



# LAND EAST OF CHERRY HINTON

A VISION FOR DEVELOPMENT

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# EXECUTIVE SUMMARY

A unique location.

A place designed for people to live.

A place connecting residents to the landscape.

Land East of Cherry Hinton, provides an opportunity to provide a sustainable new community, in a highly accessible location, benefiting from connectivity to existing, nearby facilities and an attractive landscape setting. The future of the new settlement lies with an integrated approach to place-making and sustainable infrastructure at the community scale. The design will be developed sensitively in relation to the site's Green Belt context. The new community will be strategically linked to create a resilient new neighbourhood, equipped to face the challenges of the future, whilst providing affordable, healthy and beautiful homes, set within walk-able and highly sociable neighbourhoods.

Land East of Cherry Hinton offers the opportunity to reflect the best of principles of sustainable design, following Garden Village principles, whilst ensuring the highest quality of place-making to meet contemporary, sustainable living requirements and enable resilience for the future.

Land East of Cherry Hinton will be a sustainable, landscape-led mixed use development of approximately 1,200 homes, supported by approximately 5 ha of employment opportunities, a local centre with retail and community facilities, and a primary school.



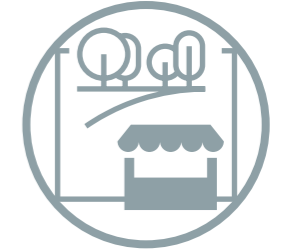
POTENTIAL TO CREATE **JOBS** AND A NEW **EMPLOYMENT** AREA OF APPROXIMATELY **5HA** WITH CONNECTIVITY TO PROPOSED **TRANSPORT LINKS**



PROVIDE A NEW **PRIMARY SCHOOL** AT THE HEART OF THE NEW COMMUNITY



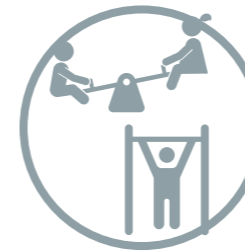
PROVIDE OPEN SPACES WHICH PROMOTE OPPORTUNITIES FOR **COMMUNAL GROWING** AND ENHANCED **HEALTH AND WELL-BEING**



PROVIDE A VIBRANT COMMUNITY HEART WITH OPPORTUNITY FOR A WIDE RANGE OF **RETAIL** AND **COMMUNITY FACILITIES**



DELIVER APPROXIMATELY **1,200** MIXED TENURE HOMES WITHIN A **GREEN SETTING**



PROVIDE A WIDE RANGE OF FORMAL AND INFORMAL **PLAY & FITNESS FEATURES** FOR ALL AGES ENCOURAGING RESIDENTS TO CONNECT THEIR COMMUNITY, STREET AND HOME



OPPORTUNITIES TO **INVOLVE THE COMMUNITY** WITHIN THE MANAGEMENT OF THE NEW DEVELOPMENT - OFFERING A SPACE FOR A LONG-TERM SHARED **COMMUNITY RESOURCE**



PROMOTE **SUSTAINABLE TRANSPORT** AND A REDUCTION IN CAR DEPENDENCY THROUGH **EASE OF CONNECTIVITY** TO EMPLOYMENT OPPORTUNITIES

## VISION PRECEDENTS

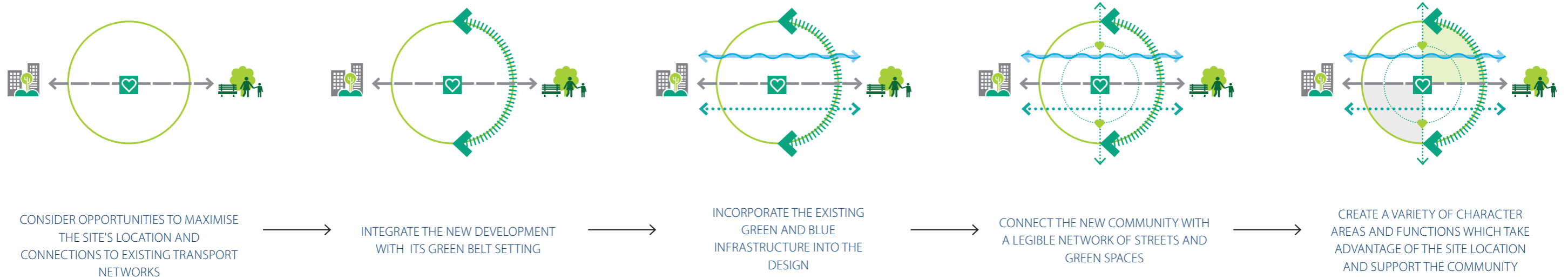




# A VISION FOR LAND EAST OF CHERRY HINTON

The site at Land East of Cherry Hinton offers an opportunity to deliver a new vibrant and sustainable, mixed tenure community based on a commitment to deliver new homes to cater for local needs, and designed to last for successive generations and to respond to the local townscape and landscape character.

## STRATEGIC CONCEPT







SECTION 01

SITE APPRAISAL

# REGIONAL ANALYSIS



## Greater Cambridge Location

The site is located within the administrative authority of South Cambridgeshire District Council, to the east of Cambridge City Centre.

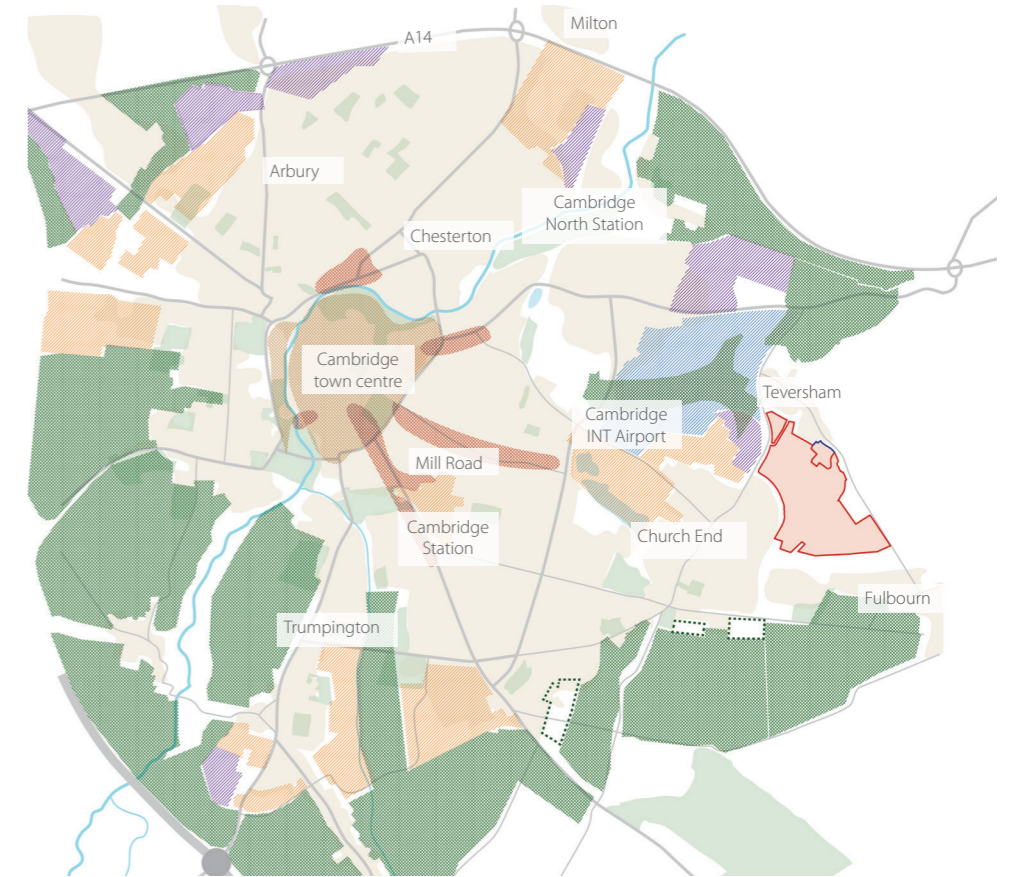
- Greater Cambridge
- South Cambridgeshire
- Cambridge City Centre
- Land East of Cherry Hinton



## Cambridge City Location

The site is located between Cherry Hinton and Teversham. The site is close to the Cambridge airport site. The A14 road is to the north of the site and the Cambridge-Ipswich rail line runs along the southern edge of the site.

- Land East of Cherry Hinton



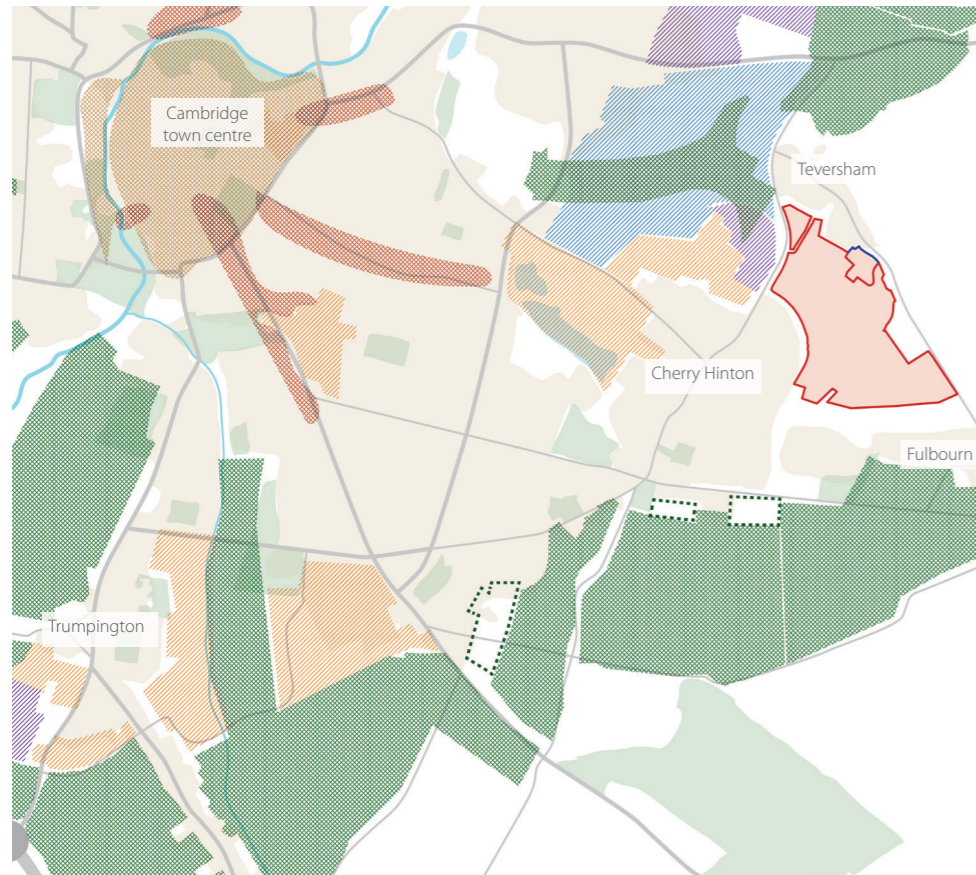
## Cambridge City Location (Proposed growth)

There is a considerable quantum of growth and development planned within the Cambridge City and South Cambridgeshire District Council areas. A number of consented schemes are under construction, and in addition, through the adoption of both authority's new Local Plans there are a number of allocated sites within the vicinity of the site. The above diagram indicates the consented, allocated and ear-marked sites in the area around Cambridge. The plan also highlights the areas of 'High Quality' Green Belt. Whilst located within the Green Belt the proposed site is located within an area of potential growth for the City of Cambridge.

- Land East of Cherry Hinton
- Cambridge town centre
- Opportunity area
- Area of major change within Cambridge
- Major development site within south Cambridgeshire
- Future development/change of land use for airport
- Areas of very high and high of significance Green Belt (based on joint Council appraisal of the inner Green belt boundary 2012)
- Land released from the Green Belt for development



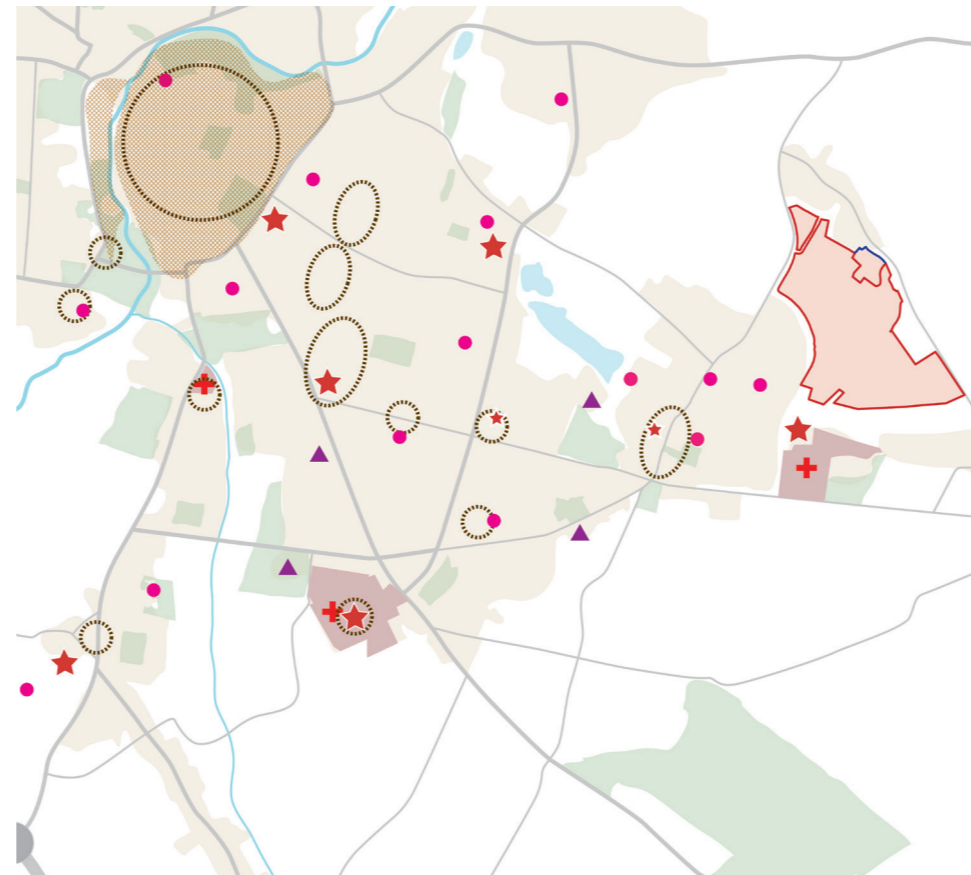
# LOCAL ANALYSIS



## Future Development and Strategies

The above plan highlights the consented, allocated and ear-marked sites within the area east of Cambridge and the Green Belt areas graded as being of high significance in the CCC and SCDC 2012 appraisal of the inner Green Belt boundary.

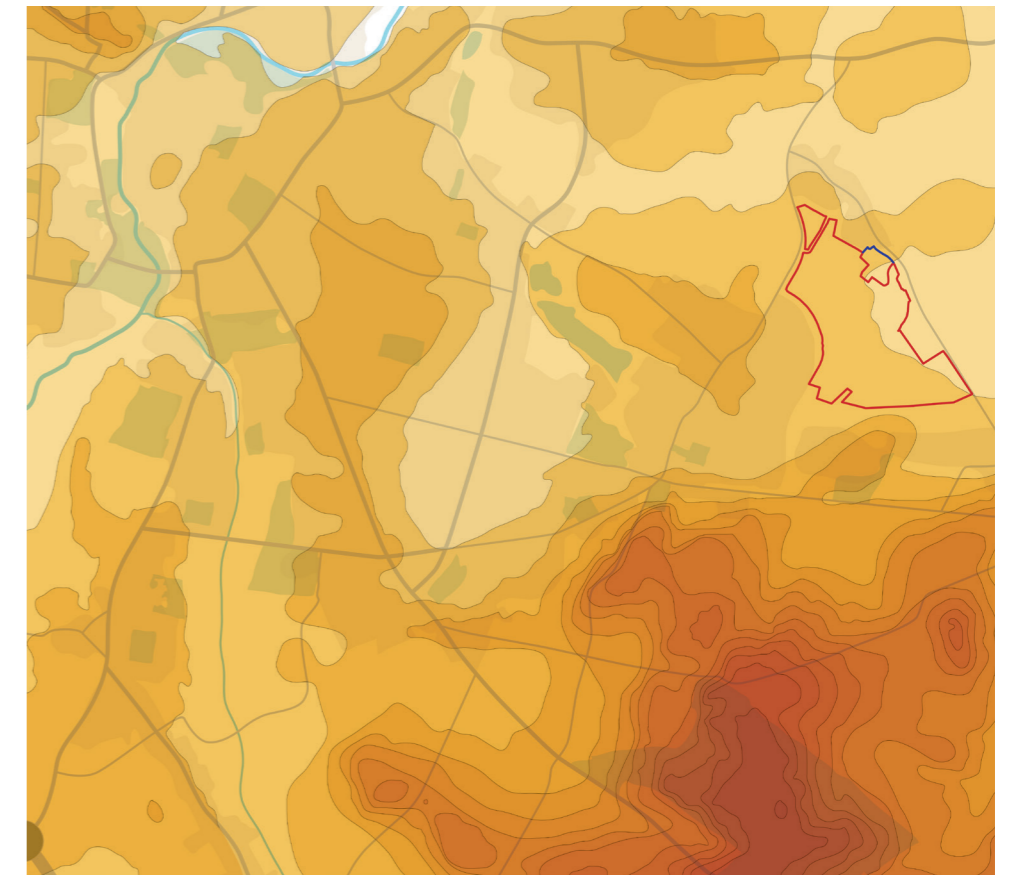
- Land East of Cherry Hinton
- Cambridge town centre
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- Land released from the Green Belt for development



## Land Use and Services

The above plan highlights the site in relation to key existing local services and the main retail centre in Cambridge.

- Land East of Cherry Hinton
- Cambridge town centre
- Primary school
- Secondary school
- College
- Hospital/Health service
- Major open space
- Hospital outline
- Local centre providing services and retail facilities
- Food store

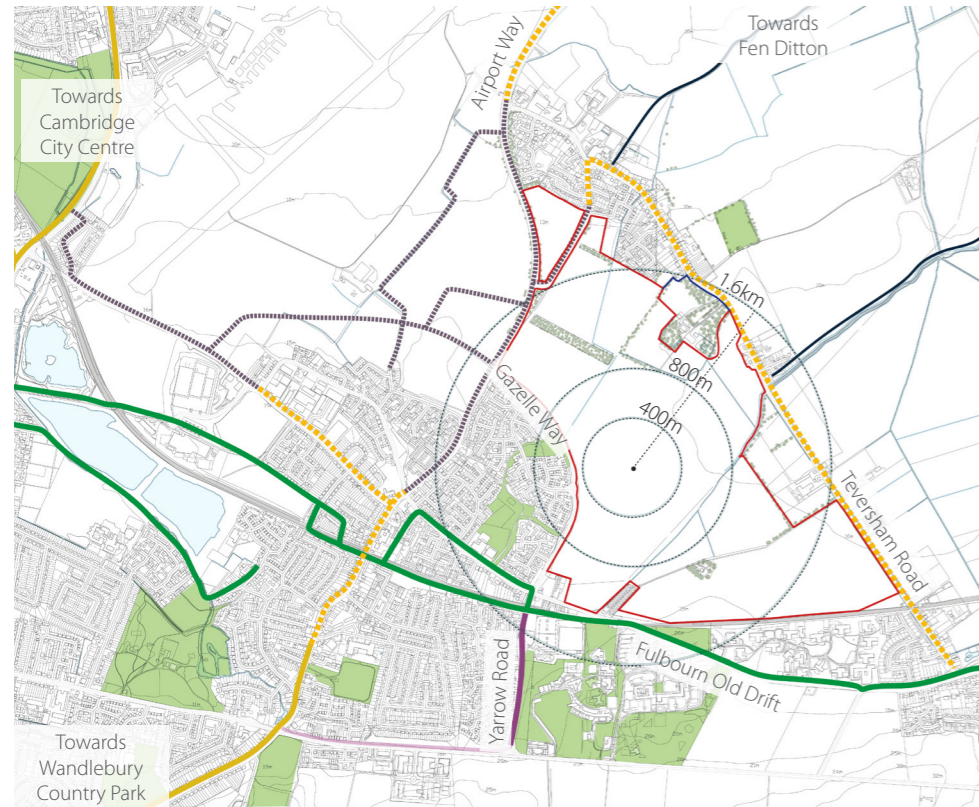


## Topography

The above plan highlights the topography of the local area. Cambridge is located in the basin of the River Cam. The site is relatively flat and at an elevation of 10-15m Above Ordnance Datum (AOD).

- Low level (10 metres AOD)
- High Level up to 75 metres (AOD)

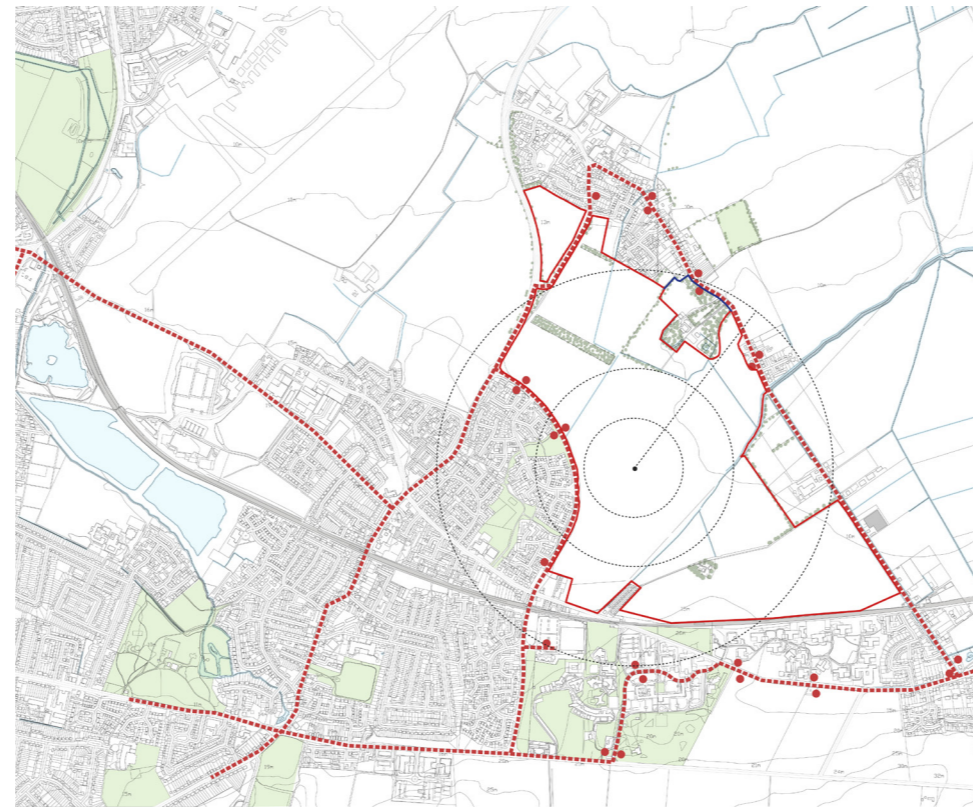
# SITE CONTEXT ANALYSIS



## Cycle Paths and Open Space

Walking and cycling infrastructure is shown on the above diagram which also highlights accessibility to Cambridge City and the open spaces surrounding the site.

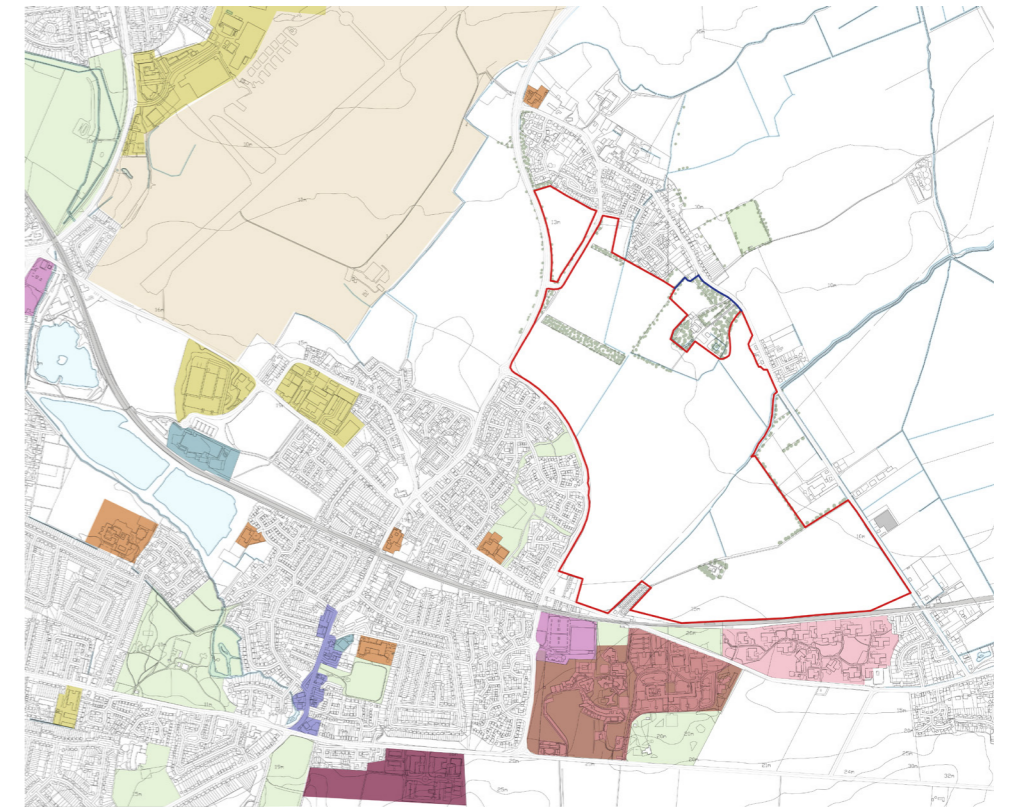
- Open space
- Primary cycle network in vicinity of the site
- Other local cycle links in vicinity of the site
- Fulbourn Greenway
- Yarrow Road cycling quick win improvements
- Fulbourn/Cherry Hinton cross city cycling improvements
- Land North of Cherry Hinton footway/cycleway improvements
- Public rights of way in vicinity of the site



## Public Transport

The bus stops on Gazelle Way to the west and Fulbourn Road to the east are served by the routes 16A, Citi 1 and Citi 2. Hinton Road and Fulbourn Old Drift south of the site and the railway are covered by Citi 1 and Citi 2. A journey with Citi 1 from Gazelle Way to Cambridge city centre takes 35 minutes with no changes

- - - Bus route
- Nearby bus stop



## Land Use and Services

There are a number of primary and secondary schools close to the site. Bewick Bridge Community Primary School in Cherry Hinton is the nearest school to the site. Shops, a local library and leisure centre can be found along the High Street in Cherry Hinton, less than 2km from Gazelle Way.

- Open space
- Education/school
- Employment
- Leisure centre
- Airport
- Large scale retail
- Hospital
- Cherry Hinton high street
- Ida Darwin Hospital Redevelopment (allocation for residential and hospital)
- Peterhouse technology park

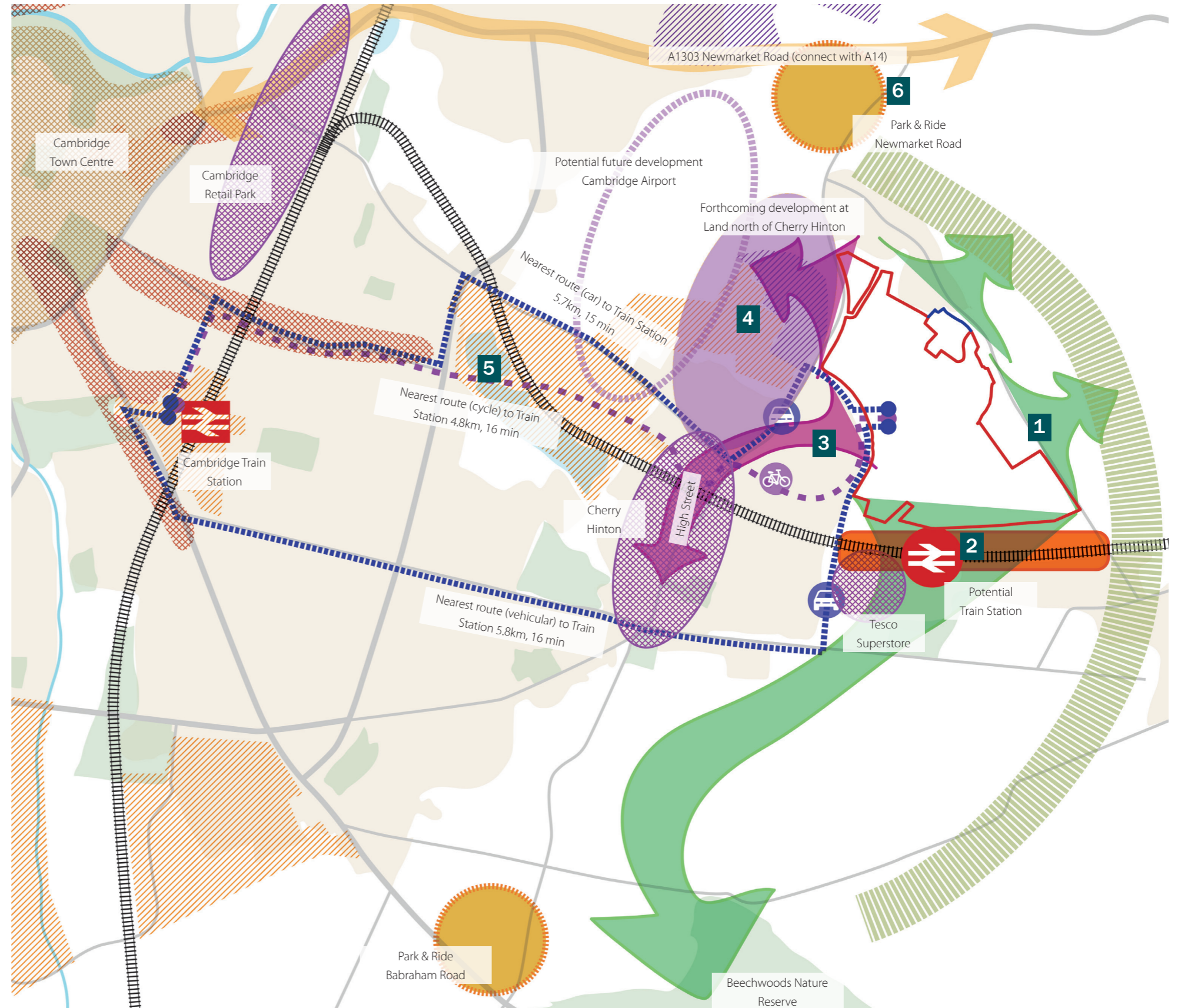


# WIDER CONSIDERATIONS

The adjacent diagram highlights key considerations in relation to the wider site context. The site is well-connected to the City centre by roads, public transport and cycle routes. There is considerable existing employment within the local area, which offers the opportunity for Land at East Cherry Hinton to contribute to and enhance this employment offer and to create an employment destination. There is the opportunity to support this employment destination further by facilitating a new train station to the south edge of the site which would provide a sustainable transport link to the site.

The site is located within the Green Belt. An assessment has been undertaken of the 2012 and 2015 Inner Green Belt Studies (Appended to this document) to inform this Masterplan. The site offers an opportunity to create a unique new community which marries town and country, creating a high quality edge to the Green Belt and bringing the landscape into the development, partly through the retention and enhancement of tree belts and hedgerows.

- |  |                                       |  |                                    |
|--|---------------------------------------|--|------------------------------------|
|  | Cambridge town centre                 |  | Airport                            |
|  | Opportunity area                      |  | Adjacent Cherry Hinton site        |
|  | Area of major change within Cambridge |  | Route to train station (cycle)     |
|  | Major development site                |  | Route to train station (vehicular) |
|  | Concentration of retail/high street   |  | Railway barrier                    |
|  | Open space                            |  | Greenbelt                          |
|  | Railway                               |  | Park & Ride                        |
|  | Train station                         |  | Urban links                        |
|  | Futureproofing new train station      |  | Green links                        |



# SITE ANALYSIS

The site is flat, arable farmland divided by hedgerows, woodland belts and ditches. The site separates Teversham and Cherry Hinton and provides a green setting for both villages. The site is at an elevation of 10-15m above ordnance datum. The majority of the site is characterised as being flat, open farmland with a series of straight ditches, hedge and tree lines running across the site. Towards Teversham, there is mature woodland around the medieval moated building of Manor Farm. Overhead power lines and associated pylons cross the site in several locations.

The existing village of Teversham has an historic centre centred around the All Saints Church. The village is predominantly residential, of mixed ages around the High Street. From the village there are open views to Cambridge airport and from the Fulbourn Road east towards Little Wilbraham.

Gazelle Way bounds the west of the site and adjoins the residential development of Church End and this area has a homogeneous character of modern two storey residential development.

To the south of the site lies the planted edge to the railway line. This crosses the Fulbourn Old drift, a track leading to a mobile home community and an electrical substation bounding the site. Currently this track does not cross the railway line to join the footpath routes that links the supermarket, Hospital and business park that are adjacent to the railway line.

Significant features in the landscape include:

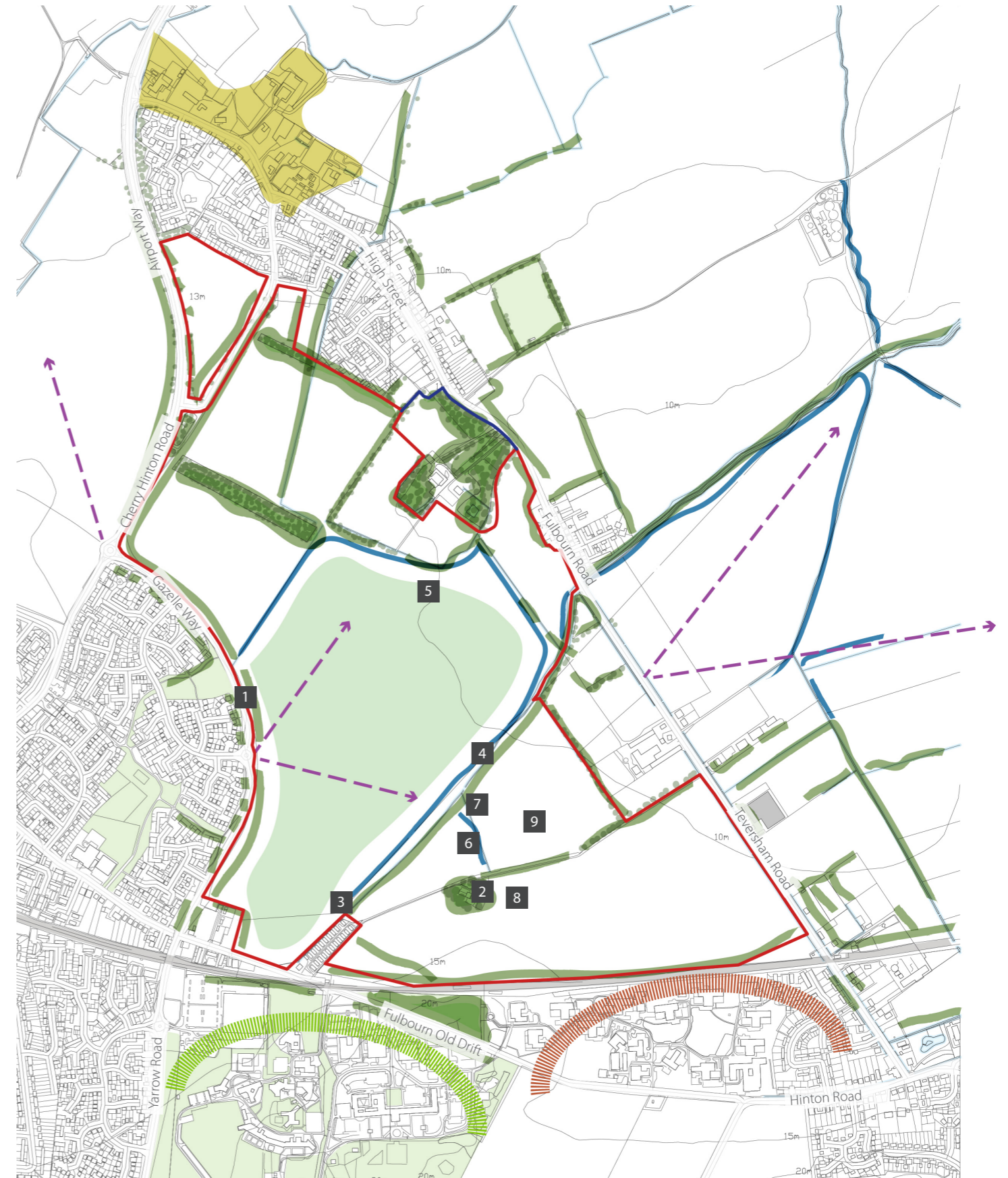
- Caudle Ditch and planting along the ditch edge
- A Line of established Poplar trees along the south edge of Fernleigh farm
- Woodland block east of Cherry Hinton Road
- Established tree groups around Claudle Corner farm and Manor farm
- Hedgerows and trees along the railway line to the southern edge of the site
- Long hedgerow along boundary to Gazelle Way
- Smaller grazing fields with planted boundaries along the east of the site

The site is part of the Fen Edge landscape which sits between the Fens to the north and east and Cambridge town centre. Key characteristics of the Fen Edge are:

- Flat landscape sitting outside the flood plain
- Variety of land uses including arable and pastoral agriculture
- Lines of trees and hedgerows along ditches and field boundaries
- Small woodland groups

There are open views across the site mainly to the north and east. There are also views of the Fulbourn Hospital buildings to the south and occasional glimpses of the Gog Magog hills south of Cherry Hinton. Residential areas to the west and north of the site are mainly two storey suburban houses. The hospital and business park areas south of the railway include buildings of a larger scale, three to four storeys high but these are hidden behind dense banks of trees.

As part of the Site Analysis, a review of the 2012 and 2015 Inner Green Belt Studies has been undertaken (appended to this report). Within the 2012 Study it was identified that the majority of this Site is considered to be of 'low significance' and was of the lowest significance of all the Green Belt around Cambridge. The 2015 Study identified that this area of Green Belt is remote from the historic core of Cambridge and does not make a significant contribution to the rural character of approaches to the city edge. Further more there are no key views within or across this area of Green Belt. The role of this area of Green Belt in relation to Cherry Hinton, Teversham and Fulbourn is acknowledged. As will be demonstrated throughout this document it is considered that sustainable development can be accommodated within this area whilst maintaining a separation between Cherry Hinton, Teversham and Fulbourn through the preservation and enhancement of existing green infrastructure and provision of large area of green space.





View of the site boundary with Gazelle Way



Existing house located within the site



Site boundary with nearby static homes



High voltage power cables follow the alignment of hedges and ditches



View from the south of the site towards Fulbourn



View towards the airport from the centre of the site



View between hedgerows towards the existing business park



View across the site towards Fulbourn



Line of poplar trees along the site boundary

# ECOLOGY AND BIODIVERSITY

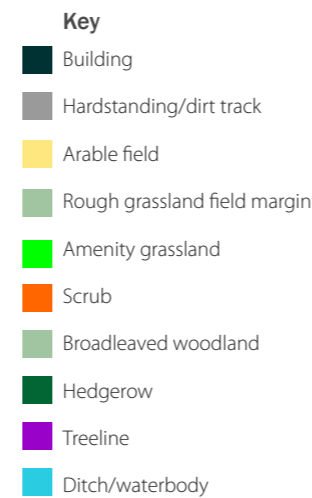
The site is not subject to any statutory or non-statutory nature conservation designation. Wilbraham Fens Site of Special Scientific Interest (SSSI) is to the northeast, and linked to the site by the Caudle Ditch. Safeguarding the ditch will be a key aspect of the design, and no adverse effects on the SSSI are likely.

The site largely comprises intensively managed arable fields bounded by hedgerows. Some rough grassland 'headlands' are present, while several of the field boundaries include ditches. Chief among these is the spring-fed Caudle Ditch, a feature of significant potential for wildlife. Small areas of broadleaved woodland are situated in the north of the site. Overall, the habitats within the site are of low intrinsic ecological interest, though the woodland, hedgerows and ditches are of relatively greater value. These will be incorporated into the green infrastructure network for the development, and there is good scope for significant ecological enhancement.

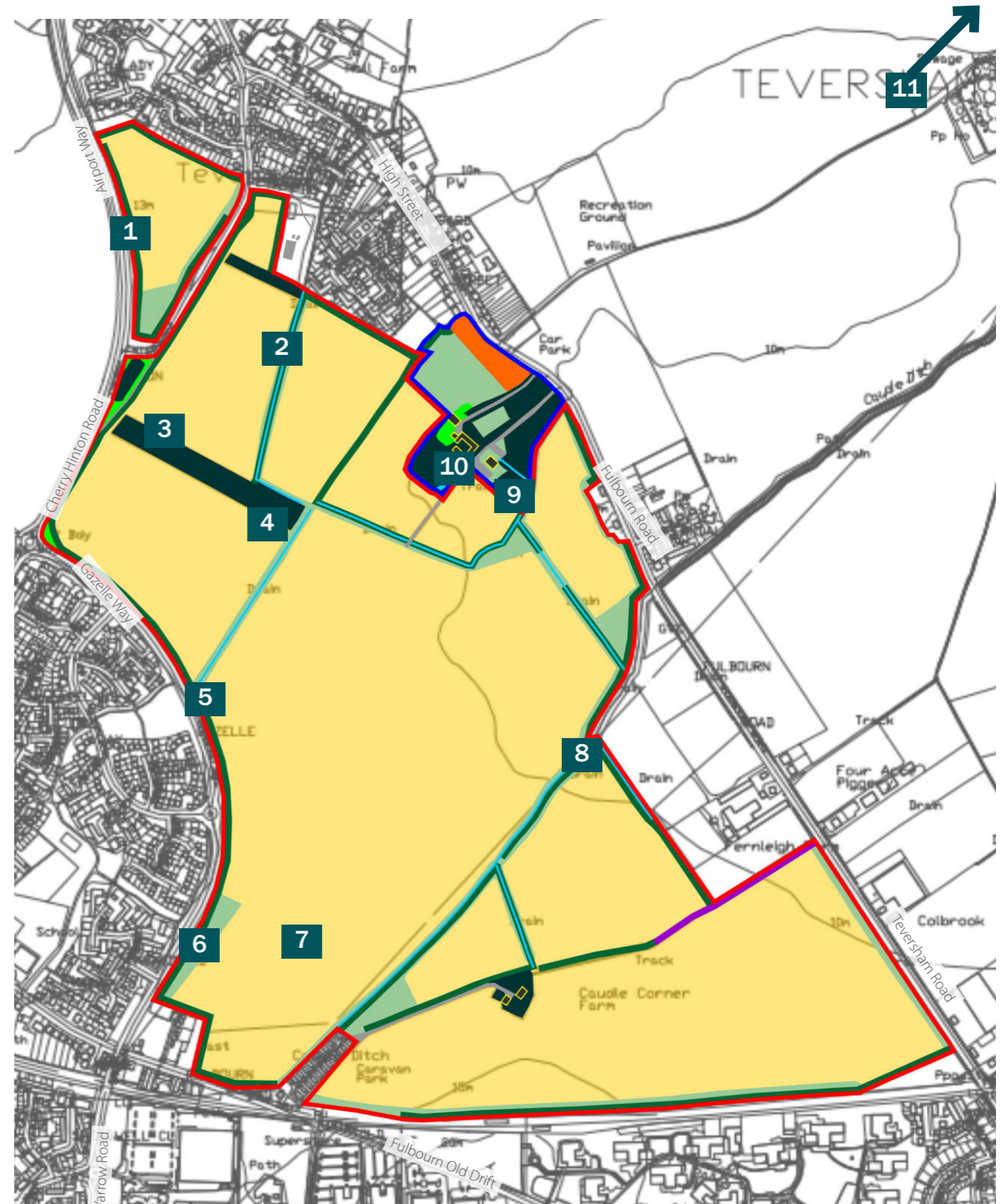
A significant body of work has been accumulated for the Land North of Cherry Hinton proposal, and given the proximity to that site and the nature of the habitats, the protected and notable species present are expected to be similar.

Several bat species are likely to use the site for foraging and dispersal, but there is no evidence to suggest that any rare species would be present. The ditch network, particularly the Caudle Ditch, is considered suitable for Water Voles, which are known to be in the area. The site is likely to support several farmland bird species, while there may also be some use by reptiles and amphibians. Detailed survey work would be undertaken to identify the species present.

Subject to completion of surveys and incorporation of mitigation into the masterplan, there is nothing to suggest that development would be precluded on ecological grounds. Owing to the current use of the site and habitats present, it is expected that net biodiversity gain can be achieved leading to positive enhancement over and above the existing situation.



- |  |  |
|--|--|
| <p><b>1</b> Retention of hedgerows along site boundaries</p> <p><b>2</b> Opportunity to improve the wildlife value of the network of ditches and drains present within the site, via channel widening and vegetation planting. Ditches can be managed specifically for Water Vole</p> <p><b>3</b> Hedgerows and woodlands offer foraging and commuting potential for bats</p> <p><b>4</b> Opportunity to incorporate existing woodland, hedgerows and ditches into the green infrastructure network for the development</p> <p><b>5</b> The site likely supports an assemblage of farmland and woodland birds. Nesting opportunities are provided in trees and hedgerows</p> | <p><b>6</b> Small areas of rough grassland present around the field margins have potential to support reptiles</p> <p><b>7</b> Open agricultural fields with limited potential for farmland ground nesting birds, e.g. Skylarks</p> <p><b>8</b> The Caudle Ditch is considered to provide suitable opportunities for Water Vole, which are known to be present in the locale</p> <p><b>9</b> Ponds with potential to support Great Crested Newts and Water Voles</p> <p><b>10</b> Farm buildings with potential to support roosting bats</p> <p><b>11</b> Wilbrahams Fens Site of Special Scientific Interest (SSSI), 1.8km north-east of the site</p> |
|--|--|



# HERITAGE AND ARCHAEOLOGY

## Designated Heritage Assets

Two Scheduled Monuments lie within or adjacent to the site. Both a moated medieval site at Manor Farm and crop mark evidence (from aerial photography) for an Iron Age settlement would be preserved as part of the development. Their settings would also be maintained through appropriate buffers and sympathetic development. Furthermore, the crop mark monument is on Historic England's Heritage at Risk Register due to prolonged damage through ploughing. The proposed development would take this monument out of agriculture and ensure its long-term survival. This is a significant benefit.

There are listed buildings located within the surrounding villages of Teversham, Fulbourn and Cherry Hinton. Because of intervening development, mature vegetation and the largely flat nature of the local topography none has a clear line of sight of the site. Manor Farm, a grade II house of 17th century origins, is the nearest listed building to the site. Its setting, which is enveloped by trees, would be further protected through an appropriate stand-off.

## Archaeology

In the southern part of the site a number of entries are recorded in the Cambridgeshire Historic Environment Record (CHER). These include Iron Age activity to the east of the scheduled Iron Age settlement uncovered during deep ploughing in the 1970s.

Roman activity includes a site examined by a local archaeologist over a period of 8 years in the 1980s and identified as a villa. This villa started in the second century as a timber building replaced in the third by a flint, stone and timber structure with evidence for at least one tessellated floor. Other structures were located nearby including further timber buildings and a pottery kiln suggesting an industrial annex to the villa. The vast majority of the archaeology was found cut into the chalk indicating significant plough truncation.

In 1986 the villa was recorded as being cut through by a 'new' road which suggests that this now lies outside the site.

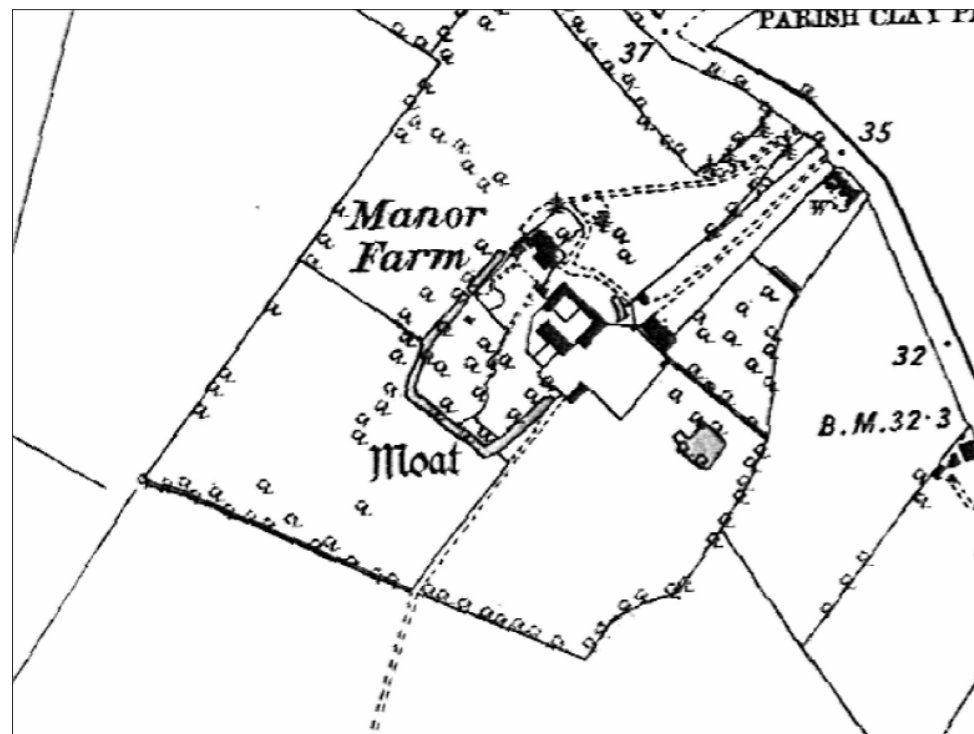
The site also includes a number of undated crop marks that probably represent multi-period field boundaries, along with stock penning and potential domestic features. The wider landscape includes crop marks of ring ditches indicating ploughed out Bronze Age burial mounds or barrows and Bronze Age domestic activity found as part of works associated with the construction of the nearby Tesco store.

## Historic landscape

Historic maps show the site divided up into a number of generally quite large rectilinear fields perpendicular to the Fulbourn Old Drift. These pre-date the railway which bisects the field boundaries. Between 1880 and 1938 some of the larger units were further amalgamated.

## Opportunities


The site has been under the plough for centuries and in the modern era will have experienced deeper mechanised ploughing. The result has been the truncation of buried archaeology without record. This is most clearly evidenced by the inclusion of the Iron Age scheduled monument on the Heritage at Risk Register. This development would offer an opportunity to excavate and record archaeology (funded by the developer) before it is destroyed. Nationally important archaeology, including the scheduled monument, can be preserved in situ through careful design of the layout, for example using public open space to ensure its future protection.



1888 OS Plan of the Manor Farm Moated Site - Scheduled Monument



View across the site to the scheduled Iron Age Monument



## Heritage at Risk

**Settlement site by Caudle Corner Farm, Fulbourn**

**Site Details**

- **Designated Site Name:** Settlement site by Caudle Corner Farm
- **Heritage Category:** Scheduled Monument
- **List Entry Number:** 1006878
- **Local Planning Authority:** South Cambridgeshire
- **Site Type:** Domestic > Settlement

**Assessment Information**

- **Assessment Type:** Archaeology
- **Condition:** Extensive significant problems
- **Principal Vulnerability:** Arable clipping
- **Trend:** Declining

Extract from the Historic England Heritage at Risk register.

# TRANSPORT CONTEXT OF THE SITE

## Key Employment Locations

The whole of the City Centre is within about 3.5 miles from the site, as is North East Cambridge (including the Cambridge Science Park, Cambridge Business Park and St John's Innovation Centre). The Cambridge Biomedical Campus is within 3 miles of the site, and the West Cambridge employment site is within 5 miles of the site. The Peterhouse Technology Park is within a mile of the site. These key employment locations are shown on the adjacent diagram

Based on Department for Transport advice that, for commuter journeys, cycling distances up to 5 miles are not uncommon, these key employment locations are therefore within a reasonable cycling distance of the site.

## Walking and Cycling Infrastructure

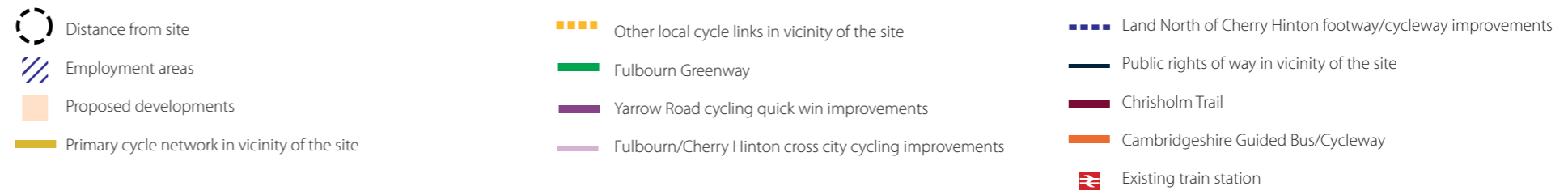
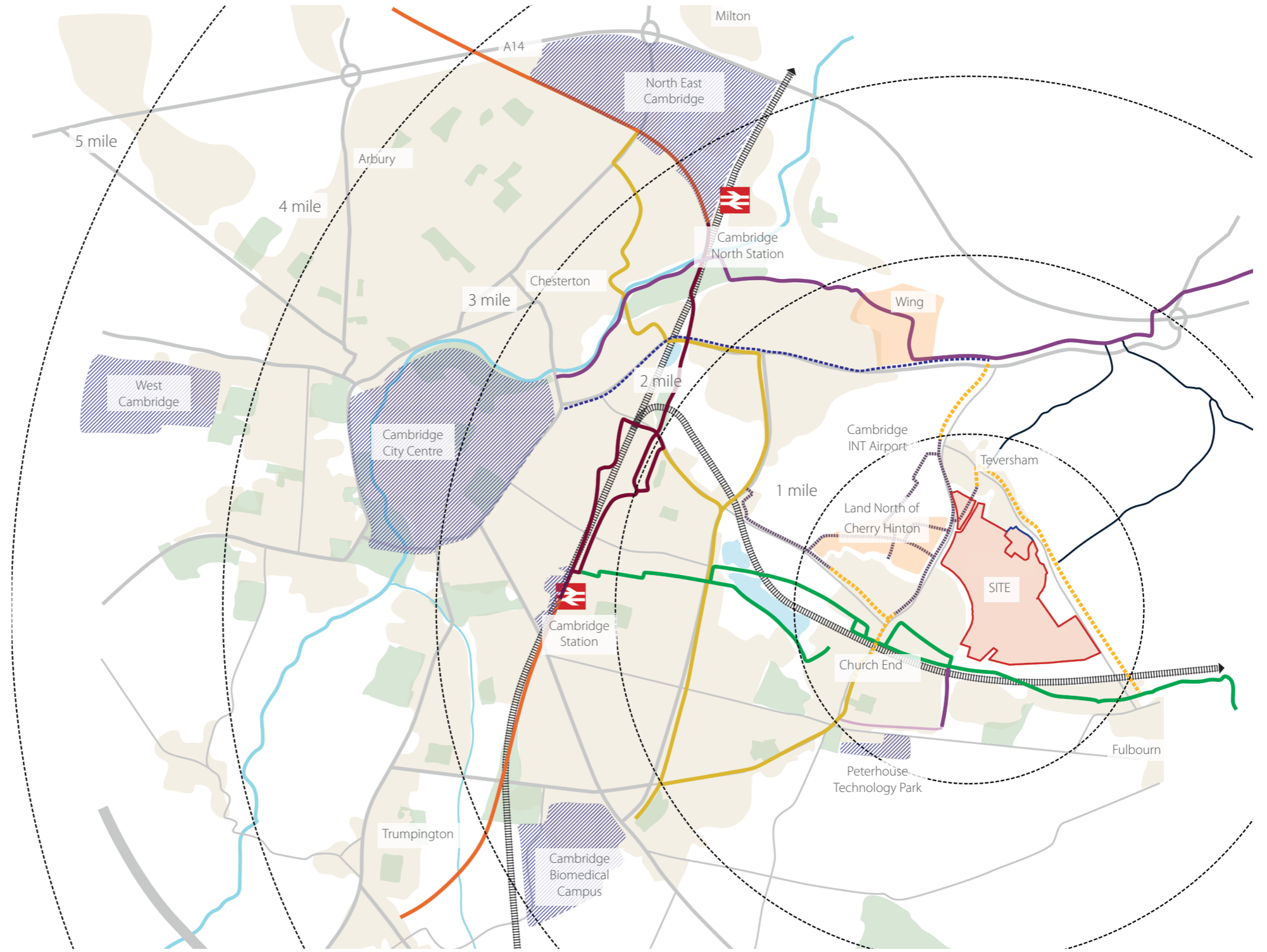
The site in the context of walking and cycling infrastructure is shown on Figure 2. This shows the 'Chisholm Trail', a series of new segregated cycle links parallel to the railway line through Cambridge linking the Cambridge Biomedical Campus with the Northern Fringe East. The Chisholm Trail is being delivered by the Greater Cambridge Partnership (GCP) and is expected to be completed within three to five years. This would mean the Trail is open and in use prior to development of Land East of Cherry Hinton.

The site's cycling accessibility will be improved as a result of the Fulbourn Greenway, being delivered by the GCP. The Fulbourn Greenway would connect Fulbourn with Cambridge City Centre and Cambridge railway station. Final designs are being prepared for agreement by GCP later in 2019. The expectation would be that the Fulbourn Greenway is open and in use prior to the development of Land East of Cherry Hinton.

Other transport improvements are planned as shown on Figure 2 which will make the Land East of Cherry Hinton site highly accessible by walking and cycling. These include:

An enhanced Jubilee Cycleway connecting with the Chisholm Trail and thereafter to the key employment area of the North East Fringe, being delivered by the Wing development;

- Walking and cycling improvements to Newmarket Road between Airport Way and East Road, also as part of the Wing development;
- New high-quality footway / cycleways along Coldham's Lane between Norman Way and Barnwell Road and on Airport Way, being delivered by the Land North of Cherry Hinton development;
- Local footway and cycleway improvements in Cherry Hinton and Teversham, being provided by the GCP as part of the Cross City Cycling and Cycling Quick Wins projects.





### Public Transport Services and Infrastructure

The site in the context of public transport services and infrastructure is shown on Figure 3. This shows that the site has good access by public transport. The Citi 1 bus service calls at stops on Gazelle Way up to every 10 minutes. Operated by Stagecoach, it provides connections between Cherry Hinton, Addenbrooke's Hospital, Cambridge railway station, Chesterton and Arbury.

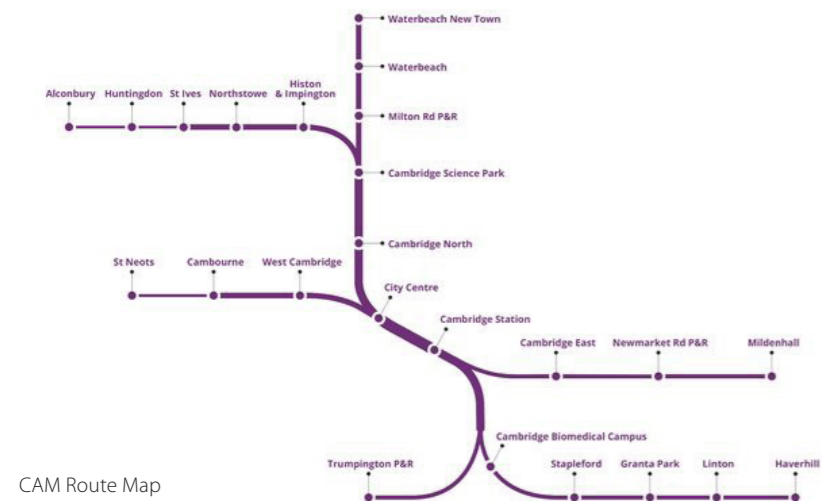
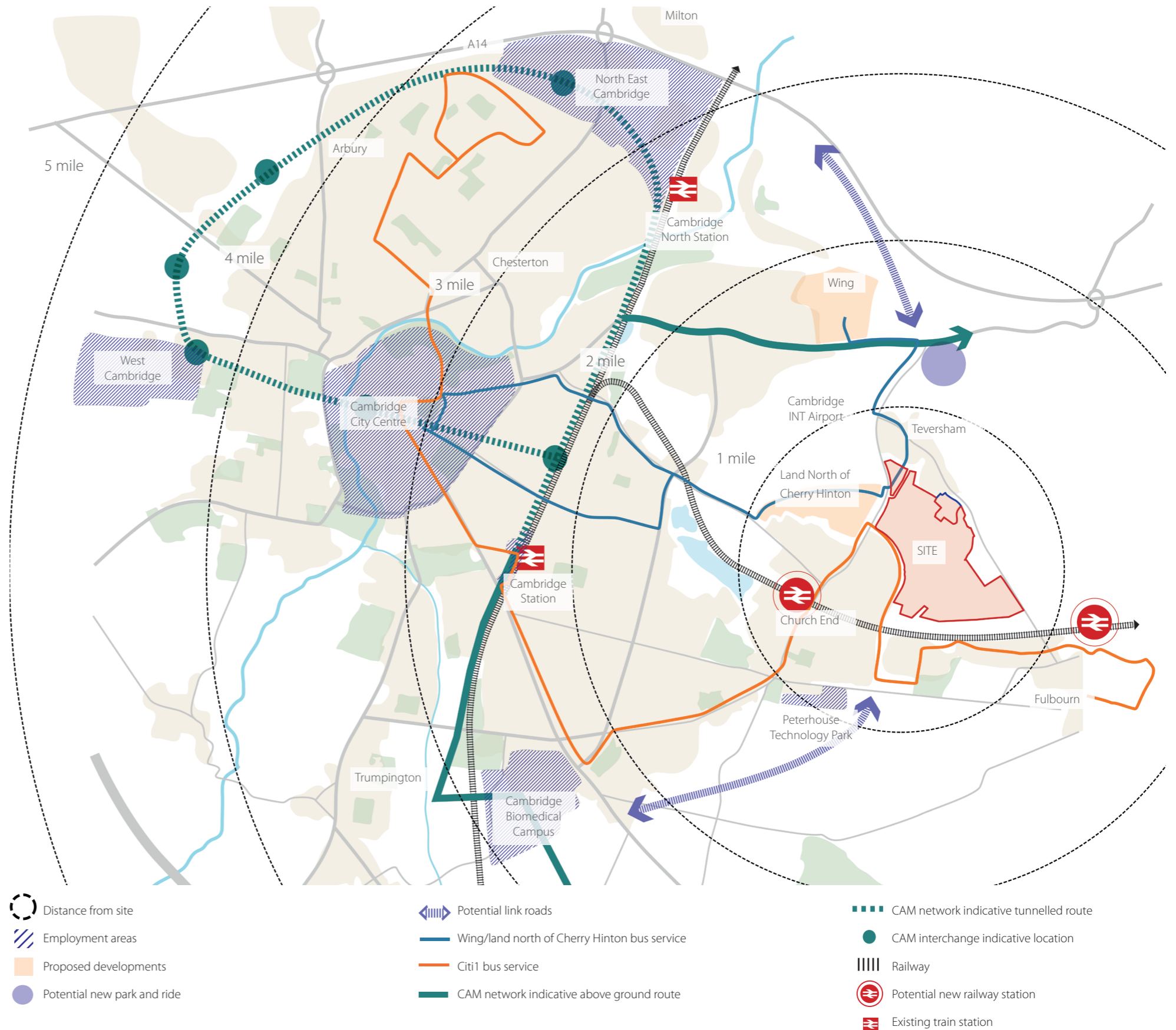
New and enhanced conventional bus routes are planned as part of the Wing and Land North of Cherry Hinton as shown on Figure 3, providing high quality bus services between these developments, the city centre and the Cambridge Biomedical Campus.

This public transport accessibility will be significantly enhanced through the Cambridge Autonomous Metro (CAM), a rapid mass transit system for the Cambridge area that is being promoted by the GCP. It will provide high quality public transport connections linking key employment locations with housing growth sites.

Phase 1 of the CAM network would run along the Newmarket Road corridor at surface level, passing Wing and the Airport towards Newmarket. Routes within the city centre would run in tunnels underground. Delivery of the early, surface-level phases of the CAM is proposed for delivery by 2025, which would be before the development of Land East of Cherry Hinton. The tunnelled section is not expected to be operational until the end of the 2020s, which would be before any significant development at Land East of Cherry Hinton.

Cambridgeshire County Council's Long Term Transport Strategy (LTTS) identifies further major public transport infrastructure requirements to cater for the transport demand associated with planned growth in the Cambridge area. The LTTS includes the potential for new railway stations in Cherry Hinton and Fulbourn on the Cambridge – Ipswich line. It also shows a new Park and Ride site south east of the Newmarket Road / Airport Way junction – this is linked with the GCP's CAM proposals, summarised above.

In the medium to long term, the LTTS includes the possibility of a new Southern Link Road between Cherry Hinton and the Cambridge Biomedical Centre. It also includes the possibility of a new Fen Ditton Link Road between the Newmarket Road / Airport Way junction and the B1047 between Fen Ditton and its junction with the A14. These LTTS schemes are longer term aspirations but nevertheless will assist with the public transport accessibility of the Land East of Cherry Hinton site.



CAM Route Map

# UNDERSTANDING THE SITE CONSTRAINTS

Analysis of the site and surrounding area has enabled an understanding of the various constraints of the which will influence proposals for the site. There a number of constraints identified of historical, heritage, planning and landscape significance. The degree to which these constraints affects and limits development varies. A sensitive approach to the key features of the site development will be taken to ensure a successful design. The adjacent diagram provides an overall summary of the key constraints to be considered within the design principles for the site.

Additional detail regarding the utilities and drainage constraints are set out below.

## Utilities:

A high pressure gas main runs through the site, along with a 132kV overhead power line carried on steel pylons. The high pressure gas main would need to stay in place but there is potential to put the 132kV power line underground, beneath the gas main subject to agreement with the gas and electricity providers. Appropriate restrictions on building around the gas pipe and 132kV power line will be incorporated into the emerging development proposals for the site.

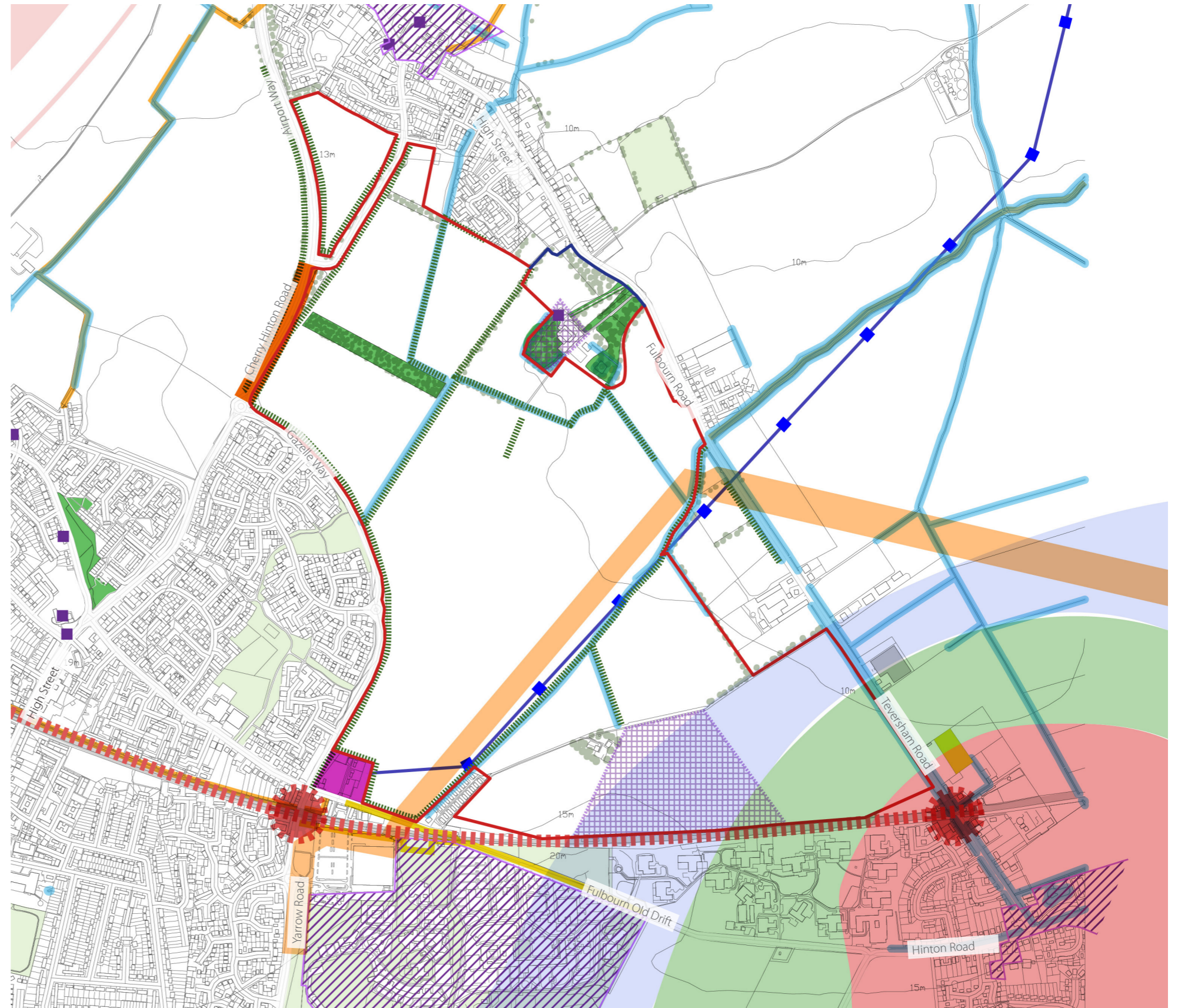
Other utilities within the site include a 600mm diameter water main, 33kV and 11kV overhead power lines, intermediate pressure gas main and a surface water pipe. These, however, can be diverted / lowered.

## Drainage:

The site falls within Flood Zone 1, and is therefore at a low risk of fluvial flooding. There is also a low risk of surface water flooding. A surface water flow path runs generally southwest – northeast through the centre of the site.

The site has a series of land drains, which interconnect with other land drains to surrounding areas. This includes the Caudle Ditch, which runs generally southwest – northeast through the southern extent of the site. The site is located in a Principal Aquifer area, which will mean that Sustainable Drainage System (SUDS) will be important for the final drainage design.

The south-eastern part of the site is located in a Groundwater Source Protection Zone, as defined by the Environment Agency.



- |  |   |                                |                                 |
|--|---|--------------------------------|---------------------------------|
|  | Conservation area                       |                                | Bridleway                       |
|  | Scheduled monument                      |                                | PRoW                            |
|  | Priority habitat, deciduous woodland    |                                | Power lines with pylons         |
|  | Main gas line                           |                                | Noise from airport              |
|  | Listed building                         |                                | Barrier/railway tracks          |
|  | Avoid vehicular access with airport way |                                | Railway/road crossing           |
|  | Priority habitat, traditional orchard   | <b>Source Protection Zones</b> |                                 |
|  | Electric plant                          |                                | Zone I - Inner Protection Zone  |
|  | Hedgerow                                |                                | Zone II - Outer Protection Zone |
|  | Water features and ditches              |                                | Zone III - Total Catchment      |



# OPPORTUNITIES TO BE ADDRESSED

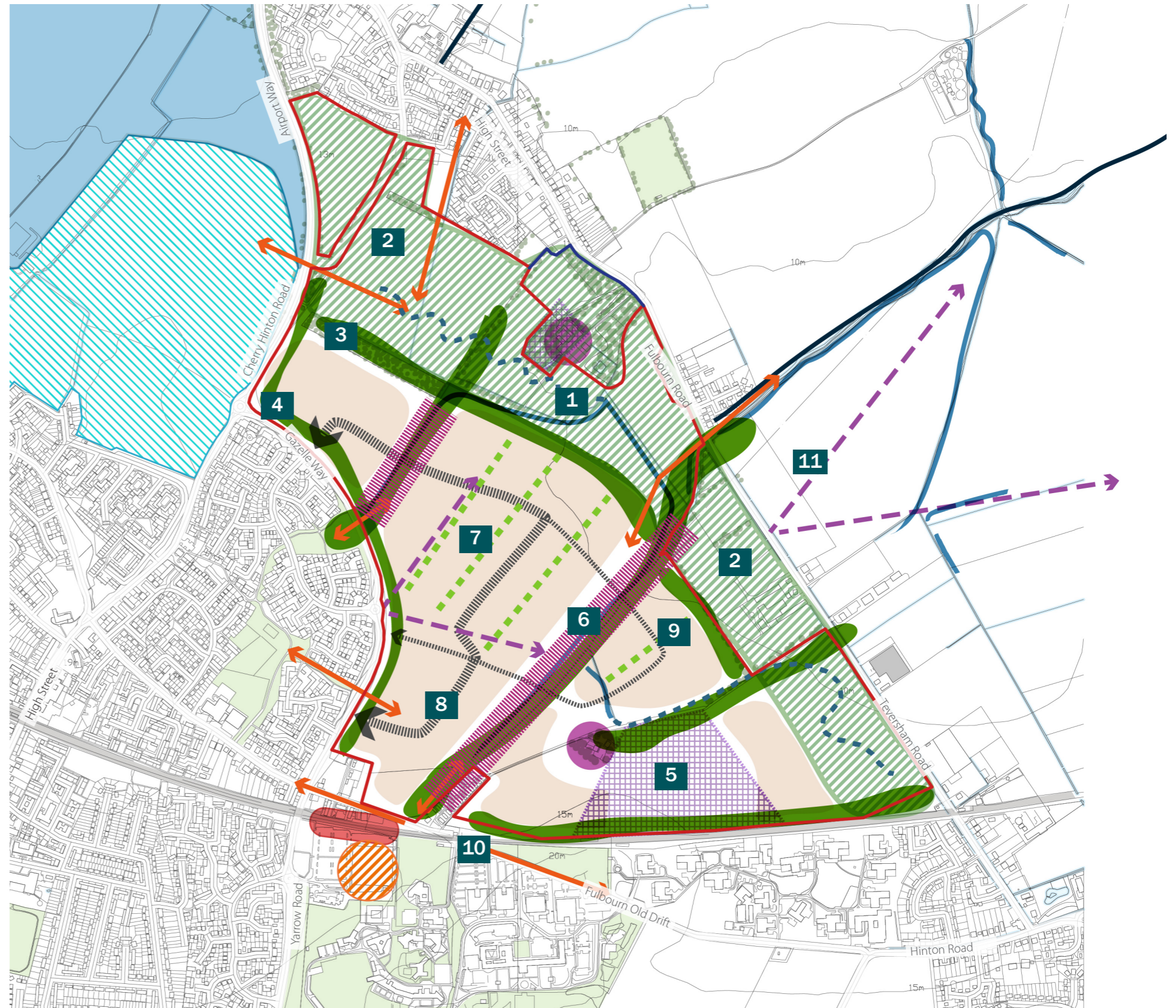
The Land at East Cherry Hinton provides a unique opportunity to provide, in one sustainable location, new homes, education and local retail within a rich landscape setting.

The existing green assets across the site can be retained and connected to create a strong landscape structure for the new development and for the open spaces circulation routes. Retention of the existing green structure, including trees, tree belts and hedgerows, also provides opportunities to retain and enhance ecology and existing green corridors linking to the surrounding green belt landscape and existing green corridors leading into the city centre.

There is an opportunity to integrate the proposals with existing pedestrian and cycle networks, providing a sustainable route into Cambridge as an alternative to reliance on car travel. There is also the potential to facilitate a railway station within the site in the future which could provide further public transport benefits to the new and existing community and local businesses.

- 1** Existing water course retained and enhanced for nature conservation.
- 2** Area restored to Fen edge natural landscape character including enhanced water courses, reed beds, naturalised meadows and copses.
- 3** Existing hedge and tree lines retained, enhanced and extended.
- 4** Boundary hedge widened.
- 5** New Common created as a public open space - protecting ancient monument
- 6** Linear wellbeing parkland including play, fitness, sports pitches, gardens, community growing, orchard and education trails
- 7** Green streets-low traffic and pedestrian and cycle priority .
- 8** Avenue streets - main routes
- 9** Neighbourhood greens, local open space.
- 10** Improve pedestrian and cycle connections
- 11** Preserve key open views.

- Scheduled monument
- Existing buildings within site boundary
- Change of land use for the airport
- Proposed main open space
- Adjacent Cherry Hinton site
- Existing POW
- Landscape buffer
- Existing water course
- Developable parcel
- Enhanced water courses
- Futureproofing for new train station
- Existing hedges and tree lines retained
- Possibility to improve pedestrian and cycle links
- Preserve key open space
- Proposed avenue street
- Proposed green streets with low traffic
- Adjacent TESCO shop





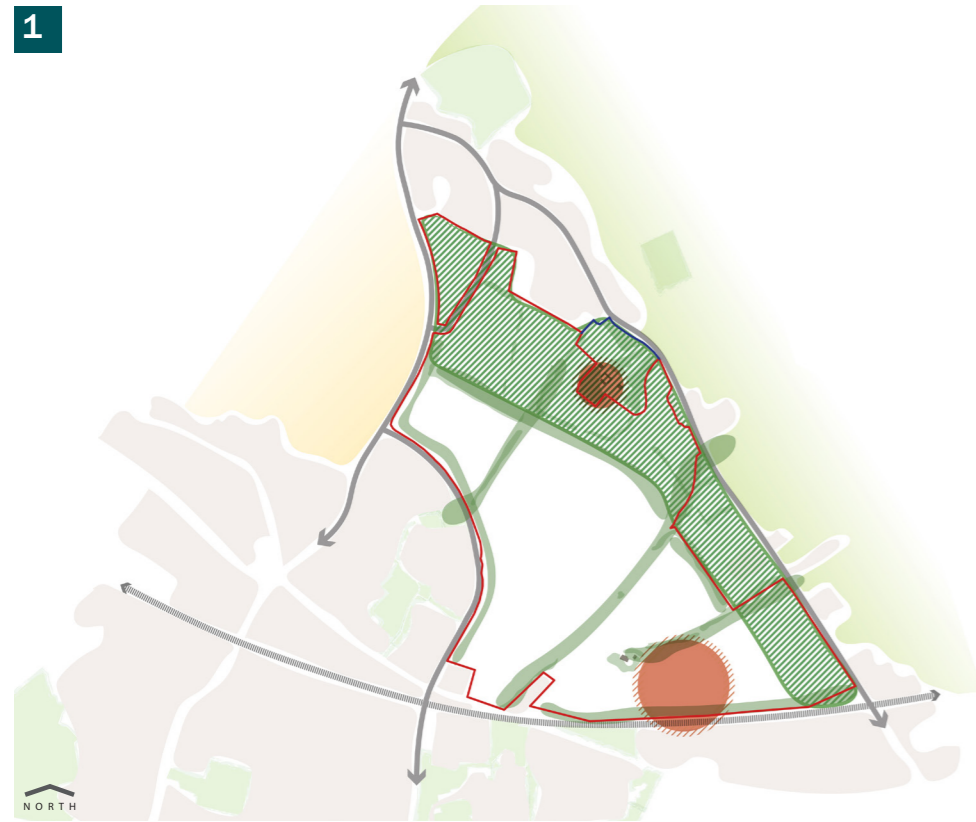
WILLOW BARNES



SECTION 02  
SITE VISION




# CONCEPT

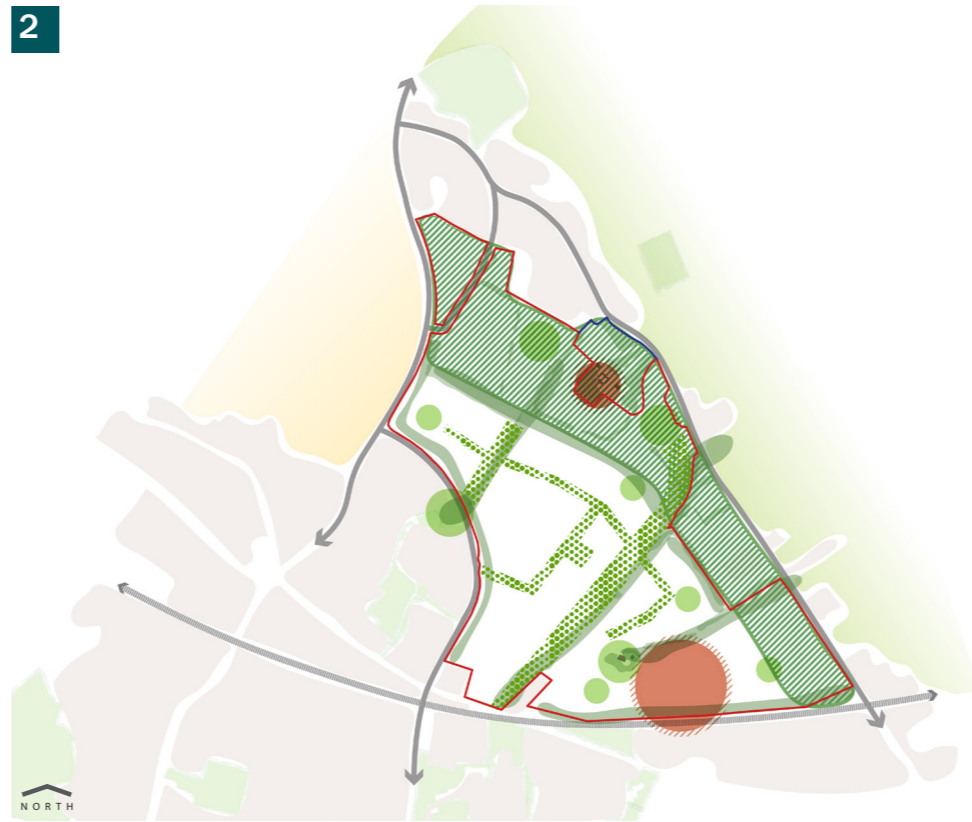
We envisage the new community at Land East of Cherry Hinton as a strong, cohesive and inclusive community. Recognising the green, ecological and naturalistic surrounds, this community will have very close ties to the landscape and neighbouring destinations, maximising the quality of life offered to new residents - it is about building upon strengths, creating a unique identity and bringing added value.



## Green assets



Existing hedgerows and tree belts will be retained where possible and will be used as the basis of a green structure for the new development. The existing planting will be enhanced and extended to create a green character to the neighbourhood and to enhance ecology, green corridors and links to the surrounding Green Belt landscape. The two existing scheduled ancient monuments will be retained, protected and integrated into the layout.

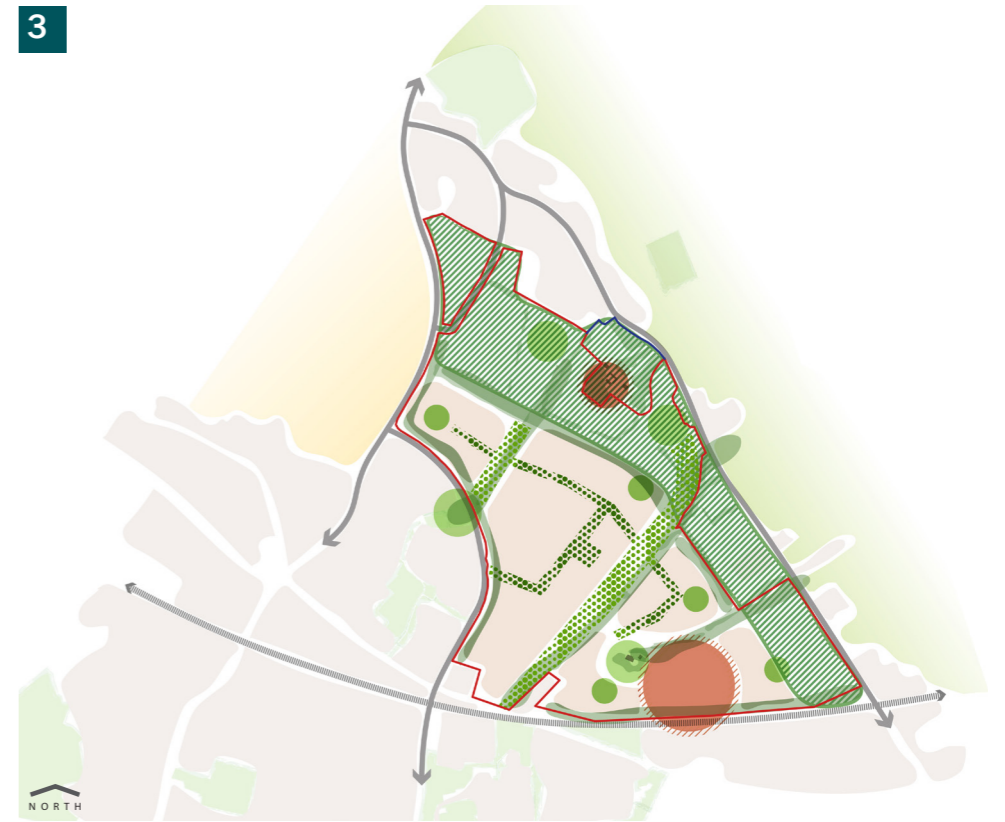
-  Improved landscape edge and buffer
-  Scheduled Ancient Monuments
-  Existing key hedgerows and tree belts



## Open space

The primary new open space will be along the north edge of the site where the Fen Edge landscape will be enhanced and will provide walking routes, cycle paths and a green setting for the new neighbourhood as well as a separation between the villages. Smaller green spaces, play areas and parks will be integrated with the new development, providing opportunities for sports, play, community events and community gardens. Planting and tree species and other landscape materials will be selected to tie in with the Fen Edge landscape and the surrounding context.

-  Proposed focal spaces
-  Proposed Green routes



## Development parcels

The new community will consist of a series of neighbourhoods interspersed amongst the green structure. Residential densities will vary throughout the site, responding to the surrounding context and landscape setting and to create a varied character and allow for a range of property types and tenures to create a more resilient and diverse scheme.

-  Developable Parcels



4



**Permeable streets**

Primary movement through the site will be provided by a primary street accessed from Gazelle Way. This central boulevard will become the main spine for the site with secondary and tertiary streets providing connectivity to residential neighbourhoods. Quiet quintessential lanes will provide access to homes on the green perimeter of the site.

 Key vehicular connections

5



**Community Focus**

A wide range of facilities will be provided to support the new community. These will include shops, homes, recreational facilities, employment, education and opportunities for community use spaces. There is potential within the site for a care home, self-build homes and community growing.



 Local Centre  
 Employment  
 Retirement Village / Community uses

6

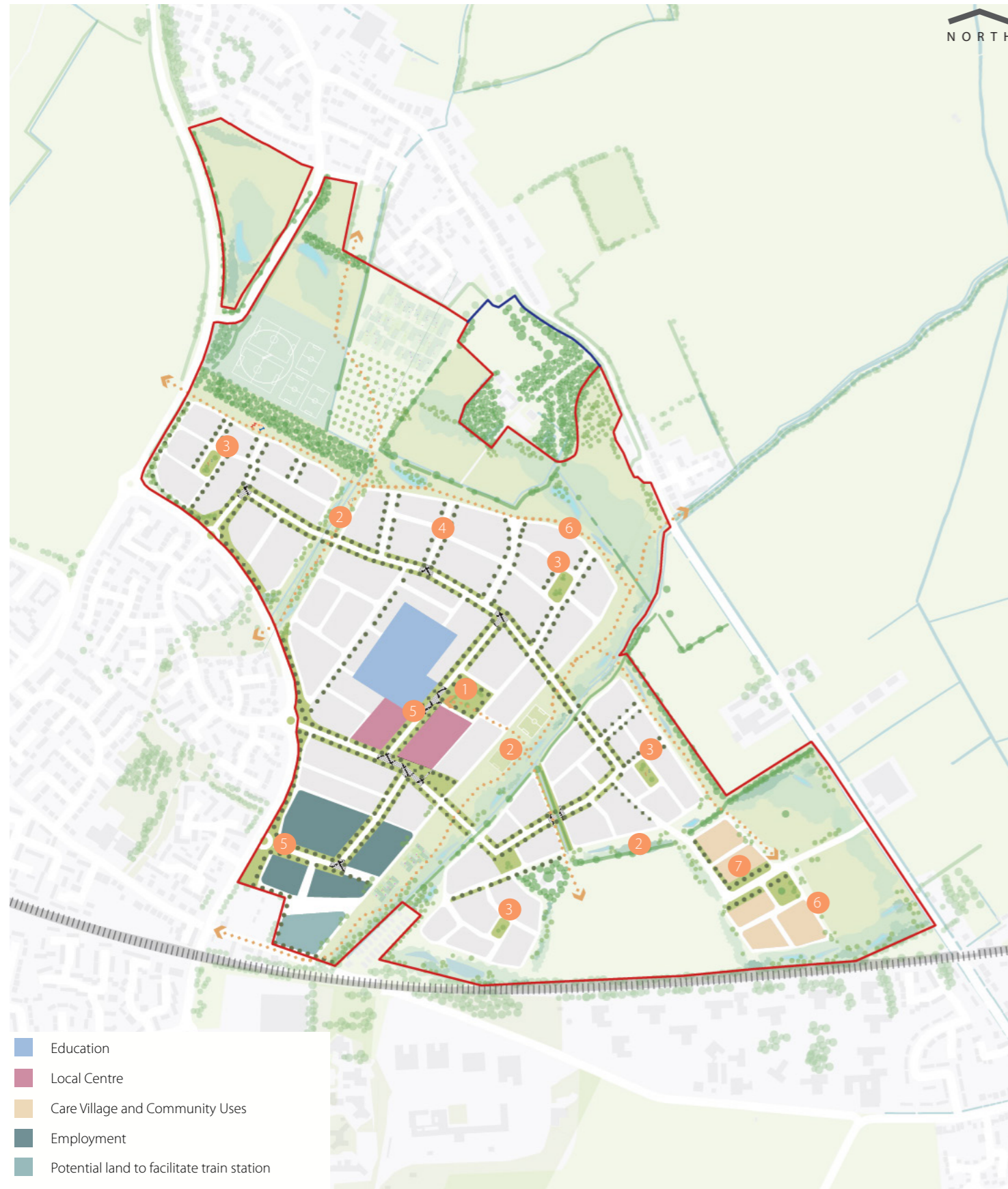


**Surrounding Connections**

Accessibility and clear links to the natural landscape and local centres will be created for well connected neighbourhoods. Connections to existing footpaths, cycleways and Public Rights of Way will be provided to promote sustainable transport routes. Within the site land will be future-proofed for a potential rail station, offering potential for additional enhanced north-south connectivity across the rail-line with existing and future employment areas to the south.

 Strengthened connections to the surroundings  
 Potential to facilitate a new train station

# FRAMEWORK MASTERPLAN



The Masterplan has been influenced by the site context, the location in the Green Belt and recent inner Green Belt boundary appraisals. Specifically the design retains a broad swathe of landscape along the northern edge of the site to maintain a separation between Fulbourn and Teversham and create a Fen land park. The initial landscape site analysis and initial review of Green Belt appraisals will be developed and will continue to inform the layout as the detail of the scheme evolves.

The development of the structure of the proposals has been designed to respond to the existing connections surrounding the site and proposed connections will be designed to prioritise pedestrians and provide for on-street cycling and cycle parking to promote sustainable transport modes.

A new local centre will be created at the natural “heart” of the site to be located within a short walking distance of the new homes. This will contain a variety of community facilities to support both new and existing communities with the potential to include retail, a medical centre, a retirement village and community uses. A primary school will also be provided.

The evolution of the masterplan will ensure that the character and massing prioritise retention of key views and the setting of the ancient monuments.

Key objectives of our masterplan include:

- 1 Create a central green to make a place where residents can gather and create a strong identity for the community.
- 2 Connect the community from the heart to the countryside through green routes which incorporate existing green and blue features to bring the wider landscape into and through the site.
- 3 Create a number of neighbourhood greens - this provides a strong identity within each neighbourhood enabling all residents ease of access to amenity space and aiding with way-finding through the site.
- 4 Allow built form and landscape to embrace one another - provide appropriate densities in the right locations to deliver a sense of openness in an urban setting.
- 5 Create gateway spaces, as hubs of activity, to welcome the new community and create meeting places for residents.
- 6 Create a strong landscape edge connecting the new community to the wider countryside and providing a setting and sensitive treatment suitable for the Green Belt context.
- 7 Opportunities for a residential Care Village to be integrated into a high quality landscape setting, incorporating community uses such as self-build, community orchards and allotments.





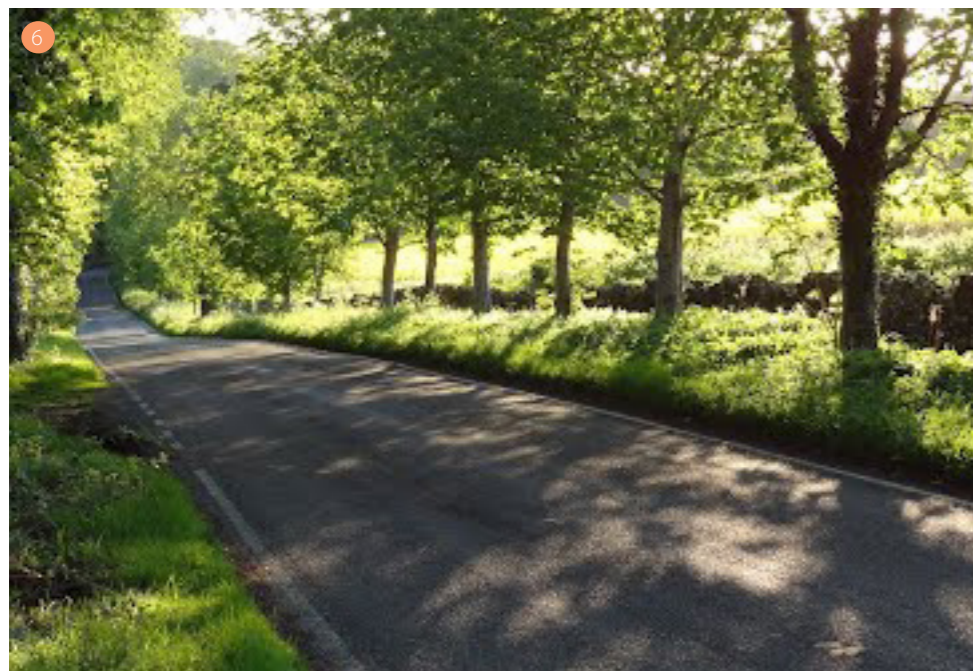
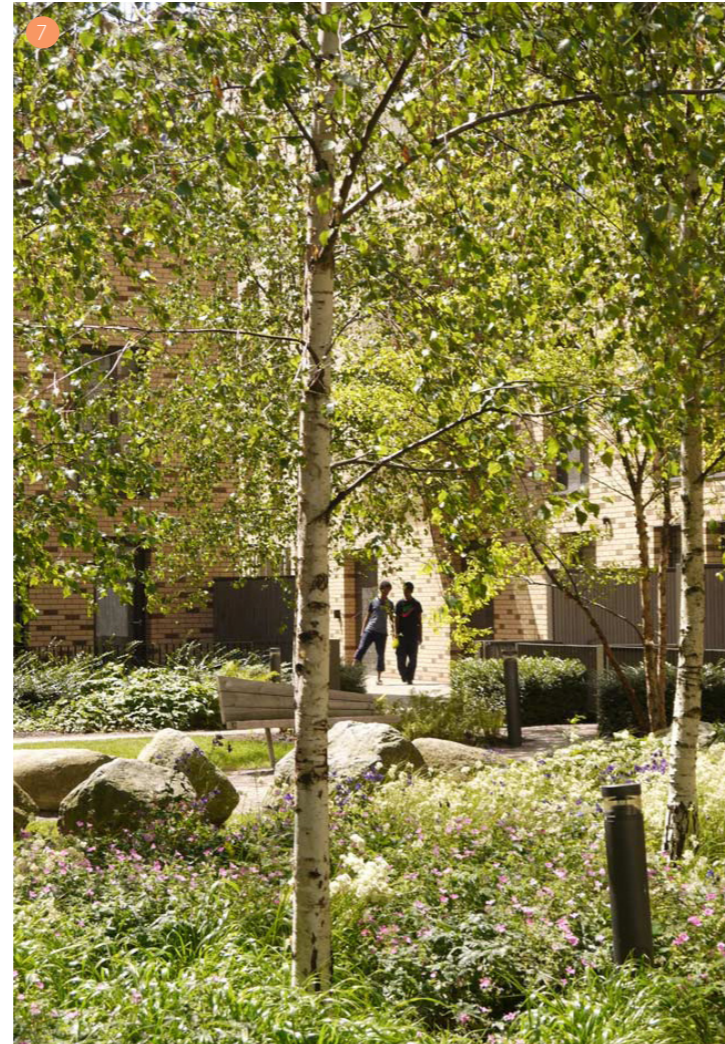
# LANDSCAPE STRATEGY

The landscape strategy is designed to integrate the new neighbourhoods into their Green Belt and landscape context and to protect and enhance the character of the Green Belt. The Green Belt Review appended to this document has informed the Landscape Strategy through the retention of strategic green breaks between Teversham and Fulbourn, underpinning the landscape led approach to the masterplan. Existing features such as hedge lines, tree belts and water courses will be retained, to form a framework of green infrastructure that respects the disposition and character of the existing landscape and significantly enhances nature conservation and benefit to wildlife.

The key objectives are:

- 1 **Strengthen connections:** with cycle and footpath connections to the surrounding villages of Teversham, Cherry Hinton and Fulbourn, and the countryside beyond.
- 2 **Fenland Park:** Create a fenland park between Teversham and Fulbourn. This park will recreate the natural fen edge landscape of the area with naturalised water courses, scrapes, reed beds and copses. It will be a haven for wildlife, contain footpath routes, and bird hides and integrate the development into the Green Belt countryside beyond.
- 3 **Linear Wellbeing Parkland:** two linear parks will be created that extend and reinforce existing hedge and ditches to form linear parks. They will be easily accessible to the new and existing communities and cater for all ages all year round. They will contain gardens, growing areas and orchards, areas of play, outdoor gyms and fitness trails and a series of sports pitches.
- 4 **The Common:** the scheduled ancient monument site will be protected and transformed into a meadow for informal recreation.
- 5 **Existing Hedges and Tree Lines:** The key hedge and tree lines will be protected and enhanced with new native planting to reinforce the existing landscape character. Existing low boundary hedges will be raised and maintained for nature conservation. Gaps will be retained to afford open views across the site visually integrating it with its surroundings.
- 6 **Green Streets and Avenues:** A network of green streets will have a green character containing trees, planted verges and swales and will have low traffic volumes and speeds to encourage walking and cycling. The main spine road through the development will be lined with avenue trees and will contain wide planted verges and hedges to create a green and sheltered character to the development.
- 7 **Neighbourhood Greens:** Within the development a series of greens will be formed providing immediate access to open space for residents. These are envisaged as open lawns, tree lined and areas of planting. Some may contain ponds and swales.





# TRANSPORT AND ACCESS STRATEGY

Land East of Cherry Hinton will be a residential-led mixed use development, and so residents of the development will be able to meet many of their day-to-day needs by the provision of services and facilities within the site, reducing the need to travel into Cambridge. Because the distances to these local services and facilities will be relatively short, the opportunities for these day-to-day trips to be made within the site on foot and cycle will be maximised.

## Promote Walking and Cycling

Significant improvements to local walking and cycling routes have already been secured as part of the Wing and Land North of Cherry Hinton residential developments. This includes local footway and cycleway improvements, along with more significant improvements to the Jubilee Cycleway and the new Coldham's Lane footway / cycleway. Further pedestrian and cycle improvements are planned by the GCP, including the Fulbourn Greenway and the Chisholm Trail.

Land North of Cherry Hinton will deliver high quality walking and cycling links to provide connections to these walking and cycling improvements, and therefore enable the site to be a fully integrated part of the future high-quality walking and cycling network in Cambridge. Indicative connections are shown on the adjacent diagram. This will make walking and particularly cycling an attractive means of travel between the site, the city centre and the key employment locations of the North East Fringe, Cambridge Biomedical Campus, Peterhouse Technology Park and West Cambridge. These are all within a commutable cycling distance of the site.

Logical connections will be provided with the adjacent Land North of Cherry Hinton development and existing areas of Cherry Hinton, Teversham and Fulbourn. This will be to achieve good connectivity and therefore assist with the integration of the Land East of Cherry Hinton with the rest of Cherry Hinton, including not only the Land North of Cherry Hinton development but also the more established part of Cherry Hinton.

There are a wide range of local services and facilities in Cherry Hinton which would be within walking distance of the site, and a wider area of Cambridge would be within cycling distance, so achieving high quality pedestrian and cycle links between the site and Cherry Hinton, along with a high quality internal pedestrian and cycle movement network, will be an important element in delivering a development that promotes non-car modes of transport and reduces the reliance on the private car.

Walking and cycling will be encouraged as part of a Travel Plan that will be prepared for the development, the main aim of which will be to seek a reduction in the number and length of car trips generated by the development, while also supporting more sustainable forms of travel and reducing the overall need to travel.



### Indicative Walking and Cycling Strategy

- On-street footpath
- ← Proposed footpaths and cycle route
- Pedestrian access point
- - - Other local cycle links in vicinity of the site
- Fulbourn Greenway
- - - Land North of Cherry Hinton footway/cycleway improvements
- Public rights of way in vicinity of the site
- ⊕ Potential location for future train station



Cycle Counter



Cambridge North Bus and Cycle Parking



Ninewells, Cambridge footpath and cycle routes



### Encourage Public Transport

The public transport strategy for the development will build on the significant improvements to the public transport network that are planned for this area of Cambridge. The site would link with the GCP's CAM network by providing a high-quality bus route between the site and Newmarket Road at the junction with Airport Way. This could be an extension of the CAM and / or an enhancement of the conventional bus service improvements being delivered by the Wing and Land North of Cherry Hinton developments. This would then provide quick and frequent public transport links with the key employment areas of Cambridge City Centre, West Cambridge and the Northern Fringe East. Indicative connections to the public transport network are shown on the diagram on the previous page.

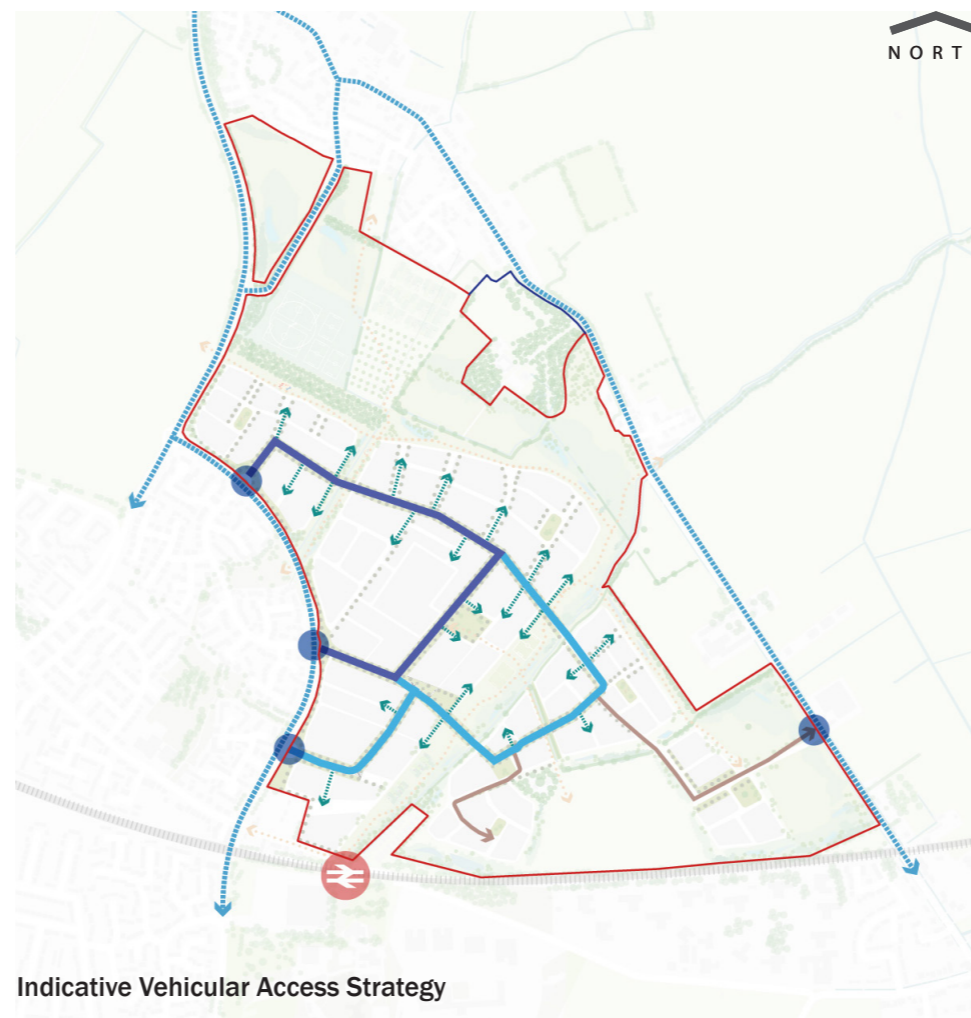
The development would seek to enhance the Citi 1 bus services that pass the site along either Airport Way or Gazelle Way, so that it penetrates the site. This would provide a high-quality public transport route between the site and the Cambridge Biomedical Campus.

Land on the southern boundary of the site has been identified to support the delivery of a new railway station in Fulbourn on the Cambridge – Ipswich railway line as shown indicatively on the adjacent diagram. This might be an alternative to the Long Term Transport Strategy (LTTs) plans for re-opening Cherry Hinton and Fulbourn stations. This 'Cambridge East' station would provide a step-change in the public transport accessibility of this area of Greater Cambridge.

In the longer term, Land East of Cherry Hinton could assist with the delivery of an outer orbital section of the CAM network, linking the Northern Fringe East with the Cambridge Biomedical Campus via the LTTs's Fen Ditton Link Road, improvements to the Airport Way corridor, linking through Land East of Cherry Hinton (including the potential Cambridge East station) and then via the LTTs's Southern Link Road.

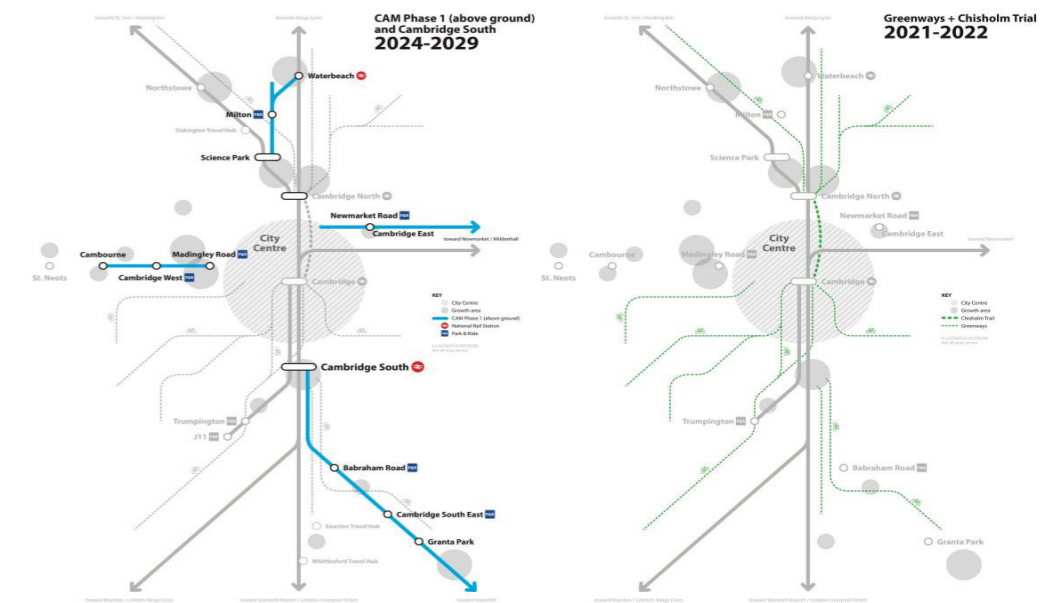
### Vehicular Access Strategy

The development would have three points of vehicular access onto Gazelle Way, likely to be at its existing junctions with Eland Way. There is potential for an additional, minor access from Teversham Road. These points of access are indicated on the adjacent diagram. Within the site, the layout should be designed in accordance with the principles of Manual for Streets, which puts movement on foot and cycle before that by private car.



Indicative Vehicular Access Strategy

- Tertiary road
- Primary road
- Secondary road
- - - Indicative residential green streets
- - - Existing adjacent roads
- Vehicular access point
- ⊕ Potential location for future train station



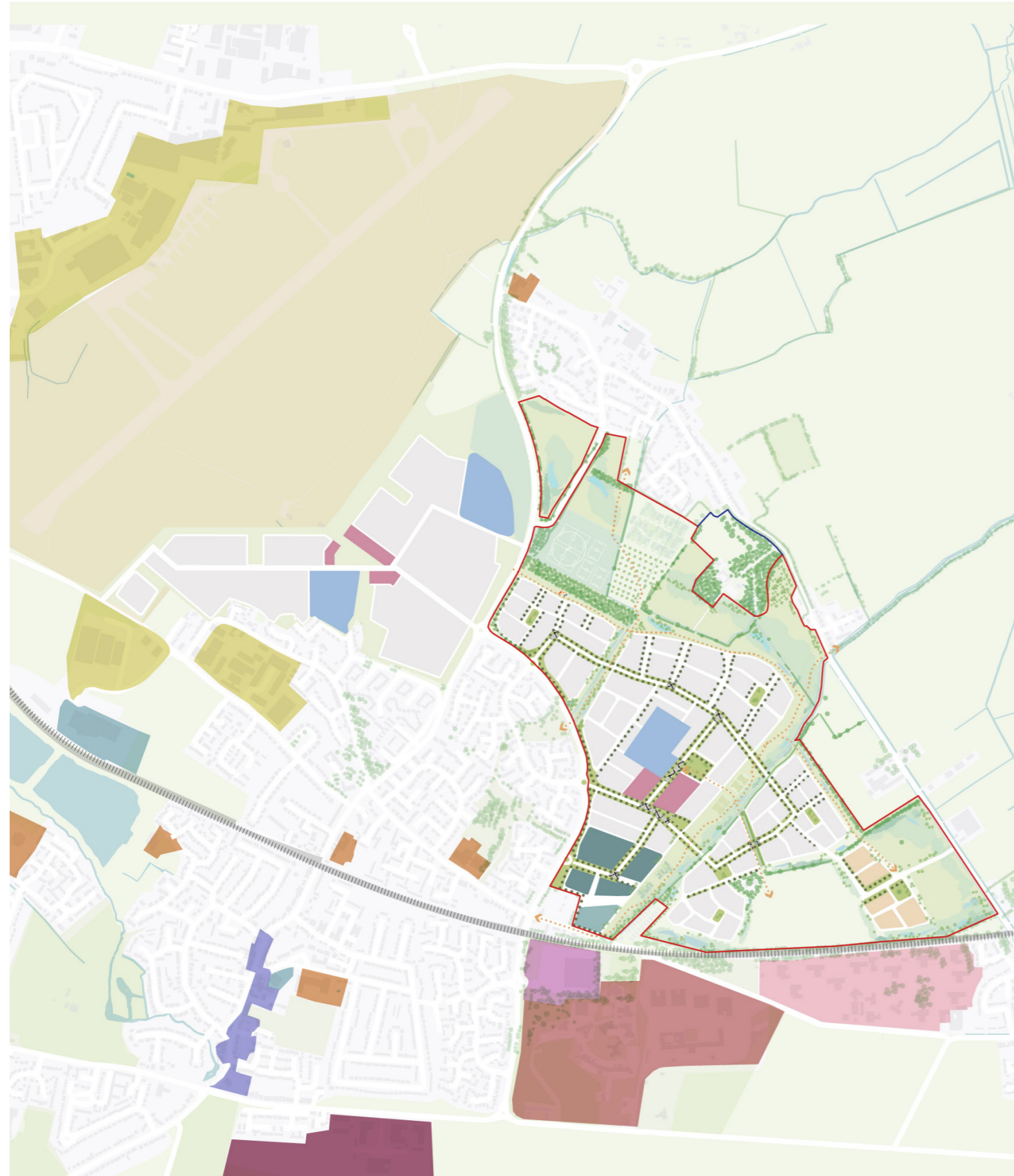
CAM 2024 to 2029

Chisholm Trail and Greenways map



Cambridge bus transportation

# A MIXED USE NEW COMMUNITY



To ensure that East Cherry Hinton is a balanced new community, with opportunity to live and work within the community, a range of land-uses will be provided to provide day-to-day facilities for new and existing residents. Education, employment and community uses amongst others will be provided, set within a high quality landscape setting, to create a sustainable place for people to live, work and play. The adjacent diagram highlights the proposed land uses within the context of the existing and forthcoming uses within the local area.

The following land uses are to be considered within the new community:

1. Residential: the development will provide approximately 1,200 new homes including a mix of housing typologies, tenures and affordability.
2. Education: a new primary school is proposed at the heart of the community, within walking distance of the new neighbourhood and the local centre.
3. Employment: a range of job and business opportunities will be provided within the development, within a specific employment zone and also within the local centre and supporting uses.
4. Local Centre: the local centre will be a central hub for new residents to meet and will provide day-to-day facilities with the potential for a supermarket, retail, healthcare, leisure and community amenities.
5. Potential Train Station Hub – an area adjacent to the employment area has been shown to facilitate a new train station. This is located adjacent to the existing and proposed employment uses to create an employment destination, connected by sustainable transportation.
6. Retirement Village – there is the potential within the site to provide a residential care home, set within an attractive landscape setting.

**Proposed facilities:**

- |   |   |
|---|---|
| <span style="color: blue;">■</span> Education                     | <span style="color: teal;">■</span> Employment                                      |
| <span style="color: purple;">■</span> Local Centre                | <span style="color: lightgrey;">■</span> Potential land to facilitate train station |
| <span style="color: orange;">■</span> Community Uses / Extra Care | <span style="color: lightgrey;">■</span> Residential                                |

**Existing facilities:**

- |  |   |
|--|---|
| <span style="color: brown;">■</span> Education/school    | <span style="color: red;">■</span> Hospital   |
| <span style="color: yellow;">■</span> Employment         | <span style="color: blue;">■</span> Cherry Hinton high street   |
| <span style="color: teal;">■</span> Leisure centre       | <span style="color: pink;">■</span> Ida Darwin Hospital site (Proposed residential and hospital redevelopment)) |
| <span style="color: orange;">■</span> Airport            | <span style="color: darkred;">■</span> Peterhouse technology park   |
| <span style="color: purple;">■</span> Large scale retail |   |





# A DAY IN EAST CHERRY HINTON

A typical day will offer opportunities to work, learn, create, live, play and eat 365 days a year, all centralised around high quality interactive and renewable public realm and landscaping.



# CAMBRIDGE QUALITY CHARTER

The new community will respond to the 4 C's Cambridgeshire Quality Charter. In addition the site will seek to incorporate opportunities for **Commerce** and will be underpinned by a vision which responds to the surrounding **Countryside**.



## Community

- The future evolution of the proposals for the site will be developed through engagement with local residents and stakeholders to develop the vision and opportunities for the site.
- Provide community facilities, opportunities for interaction and engagement within public realm and landscape spaces
- Create a strong green framework which permeates through the site with opportunities for active engagement interaction.
- Centrally located local centre to support the new community
- Range of types of housing and mix of tenures
- Opportunities for social infrastructure such as a new primary school, health centre and leisure facilities
- Opportunity for specialist housing to be integrated within the masterplan
- Potential to provide a Retirement Village and Care Home



## Connectivity

- Opportunity within the site area to facilitate a new train station to serve the existing and new employment within the area
- Opportunity to connect to existing Public Rights of Way and footpaths to integrate into the surrounding settlements and promote walking and cycling
- Creation of a strong pedestrian and cycle network within the site - integrated into the green infrastructure to create pleasant spaces for the community to utilise
- Potential to connect the site with the existing bus network and improve connections to the wider network.
- Create a clear street framework within the site to ensure legibility and a safe environment



## Character

- Bring the surrounding countryside into the site to create a landscape led sense of place
- Utilise existing site features to create a green and blue structure which respects the past use of the site
- Create a variety of densities and appropriate house types which respond to their location and the Green Belt setting.
- Reflect the local vernacular and characteristics of the area
- Provide a wide range of public spaces with a variety of facilities for all ages



## Climate

- Energy efficient built development
- On-site renewable energy
- Supporting and facilitating sustainable modes of transport with pedestrian and cycle routes incorporated within green routes
- Mutually supportive green and blue infrastructure
- Opportunities to enhance biodiversity through network of green corridors and spaces and SUDs features.
- Infrastructure for new transport technologies, such as electric cars



## Commerce

- Providing jobs close to homes
- A local centre to support the new community
- Provision of jobs close to existing sustainable transport infrastructure
- Supporting the economic growth of Cambridge





# HEALTH AND WELL-BEING

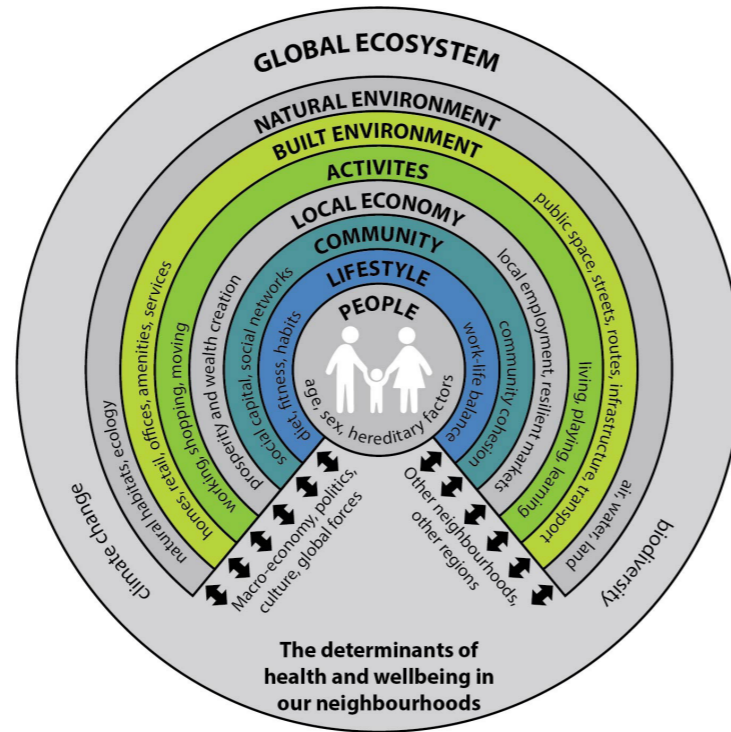
Generously landscaped, diverse and well-maintained green spaces will promote good outdoor air quality, improve existing ecological habitats, enhance biodiversity and provide biophilic features that support mental health and wellbeing.

The masterplan has been designed to promote healthy and active lifestyles, and will be a co-created community that addresses the needs and aspirations of the residents and key stakeholders. Designed with a 'people first' approach, the development aims to promote design features that encourage active living through active design features, community cohesion and social engagement. The adjacent diagram highlights key factors which will continue to be considered for the development as the vision for the site progresses to ensure the creation of a healthy and sustainable neighbourhood.

The responsiveness to the local context, including key heritage and landscape features, and existing connections, creates a safe, secure and pedestrian friendly environment that not only promotes sustainable transport but also encourages community engagement and an awareness of the local ecology and environment. The new local centre and its community facilities will serve to create a sense of pride and ownership.

Generously landscaped, diverse and well-maintained green spaces will promote good outdoor air quality, improve existing ecological habitats, enhance biodiversity and provide biophilic features that support mental health and well being.

Healthy, energy efficient homes that promote physical health, mental well being and good family relationships through design and careful selection of materials will help to improve the quality of life and promote positive outcomes for the residents. A range of housing types and tenures will also ensure that the development promotes social inclusion and diversity.



## Healthy Neighbourhoods

- RESILIENCE**: use sustainable urban drainage systems and permeable surfaces to mitigate flood risk and carefully consider passive cooling techniques and urban heat island effects to mitigate overheating
- EMPLOYMENT**: access to a range of business networks, training opportunities and employment options
- HEALTHY HOMES**: homes that promote physical health, mental wellbeing and good family relationships (see diagram 'What is a healthy home?')
- NOISE**: control urban noise sources through sound insulation and site planning
- AIR QUALITY**: monitor and minimise air pollution from traffic and energy generation
- HEALTHCARE**: good access to quality healthcare and supporting services
- EDUCATION**: good access to a range of primary, secondary and higher education options
- COMMUNITY**: provide community facilities and engage with them throughout the development process to create a sense of pride, ownership and cohesion
- CONNECTIVITY**: connect public realm to local and strategic cycling networks, walking routes and public transport provision
- ACTIVE DESIGN**: walkable neighbourhoods that encourage walking, cycling, car clubs, and the use of public transport to reduce car dependence and improve levels of physical activity
- HEALTHY FOOD**: access to fresh, nutritious and affordable food, support local food shops and farmers, create opportunities for local food growth
- GROCERY**: well-integrated and easily accessible mix of homes, shops, schools, services, cultural venues and local businesses
- GREEN SPACES**: diverse and well-maintained green open spaces to promote community interaction, fitness, and mental health
- ART & CULTURE**: access to public art and cultural venues that inspire the mind and uplift the human spirit
- ACTIVE LIFESTYLES**: access to a range of leisure, sports, fitness and recreational facilities to encourage regular physical activity and exercise
- CONSTRUCTION**: minimise the environmental impact of construction activity, including reduction of waste, dust, noise, vibration and emissions
- PLAY SPACES**: provide a range of safe and secure play provision for children and young people
- BIODIVERSITY**: improve existing habitats and promote green roofs and living walls to enhance biodiversity and ecology
- ACCESSIBILITY**: accessible and inclusive neighbourhoods that support independence and empowerment
- MIXED-USES**: well-integrated and easily accessible mix of homes, shops, schools, services, cultural venues and local businesses
- POLICE**: strong community engagement, an active and well-maintained public realm, safe and well-lit pedestrian routes and traffic calming measures that make neighbourhoods feel safe and secure
- SAFETY & SECURITY**: strong community engagement, an active and well-maintained public realm, safe and well-lit pedestrian routes and traffic calming measures that make neighbourhoods feel safe and secure

# FUTURE PROOFING AND SUSTAINABILITY

The proposals for Land East of Cherry Hinton will be designed with sufficient flexibility and resilience in order to enable the new community to evolve and respond to changing conditions, enabling adaptation across the lifecycle of the community.

## Placemaking for the Future

The masterplan and vision for East Cherry Hinton will be developed to provide a framework of key design principles to guide the development as it comes forward. The framework will be designed with sufficient flexibility in order to enable the new community to evolve and respond to changing conditions, enabling adaptation across the life cycle of the community.

This can be considered at a number of levels:

### 1) Context

Planning for the future should look beyond the borders of the development itself. New communities sit within the context of existing settlements and East Cherry Hinton will be designed to respond to changing influences in Cherry Hinton, Teversham, Fulbourn and Cambridge.

### 2) Community

Creating a holistic community is central to the ethos of East Cherry Hinton. Communities should be allowed to grow and adapt as a result of active participation. Flexibility will be granted within the vision to correspond and respond to changing demographics, economic and social needs and life circumstances of residents.

### 3) Neighbourhood

Individual neighbourhoods within the community will be people focussed, sustainable and designed to anticipate change. Neighbourhoods are expected to provide facilities and infrastructure to meet the basic day-to-day needs of residents and will need to be robust and resilient to cope with changing demands of their inhabitants as numbers fluctuate.

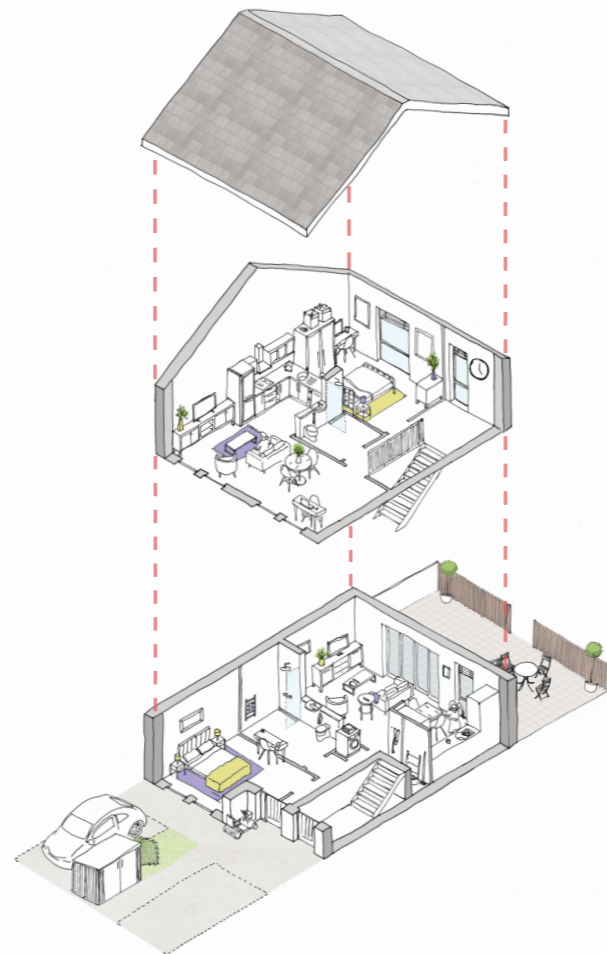
### 4) Home

In addition to environmental changes, future proofing homes requires consideration to changing demographics, household composition and life circumstances.

**Age-in-place homes** - Enabling older people the opportunity to remain within their existing community as they age.

**Inter-generational living** - Homes where different generations live next to one another offering benefits to both parties.

**Multi-generational homes** - a home with a self-contained studio annex. The flexibility of the layout allows for changing resident circumstances.



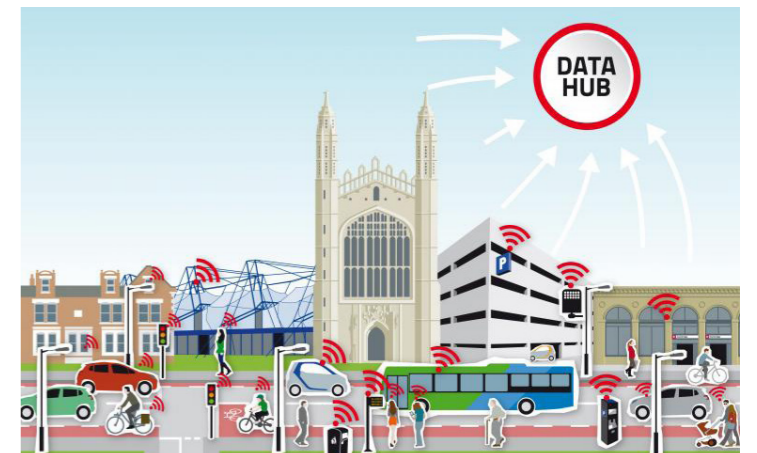
Inter-Generational Living

## Future Mobility

The way people are travelling is changing, with some very significant shifts in travel patterns over the last 20 years. This is particularly so amongst younger people, whose propensity to travel by car has fallen over this period, in men by some 47%. Whilst the older generation are generally travelling by car a little more, the trends amongst younger people away from car travel might have very significant implications for future transport provision.

Over the next 20 years, further changes to travel patterns are likely, resulting from new innovations and emerging trends such as the following:

- Big data – The digital revolution has bought us so much data that it is possible to plan better for people's needs;
- Internet of things – this is about connecting devices over the internet, allowing the travel industry to track people and vehicles to reduce the need to travel or co-ordinate seamless travel;
- Connected vehicles – a system that allows vehicles to communicate with each other and the world around them, connecting them to the Internet of Things. It supplies information to allow drivers make informed decisions about their travel;
- The sharing economy – we are sharing cars, taxis, lifts, driveways, houses, tools and many more things. This could change when and how we travel, and whether we do it together;
- Mobility as a Service – MaaS will offer consumers access to a range of vehicle types and journey experiences. An app would allow you to select your travel choice. Alerts and information will guide you on your journey to your destination, giving real-time information, on where and when to get each means of travel;
- Driverless vehicles – these already exist and are being trialled by many manufacturers. The UK has one of the best regulatory regimes for testing automated vehicles in the world, therefore providing a good platform for developments in this industry.





### Future Housing

Chancellor Hammond's recent announcement of proposals for a new 'Future Homes Standard' envisions a future where all new homes are built without fossil fuel heating and to world leading levels of energy efficiency by 2025. While the details have not yet been specified, this would possibly indicate a near-zero or zero carbon standard, support for micro-renewables, and the use of smart grid and energy storage solutions for new homes. These future homes would need to be energy generating, with any surplus stored for sharing across a local electricity network.

These homes would also need to be 'fit for the future' in terms of addressing societal challenges, including homes that are designed for health and well-being as well as reduced environmental impacts. These homes will need to be resilient and reflect a performance that will meet the challenges presented by climate change, evolving demographics, and changing lifestyles.

At this year's MIPIM conference, former General Secretary of the UN Ban Ki Moon called for action to ensure that our future cities are "resilient and sustainable, creative and innovative, and inclusive and equitable." Our homes for the future should reflect this - not only will they be resilient to climate change, embody the sustainable use of our resources, offer creative solutions to local challenges and be a showcase of the latest innovations in housing and construction, but they will also reflect the needs of the community, and provide an inclusive environment built on principles of social equality and justice that will enable the local residents and businesses to thrive.

The world is also rapidly changing and even today, we are presented with a variety of interesting smart home technologies that offer improved comfort, quality of life, convenience and cost savings. Connected via the 'internet of things', these devices offer the possibility of controlling everything in your home - from temperature to lighting to laundry and even food management - from your smart phone, from anywhere in the world, 24 hours a day. Sensors and monitoring devices are also coming to the forefront, making real-time and cloud hosted data more accessible and affordable for a non-technical audience, and, in conjunction with wearables, has made data on issues that affect personal health and well being, such as temperature, CO2 levels, indoor air quality and noise levels, much more visible and tangible.

Houses of the future will probably build on all of these current technologies and lead to a new generation of 'cognitive' buildings - buildings that combine these smart appliances and devices with the data being generated by the monitoring devices, as well as the body of 'big data' that exists on the cloud, to deliver homes that are more intelligent and dynamically responsive to people's needs and behaviours. These future homes will require a robust and resilient IT and power infrastructure to thrive, and we need to ensure that our buildings are designed with this in mind, including an awareness of design features (e.g. metallic finishes and Faraday cages) that may prevent these smart features from working efficiently without significant refurbishment.

### Healthy Homes

