



# NORTHSTOWE Phase 3A

Design and Access Statement  
(Incorporating Design Principles Document)

January 2021



Homes  
England

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## Executive Summary

# Executive Summary

*Northstowe is a planned new town of approximately 10,000 homes to the North West of Cambridge. It aspires to be a vibrant 21st Century settlement enabling sustainable lifestyle choices and patterns of living.*

Located north west of Cambridge, Northstowe is one of the largest new settlements in the country and is built on the former RAF Oakington base. When complete, Northstowe will be the home of around 25,000 people.

This Design and Access Statement is submitted in support of the Phase 3A Outline Application. The following development description applies:

***'Outline planning application for the development of Northstowe Phase 3A for up to 4,000 homes, two primary schools, a local centre (including employment, community, retail and associated services, food and drink, community, leisure, residential uses and other accommodation), secondary mixed use zones (including employment, community, retail and associated services, food and drink, community, leisure, residential uses), open space and landscaped areas, sports pitches, associated engineering and infrastructure works, including the retention of the existing military lake and creation of a new lake, with details of appearance, landscaping, layout, scale and access reserved. Application is accompanied by an Environmental Statement and involves works to/affecting existing Public Rights of Way.'***

Phase 3A is a site rooted in history; its heritage assets lend themselves to character generators to create a strong and distinctive identity for the development, which will form a gateway entrance to Northstowe from the south. The unique assets that this site has to offer enable the creation of a sequence of neighbourhoods that are integrated as a comprehensive whole, yet offer a wide variety of opportunities and experiences between them. The neighbourhoods are shaped around new and existing green and blue networks, creating a series of linked landscapes that permeate the built form and create attractive settings for active travel, informal and formal recreation.

## Community

Phase 3A will provide a range of house types, including affordable homes for rent and purchase, self-build and custom build homes to help establish a mixed community. Opportunities for employment within Northstowe (in the Town Centre, Phase 3A Local Centre and in education, shopping and community/sports facilities) together with measures to facilitate home working will support the development of the town as a place to live and work.

Northstowe is one of ten Healthy New Towns in England. As a Healthy New Town, priorities are to reduce obesity and promote healthy ageing to deliver a healthy community. This can be achieved through a framework of interventions many of which are embedded within the masterplan/ development form. This framework can then be applied as the town develops; to create a healthy town through infrastructure and place shaping; and deliver a new model of care for Northstowe.

Homes England are committed to ensuring that Healthy New Town principles are applied to all aspects of Northstowe's development.

The proposed masterplan for Phase 3A incorporates a range of formal, semi-formal and informal open spaces providing opportunities for a range of activities, such as formal playing fields, allotments and community orchards, running and walking routes, thus enabling an active and healthy lifestyle for residents of all ages.

## Connectivity

Northstowe Phase 3A will be highly accessible by sustainable modes of transport, with services for the Cambridgeshire Guided Busway running through the heart of the development (already under construction to serve Phase 2) as well as extended local bus services, continuing through from Phases 1 and 2, and potentially linking via Oakington. Cycle routes will connect from the development to the adjacent local communities, Bar Hill to the south west and to Cambridge North Station. The walking and cycling networks will connect into Phases 1 and 2 ensuring convenient routes to the Town Centre, schools and sports facilities.

There will be connections to the wider Public Rights of Way network to enable residents to enjoy access to the countryside and to connect to and from surrounding communities.

The Southern Access Road West (SARW) is under construction and will provide the highway route to the upgraded A14 at Bar Hill and a second route (the Southern Access Road East (SARE)) will potentially provide a connection to Dry Drayton Road and the local access road southwards to Cambridge.

The masterplan has been developed to maximise opportunities for active travel with walking and cycling routes given prominence throughout the development, with segregated routes alongside the primary and secondary streets as well as links through greenways with the majority of homes being within 250m of a principal cycle route. These cycle routes may be segregated, shared, or accommodated within shared surface residential streets. The development will create walkable neighbourhoods within easy walking distance to primary schools and open space provision.

## Character

Analysis of the local context has been carried out to inform the preparation of the masterplan for Phase 3A. The character and setting of the adjacent settlements of Longstanton, Oakington and Westwick as well as Phases 1 and 2 have been carefully considered throughout the design development process. The masterplan incorporates linking landscapes, in the form of new green infrastructure and retained existing vegetation, between the new and existing settlements.

The intrinsic characteristics of the Phase 3A site, including the retained Military lake and existing tree belts, have shaped the distinctive character areas set out in this document.

A variety of spaces are to be created as character drivers, consistent with the approach set out in the Phase 2 design code. These spaces will vary in form, function and character and incorporate the intrinsic characteristics of Phase 3A, including the retained Military Lake and existing tree belts. Buildings will draw on the best of local tradition from adjoining villages as well as new development on the Cambridge fringes

to create a modern yet locally distinct character. Historic influences including former lanes lost due to the more recent RAF history, as well as the surrounding landscape character are recognised within the masterplan. The former airfield is recognised in the main axis of the Phase 3A development consisting of a sequence of spaces along the line of the former main runway.

## Climate

The masterplan develops and embeds the principles of climate change mitigation and adaptation into the development, with the aim of demonstrating innovation and future proofing the development. Key themes include building design, overheating, materials, flood risk and layout in relation to climate hazards and risks.

Climate change is likely to impact on Water Supply and Management due to increasing irregularity in precipitation patterns and a higher likelihood of droughts. Protecting and conserving water supplies and resources in order to secure Northstowe's needs in a sustainable manner is seen as an urgent priority for the masterplan. It is recognised that in order to achieve this, water consumption per person needs to be reduced. The aim is to create a development that has adapted to climate change, ensuring it is safe from flood risk, controls surface water flows; improves water quality and has reduced water consumption. Climate resilience has been built into the masterplan with the surface and flood risk strategy being beyond standard practice (i.e. 1:200 year event plus climate change and 48 hours storage). The extensive green infrastructure network will help in combating heat islands. SuDS are an integral part of the design of Phase 3A. Attenuation features in the form of lakes are key elements of the masterplan and most primary and secondary streets contain swales and SuDS features. The design of Phase 3A is based on an integrated network of blue and green infrastructure. Microclimate (wind) analysis has been undertaken.

Sustainable Travel is a key aspect of the development to minimise carbon impacts, with high accessibility by walking, cycling and public transport, continuation of the approach to Travel Planning set out in Phase 1 and 2 as well as provision for electric vehicles.

This Sustainability Statement, submitted as part of this application, demonstrates that the proposed new development will:

- Minimise carbon emissions through the approach to energy use
- Minimise water usage and flood impacts
- Provide a sustainable approach to waste and materials and resources
- Provide for a high level of accessibility by sustainable travel modes
- Provide substantial amounts of high quality green infrastructure
- Develop sustainable new buildings;
- Create a cohesive community and culture;
- Support the local economy; and
- Promote health and wellbeing

# I Introduction

# I Introduction

## I.1 Role and Structure of the Design and Access Statement

This Design and Access Statement (DAS) has been prepared on behalf of Homes England and is submitted in support of the Outline Planning Application for Northstowe Phase 3A. This DAS document describes the:

- Design evolution and considerations that have led to the development proposals;
- Design concepts that underpin the masterplan and subsequent parameter plans;
- Design principles that should be read alongside the parameter plans; and
- Illustrative material that describes the design intentions and brings the application drawings to life.

The DAS describes how the design relates to the technical, planning and site considerations. The main chapters of this document have been structured as follows:

1. **Introduction:** This chapter sets out the summary of the application and the description of the development.
2. **Strategic Context:** The social and economic context of the site, and facilities provided outside of Northstowe's boundaries are discussed in this chapter. The three phases of Northstowe are set out here before a brief overview of the relevant planning policy guidance is provided.
3. **Health and Wellbeing:** This chapter sets out Homes England's commitments to Northstowe's Healthy New Town (HNT) legacy, and the key priorities for the development with regards to this.
4. **Site and Context Appraisal:** The physical context of Phase 3A is discussed in this chapter, including existing site features and the opportunities and constraints with regards to: movement, facilities, landscape and heritage. The local character influences in terms of architecture and urban design are also analysed in this chapter.
5. **Design Development:** The initial stages of design are presented and explained in this chapter, with an overview of the community, stakeholder and Design Review Panel engagement undertaken.
6. **The Masterplan:** The key driving principles for the masterplan development are set out in this chapter; before how the Character, Connectivity and Community objectives have been addressed and integrated into the proposals for Phase 3A.
7. **Landscape Strategy:** This chapter sets out the key design influences on the landscape strategy and the strategic proposals for the different typologies of open space.
8. **Climate:** This chapter summarises the key sustainability objectives for the development.
9. **Delivering Design Quality:** This chapter sets out how design quality could be achieved through the planning process.

### 10. Appendices:

- **Appendix A: Design Principles Document:** This document sets out the primary urban design principles that will guide the future design development of Phase 3A. An Urban Design Framework Plan brings together the Parameter Plans to illustrate how the different elements of green space, land use and movement interact with each other.
- **Appendix B: Building for Life 12:** This Appendix assesses the scheme against the criteria set out in Building for Life 12 (BfL 12, Third Edition - January 2015).

The Town and Country Planning (Development Management Procedure) Order 2015 (DMPO) sets out the requirements that must be addressed within a DAS. These requirements, and the locations of where they are addressed throughout this DAS are as follows:

- **Chapters 6 and 7** explain the design principles and concepts that have been applied to the development (DMPO Regulations 9.(2)(a) and 9.(3)(a))
- **Chapter 6, Section 6.4** explains how issues relating to access to the development have been dealt with (DMPO Regulation 9.(2)(b))
- **Chapter 4** demonstrates the steps that have been taken to appraise the context of the development and how the design of the development takes that context into account (DMPO Regulation 9.(3)(b)). Chapters 5 and 6 then continue to describe how the context has been taken into account as the design was developed.
- **Chapter 6** explains the approach adopted for access and **Section 6.3** describes how policies relating to access in relevant local development documents have been taken into account; (DMPO Regulation 9.(3)(c))
- **Chapter 5, Section 5.3** explains the consultation that has been undertaken on issues relating to access to the development and what account has been taken of the outcome of any such consultation (DMPO Regulation 9.(3)(d)) **Chapter 6, Section 6.4** describes how specific access related comments raised in the engagement have been addressed in the proposed movement strategy.
- **Chapter 6, Section 6.4** explains how any specific issues which might affect access to the development have been addressed (DMPO Regulation 9.(3)(e))

## I.2 Scope of the Document

The purpose of this DAS is to describe the design process which has resulted in the application proposals and to provide an illustrated explanation of the proposed development. One of the roles of the DAS is to demonstrate that the parameters of the proposed development are sound and able to create a high quality place.

Chapter 6, which incorporates the Illustrative Masterplan, illustrates how distinctive and site specific character can be created across the different areas of the site. The diagrams and illustrations set out in Chapter 6 are illustrative only and do not establish any further fixed elements of the development beyond those set out in the Parameter Plans. Where diagrams and illustrations in this DAS include parameters from the parameter plans, they may also include additional illustrative materials. For the fixed parameters, please refer to the 'Movement and Access', 'Building Heights' and 'Open Space and Land Use' Parameter Plans submitted as part of this planning application, which will be approved as part of the application.

The Design Principles Document, contained within Appendix A of this document, identifies the primary Urban Design Principles (extracted from Chapter 6) that will guide the future design development of Phase 3A. It is envisaged that the Design Principles Document will be approved as part of the Outline Planning Application for Phase 3A and that an appropriate condition ensures that future Design Code(s) and Reserved Matters applications take account of these design principles.

## I.3 Summary of Application and Description of Development

Outline planning permission is being sought for development of Phase 3A with details of appearance, landscaping, layout, scale and access reserved. The description of development is:

*'Outline planning application for the development of Northstowe Phase 3A for up to 4,000 homes, two primary schools, a local centre (including employment, community, retail and associated services, food and drink, community, leisure, residential uses and other accommodation), secondary mixed use zones (including employment, community, retail and associated services, food and drink, community, leisure, residential uses), open space and landscaped areas, sports pitches, associated engineering and infrastructure works, including the retention of the existing military lake and creation of a new lake, with details of appearance, landscaping, layout, scale and access reserved. Application is accompanied by an Environmental Statement and involves works to/affecting existing Public Rights of Way.'*

Further details on the planning application are set out in the Planning Statement submitted in support of the scheme.



## 1.4 The Applicant and Team

### Homes England

Applicant



### Arcadis

Lead Consultant, Landscape Architects, Transport Consultant, Drainage Consultant



### Tibbalds Planning and Urban Design

Planning Consultants, Urban Designers and Masterplanners



Key  
— Application Site Boundary  
— Indicative boundaries of Phases 1, 2 and 3B

January 2021



Figure 1.1: Aerial Photo showing Site Location



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## Northstowe Context

## 2 Strategic Context

Northstowe is located within South Cambridgeshire, approximately 8.5km north west of Cambridge City Centre and 7km from Cambridge Science Park.

### 2.1 Northstowe

Northstowe is a new town in Cambridgeshire that is jointly promoted by Homes England, the Government's housing accelerator, and Gallagher Estates (now L&Q), a master developer and property investment company. Northstowe will occupy 490 hectares of land straddling the Longstanton and Oakington parish boundaries. Northstowe has an anticipated population of approximately 25,000 people (10,000 homes) and a broad range of supporting facilities and infrastructure, that will take shape over a period of 15-20 years. It aims to achieve the highest quality of community living and will contribute to the local identity of the area. The town will be delivered in three phases, with the Town Centre located within Phase 2.

### 2.2 Wider Context

#### Movement

Northstowe benefits from key strategic links to nearby settlements, such as Cambridge and Huntingdon. Northstowe has access points from the A14 (via the Southern Access Road West) to the south and the B1050 to the north, with a further potential southern access route that links into Dry Drayton Road via the Southern Access Road East (SARE). The A14 provides a direct link to the M11 to the south, ensuring ease of movement both regionally and nationally.

Cambridge North Train Station is the nearest major railway station to Northstowe; located approximately 8.5km to the south east of Northstowe's Town Centre, with onward services to London.

The Cambridgeshire Guided Busway (CGB) runs along the site's eastern boundary, ensuring that public transport is a highly accessible, easy and fast mode of transport for the new residents. A pedestrian and cycle route runs along the CGB, providing a sustainable and direct link between Cambridge City Centre, the Science Park, Cambridge North Station and Northstowe.

Local bus services are also accessible to the new residents of Northstowe, with routes running through the existing settlements of Longstanton and Oakington, which adjoin the site's southern and western boundaries.

A network of public right of way paths that run around and through Northstowe provides walking links to nearby settlements including Rampton, Longstanton and Oakington, and the wider countryside.

#### Facilities

Cambridge City Centre and Cambridge Science Park are major employment hubs within 10km of Northstowe. Both are easily accessible to the residents of Northstowe via the CGB.

The local settlements within close proximity of Northstowe also offer the following:

- **Huntingdon** - medium-sized market town comprising a wide range of services and community facilities including a train station.
- **Oakington**: Facilities and services including a public house, post office, primary school and a place of worship, amongst others.
- **Longstanton**: Facilities and services including a veterinary practice, bed & breakfast, supermarket, primary school and two places of worship.
- **Bar Hill** - Tesco Extra store that acts as the first choice for the majority of residents' food shopping in the local area.
- **Impington** : Local swimming pool

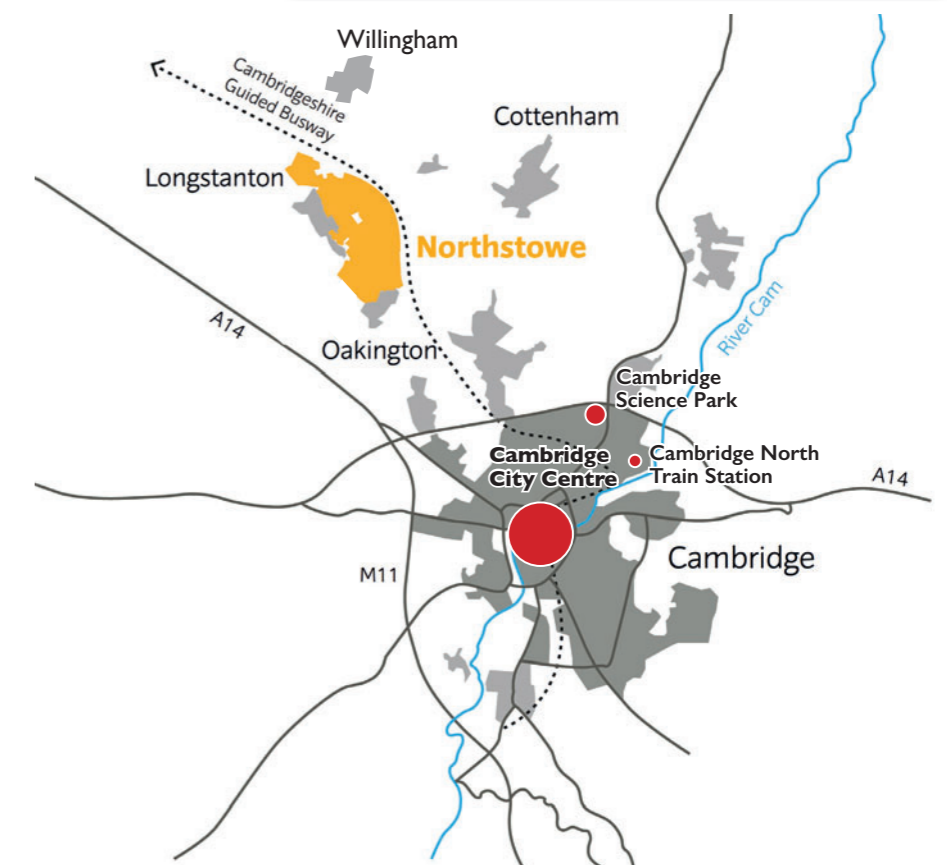
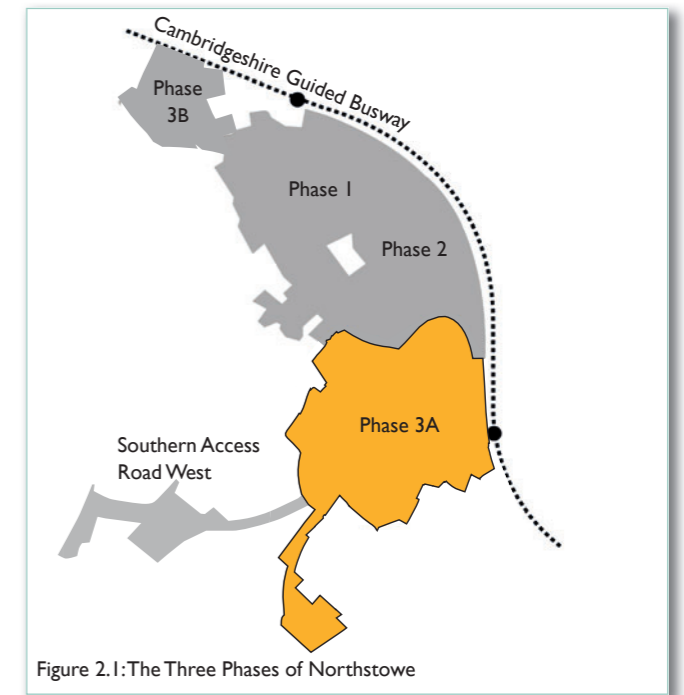
#### Social and Economic Context

The diverse economy of Cambridgeshire has particular strengths in sectors including engineering, research and development, pharmaceutical and tourism, amongst others.

The town of Northstowe is secondary to Cambridge, but it has the opportunity to provide space for the supply chain, for example in the knowledge economy (B1) and food sector; machinery supply and maintenance (B1c).

Northstowe aims to be a forward thinking, modern development which will provide 21st Century workspace, with an emphasis on flexible, move on space and home-working.

More detailed information on the social and economic context can be found in the Economic Development Strategy submitted as part of this application.



## 2.3 Relevant Policy and Guidance

The overarching Masterplan proposals for the planning application have been developed in accordance with National and Local Planning policies. The design proposals have evolved with input from statutory consultees and discussions with South Cambridgeshire District Council. An inclusive approach to design, planning and technical input has been adopted, including extensive public and community engagement, enabling the proposed development of the Application Site to be realised in a positive and sustainable way.

The Development Plan for the site consists of the following planning policy documents,;

- South Cambridge Local Plan ('LP') – September 2018
- Northstowe Area Action Plan ('NAAP') – July 2007

Other material considerations that the proposals have taken into account include:

- National Planning Policy Framework ('NPPF') – February 2019
- Northstowe Development Framework Document ('DFD') - August 2012 & Exemplar Addendum Document - October 2012
- South Cambridgeshire Supplementary Planning Documents ('SPD'):
  - Affordable Housing SPD
  - Biodiversity SOD
  - Development Affecting Conservation Areas SPD
  - District Design Guide SPD
  - Health Impact Assessment SPD
  - Landscape in New Developments SPD
  - Open Space in New Developments SPD
  - Public Art SPD
  - Trees and Development Sites SPD

A full schedule of planning policies relevant to Phase 3A and the scheme's response to each is set out in the Planning Statement submitted as part of this application.

The Design and Access Statement has taken into account policies relating to access in relevant local development documents. The relevant documents, and the sections in which they have been addressed within this document are as follows:

- South Cambridgeshire Local Plan (2018): Policy HQ/1: Design Principles (Section 6.4),
- Northstowe Area Action Plan (2007): All references to good access to services, permeable access and movement, and minimising disruption to villages, including the objectives set out in section D6 and policies NS/10 and NS/11.

### 2.3.1 Northstowe Development Framework Document (2012) (DFD)

The Development Framework remains a masterplan consideration. However, it has been overtaken by changes in the way people live and work.

The Healthy New Town status has brought an emphasis on health and wellbeing, requiring a multi-layered approach to open space and sport.

The Town Centre Strategy developed as part of Phase 2 has shifted the emphasis of land uses and size of the Town Centre, bringing it into line with today's shopping and working pattern. This also has an influence on Phase 3 and the local services provided within it. Nevertheless, the DFD sets out important considerations and has a role in ensuring Northstowe becomes a well integrated town.

The development proposals for Phase 3A incorporate the following principles set out in this DFD:

#### Community

- Self-sufficient community: Retail, community buildings, employment areas, health clinics, sports hub and schooling within 600m walking distance and co-located for ease of access to services.
- Active and healthy living: Allotments within walking distance of homes, greenways, community orchards, sports hubs, trim trails and a comprehensive network of cycle and pedestrian paths will encourage healthy lifestyles.
- Community cohesion with the town and local centres at key crossroads and a strong infrastructure with the potential for co-located facilities (primary schools, a secondary school, community and sports hubs and support for community development), with opportunity for people to interact and to help integrate the community.
- Phasing of the development primarily from north to south to allow for a coordinated and planned approach to construction which minimises the impact on existing communities and new residents of the site and avoids a piecemeal development.

#### Connectivity

- Dedicated busway as a direct link from the Cambridgeshire Guided Busway running through the middle of Northstowe enabling the site to be served by a high quality public transport system linking Huntingdon and Cambridge.
- Walking, cycling and buses to be given priority on streets with pedestrians afforded top priority. Pedestrian and cycle connections will be provided between Northstowe and adjoining settlements e.g. Oakington, Longstanton, and improved links further afield, especially to Bar Hill. Commuter cycle routes and local bus routes throughout the site to provide a sustainable transport system, overlooked where possible for security.
- Southern access roads (east and west) to provide vehicular access to the A14 at Bar Hill and Dry Drayton Road as well as from the B1050 at the northern end of the site.

#### Climate

- Towards low carbon with a combination of energy efficient solutions, local food production, green travel, innovative technology and communications systems and waste recycling centre.

#### Character

- Physical environment - linear development reflecting local settlement forms along key routes with an alternating street alignment, and a strong sequence of public spaces to aid legibility. Flexibility for change and innovation over time, inherent within the development form.
- Varied building heights and architectural vernacular as a defining feature.
- A strong landscape structure with a hierarchy of interconnected green public spaces and parks, often linked via strong linear axis, based upon the grain of the land and incorporating existing site assets and features.
- Nature conservation in wildlife corridors, a network of lakes, ponds and ditches, meadows and scrub, retained landscape features, green links and linear parks to create a mosaic of habitats and green space utilising and emphasising water features, becoming a haven for wildlife and providing opportunities for natural play and informal access.



Figure 2.3: Northstowe Development Framework Plan (DFD 2012)

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**Health and Wellbeing**

# 3 Health and Wellbeing

Northstowe was included in the NHS Healthy New Town (HNT) initiative. This chapter sets out the commitments and principles that will that apply to Northstowe as a whole and how strategies and detailed principles developed for Phase 2 will shape the development proposals for Phase 3 to continue the HNT legacy.

## 3.1 Health and Wellbeing Commitments

The 'Healthy New Towns' national initiative is both based on existing evidence and intended to generate new evidence about what works, why and how. Therefore, Northstowe is expected to explore innovative strategies and initiatives that will contribute towards the health and wellbeing of its future population. Good design and placemaking can have a significant impact on encouraging an active and sustainable lifestyle for a community, therefore this section is of particular importance to the Design and Access Statement; ensuring that the key principles for healthy living are embedded into the design process from the outset.

Northstowe's Healthy New Town priorities are to:

- Deliver a healthy community through a framework of interventions which can be applied as the town develops;
- Create a healthy town through infrastructure and place shaping; and
- Develop a new model of care for Northstowe.

The commitment to create a healthy community through infrastructure and place shaping includes:

- The delivery of open space, landscape, and green infrastructure to create nudge and pull factors and maximise opportunities for positive lifestyle choices around obesity.
- The provision to cater for all ages and abilities with a focus on dementia and older people.

Homes England are committed to ensuring that Healthy New Town principles are applied to all aspects of Northstowe's development. While the NHS' programme has ended, Homes England and its partners, including South Cambridgeshire District Council (SCDC) and Cambridgeshire County Council (CCC), have made a joint commitment to continue with the programme for the benefit of future residents of Northstowe.

### 3.1.1 Northstowe Healthy Living and Youth & Play Strategy (2018)

A Healthy Living and Youth & Play Strategy was approved as part of Phase 2. Within this document is the Healthy Living Strategy which sets out 9 principles, which based on scientific research are considered to be fundamental drivers in improving physical and mental health and wellbeing.

These principles are:

- Providing contact with nature;
- Promoting a positive community identity;
- Providing access to sports;
- Providing inclusive design / design for all;
- Health and wellbeing through play;
- Promoting positive social interaction;
- Promoting access to healthy food;
- Increasing physical activity; and
- Creating a low pollution environment and adapting to climate change.

The development proposals for Phase 3A will adhere to these principles. Their detailed implementation will be defined through later stages in the planning process, such as the Design Code(s).

### 3.1.2 Northstowe Phase 2 Design Code (2017)

The Design Code for Phase 2 is an important bridge between the outline planning consent and detailed proposals for Northstowe Phase 2. It is an appropriate forum for embedding principles of healthy neighbourhoods. The final document demonstrates how these objectives can be embedded in design requirements at a strategic as well as detailed level. Some of the principles that aim to promote healthy and active lifestyles within the Phase 2 Design Code include:

- **Development density and permeability:** Higher densities can create active and animated streets. A choice of attractive routes, higher densities and variation in character help to deliver streets and spaces that are safe and interesting to walk along.
- **Spatial organisation of parks: and the provision of community allotments and orchards:** The benefits of this include catering for gentle outdoor activity, increased sense of community and belonging and healthy, fresh produce.
- **Walking and cycling:** Provision of a choice of walking and cycle routes at a fine grain is an important consideration in promoting healthy activities including the use of bikes as an active mode of transport.
- **Accessibility of public transport:** Including high quality bus connectivity throughout the site as well as connecting to adjacent settlements.

It is expected that consent for Phase 3A would be dependant upon a requirement to produce similar design codes. The Design Principles Document (Appendix A) provides a framework for more detailed Phase 3A coding post permission.

### 3.1.3 Summary

The Healthy New Town priorities and the detailed strategies developed for Phase 2 have informed the masterplan for Phase 3A, to ensure these are embedded from the strategic level down to the detailed implementation. Homes England has made the commitment to extend the principles set out in the above documents to Phase 3.

This will provide a coherent town wide approach and ensure that all residents have the opportunity for healthier and happier lives.



Figure 3.1: 'Putting Health into Place' (NHS England)



Figure 3.2: Northstowe Phase 2 Healthy Living and Youth & Play Strategy (Approved as part of Northstowe Phase 2)



Figure 3.3: Northstowe Phase 2 Design Code (October 2017)



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## Site and Context Appraisal

## 4 Site and Context Appraisal

This section sets out the social and physical context of the site, the existing site features and the design influences associated with Phase 3A.

### 4.1 Northstowe:

The development proposals for Phase 3A, will complete the southern neighbourhoods of Northstowe. As such it must be seen in context of Phase 1 and 2 of Northstowe as well as the surrounding villages of Longstanton and Oakington.

The next pages illustrate the design influences that have been considered during the masterplan development. These also formed the basis of stakeholder and community engagement in the early stages of the design development.

#### 4.1.1 Phase 1

Northstowe Phase 1 has been promoted by Gallagher Estates (now L&Q). Planning permission for this phase was granted on 22 April 2014, with the associated design code approved later that year.

Phase 1 is located to the north east of Longstanton and abuts the western boundary of the Cambridgeshire Guided Busway (CGB). The main area of Phase 1 accommodating the development proposal measures 97ha, with an additional 25ha of land within the application red line located southwest of Longstanton, accommodating flood attenuation ponds.

The Phase 1 proposal included:

- Up to 1,500 dwellings, including affordable housing in a mix of tenure types;
- A Local Centre, including space for a community building and provision for retail and other appropriate uses;
- A primary school;
- 5ha of employment land including a household waste recycling centre and foul water pumping station;
- Formal and informal public open space, including a sports hub of over 6ha and approximately 23ha of additional public open space including parks/play space and a network of footpaths and cycleways;
- Water bodies of approximately 5.2ha including a water park providing a recreational, ecological and drainage resource;
- 1.57ha of allotments and community orchard;
- Improvements to the existing B1050;
- Earthworks and cut and fill to enable land raising and re-profiling of the site for sustainable drainage purposes.

A Design Code was produced by Gallagher Estates (now L&Q) and Homes England in order to satisfy the requirements of the NAAP and, meet the requirements of a planning condition. This document comprises high level, town-wide design guidance as well as detailed guidance for Phase 1 only.

At the time of writing, the primary school, Pathfinder C of E Primary School is open and approximately 480 new homes within Phase 1 are occupied.

#### 4.1.2 Phase 2

Northstowe Phase 2 lies to the north of Phase 3A and delivers the central part of the development, comprising the Town Centre, and is approximately 165ha in size. This phase is bordered to the east by the CGB and to the west by Longstanton and surrounds the existing settlement of Rampton Drift. An existing water tower is located within this phase, which is visible from certain locations within Phase 3A.

Phase 2 of Northstowe, which is currently under construction, will be a series of urban neighbourhoods of up to 3,500 homes with Town Centre facilities and schools as well as community and sports facilities. The application for Phase 2 included:

- Up to 3,500 dwellings
- 2 primary schools
- Special Educational Needs (SEN) school
- 1 secondary school as part of an education campus
- Town Centre, including employment uses, formal and informal recreational space and landscaped areas
- Eastern sports hub
- Remainder of western sports hub (to complete the provision delivered as part of Phase 1)
- Dedicated Busway
- Primary road links
- Construction of a new highway link (Southern Access Road (West)) between the proposed new town of Northstowe and the B1050, and associated landscaping and drainage.

The Town Centre within Phase 2 will provide the primary focal point for the town. It is within this central core that the key services and employment provision will be located.

At the time of writing, the secondary school and essential infrastructure is under construction within Phase 2, and detailed proposals have been developed for an initial parcel of 406 homes (Phase 2A).



Figure 4.1: Composite Plan showing detailed design and illustrative layout of different parcels within Phase 1



Figure 4.2: Pathfinder C of E Primary School opened within Phase 1 in September 2017

The Healthy Living, Youth and Play Strategy (2018) and Design Code (2017) described in Section 3, and the Town Centre Strategy (2019), summarised below and submitted relevant to Phase 2, have been taken into consideration in the development of the proposals for Phase 3A.

### Town Centre Strategy (2019)

The aspiration for Northstowe Town Centre, as set out in the Town Centre Strategy prepared for Homes England by Allies and Morrison, is to:

*'provide a dynamic and innovative centre that meets the needs of residents throughout its phased delivery and long into the future, as well as serving residents in surrounding villages and attracting a diverse range of workers and visitors.'*

It aims to establish the Town Centre as a destination and a hub of activity; growing and evolving as development progresses to continue to meet the wide ranging needs of new residents, workers and visitors. The Town Centre Strategy sets out the changing roles of Town Centres, as they transform into social destinations for experiences and interaction due to the rise in online shopping. The range of services and facilities available will be complementary to Cambridge and provide a differentiated offer which isn't available in the wider context; meeting the needs of the Northstowe residents as well as drawing on a wider context through the distinctive retail provision.

In addition to retail provision, Northstowe Town Centre will comprise a spectrum of employment spaces. It will be a place to have ideas, start and grow a business, with a wide range of working environments provided to encourage a range of business types and sizes. New spaces will complement the sci-tech provision in the region and provide spaces for creative endeavour, with the intention being to develop a strong relationship between the Education Campus in Phase 2 and the businesses within the town.

The Market Hall and Civic Hub typologies are key components of the Town Centre, providing a mix of uses in one location including employment space, retail, leisure, community and cultural.

Phase 3A has been carefully designed to ensure its service and employment provision does not compete with that of the Town Centre, instead complementing and supporting the Phase 2 provision.



Figure 4.3: CGI of Phase 2 Town Centre (Allies and Morrison)

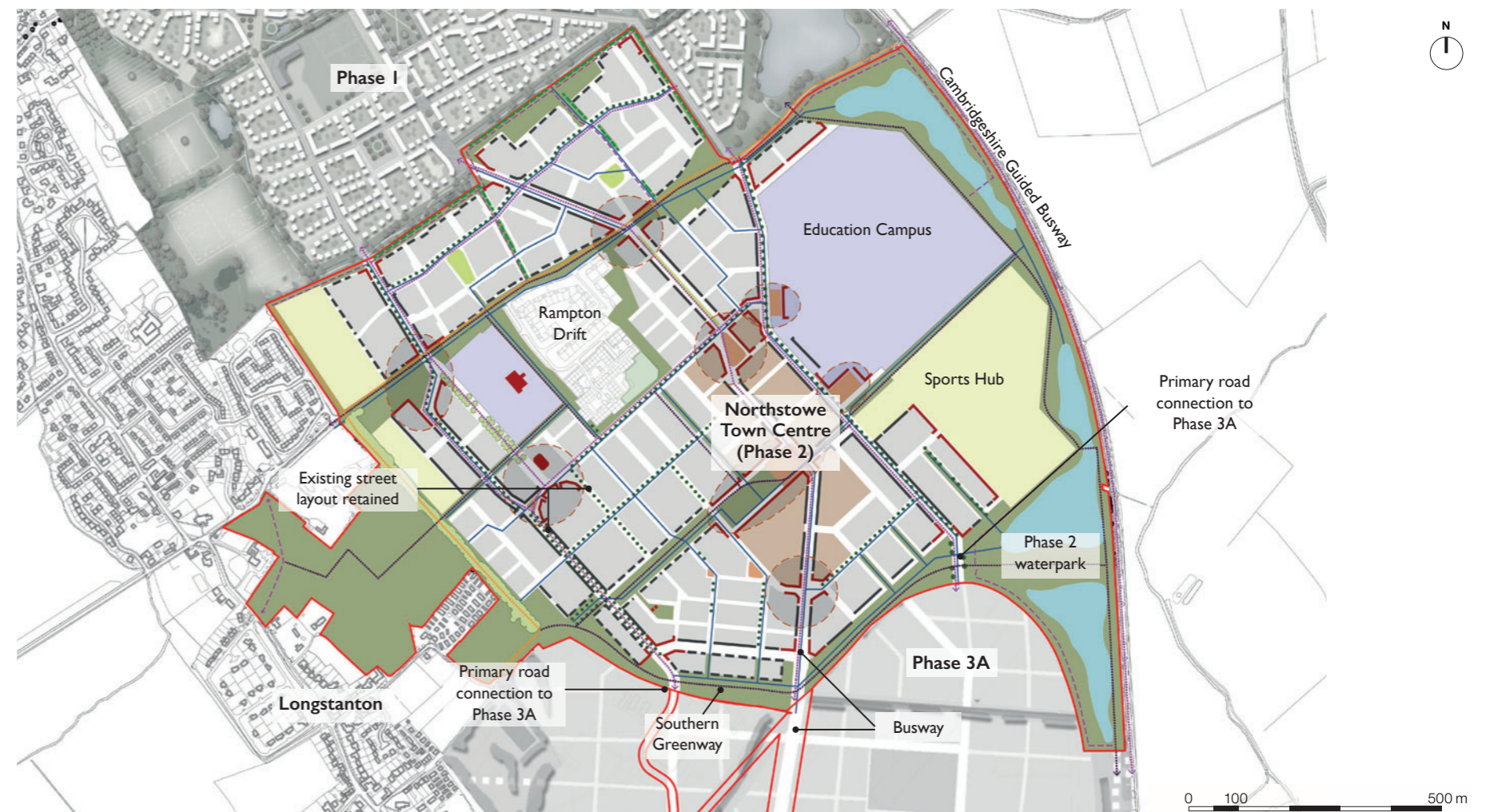


Figure 4.4 Phase 2 Urban Design Framework (extract from Design Code 2017)





### 4.1.3 Phase 3

Phase 3 is comprised of Phases 3A and 3B, which are located at the south and north of Northstowe respectively. Together, Phases 3A and 3B will deliver the remaining balance of homes (up to 5,000: 4,000 in Phase 3A and 1,000 in Phase 3B) and complete the town. Phase 3B will be covered by a separate outline planning application.

### 4.2 Phase 3A Site Location

The Phase 3A Application Site Boundary covers an area of approximately 210ha (including the Southern Access Road East); the Application Site Boundary for this phase is shown on Figure 4.5. The key points regarding the location of Phase 3A in relation to Northstowe and the wider context are listed below:

- Phase 3A is located between the southern settlement edge of Longstanton and to the north of Oakington. It adjoins Phase 2 along part of its northern boundary and will provide the gateway to Northstowe from the south.
- The Southern Access Road West (SARW), approved as part of Phase 2 and currently under construction, provides access to the town from the B1050 and A14 and the primary vehicular access to Northstowe.
- The Southern Access Road East (SARE), which forms part of this application, will provide potential access to Northstowe from Dry Drayton Road to the south.
- The CGB borders Phase 3A to the east. A dedicated bus route will run through Phase 3A, into the Town Centre and onwards to Longstanton Park and Ride, where it will rejoin the main CGB route. This route has been approved as part of Phase 2 planning application.
- The distinctive Cambridgeshire fen landscape pattern is apparent on the opposite side of the CGB to Phase 3A.
- Longstanton Road, which runs along the south western boundary of the main site area has been closed to vehicular traffic and will be incorporated in the form of a combined walking, cycling and bridleway in the proposals. This Public Right of Way also forms part of Pathfinder Long Distance Walk; a circular route that was originally established to link the historic RAF Pathfinder Stations including Oakington, Wyton, Graveley and Warboys.

-  Application Site Boundary
-  Alignment of Busway (Approved as part of Phase 2)
-  Link road to Southern Access Road West (Approved as part of Phase 2)
-  Indicative alignment of Southern Access Road West (Approved as part of Phase 2)

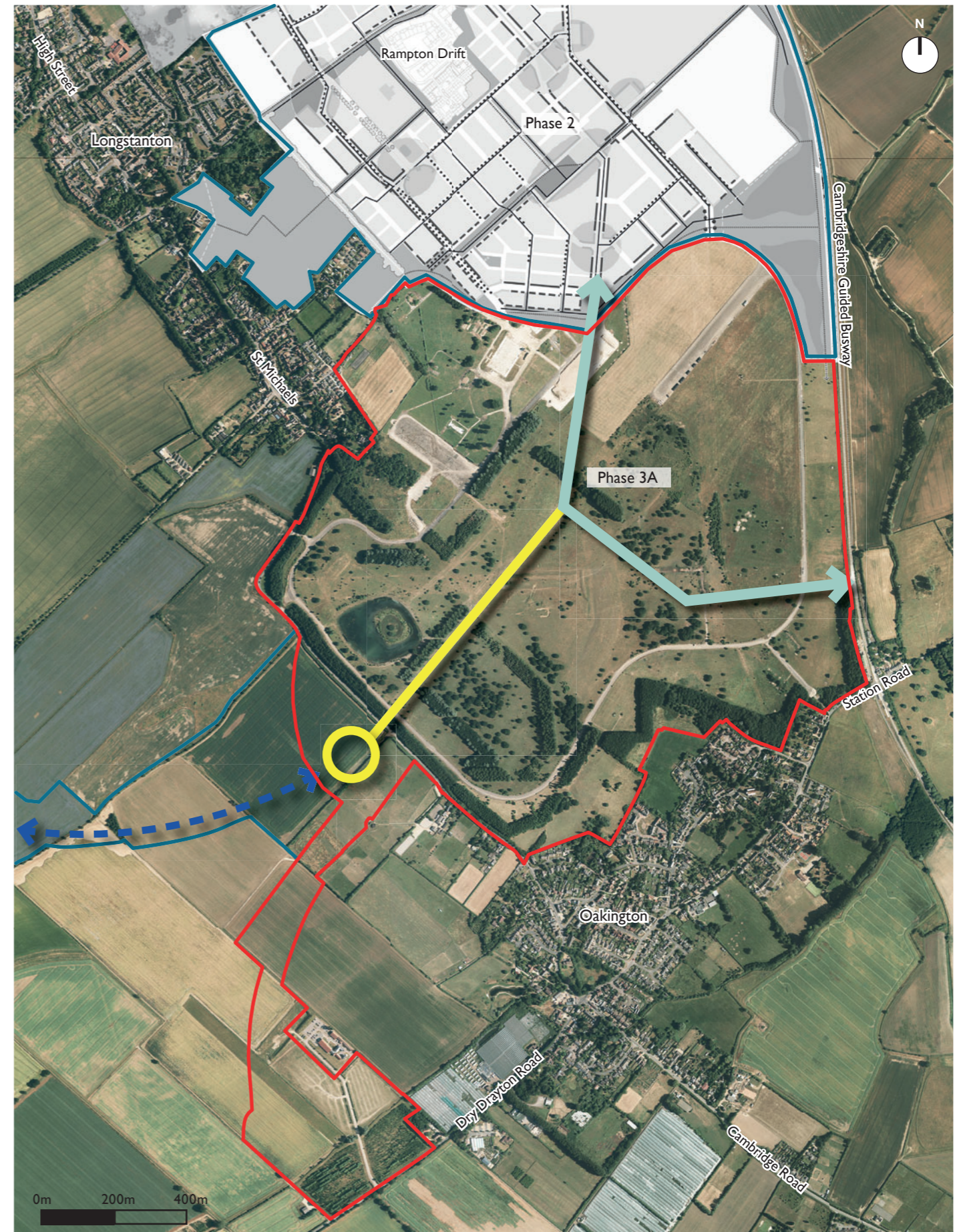


Figure 4.5: Phase 3A Site Location Plan.

### 4.3 Existing Site Features

An overview of the existing site features is set out in this section. For more information about the existing landscape character and site features please refer to the Landscape Strategy submitted as part of this application.

The existing site at Phase 3A is flat with few built structures, but includes a number of features that hail from the RAF's use of the site as an airfield and subsequent use by the army. These features include:

- Four cantilevered, Grade II Listed pillboxes and further unlisted pillboxes are located within the Application Site. Many of these are overgrown and only partially visible;
- A number of existing tree belts, predominantly located in the southern part of the site and along the sites south eastern boundary where it adjoins the existing settlements of Longstanton and Oakington.
- A large lake ('The Military Lake'), which is located within the southern part of the site. The lake has a central island which comprises thick vegetation.
- A partial runway which runs north east to south west through the centre of the site.
- The former airfield road, which runs south west - north east through the site. The alignment of this road is shown on Figure 4.21.

There are also a number of existing trees across the site of varying species, these are particularly concentrated within the south eastern part of the site as can be seen on Figure 4.5. Within the western part of the site there is a section of historic Ridge and Furrow landscape, which forms part of the Longstanton Conservation Area.

The following sections describe how the existing context of the site, including the existing site features set out here, can be drawn into a set of design influences.



Figure 4.6: The Military Lake, within the south western part of the site, is a unique and defining feature of the site that will be integrated into the proposals.



Figure 4.8: This photo shows one of the Oakington pillboxes found within Northstowe. These are to be retained within the Phase 3A proposals.



Figure 4.7: There are a number of tree belts within the site that hail from its use as an RAF base.

#### 4.4 Movement: Design Influences

The existing movement network within and surrounding the site has been analysed to ensure the structure of movement within the masterplan is well connected to its immediate and wider context. For a more extensive explanation of the movement analysis please refer to the Transport Assessment submitted as part of this Planning Application. The key opportunities identified are;

- To link into the surrounding context and reinstate those Rights of Way that had been severed as a result of the RAF airfield.
- Northstowe Phases 1 and 2 have established a network of strategic and local cycle routes. The principles and routes established in the earlier phases have influenced the masterplan for Phase 3A to create a well connected network of cycling routes, greenways and streets that encouraging walking and cycling.
- The Southern Access Road West has been given detailed planning approval as part of Phase 2 and is currently under construction. This road, together with the potential Southern Access Road East will provide the main access to Phase 3A.
- The opportunity exists to create a well connected street network that ties into earlier phases, the wider road network and creates a clear hierarchy of streets.
- The alignment of the busway through Phase 3A has already been established as part of Phase 2. This will provide a central dedicated public transport corridor. There is the opportunity to create a wider network of streets suitable to accommodate local bus routes and create a new route to extend an existing local bus route from Oakington into Northstowe.

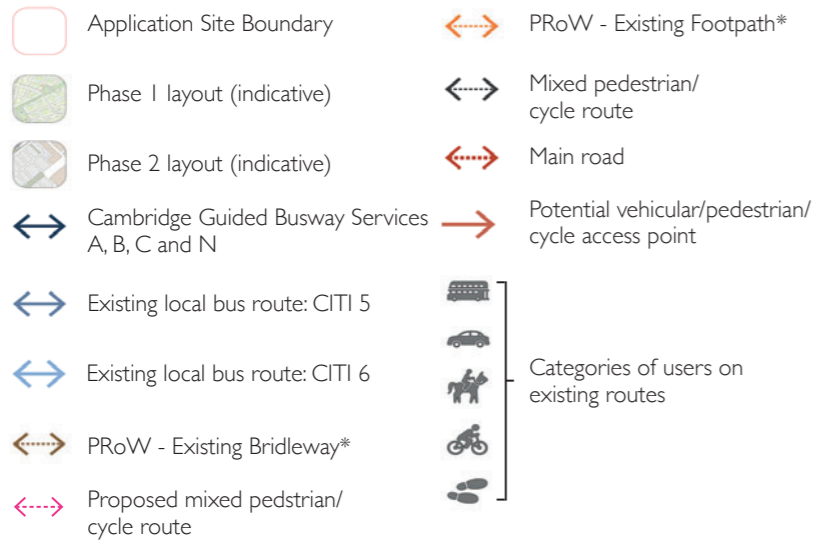
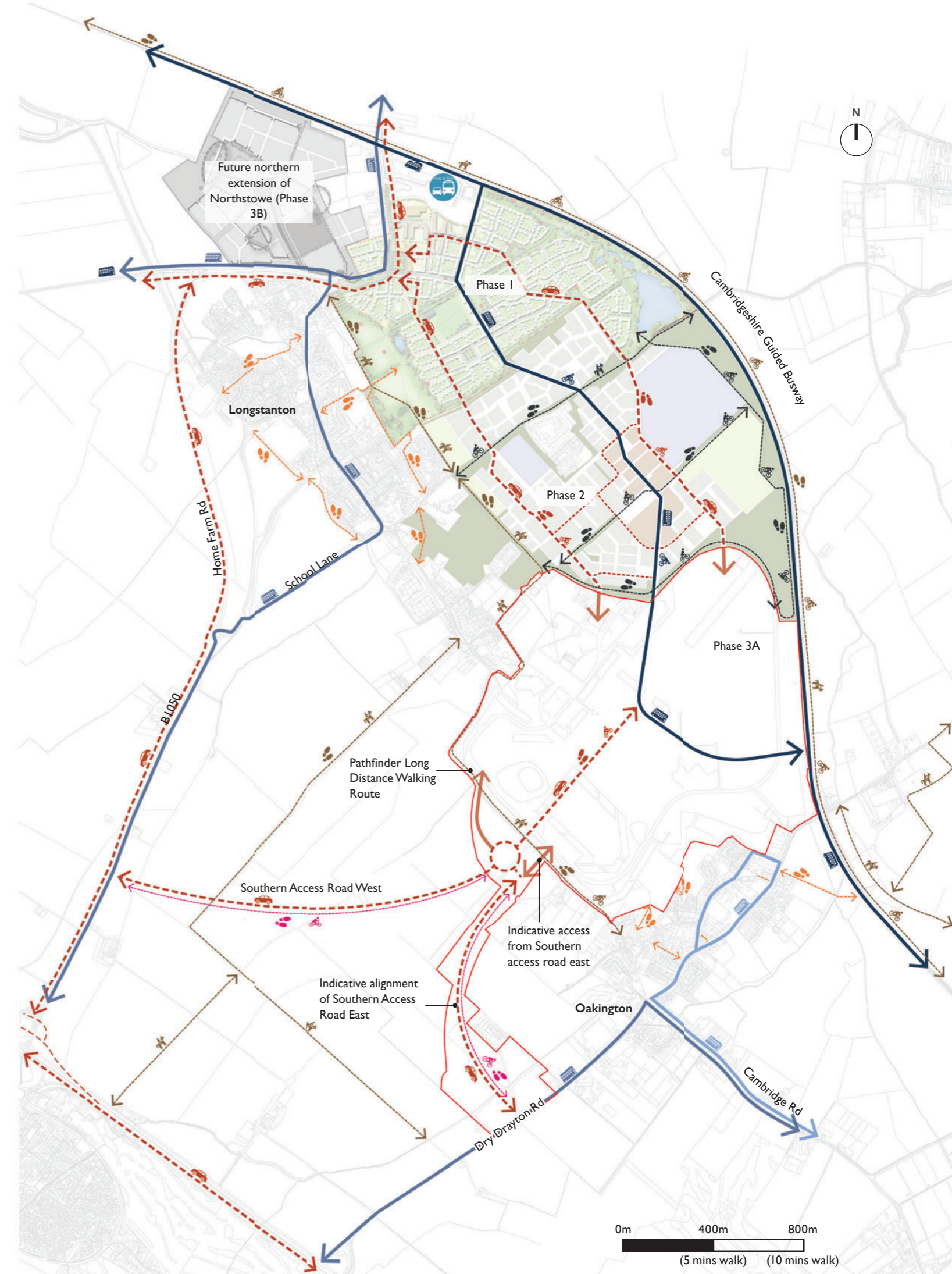


Figure 4.9: Movement Design Influences Plan. \*PRoW: Public Right of Way



## 4.5 Facilities: Design Influences

Cambridge is a regional city of great influence. It is located close to Northstowe and is connected by the CGB. There are a number of Science Parks in the wider sub-region, including Cambridge Science Park, Cambridge Research Park, Cambridge Innovation Park, Alconbury Enterprise Park and Cambridge BioMedical Centre at Addenbrookes which is a major national facility and has direct CGB links from Northstowe. A number of these are currently being built out to meet the needs of the future residents of the area. More locally, the surrounding villages of Longstanton, Oakington, Cottenham, Willingham, Over and Swavesey are key locations in serving the needs of the local residents.

Northstowe Town Centre's vision is to complement the employment provision within the area, and identify gaps in the market in terms of facility and service provision. A wide range of employment, leisure and commercial services and facilities will be provided within this phase of the town, which will complement those provided within Longstanton and Oakington and be easily accessible both within Northstowe and within the wider context.

Northstowe Phase 2, including the Town Centre, will provide a primary school, secondary school, special educational needs school, sports hub, health hub and a wealth of employment and retail provision, amongst others.

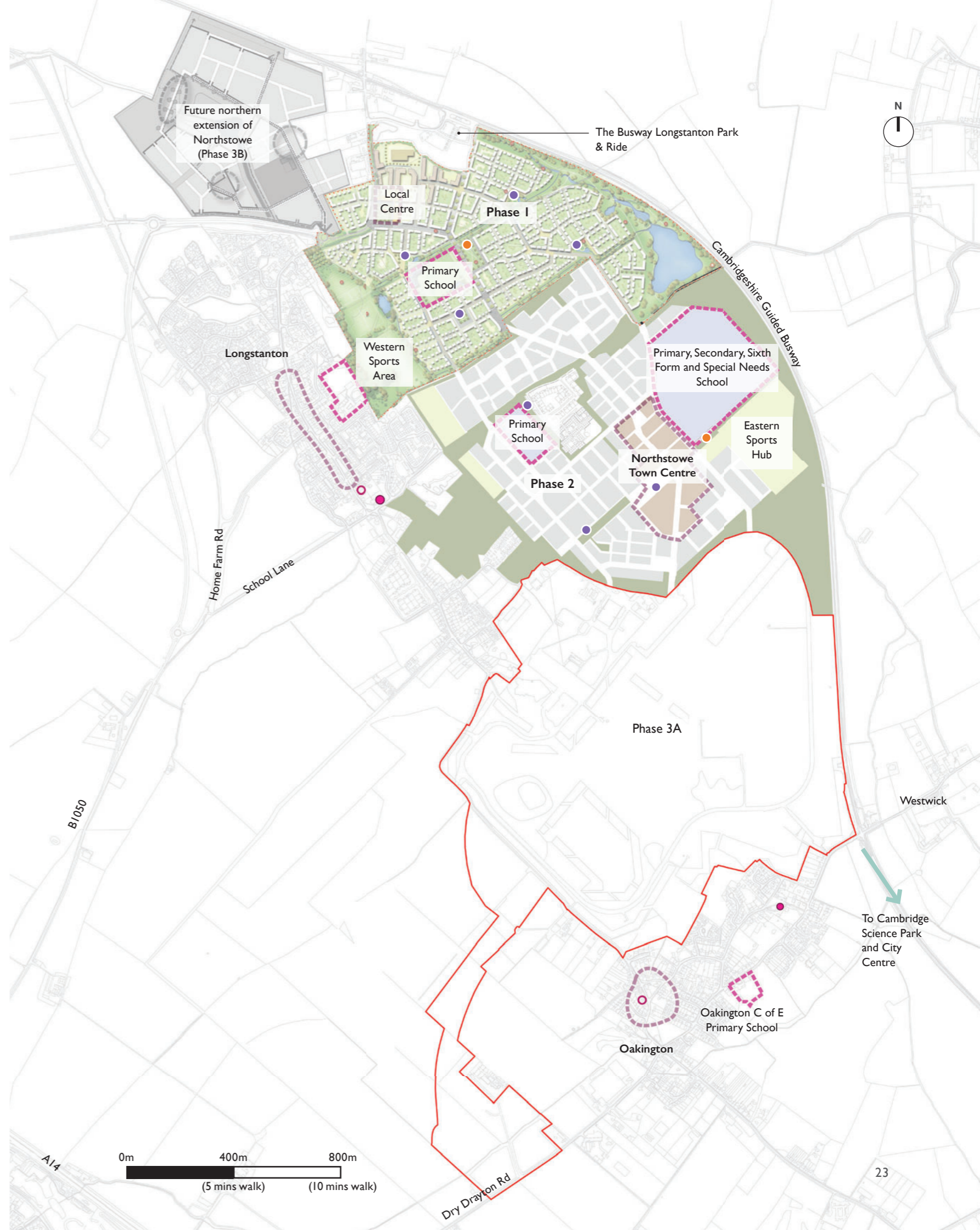
Longstanton and Oakington are important considerations for Phase 3A. Northstowe Phase 3A has the opportunity to re-establish a link between the two settlements and aims to improve connectivity between the new town and the existing settlements. Between the two villages they offer a doctor's surgery, a medical practice, two public houses, a bar, places of worship, two bed and breakfasts, two primary schools, a veterinary practice, and a garden centre and a cafe amongst many other services.

Phase 3A takes into consideration the movement structure to and from the existing settlements and their service provisions and aims to complement instead of compete with the existing provision.

- Application Site Boundary
- Phase 1 layout (indicative)
- Phase 2 layout (indicative)
- Place of Worship
- School
- Local settlement 'centres'
- Post office
- LEAP
- NEAP

Figure 4.10: Facilities Design Influences Plan.

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## 4.6 Landscape and Environment Design Influences

### Landscape Character

Northstowe has a rich and complex landscape history, evolving through natural processes and human interactions, from its ancient origins. Throughout history it has significantly changed; the Northstowe development presents an opportunity for the next layer in its landscape evolution. For more information on the landscape character of Northstowe and the surrounding context, please refer to the Landscape Strategy submitted as part of this application.

The existing landscape features of Northstowe form the base layer of Green Infrastructure. Woodland, hedgerows delineating agricultural fields, and field ponds all form part of the existing mosaic of landscape typologies and biodiversity habitats in the surrounding area. The key components of the existing landscape character are:

- The predominant historic character of land adjoining Longstanton comprises a series of paddocks with hedgerows and small copses.
- The Conservation Area at St Michael's includes fields and paddocks adjoining the village and is bound by the tree lined bridleway of Long Lane which lies further than 200m from the village framework. Historically this is an important area and includes fields which still demonstrate remnants of the early ridge and furrow field system. Long Lane is a long established right of way and its sylvan character is a key part of the setting of Longstanton and is to be retained and enhanced as part of the masterplan proposals for Phase 3A.

The site itself shares many of the characteristics of the wider Fen landscape character. However, its former use as RAF Airfield and then army barracks have added landscape features, such as:

- Open area of grassland with scattered groups of mature oak trees and blocks of evergreen and deciduous tree plantations and tree belts; and
- Plantations and tree belts strategically located close to the boundaries and filter views to the neighbouring villages of Longstanton and Oakington.

Further information on the design influences afforded by the site's history is set out in Section 4.7 - Heritage.



Figure 4.11: The Fens National Character Area (NCA) is a large, low-lying landscape with a high number of drainage ditches, rivers and dykes



Figure 4.12: The Fens NCA is characterised by flat, open landscapes with extensive views



Figure 4.13: Aerial photo of the River Ouse and the surrounding fen landscape pattern.



Figure 4.14: Existing vegetation and watercourses will be retained where possible



Figure 4.15: Existing tree belts will be retained and enhanced as part of the green infrastructure strategy, where possible



Figure 4.16: The Military Lake within Phase 3A will be retained



The Landscape and Environment opportunities and influences have been identified as part of the site analysis. For further explanation please refer to the Environmental Impact Assessment and Landscape Strategy documents submitted as part of this Planning Application. The main influences are:

- Surveys have identified a range of considerations in relation to protected species including badgers, bats, great crested newts, toads, reptiles, hares and breeding birds. Their habitats have influenced the masterplan layout and mitigation strategies. Most of these are located in and near the existing woodland planting on the eastern and southern boundaries.
- There is the opportunity to retain and integrate as much of the existing vegetation, into the masterplan as possible. This includes existing hedgerows, woodland blocks, Ridge and Furrow landscape, individual trees and scrub, which are important ecological and landscape features
- Opportunity to integrate the existing Pillboxes into the network of green infrastructure.
- To enable the landscape to provide an environment suitable for the mitigation of adverse wildlife impacts and to maximise benefits to wildlife including plants.
- The existing Military Lake will be retained as part of the proposals. It provides an important habitat for bats and toads as well as an attractive landscape feature.
- The opportunity exists to create Strategic Green Infrastructure corridors on site; providing walking and cycling links to the wider landscape context.
- Opportunities to reduce existing flood risk along Longstanton Road and Oakington.

- |   |  |   |  |
|---|--|---|--|
|  | Application Site Boundary                      |  | Potential locations for Sustainable Urban Drainage (SuDS) features |
|  | Phase 1 layout (indicative)                    |  | Wind direction   |
|  | Phase 2 layout (indicative)                    |  | Toad migration   |
|  | Deciduous woodland and other clusters of trees |  | Indicative direction of waterflow                                  |
|  | Bat commuting and foraging potential very high |  | Strategic landscape corridors                                      |
|  | Lake / pond                                    |  | Solar path   |
|  | Existing surface water drainage corridor       |   |  |

Figure 4.17: Landscape and Environment Design Influences Plan.



## 4.7 Heritage: Design Influences

The long and varied history of Northstowe as a whole, and Phase 3A specifically, has informed and shaped the development process, with the masterplan reflecting a number of the historical influences across the site.

The heritage of Northstowe and the wider context has been mapped and analysed to ensure that development maximises the opportunities that this historical context provides. The adjacent diagram shows an approximate time-line of the historic uses of Phase 3A, with the RAF occupation of the site leaving the biggest mark on the site as it stands today.

### Northstowe through the ages

*Human Intervention (\*based on wider fenland history)*

#### Paleolithic

Hunter gathering\*

#### Neolithic

Primitive farming\*

#### Bronze/Iron Age

Engineered farming (ditched fields)\*

A potential Bronze Age ritual monument and 7 Iron Age sites were identified within phase 1. Iron Age enclosures which comprised interconnected circular and sub-circular enclosures were recorded within the centre of the airfield.

#### Roman

Market trading and road building

The extensive archaeological work that has taken place so far on Northstowe Phase 2 has focused on the detailed excavation of a large Roman settlement. This overlies older Iron Age settlement and has Saxon activity around the edge. There is evidence of buildings, wells, rubbish pits, ditches, cemeteries, metal working, textile production and a pottery kiln within the settlement area.

#### Medieval Period (1066-1540)

The Historic Environment Record (HER) reports two non-designated heritage assets of Early Medieval date within the proposed development. The Domesday Book (1086-7) suggests that the land around Oakington and Longstanton consisted of arable and meadow land.

#### 1630's - 1820's

Attempts to drain the fenlands\*

#### 1820's - 1930's

Successful drainage allowing extensive arable cultivation

#### 1930's - 2010

RAF Oakington and Home Office Occupation

Oakington was established in the late 1930's during the expansion period of the RAF. Construction of three concrete runways began in 1941 and they were in use by 1942. In 1950 the airfield became a training school and the RAF flying ceased at the site by the end of 1974. In 1979 the station became an army base and became home to 657 Squadron. It came to be known as Oakington Barracks and the personnel lived in the RAF houses in Longstanton. Most of the runways were removed apart from a short stretch which was used by light army aircraft.

In 1991 the site was relinquished by the Ministry of Defence and it came into use as an immigration centre by the Home Office. The immigration centre closed in 2010.



Figure 4.19: Extensive archaeological work has taken place at Northstowe Phase 2



Figure 4.18: Oakington airfield



Figure 4.20: 7 squadron at RAF Oakington

From the analysis of the history of the site, a set of design influences have been mapped out on Figure 4.21.

The key opportunities identified are:

- Provision of green links between the Conservation Areas of Longstanton, Oakington and Westwick to respect their individual characters and setting.
- Opportunity to reflect the alignment of the former runways as part of the masterplan.
- Reflection of the cultural heritage, including military legacy as well as historic lanes and field patterns that existed before the RAF airfield.
- Historic routes which will be reinstated as part of the proposed movement network. Inclusion of historic interpretation and heritage trail.
- Retention and appropriate management of Paddocks Ridge and Furrow.
- Retention of the existing Listed pillboxes and potential retention of the unlisted pillboxes on site, creating an opportunity to be integrated into the wider landscape strategy.
- Local landmarks, such as the water tower in Phase 2 and church spires in Oakington and Longstanton have been considered. Due to the dense tree belt surrounding the site, the latter are not visible from within the site.

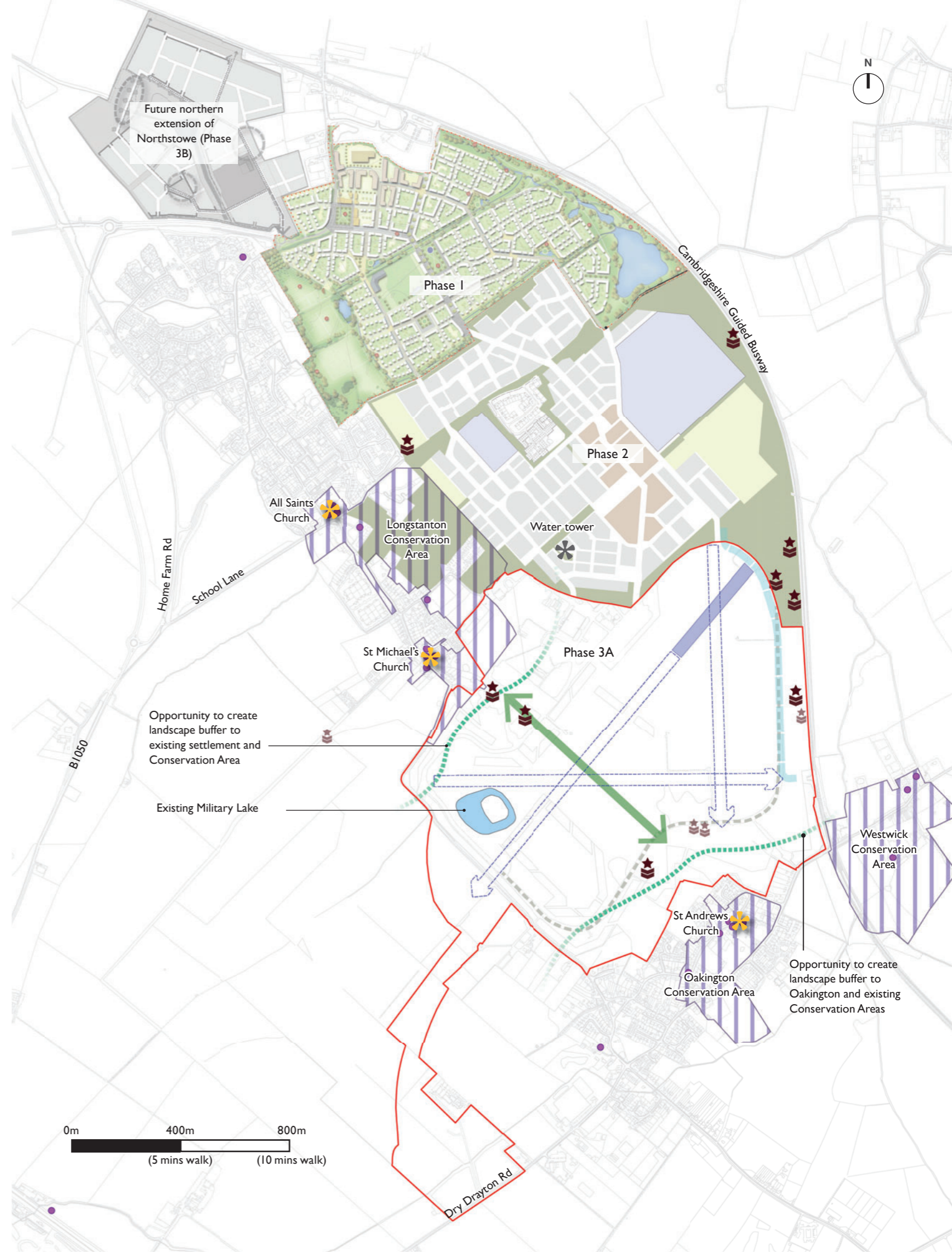
At the detailed design stage it is envisaged that other historical features will inform, for example, street names and interactive historical trails through the site.

For more detailed information on the heritage of the site please refer to the Environmental Statement Volume 1, Chapter 9: Cultural Heritage.

- |   |                             |   |                                      |
|---|-----------------------------|---|--------------------------------------|
|  | Application Site Boundary   |  | Historic Church                      |
|  | Phase 1 layout (indicative) |  | Visually prominent edge              |
|  | Phase 2 layout (indicative) |  | Landscape buffer                     |
|  | Conservation area           |  | Former Airfield runways              |
|  | Other /unlisted pillbox     |  | Remaining section of Airfield runway |
|  | Listed pillbox              |  | Existing water tower -Phase 2        |
|  | Listed buildings            |  | Former alignment of Mill Road        |
|  | Airfield road               |   |                                      |

Figure 4.21: Heritage Design Influences Plan

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## 4.8 Opportunities and Influences: Character

The vision for Northstowe is to create a new town with a distinctive identity, that draws on aspects of the local traditional characteristics. Therefore, an understanding of its context in wider Cambridgeshire is essential.

On the next few pages we have drawn out the key characteristics that have influenced the masterplan and development form. These contain influences from:

- Policy: Northstowe Development Framework Document (2012);
- Analysis of Cambridgeshire architecture; and
- Local influences.

It must be noted that this DAS supports an outline planning application and therefore, the level of detail of the development proposals remains at a high level. Future planning stages, such as the design code(s) and Reserved Matter Application(s) will provide further detail on how individual buildings and architecture will relate and respond to local characteristics.

### 4.8.1 Northstowe DFD (2012)

The DFD includes a contextual study of Cambridgeshire settlements within proximity of Northstowe that are influential in determining key aspects of the town's character, layout and structure. These are:

#### Overall structure

- Urban form with a dense core set around a grid street pattern;
- Based on a linear form;
- Clearly defined approaches and gateways with marker buildings; and
- Connected greens and spaces.

#### Vernacular

- Cambridge stock brick of buff colour or yellow Gault clay bricks, pastel and white render;
- Plain grey roof tiles; turned gables;
- Varied building heights and plot width in specific locations; and
- Contemporary civic buildings.

#### Density and uses

- Mixed use located along Town Centre approaches;
- Mixed use commercial focus within Town Centre; and
- Continuous frontages along Town Centre approaches.

#### Landscape and drainage

- Use of open swales and water overlooked by development;
- Hedgerows, woodland or tree belts at settlement edges.
- Village greens; and
- Orchards and hedgerows paddocks.

### 4.8.2 Cambridge Architectural Character

In its contextual analysis, the DFD says relatively little about building form and materials - it is focused more on the structuring elements described above. Vernacular forms and materials are described in depth in the Council's District Design Guide SPD. The masterplan and proposed development form has been influenced by site visits of Huntingdon, Peterborough, Ely, St Ives and more recent developments in Cambridge (Abode, Accordia, Eddington, Trumpington Meadows and Addenbrooke/Ninewells) to develop a greater understanding of how regional forms and materials could be interpreted in a contemporary way at Northstowe. This work has influenced the Phase 2 Design Code and is envisaged to influence the detailed proposals for Phase 3A. The following pages illustrate the key principles, grouped around the following themes:

- how buildings define streets and spaces;
- built form: rooflines;
- built form: rhythm and proportion; and
- materials.

#### Materials



**Figure 4.22:** Consistent brick used for boundary walls and buildings create a coherent townscape in Addenbrooke/Ninewells.



**Figure 4.23:** Materials vary in Huntingdon Town Centre, but the variety is controlled by being within a limited palette of brick types and render, and varying only building-by-building, not within each building.

## Materials



Figure 4.24: Variation in material in this street in Great Kneighton is unified by the symmetrical buildings form, creating a high quality appearance.



Figure 4.25: Consistent use of a single brick type in Ely brings together these varied building forms.



Figure 4.26: Variation in material which respects the same colour palette in Eddington unifies the street and ensures it is seen as a cohesive whole.

## Defining Streets and Spaces



Figure 4.27: This street in Ely is typical of the way that strong linear building forms define and enclose the street. The setback varies, but it is consistent within each building block.



Figure 4.28: Ely: different materials and built form but the consistent building line within blocks strongly defines the river-front street.



Figure 4.29: Contemporary forms in Eddington, Cambridge achieve a similarly strong enclosure of the street and a consistent approach within the building block.



Figure 4.30: Strong definition of Town Centre streets in Peterborough (left) and Huntingdon (right) but there is no doubt which is the main street. The greater width of the street and scale of the buildings on the left gives it a much greater sense of importance than the lane on the right.



Figure 4.31: More subtle changes distinguish these two streets in Great Kneighton, Cambridge. The regular building line, consistent street width and defined kerbs on the left give the street a more formal look and feel than the shared surface, varying width and irregular building line of the street on the right. Although subtle, the differences make the hierarchy clear.

## Built Form: Rhythm and Proportion



Figure 4.32: Although the building scales and materials vary, the proportions in St Ives Town Centre are similar with a strong vertical rhythm and window proportions consistent across building types.



Figure 4.33: Strong vertical rhythm and consistent window proportions in Huntingdon.



Figure 4.34: The block varies in height and building line, but there is a consistent approach to window proportions in Eddington.



Figure 4.35: Away from the Huntingdon Town Centre, buildings become more informal with varied proportions and sometimes horizontal window proportions



Figure 4.36: Informal buildings on the edge of Ely Town Centre have varied window proportions that make the building group appear complex. This complexity is 'calmed down' by the consistency of degree of roof pitch pitched roofs and building line



Figure 4.37: Trumpington Meadows: the distinctive building rhythm allows for a simple approach to elevations.

## Built Form: Rooflines



Figure 4.38: The bringing together of a series of simple roof forms creates a rich townscape in Peterborough. Built forms do not need to be complex to be interesting - it is the way that simple forms come together that creates richness



Figure 4.40: Strong, simple roof forms create a solid, homely character to these homes in Ely.

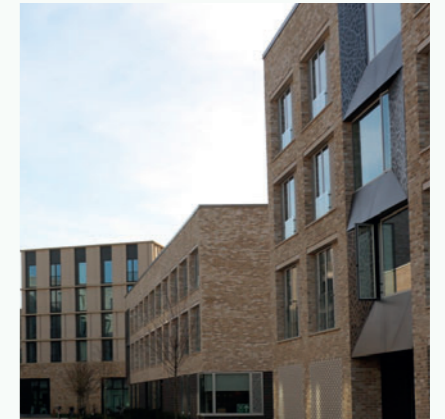


Figure 4.39: Strong, simple roof forms come together to create a contemporary built form in Eddington.



Figure 4.41: The simplicity of form gives a similar feeling of solidity. The quality of the materials and detailing ensure the built form doesn't appear too simple.

### 4.8.3 Local Context

This section analysis the immediate context of Phase 3A, which for the purpose of this DAS comprises Longstanton, Oakington, Westwick, the newly built homes in Phase 1 as well as the character and design principles established for Phase 2.

Phase 2 and 3, promoted by Homes England aim to deliver a step change in design quality. The commitment to delivering design quality has been set out in the Design Code for Phase 2 and is envisaged to be taken forward in Phase 3.

'Lessons learned' workshops within the team and also with SCDC officers have helped to inform character and design approach for Phase 3A.

#### Oakington and Westwick

Oakington is a historic village, comprising a number of local facilities as set out in Section 4.5. The Church of St Andrew is a Grade II\* Listed local landmark.

The historic dwellings within Oakington typically fall into two categories. The earlier buildings (15th to 18th Century) are generally characterised by rendering and a thatched roof (although some of these have now been replaced with tiling). The slightly later buildings (19th Century) are typically constructed using bricks and slate roofs. These buildings are often clustered and sit at the back of the pavement, or occasionally with a small set back. This gives a distinctive, tight and active frontage that forms a strong relationship with the street.

Infill development, mainly in the late 20th Century, has occurred between the historic buildings in the village. The architectural style of these neighbourhoods is somewhat eclectic, with a range of brick, rendering, cladding and pitched and mansard roofs present. The set back of the majority of these buildings behind large grass verges or front gardens is a characteristic that differentiates them from the more historic core.

The hamlet of Westwick is part of the Oakington and Westwick Parish. It is situated east of the Guided Busway and separated from Phase 3A by a dense tree belt. A row of eight agricultural workers cottages form a defining part of Westwick's character, overlooking Oakington Road, as shown in Figure 4.42. These cottages are built from brick with slate roofs and have a minimal set back from the pavement edge, a characteristic style also found within the historic parts of Oakington, as mentioned previously.

Figure 4.42: Examples of local vernacular in Oakington and Westwick:



Agricultural brick built cottages in Westwick



The more historic buildings in Oakington have a minimal set back from the back edge of the pavement and have a strong relationship with the street. The Old Post Office is shown here (left). As seen in this photo and the photo below, low fences, walls or vegetation are used to define property boundaries, which maintains the active edge at ground level.



Characteristic historic buildings along Oakington High Street with the Church of St Andrew visible in the background.

#### Longstanton

Historic village stretching along the western side of Northstowe. Longstanton is a linear village that has expanded from the High Street, with the Conservation area formed around the two churches of All Saints and St Michael's Church and the historic core of the village lying in the south adjacent to Phase 3A. A range of buildings from different periods characterise this village, including the two churches, historic cottages and a recent development in the north, adjacent to Phase 3B. The recent developments are typically suburban in character, formed of two storey brick buildings which are set back from the main road. This, as was found in Oakington, contrasts with the more historic buildings in the village which sit much closer to the pavement edge and incorporate more permeable boundary treatments, as seen on the images below. Red and buff brick, rendering and pitched tiled roofs are all prevalent throughout Longstanton.

Figure 4.43: Examples of local vernacular in Longstanton.



Two storey dwellings set back from the pavement edge characterise much of Longstanton.



The more historic buildings within the village have a stronger relationship with the street afforded by their minimal set back and visually permeable boundary treatments.



St Michael's Church, a distinctive thatched church in Longstanton

## Northstowe

The town-wide structure for Northstowe is set out in the DFD and has been further developed as part of the Design Codes for Phases 1 and 2. In order to create a town that feels coherent and has a strong identity the following overarching requirements and principles have been developed.

### Landscape and open space:

Landscape and open space is an essential part of the vision for Northstowe. Town-wide requirements include:

- Create a series of public open spaces for all ages and abilities;
- Use of native species;
- Integrate flood mitigation as design features, creating locally distinct spaces; and
- Provide natural areas of play.

### Urban Form:

The objectives are to create an adaptable urban form that stands the test of time, is rich in character, locally distinctive and legible and memorable. Town-wide requirements include:

- Create a walkable grid of streets to encourage ease of use for pedestrian and cyclists;
- Allow a variety of architectural approaches within the Town Centre and provide active edges to the main spaces and High Street; and
- Provide a linear route through the town, connecting the Town Centre, local centres and important open spaces.

**Movement:** The dedicated busway provides the central spine through the town. While buildings change throughout the lifetime of a town, streets generally remain. Therefore, it is important to design a network that is robust and can accommodate future changes. This applies in particular to the busway, which must be designed to allow flexibility in its use and the transport modes it can accommodate. Town-wide requirements include:

- Give priority to pedestrians and cyclists, by creating a connected network of legible streets that provide a safe cycle and pedestrian environment;
- Use of tree planting to soften the street scene;
- Create a clearly defined street hierarchy; and
- Include streets that are paved and promote the use of shared surface areas.

## Phase 1

A new residential neighbourhood with a range of houses of contemporary and traditional character. Phase 1 provides a variety of different house types and a Primary School, and it has established the beginnings of a 'town' character with appropriate building scales and character. A Local Centre is also planned.

A number of lessons have been learnt from the build out of Phase 1 which can be carried forwards in Phase 2 and 3, including the need to ensure that the phasing of the build out delivers public open spaces that are accessible by the new residents as they move in.

## Phase 2

Phase 2 of Northstowe contains the Town Centre and higher density development than in Phases 1 and 3.

The Phase 2 Design Code (2017) sets out the vision for this part of the town in terms of character. The following principles are set out to guide how Phase 2 is bought forward:

- The architecture will be contemporary and of urban character;
- Phase 2 will be of higher density than other large developments in South Cambridgeshire, such as Cambourne or Northstowe Phase 1. It will comprise a high percentage of terraces, urban housing and flatted development.
- The development character will vary across Phase 2 with distinct differences to aid legibility. The Town Centre will be the most urban in character with mixed-use blocks of around five storeys. Residential areas surrounding the Town Centre will be more intimate with buildings of mostly 3 storeys and focussed on creating a high quality living environment.
- Medium to high-density housing will be combined with high quality open spaces that are located within short walking distances from all homes.
- Local tradition will inform the overall structure, scale and order of buildings as well as the use of materials, ensuring that Northstowe will be based on the local context and vernacular architecture.
- Streets and spaces will be social areas that encourage community interaction and avoid segregation of the elderly and less able.

### Phase 2A - Urban Splash

The proposals for Phase 2a, prepared by Urban Splash, have been submitted for Reserved Matters approval. The proposals show a neighbourhood that is strongly shaped by the fenland context of the site. The vision for this parcel is to create a contemporary fenland village, 'Inholm Village', which has a perimeter of landscape and is a clearly defined new neighbourhood quarter. The parcel will be permeable and connected to surrounding neighbourhoods within Phase 2 and wider Northstowe.

The dwellings within Inholm Village will all be of modular construction and will offer a range of urban typologies, with an innovative approach to amenity and parking. The proposals demonstrate the quality of development that can be achieved with appropriate masterplanning and design coding.



Figure 4.44: Northstowe Phase 1.



Figure 4.45: Phase 2 Town Centre Visualisation (Allies and Morrison)



Figure 4.46: Phase 2A Reserved Matters Application (Urban Splash)



**5**

**Design Development Process**

# 5 Design Development Process

This chapter sets out the process of initial design and early engagement that was undertaken following the site and contextual analysis.

Two initial concept ideas were developed for Phase 3A, each exploring a different key theme. The first topic of exploration was the history of the site and how this could be acknowledged in the design of the masterplan. The second key theme was the surrounding fen landscape pattern and the opportunity to reflect this in the masterplan. The two concept plans are set out in sections 5.1 and 5.2 below. These were produced for the purposes of early engagement with the public and stakeholders.

## 5.1 Concept 1: Acknowledging Historical References

The first concept masterplan option for Phase 3A acknowledges the airfield history of the site. The former runway alignments are emphasised in this layout, with routes spaces and green corridors created along these axes. The principles of this concept plan include;

- A main axis route at the centre of the development changing in function and character along the way.
- A diagonal green axis traversing the site and linking into the water park to the north.
- A main entrance defined by a primary street at the centre of the development, dividing further north to connect with Phase 2 primary streets.
- A development block pattern that maximises linkages to the Local Centre.
- Drainage strategy focuses on large ponds at the periphery.

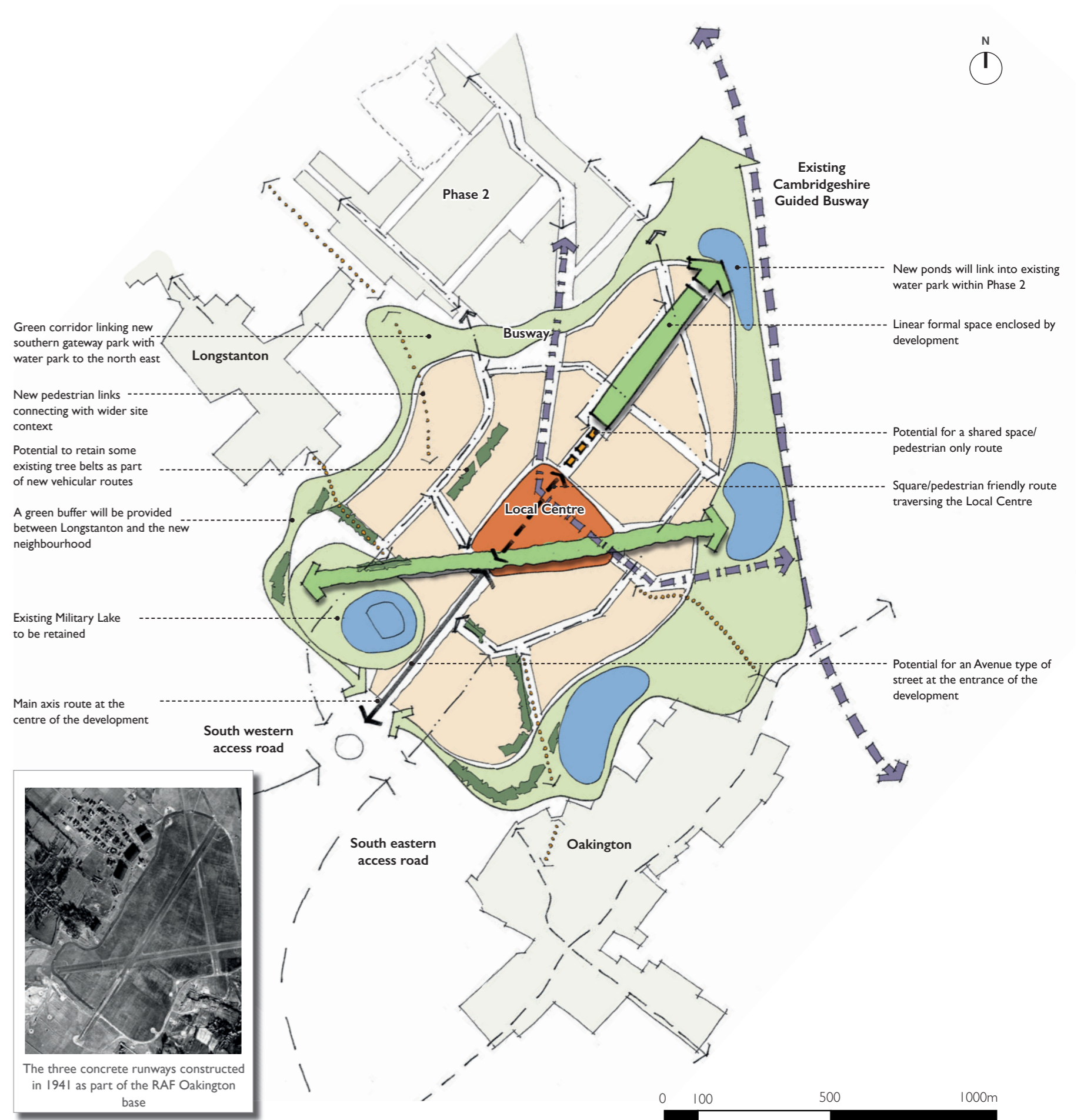
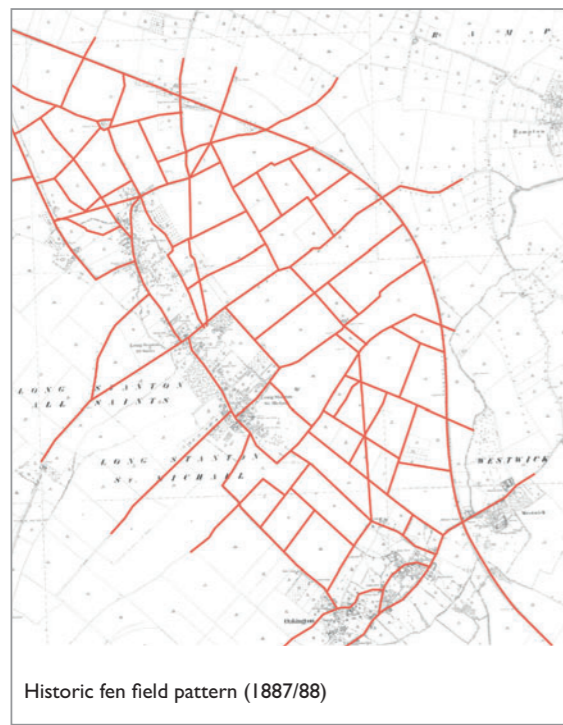


Figure 5.1: Phase 3A Initial Concept Plan Option I

## 5.2 Concept 2: Reflecting the Fen Landscape Pattern

This approach to Phase 3A adopts a formal development grid that relates to the arable field parcels of the Cambridgeshire countryside with organic green corridors traversing the development. The principles of this concept plan include:

- A series of green corridors softening the formal development grid and creating an integrated network of open space.
- A series of smaller attenuation ponds and streams reflecting the Fen landscape and creating attractive visual amenity.
- Confident development edges reflecting the town wide urban design strategy
- A regular block pattern that reflects the historic field patterns and design approaches in Phases 1 and 2.



The proposals for Phase 3A have been developed and informed in response to a series of community and stakeholder engagement events as well as presentations to design review panels.

### 5.3 Stakeholder and Community Engagement

The Stakeholder and Community Engagement Report which accompanies this Planning Application sets out the process of community engagement that has closely informed the design development of Phase 3A.

The initial concept proposals were discussed with the local community, stakeholders and interested parties at an early stage to establish their key priorities and interests to ensure that the masterplan was founded on a generally agreed concept.

Three stakeholder engagement events have been undertaken in July 2018, November 2018 and September 2019. These engagement events typically comprised the following:

- A Council member session;
- An interactive workshop attended by a range of stakeholders; and
- Two public drop-in sessions.

Online questionnaires were made available for any stakeholder or interested individual to complete following the sessions.

Following the Outline Planning Application submission in Spring 2020, formal consultation has been undertaken (during the Spring/Summer 2020 period) which has further informed the production of this DAS.

#### July 2018

The first engagement event took place in July 2018, to introduce stakeholders, Northstowe residents and the wider community to the development of the emerging masterplan. The first was held on July 7<sup>th</sup> 2018 at Pathfinder School, Northstowe and the second in Crossways Communita Café, Oakington on 30<sup>th</sup> July 2018.

Boards explaining the site analysis process and presenting the initial concept ideas and access strategies for the masterplan were displayed at the events, with the opportunity for attendees to comment on these either via post-it notes stuck onto the boards or via a questionnaire which was handed out. There was a further opportunity for people to comment online via a surveymonkey questionnaire which was posted on the Northstowe website.

The key topics raised at the engagement events (by stakeholders and the public) were:

- Desire to reflect cultural heritage of the site in the design including the pillboxes, reinstatement of Mill Road as a movement corridor and pedestrian/cycle access route between Longstanton and Oakington, and reflection of old routes and the former windmill in trails and road names;
- Keen to promote the sense of a healthy town;

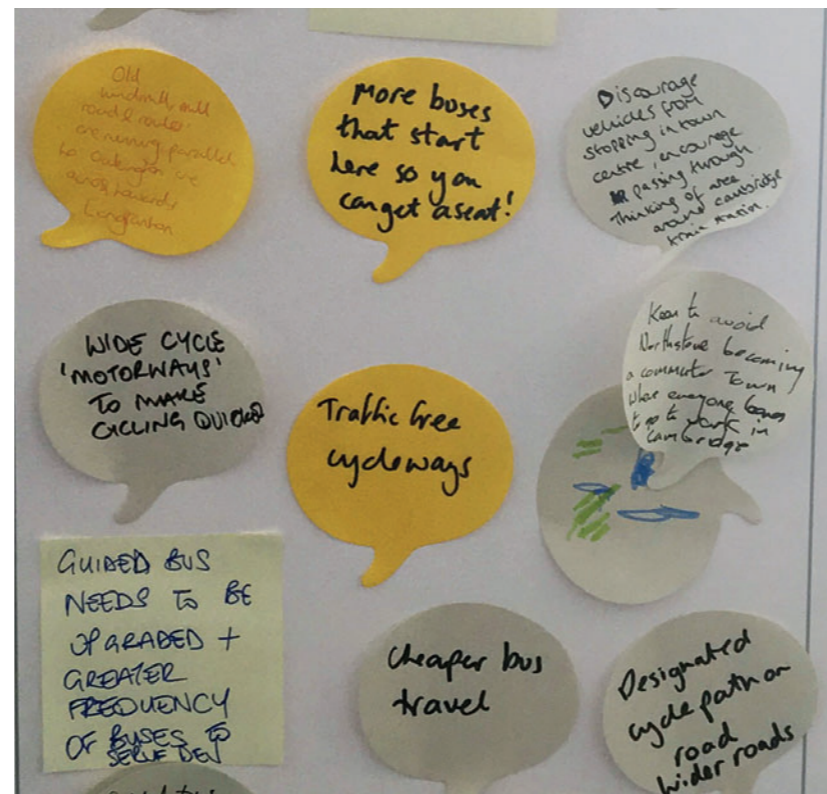
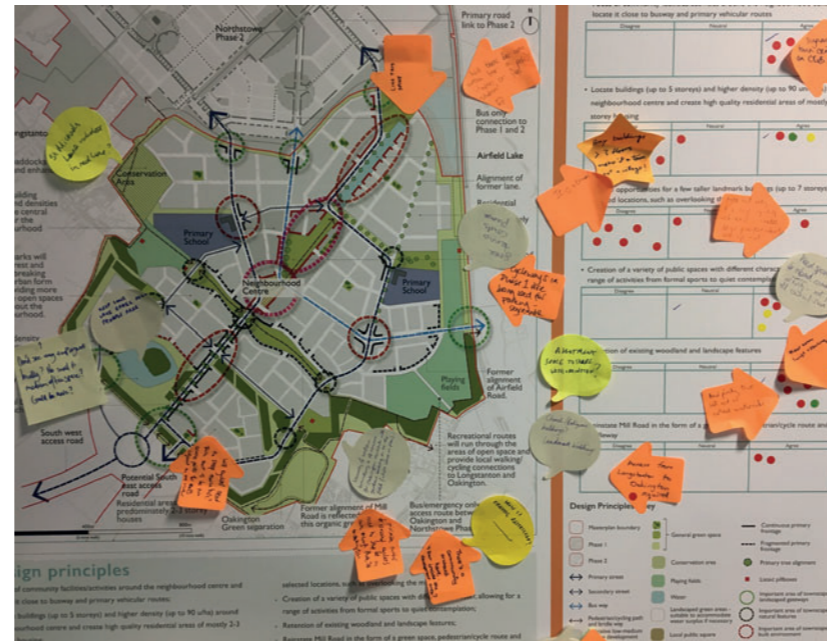


Figure 5.3: Attendees were invited to comment on the site analysis and concept proposals. These comments then helped shape the further development of the masterplan.



Figure 5.4: The initial masterplan proposals were discussed with stakeholders (top image) and the local community (bottom image).

- Positive feedback with regards to introducing organic green spaces and waterbodies into the main body of development as opposed to having peripheral open space;
- Desire to see variety in retail and service provision to reduce off-site travel;
- Establishing the opportunity to travel from Oakington to Northstowe by bus was highlighted; and
- Sustainable travel was raised as a key interest and ensuring that footpaths and cycle paths are provided where possible.

### November 2018

Following the structure of the engagement events held in July 2018, the two events held in November were located in the Pathfinder School and Crossways Communita Café, Oakington, with the opportunity to comment on the proposals online after the engagement had been held. The engagement sessions presented the initial masterplan and access proposals to stakeholders, Northstowe residents and the local community, demonstrating how the design process had evolved in response to the previous comments received.

The responses to the initial proposals included:

- Approval of the large amount of open space provided;
- Approval of the incorporate of the Military Lake and existing tree belts;
- Multiple references to prioritising sustainable transport in the movement and access strategy over cars; and
- Desire to ensure cycle and footpaths are integrated into those around Phase 3.

### September 2019

The engagement event in September 2019 was held at Homes England's offices in Northstowe. This event comprised two public drop in sessions and a council members session.

The responses received to the pre-application proposals for design and access included:

- Support for the Runway Lake and a desire to see it used for recreational activities;
- Support for the potential extended local bus service between Oakington and Northstowe; and
- A desire to see a well defined 'arrival' point into the town.

An additional update session was held in Oakington Pavilion in November 2019.

## 5.4 Design Council (December 2018)

In December 2018 the emerging masterplan for Phase 3A was presented to the Design Council Review Panel. Some of the key points raised included:

- The panel welcomed the introduction of green and blue spaces at the centre of the masterplan.
- They challenged the design team and Homes England to push boundaries and develop an exceptional place in relation to movement, integration of parking and health and wellbeing; designing a place that can change over time.
- The panel felt the design was rightly more structured and reflective of the airfield than the fenland landscape.
- Whilst acknowledging many residents in Northstowe will work in Cambridge, the panel supported Homes England in considering ways to encourage residents to work locally. This could possibly include mixing small entrepreneur units within the development with higher flexible ground floor spaces available for hire for a variety of uses.

## 5.5 Cambridgeshire Quality Panel (May 2019)

In May 2019 the proposals were presented to Cambridgeshire Quality Panel along with an accompanied site visit. Formal feedback from the Panel at the end of May 2019, some of the key points raised include:

### Urban Design Strategy

- Ensure design strategy addresses potential future trends and aims with the capability for self-sustaining healthy communities, landscape quality and recreation at the heart of the future town.
- Aspiration to make Northstowe a low carbon development that is able to accommodate the impacts of climate change.

### Population/Demographics

- Provision of information on the likely population and demographics to provide a basis to understand the level of services and facilities required to support the development and to make it somewhat 'self-sufficient' and help promote walking and cycling as part of ethos
- High level narrative about approach to flexibility and adaptation to allow the Local Centre to change over time
- Potential to challenge level of car parking and provide creative solutions to parking, appropriate to ensure the public realm isn't car dominated.

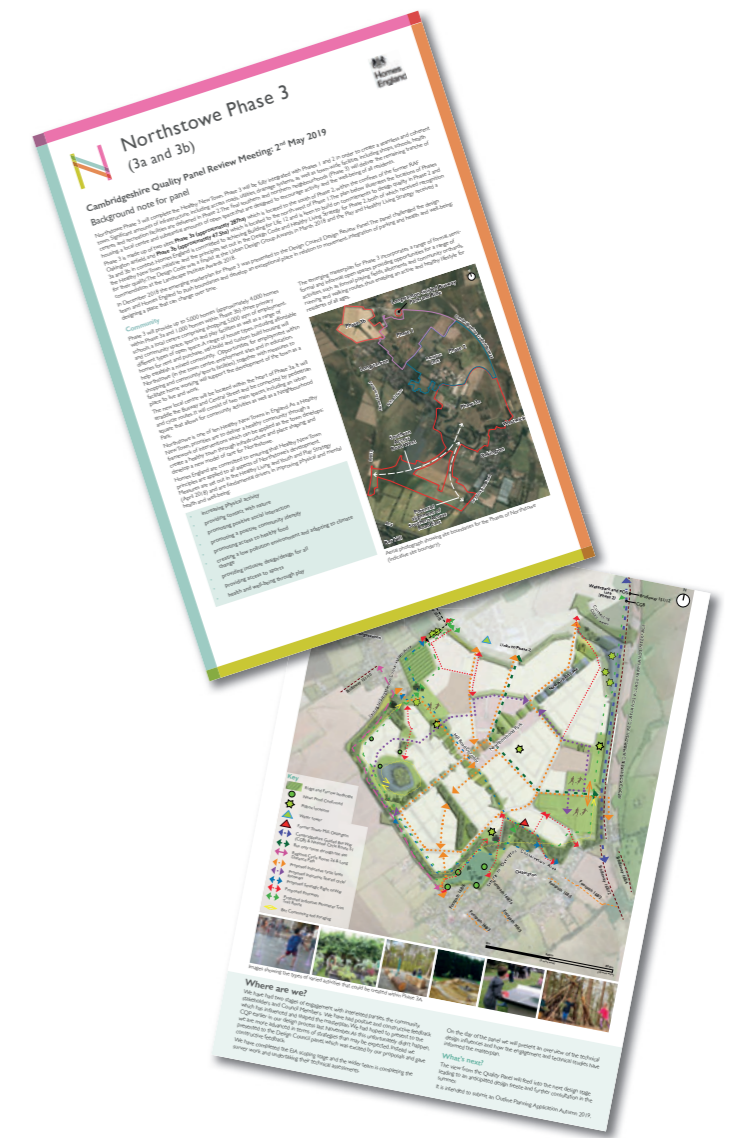


Figure 5.6: The Design Review Panel were issued a briefing note (extract above) on the design development of Phase 3A, before the site visit and presentation. Formal feedback was received in May 2019.

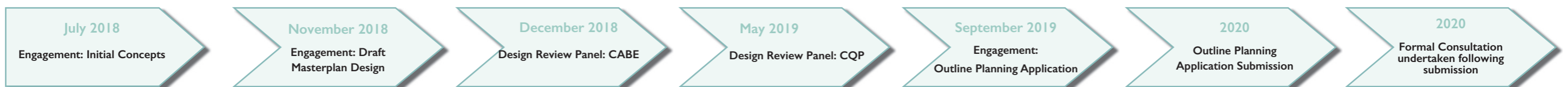


Figure 5.5: Engagement Timeline



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**6**

**The Masterplan**

# 6 The Masterplan

The key driving principles and concepts behind the proposals are explained within this chapter. These have influenced the Masterplan, Parameter Plans and Urban Design Principles. Illustrative drawings and descriptions further explain the masterplan vision and opportunities to create a high quality neighbourhood.

The purpose of this chapter is to explain the rationale behind the proposals for Phase 3A. The diagrams and illustrations set out in this chapter are illustrative only and do not establish any further fixed elements of the development beyond those set out in the parameter plans. Where diagrams and illustrations in this DAS include extracts from the parameter plans, they may also include additional illustrative materials. For the fixed parameters, please refer to the 'Movement and Access', 'Building Heights' and 'Open Space and Land Use' Parameter Plans submitted as part of this planning application. All other plans and diagrams, including the illustrative masterplan, are for illustrative purposes only to demonstrate how the proposed mix of uses and character areas could be accommodated within the site.

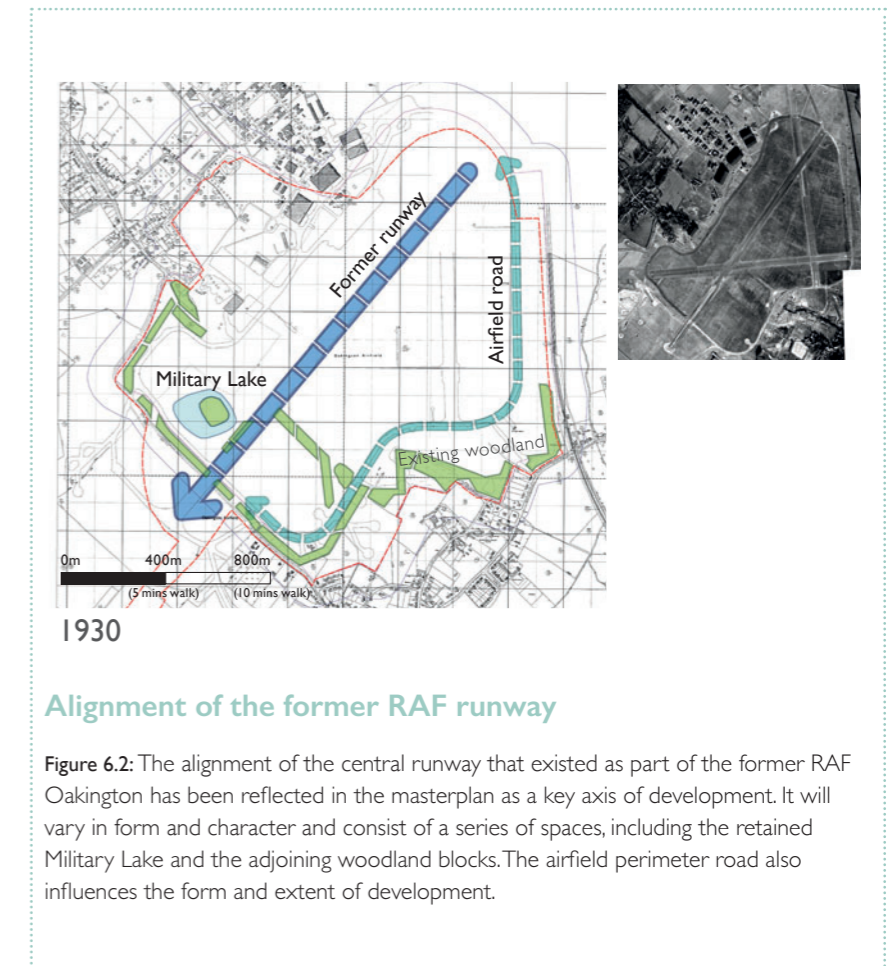
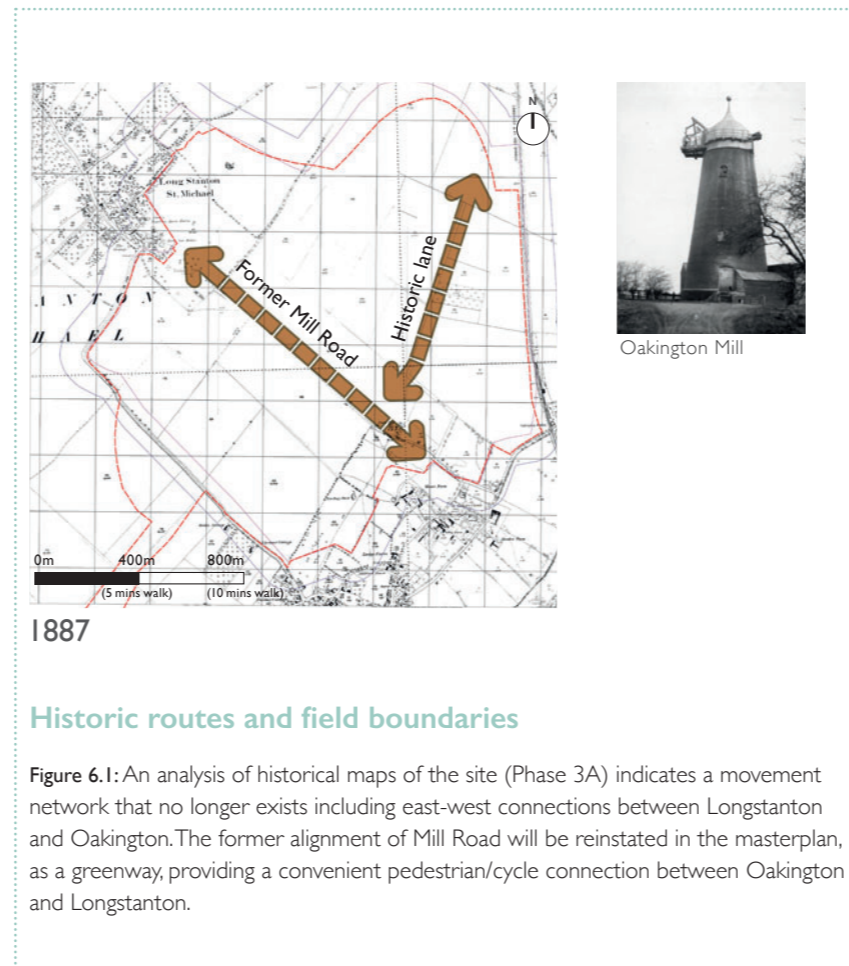
Section 6.3.2 sets out the key Urban Design Principles for Phase 3A. These principles have been extracted into the Design Principles Document (Appendix A) which forms one of the approved documents supporting this application. The Design Principles Document also contains an Urban Design Framework Plan, which draws together the Parameter Plans set out in this chapter, and illustrates how the different elements of green space, land use and movement interact with each other.

## 6.1 Concept and Strategic Principles: Phase 3A

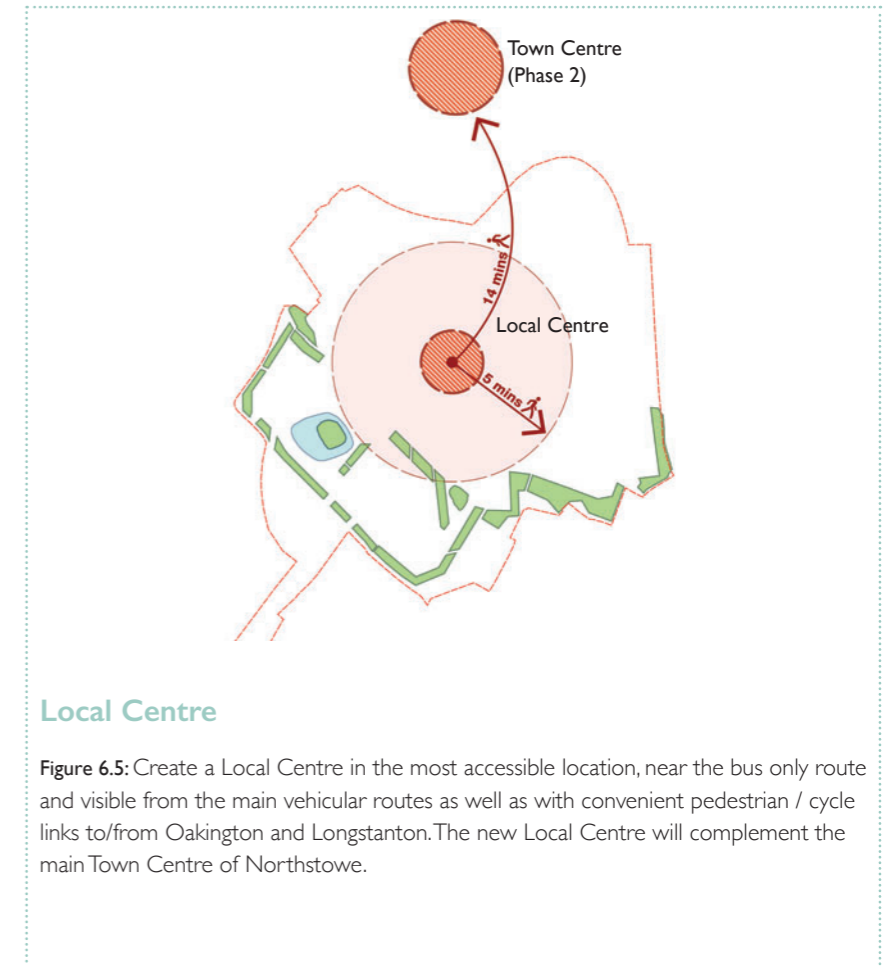
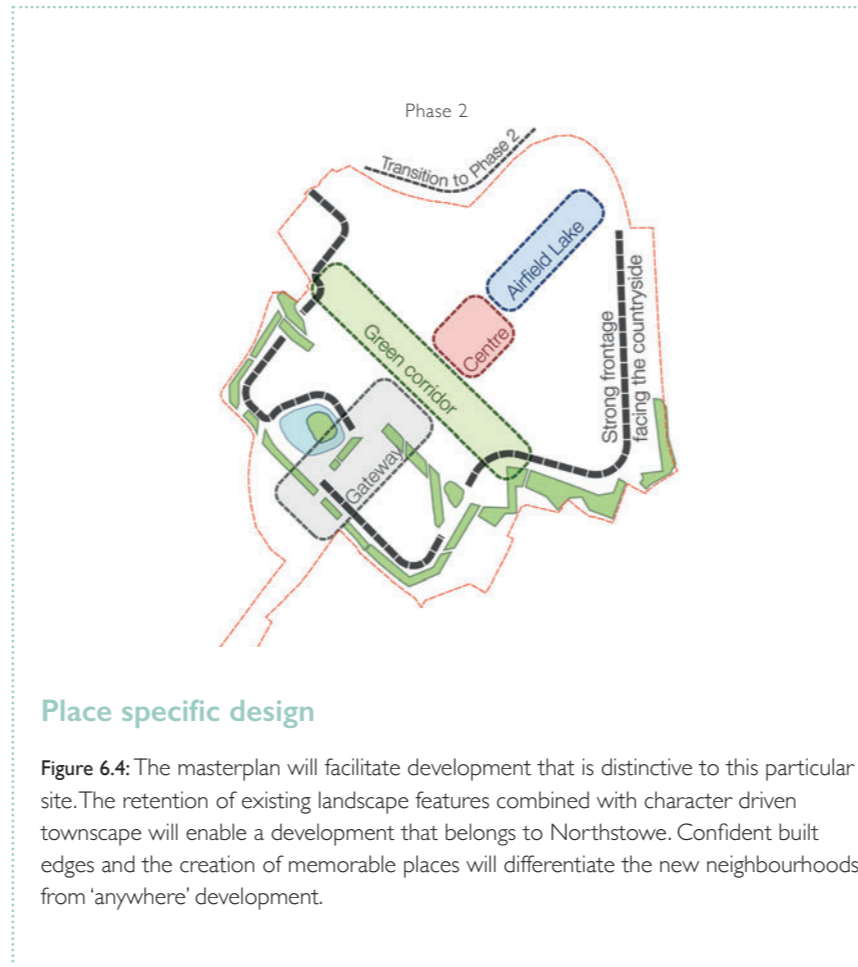
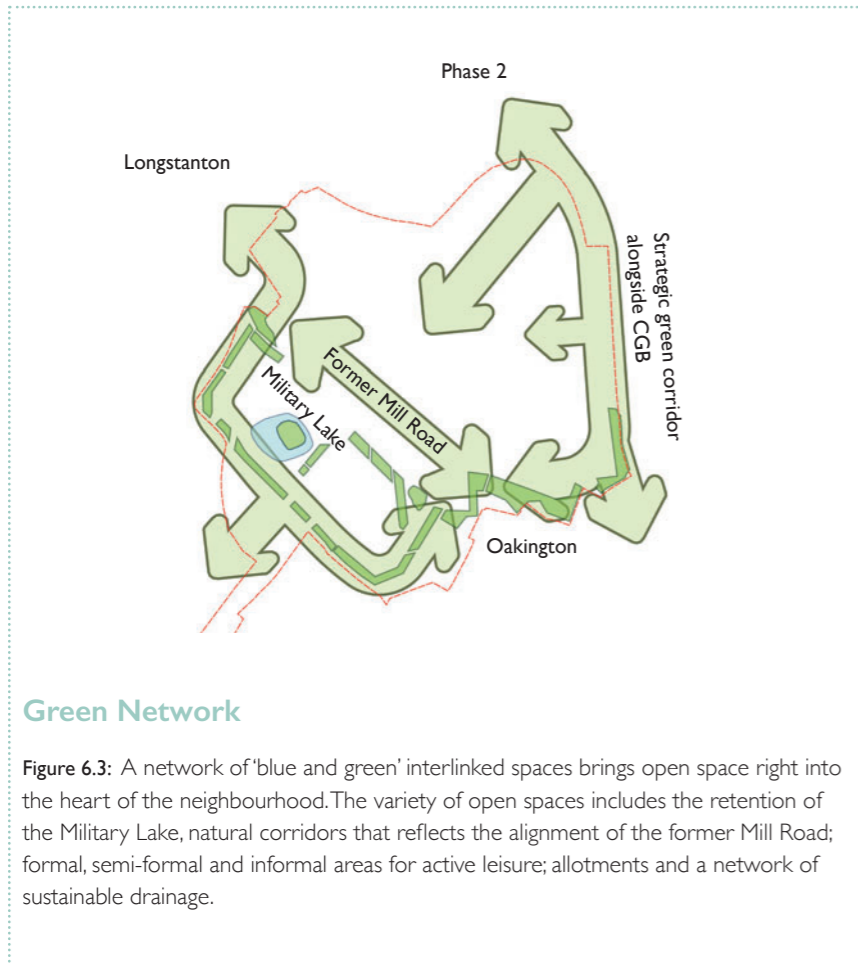
A number of key influences have shaped the development of the masterplan. These pages explain these design influences and how they have helped form the emerging masterplan. These have been drawn directly from the community and stakeholder feedback and the site analysis undertaken.

### Sustainability

Sustainability in its widest sense is a key principle for the development of Phase 3A. As Northstowe is a new town, future-proofing the development is important. The masterplan, movement network and built form should have the capacity to stand the test of time.







Figures 6.1 to 6.5: Key design principles for the Phase 3A masterplan.