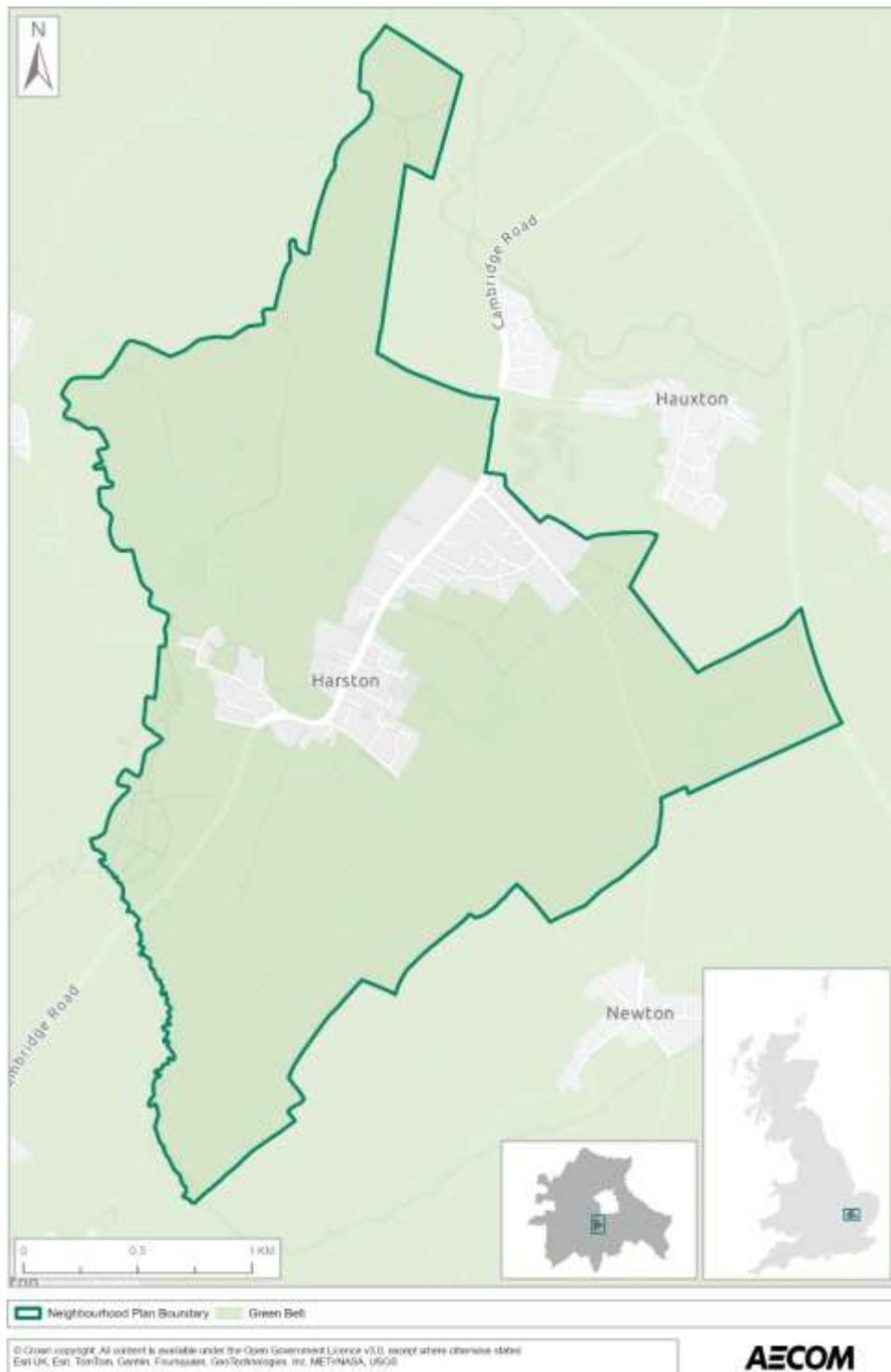


Figure 9.1 Green belt in and surrounding Harston

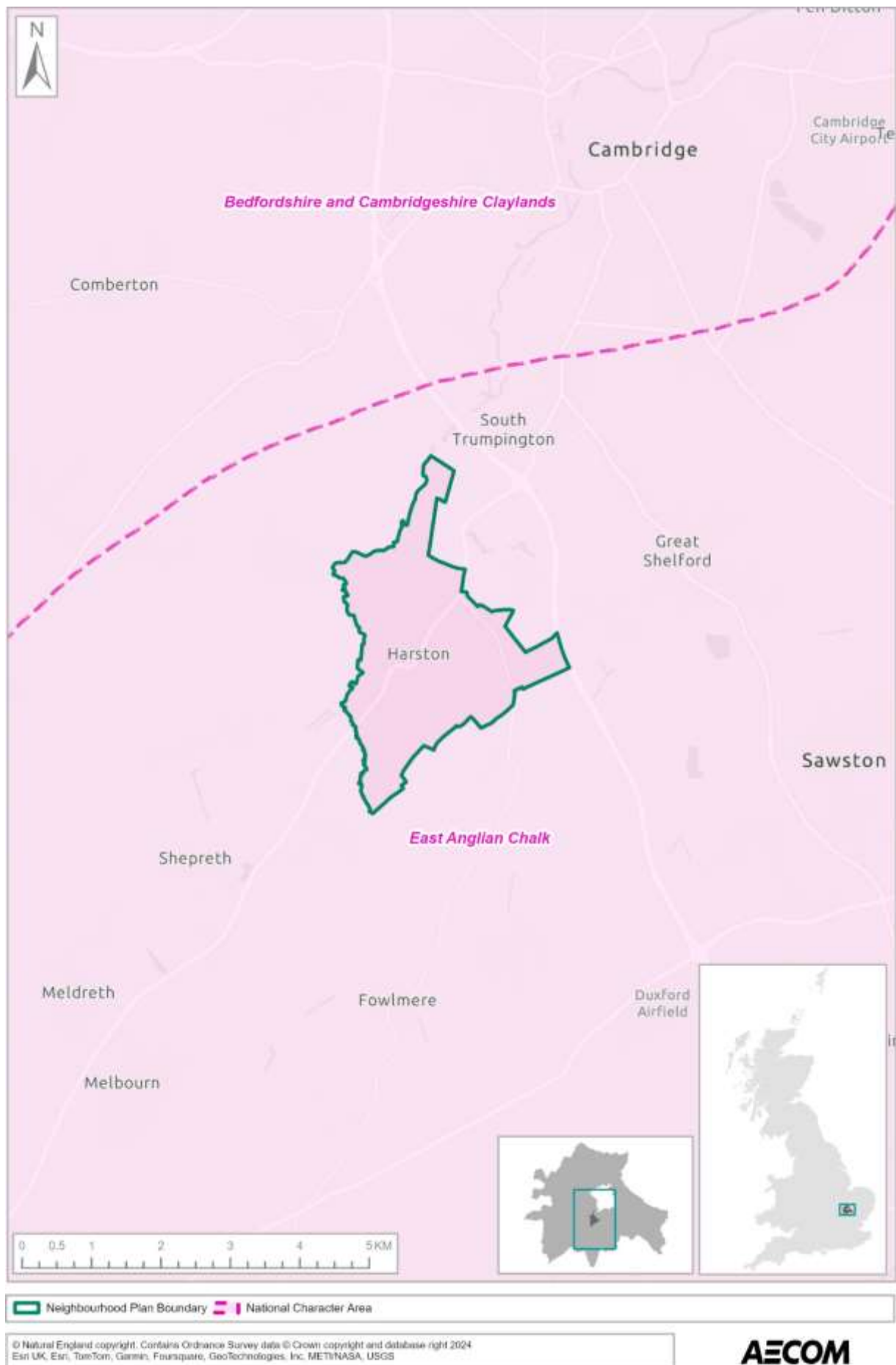


Figure 9.2 National Character Areas (NCAs) in Harston

Key evidence sources

9.2 Evidence sources which have informed the development of key issues include:

- [South Cambridgeshire District Council – Tree Preservation Orders](#)
- [Cambridge and Peterborough Open Data - South Cambridgeshire Brownfield Land Register 2021](#)
- [Cambridge Past, Present and Future – Cambridge Green Belt](#)
- [NE529: NCA Profile: 87 East Anglian Chalk](#)
- [South Cambridgeshire Recreation and Open Space Study](#)
- [South Cambridgeshire Recreation and Open Space Study - Technical Annex: Harston](#)

Policy context

Table 9-1: Additional plans and strategies relating to landscape

Document title	Year of publication
Greater Cambridge Landscape Character Assessment	2021
South Cambridgeshire Local Plan 2018	2017
Cambridgeshire Green Infrastructure Strategy	2011
South Cambridgeshire Landscape in New Developments SPD	2010
South Cambridgeshire District Council - Cambridge Green Belt Study	2002

Commentary

- 9.3 The South Cambridgeshire Local Plan Policy NH/2 (Protecting and Enhancing Landscape Character) seeks to ensure that development enhances the local character and distinctiveness of the local landscape. Key considerations should focus on visual amenity, views, noise, prominence, design, and lighting.
- 9.4 The neighbourhood area does not overlap with any nationally protected landscapes.
- 9.5 There are a number of TPOs in the neighbourhood area that can be viewed online on the South Cambridgeshire District Council website. The majority of these are directly adjacent to the currently developed urban area of Harston, mainly located centrally and to the south of the developed area. There are also no brownfield sites within the neighbourhood area.

Cambridge Green Belt

- 9.6 Paragraph 137 within the NPPF states that “*the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open.*”

The essential characteristics of Green Belts are their openness and their permanence.”

- 9.7 In the context of the above, most of the land which surrounds the village of Harston, as seen in **Figure 9.1** is part of the Cambridge Green Belt and this has both protected the countryside setting from development and restricted opportunity for growth.

Landscape and Villagescape

National Character Areas (NCAs)

- 9.8 The neighbourhood area is within National Character Area (NCA) **87: East Anglian Chalk** (see **Figure 9.2** above). This area features narrow continuation of the chalk ridge that runs south-west–north-east across southern England. The underlying geology is Upper Cretaceous Chalk, which is covered in a surface deposit of ice and river-deposited material laid down during the last ice age. This creates a visually simple and uninterrupted landscape of smooth, rolling chalkland hills with large regular fields enclosed by low hawthorn hedges, with few trees, straight roads, and expansive views to the north.
- 9.9 The vast majority of the landscape is open countryside, with trees on hill tops being visually distinct. Historically, sheep rearing, and corn production have shaped the area, leading to the creation of botanically rich grasslands, which are now often small and fragmented. Large-scale cereal production dominates the predominantly agricultural landscape, and care must be taken to ensure that the soil quality is maintained to support a viable and sustainable future for farming.
- 9.10 Key characteristics of the NCA include, but are not limited to:
- Distinctive chalk rivers, the River Rhee and River Granta, flow in gentle river valleys.
 - The rolling downland, mostly in arable production, with sparse tree cover.
 - Remnant chalk grassland, including road verges, supports chalkland flora and vestigial populations of invertebrates.
 - Settlement is focused in small towns and in villages. There are a number of expanding commuter villages located generally within valleys.

Landscape Character Types (LCTs)

- 9.11 On a local level, a Landscape Character Assessment has been conducted for the Greater Cambridgeshire area. This assessment found that the Harston neighbourhood area sits within three Regional Landscape Character Types (LCTs), the **Lowland Village Farmlands**, the **Valley Meadowlands**, and the **Lowland Village Chalklands**. These can be seen in **Figure 9.3** below.
- 9.12 **Lowland Village Chalklands:** a low lying, but gently rolling arable landscape through the south and east of Greater Cambridge. It is dissected by small streams and has a distinctive pattern of nucleated villages and patchwork of woodlands and shelterbelts.

- 9.13 **Lowland Village Farmlands:** a well settled, low lying landscape that covers a large part of Greater Cambridge; extending from the north, around the west of Cambridge and through the south of the Study Area. The high density of settlement, intensive agriculture and major transport infrastructure contribute to an often busy, rural landscape.
- 9.14 **Valley Meadowlands:** flat, low lying valley floors that extend through the landscape south of Cambridge. The Valley Meadowlands support pastoral land use, associated with notable watercourses/rivers. They are generally unsettled, with occasional areas of Carr woodland and gravel extraction lakes or ancient meres.



Figure 9.3 Landscape Character Types (LCT) in the neighbourhood area⁸

Key issues

- 9.15 TPOs are important features that contribute to local landscape and villagescape character. Any new development within the neighbourhood area should have due consideration to these (and other landscape features

⁸ Map from the Harston Parish Council website (2023) 'Landscape Character' can be accessed [here](#).

identified above), avoiding adverse effects and supporting the landscape qualities of the area.

- 9.16 The majority of the non-developed areas of Harston are covered by the Cambridge Green Belt, which means that the neighbourhood area will have restricted growth options.
- 9.17 Protecting and enhancing the local landscape through the emerging HNP, including its coherence and characteristics, can bring benefits to other SEA themes. This includes biodiversity and climate change, by maintaining features which support wildlife and natural processes, such as gardens and groups of trees.
- 9.18 The interplay between the existing built environment and open countryside is an important consideration for plan making.

SEA Framework

- 9.19 The HNP is proposing to allocate sites for development and influence design which has the potential to impact the area's landscape characteristics and distinctiveness. On this basis, and in the context of the key issues discussed above it is proposed that Landscape is **scoped in** to the SEA for the HNP.

Table 9-2 SEA objective and assessment questions

SEA theme	SEA objective
Landscape	Protect and enhance the character and quality of the immediate and surrounding landscape.

- 9.20 Supporting assessment questions include (will the option / proposal...):
- Protect and / or enhance local landscape character and quality of place?
 - Seek to prevent detriment to the openness of the Cambridge Green Belt?
 - Conserve and enhance local identity, diversity, and settlement character?
 - Identify and protect locally important viewpoints which contribute to character and sense of place?
 - Protect visual amenity?
 - Protect and extend/ enhance green infrastructure corridors?
 - Retain and enhance landscape features that contribute to the neighbourhood area's rural setting, including trees and hedgerows?

10. Transportation and movement

10.1 This section seeks to summarise transport infrastructure, transport usage, traffic flows and congestion, accessibility, and public rights of way within and surrounding the neighbourhood area.

Map

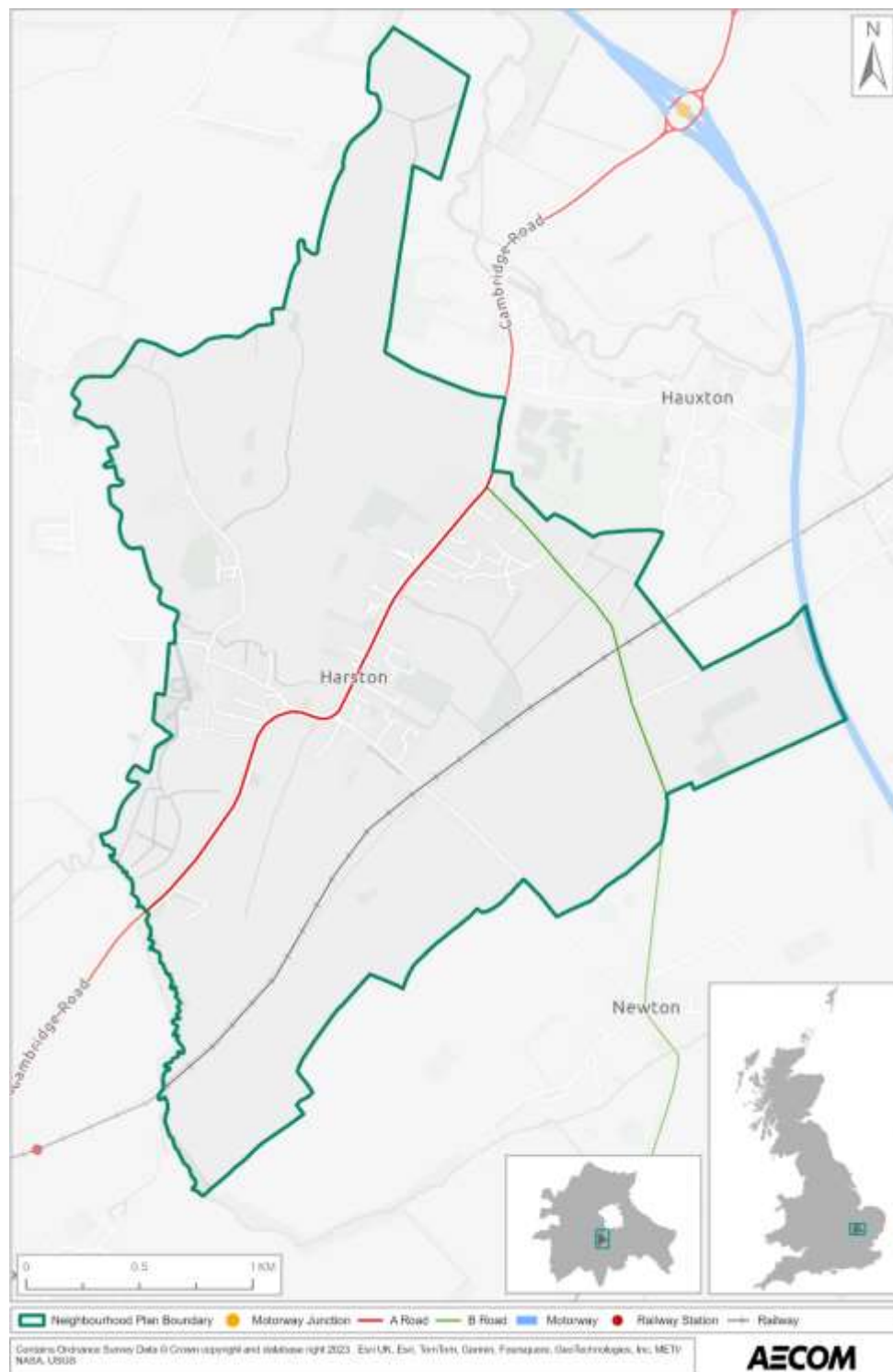


Figure 10.1: Map of transport assets in Harston.

Key evidence sources

10.2 Evidence sources which have informed the development of key issues include:

- [Bustimes - Harston](#)
- [Centrebus \(South\): 26, Royston - Cambridge](#)
- [A2B Bus and Coach: 31, Barley and Fowlmere to Cambridge](#)
- [Govia Thames Railway](#)
- [Google Maps](#)
- [South Cambridgeshire Council - Rights of Way](#)
- [Office for National Statistics – Build a custom area profile \(Census 2021\)](#)

Policy context

Table 10-1: Additional plans and strategies relating to transportation and movement

Document title	Year of publication
Cambridgeshire and Peterborough Local Transport And Connectivity Plan	2023
South Cambridgeshire Local Plan 2018	2017
Cambridgeshire Local Transport Plan 2011-2031	2015
Cambridge City and South Cambs Transport Strategy	2014

Commentary

10.3 South Cambridgeshire Local Plan Policies (TI/3: Parking Provision; and TI/4: Rail Freight and Interchanges) seek to ensure that future development in the NA takes account of transport priorities in both the local and wider, strategic context. There is an emphasis on minimising the impact of new development on the road network including the A10 (which intersects Harston NA), providing mitigative measures where necessary. Policies including TI/2: Planning for Sustainable Travel, seek to support an increased modal shift towards more sustainable modes of transport, including travel by active and public means as well as encouraging the use of electric vehicles.

10.4 As stated in South Cambridgeshire Local Plan, National Noise Action Plans First Priority Locations have been identified within the district at areas close A10 and other busy roads.

10.5 There are no railway stations within the neighbourhood area. The closest railway station is located in Foxton, which is considered walking distance (566m) from the neighbourhood area boundary, but approximately 2.2km from the urban centre of Harston. Foxton Railway Station provides regular services to primarily London King's Cross, and Cambridge, with one train servicing each on off peak hours, and two per hour during peak times.

- 10.6 According to Bustimes and local bus timetables, there are three bus services which pass through the neighbourhood area, connecting to surrounding locations. One of these is run by Centrebus, the other two by A2B Bus and Coach. The Centrebus service runs from Royston to Cambridge, every day except Sundays and bank holidays, approximately every two hours. The A2B Bus and Coach 31 service runs Monday through Saturday, not running on Sundays and bank holidays and runs four times throughout the day. The 32 A2B Bus and Coach service runs daily between Hauxton Meadows, through to Trumpington, every half an hour between 0700 and 0900, and between 1600 and 1800.
- 10.7 In terms of the strategic road network, there are two main roads in the neighbourhood area (see **Figure 10.1** above). One of these is the A10, a major road in the east, that runs from the centre of London, through to King's Lynn in Norfolk. This runs through the centre of the neighbourhood area, from the southwest to the northeast. Adjacent to the northeast border of the neighbourhood area, the B1368 meets the A10 within the neighbourhood area. The B1368 is a cross-country B-road, linking the A10 to itself, along a shorter but more winding route.
- 10.8 **Figure 10.2** shows that more people in Harston work primarily from home than the local or national average. It also shows that a higher proportion of residents travel either less than 10km, or more than 30km than the local average of South Cambridgeshire, however both of these are lower than regional or national averages. This more than likely represents residents working in Cambridge (less than 5km away) and those working in London and commuting further.
- 10.9 The data shown below in **Figure 10.3** shows a fairly high rate of car dependency in Harston, however, with relatively lower rate than local and national averages. It also shows that a higher proportion of residents travel to work by bike, in comparison to the local and national averages.
- 10.10 Despite the higher levels of bike usage in Harston for commuting, there are few Public Rights of Way (PRoW) linking Harston with other areas. There are no formal cycle routes or facilities within the Parish, although Cambridge and other areas like Great Shelford are all within 5 kilometres cycling distance, and therefore could be accessed by bike if supported by appropriate infrastructure.

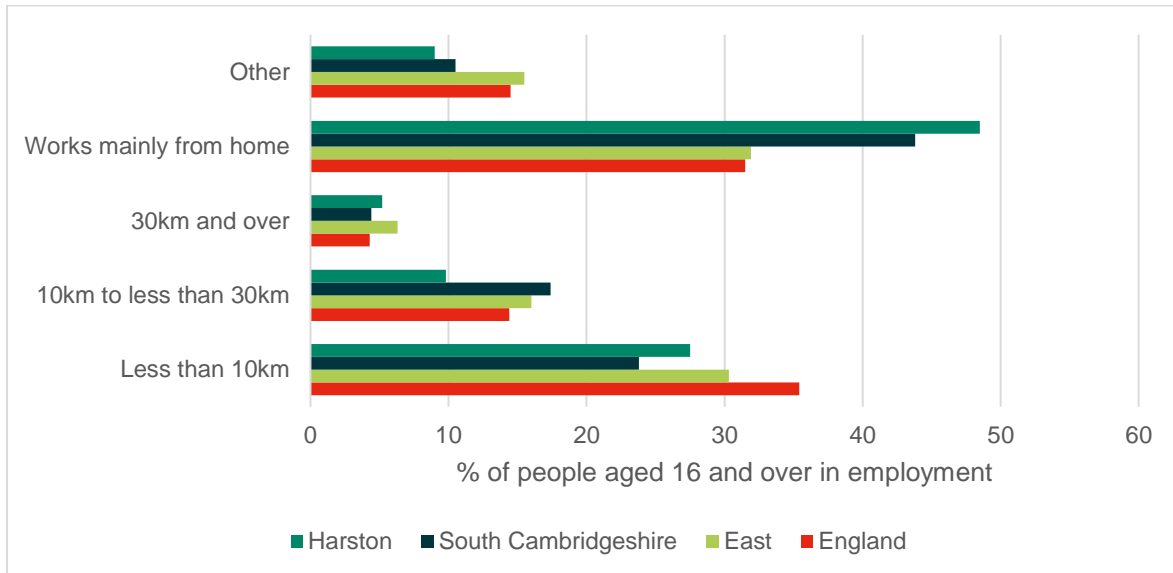


Figure 10.2 Distance travelled to work in the neighbourhood area compared to the national average (Census 2021)

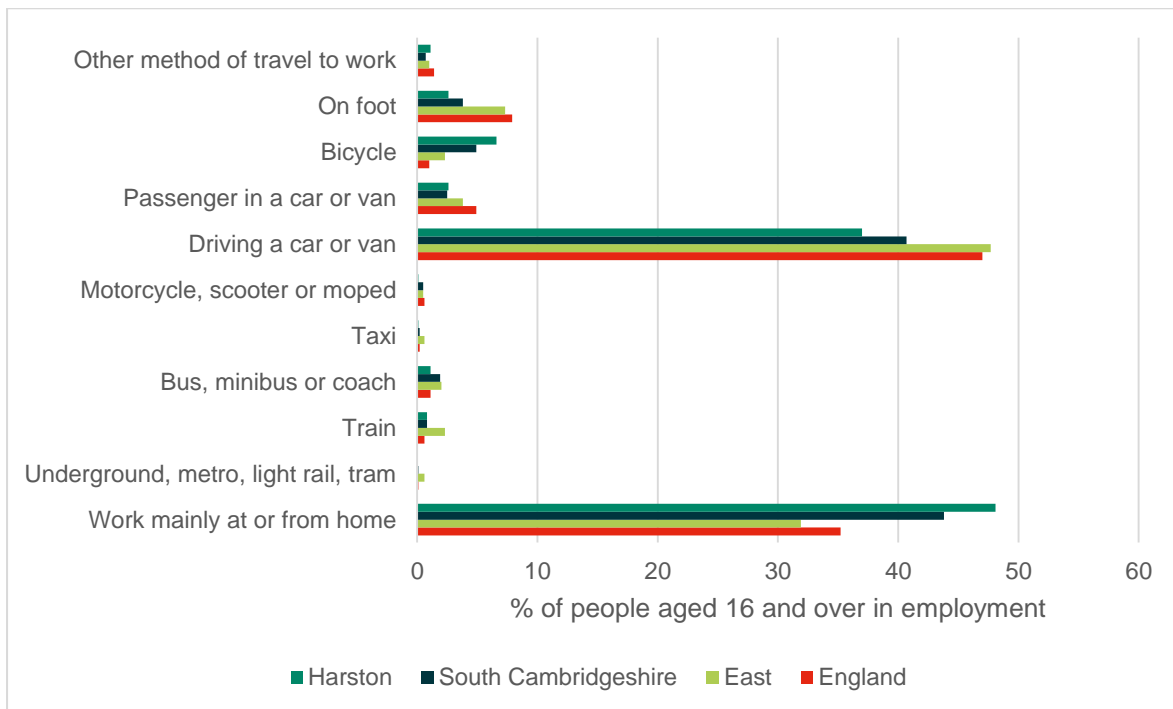


Figure 10.3 Method of travel to workplace in the neighbourhood area compared to the national average (Census 2021)

Key issues

10.11 Harston does have some public transport connectivity via the public bus services, running to the larger settlements of Royston, and Cambridge. That said, the Parish has a high rate of car dependency, and no train station within the neighbourhood area.

10.12 The intention to allocate sites to deliver housing growth in the Parish has the potential to lead to increased pressures on the road network, especially at traffic pinch points and at peak journey times in and around the A10. New housing growth has the potential to also deliver some improved

infrastructure and services which may support an increase in sustainable transport usage.

SEA Framework

- 10.13 The HNP is proposing to allocate sites for development which has the potential to impact the mobility patterns of the local population and volume of traffic on the local road network. On this basis, and in the context of the key issues discussed above it is proposed that Transportation and movement is **scoped in** to the SEA for the HNP.

Table 10-2 SEA objective and assessment questions

SEA theme	SEA objective
Transportation	Promote sustainable transport use and active travel opportunities and reduce the need to travel.

10.1 Supporting assessment questions include (will the option / proposal...):

- Support the objectives within the South Cambridgeshire Local Transport Plan to encourage the use of more sustainable transport modes?
- Encourage a shift to more sustainable forms of travel and enable sustainable transport infrastructure enhancements?
- Improve local connectivity and pedestrian and cyclist movement?
- Facilitate working from home to reduce the use of private vehicles to access workplaces outside of the neighbourhood area?
- Reduce the impact of the transport sector on climate change?
- Improve road safety and reduce pollution from vehicles?

11. Proposed SEA framework

- 11.1 The SEA framework has been established through the identification of key issues and environmental objectives as part of the scoping exercise. This draws upon the baseline position and policy context that has been explored for a range of SEA topics (as set out in Chapters 3 to 10).
- 11.2 The framework consists of a set of headline objectives and supporting assessment questions, which will be used to appraise the environmental effects of the draft HNP (and reasonable alternatives).
- 11.3 Table 11-1 below outlines the proposed SEA framework, bringing together the objectives and assessment questions that have been set out at the end of each SEA topic.

Table 11-1: The proposed SEA framework

SEA theme	SEA objective	Supporting assessment questions
Biodiversity and geodiversity	Protect and enhance biodiversity and geodiversity.	<ul style="list-style-type: none"> Protect and enhance nationally and locally designated sites, including supporting habitats and mobile species that are important to the integrity of these sites? Protect and enhance semi-natural habitats as well as priority habitats and species, including ancient woodland? Achieve biodiversity and environmental net gains and support the delivery of ecosystem services and multifunctional green infrastructure networks? Increase the resilience of biodiversity in the area to the effects of climate change, including through enhancements to ecological networks? Support access to, interpretation and understanding of biodiversity and geodiversity?
Climate change and flood risk	Reduce the contribution to climate change made by activities within the neighbourhood area and increase resilience to the	<ul style="list-style-type: none"> Reduce the number of journeys made and reduce the need to travel? Promote the use of more sustainable modes of transport, including walking, cycling, public transport, and electric vehicle (EV) infrastructure? Increase the number of new developments meeting or

SEA theme	SEA objective	Supporting assessment questions
	potential effects of climate change.	<p>exceeding sustainable design criteria?</p> <ul style="list-style-type: none"> • Generate energy from low or zero carbon sources, or reduce energy consumption from non-renewable resources? • Improve and extend green infrastructure networks in the neighbourhood area? • Sustainably manage water run-off, and reduce runoff where possible? • Increase the resilience of biodiversity in the area to the effects of climate change, including through enhancements to ecological networks?
Community wellbeing	Ensure growth in the neighbourhood area is aligned with the needs of all residents, improving accessibility, anticipating future needs and specialist requirements, and supporting cohesive and inclusive communities.	<ul style="list-style-type: none"> • Provide everyone with the opportunity to live in good quality, affordable housing? • Support the provision of a range of house types and sizes? • Support opportunities to enhance the resilience and diversity of the local economy? • Meet the needs of all sectors of the community? • Provide flexible and adaptable homes that meet people's needs, particularly the needs of an ageing population? • Improve the availability and accessibility of key local facilities, including health infrastructure? • Encourage and promote social cohesion and active involvement of local people in community activities? • Facilitate green infrastructure enhancements, including improved access to open space? • Maintain or enhance the quality of life of existing residents?
Historic environment	Protect, conserve, and enhance the historic environment	<ul style="list-style-type: none"> • Conserve and enhance buildings and structures of architectural or historic interest, both designated and non-designated, and their settings?

SEA theme	SEA objective	Supporting assessment questions
	within and surrounding the neighbourhood area.	<ul style="list-style-type: none"> • Protect the integrity of the historic setting of key monuments of cultural heritage interest as listed in the Cambridgeshire HER? • Support the undertaking of early archaeological investigations and, where appropriate, recommend mitigation strategies? • Support access to, interpretation and understanding of the historic evolution and character of the neighbourhood area?
Land, soil, and water resources	Ensure the efficient and effective use of land, and protect and enhance water quality, using water resources in a sustainable manner.	<ul style="list-style-type: none"> • Promote the use of previously developed land wherever possible? • Identify and avoid the development of the BMV land? • Support the minimisation, reuse, and recycling of waste? • Avoid any negative impacts on water quality and support improvements to water quality? • Ensure appropriate drainage and mitigation is delivered alongside proposed development? • Protect waterbodies from pollution? • Maximise water efficiency and opportunities for water harvesting and/or water recycling? • Avoid any negative impacts on mineral and waste infrastructure?
Landscape	Protect and enhance the character and quality of the immediate and surrounding landscape.	<ul style="list-style-type: none"> • Protect and / or enhance local landscape character and quality of place? • Seek to prevent detriment to the openness of the Cambridge Green Belt? • Conserve and enhance local identity, diversity, and settlement character? • Identify and protect locally important viewpoints which contribute to character and sense of place?

SEA theme	SEA objective	Supporting assessment questions
Transportation	Promote sustainable transport use and active travel opportunities and reduce the need to travel.	<ul style="list-style-type: none"> • Retain and enhance landscape features that contribute to the water setting, or rural setting, including trees and hedgerows? • Support the objectives within the South Cambridgeshire Local Transport Plan to encourage the use of more sustainable transport modes? • Encourage a shift to more sustainable forms of travel and enable sustainable transport infrastructure enhancements? • Improve local connectivity and pedestrian and cyclist movement? • Facilitate working from home to reduce the use of private vehicles to access workplaces outside of the neighbourhood area? • Reduce the impact of the transport sector on climate change? • Improve road safety and reduce pollution from vehicles?

12. Next steps

Subsequent stages for the SEA process

- 12.1 Scoping (the current stage) is the second stage of the SEA process:
- Screening.
 - Scoping.
 - Assess reasonable alternatives (to inform preparation of the draft plan); and
 - Prepare the Environmental Report (to inform consultation and plan finalisation).
- 12.2 The next stage will involve appraising reasonable alternatives for the Harston Neighbourhood Plan (HNP). The findings of the appraisal of these alternatives will be fed back to Harston Parish Council so that they might be considered when preparing the draft HNP.
- 12.3 Once the draft ('pre-submission version') plan has been prepared, it will be subjected to SEA, and the prepared Environmental Report will go out to consultation alongside it.
- 12.4 Following consultation on the draft HNP and the Environmental Report, the HNP will be finalised and submitted to South Cambridgeshire Council for Independent Examination.

Consultation on the Scoping Report

- 12.5 At this scoping stage, the SEA Regulations require consultation with statutory consultation bodies. The statutory consultation bodies are the Environment Agency, Historic England, and Natural England. Consultees are invited to comment on the content of this Scoping Report; in particular, the evidence base for the SEA, the identified key issues, and the proposed SEA framework.
- 12.6 The consultation period runs from **XXX** to **XXX**. Comments on the Scoping Report should be sent to:
- Olivia Marter, AECOM
- Email address: olivia.marter@aecom.com
- 12.7 All comments received on the Scoping Report will be reviewed and will influence the development of the SEA where appropriate.

