

## 8. A sustainable community

Northstowe is to be an exemplar sustainable new town.

The Phase 1 development will deliver a sustainable and vibrant new community.



C St Ives Bus Station

Whippet

AE59 EHR

BUS STOP

tickets  
cash & cards



## A sustainable community

Northstowe is to be an exemplar sustainable new town. The Phase 1 proposal will deliver a sustainable and vibrant new community.

The key qualities of the Phase 1 proposal in respect to encouraging sustainable lifestyles and a high standard of health and wellbeing for future residents are:

- A fully integrated mixed-use scheme including up to 1,500 new homes, approximately 5 hectares (ha) of employment land, shops and community building at the local centre, a primary school with potential for community facilities and a sports hub.
- All homes within 1,000m of the Longstanton bus stop for the Cambridgeshire Guided Busway, providing fast and efficient services to Huntingdon and Cambridge.
- A walkable environment with all new homes within 1,000m of the local centre, primary school and community building and the majority within 600m
- All new homes to be built to Code for Sustainable Homes level 4 in accordance with any future amendments to the Building Regulations 2013 / 2016, and to take account of the government's final decision on low / zero carbon requirements and the scope for on and off-site allowable solutions
- Significant green infrastructure (30% of the primary development site) including:
  - Over 6 ha of formal sports provision and associated infrastructure
  - Approx. 23 ha of additional public open space including parks / play space and a network of footpaths and cycleways
- Water bodies of approximately 5.2 ha including a water park, providing a recreational, ecological and drainage resource
- 1.57 ha of allotments

- Significant areas of enhanced ecological environment to enable a rich diversity of habitats to flourish
- An exemplar surface water drainage strategy benefiting Phase 1 well as mitigating the potential existing flood risk at the neighbouring village of Longstanton

In terms of minimising energy and water use specific proposals include:

- A focus on a micro generation strategy based on individual dwelling technologies, principally the use of solar thermal and PV panels, supplemented by high efficiency gas boilers. Due to the relatively low density of Phase 1, the widespread utilisation of district heating is not considered to be economically viable, although the potential to use this technology will be considered for later phases, where densities are greater
- Further measures to increase the proportion of total energy provided from low carbon / renewable energy technologies will be investigated. This could include the provision of large or medium scale wind turbine(s) by the Hatton's Road approach to Northstowe
- It is intended to meet the Zero Carbon Hub (ZCH) Fabric Energy Efficiency (FEE) Standards for Zero Carbon Homes. This represents the exemplar standard in the energy efficiency of dwellings
- SUDS drainage measures such as 'living roofs', swales and ditches and lined porous paving

Future residents will have every opportunity to adopt healthy sustainable lifestyles. When reviewed against the objectives of the Cambridgeshire Quality Chapter for Growth, the proposal delivers the following:

## Community

**Changes in needs and lifestyles** – a mix of tenures for all age groups will deliver a balanced community. This could include a residential care homes for elderly people.

**Flexibility of community buildings** – the strategy for community facilities has been developed in consultation with relevant authorities and local parish councils so that they complement existing facilities and provide flexibility to cater for changing needs over time. Facilities have been co-located where possible, which provides greater opportunity to ensure residents of early phases will have adequate provision.

**Social infrastructure** – Phase 1 will be a truly mixed use development with genuine opportunities for residents to live and work in the same place, to shop locally and for children of all ages to attend new education facilities within walking distance

**Green space and well defined civic spaces** – a hierarchy of attractive and multi-functional public spaces will help social interaction. The green infrastructure has been phased so that much of it will be established early on.

**Vibrant local shop as part of this first phase** – the local centre has been positioned to create a strong new northern gateway to Northstowe and crucially to benefit from passing trade on B1050, which means local shops will have the best chance to be operational and viable as part of Phase 1.

**Existing and new communities** – footpath and cycle links between Longstanton and Phase 1 will be established or strengthened at every opportunity, especially where connections to local facilities such as healthcare at Magdalene Close or the future secondary school are vitally important.

## Connectivity

**Exemplar public transport in place and integrated within the urban fabric** – Phase 1 will benefit from the unique Cambridgeshire Guided Busway, providing ‘green travel’ for all residents at the outset. A local bus network, running along the primary streets, will complement the CGB making Phase 1 an exemplar in public transport.

**Direct and attractive cycle and pedestrian routes** – a strong network of cycle and pedestrian routes (including fast commuter cycleways) will make travel by these modes both attractive and a realistic option.

**A clear and legible hierarchy of routes** – the deformed grid and a series of distinctive public spaces located on principal routes will make the townscape recognisable and attractive.

**Walkable neighbourhood** – the location of all key facilities have been founded on a guiding principal of establishing walkable neighbourhoods.

## Climate

**Sustainable waste management** – waste recycling centres will be provided at the local centre and the household recycling centre.

**Water conservation** – an exemplar surface water strategy will be a defining feature of the town and the network of green spaces.

**Tree planting** – extensive tree planting along streets, greenways and linear parks will create an attractive external environment that encourages people to walk and cycle and will provide natural cooling in summer.

**Food production** – one large allotment site on the western edge and a further four community gardens located next to the LEAPs will help existing and new communities mix. Importantly, it will also provide opportunities for different age groups to mix. A community orchard is also proposed.

**Minimise the use of energy and setting environmental challenging standards** – Phase 1 will exceed the sustainability standards for energy efficiency, reduction in CO2 emissions and use of low carbon and renewable energy technologies set out in the adopted Local Development Plan Documents. An energy hierarchy of energy efficiency and then low carbon / renewable energy technologies will be followed. A 31% reduction in regulated CO2 emissions over Building Regulations (2006) will be achieved.

## Character

**Incorporating existing site assets** – The master plan layout has been shaped to incorporate the attractive site features. In particular, linear elements such as existing ditches and hedgerows have been subsumed within the layout and augment the gridded urban form, often creating long axial views, a defining characteristic of the fen landscape.

**A clear vision** – The well-defined refreshed vision for Northstowe has been developed as part of a collaborative process. This has been interpreted in the form of a development framework for the whole town, which provides a logical town-wide structure in which the Phase 1 proposal is a planned and complementary new urban quarter.

**Understanding the local context** – The Phase 1 master plan derives much of its morphology from the positive and locally distinctive characteristics of Cambridgeshire settlements. A deformed grid is an easily understood townscape, and is particularly effective in terms of creating a legible and well-connected street pattern.

**Water as a defining feature** – numerous water bodies of varying sizes and a network of linear ditches and swales reflect the fen landscape and will enrich the landscape of Phase 1.

**Respectful of existing communities** – building heights and densities respond to the context. Adjacent the Longstanton the urban form mirrors that of the village so that when viewed from the sports hub and the village (where visible) the western edge of Phase 1 will appear in keeping and apposite.

Figure 8.1 A sustainable community

Wildlife habitat corridor

Cambridgeshire Guided Busway

Direct link to CGB stop at Longstanton Park & Ride

Employment close to new homes

Mixed use local centre with recycling centre

Central linear greenway

Sports hub and green buffer





Linear water park

Pocket park with lake

Southern greenway

Dedicated busway and commuter cycle route

Primary school at heart of community

Primary street

Retained pond