

2 Site description and development proposals

Introduction

- 2.1 This chapter provides a description of the application site and surrounding area, outlines the development proposals and provides construction and post-construction information.

The application site

- 2.2 The site is divided into two areas: the primary development site that will accommodate the proposed dwellings, employment land, facilities and open space, and the Hatton's Road attenuation ponds area (figure 2.1). The 97 ha primary development site comprises the 18-hole Cambridge Golf Course and driving range in the south and centre and agricultural fields in the north and south east.
- 2.3 There are several engineered ponds within the golf course, which largely consists of amenity grassland, and a number of fen drains that drain surface water from the course. There is an area of marshy grassland in the south west of the site. There are trees across the site associated with the landscaping of the golf course and several hedgerows that run along the fen drains. Three public footpaths run through the west of the site and a byway runs through the south east.
- 2.4 The 25 ha Hatton's Road attenuation ponds area lies adjacent to the B1050, to the south west of Longstanton and the north of New Close Farm (figure 2.1). It is in arable agricultural use. Longstanton Brook runs through the west of the area and there is a public right of way adjacent to the south eastern boundary.

The surrounding area

- 2.5 The primary development site is bordered to the north and north east by the Longstanton Park and Ride and the route of the Cambridgeshire Guided Busway, beyond which are fields, and to the south and south east by the remainder of the wider Northstowe site, including an area of fields to the north of Rampton Road and the former Oakington Immigration Centre, barracks and airfield. The village of Longstanton forms the western site boundary.
- 2.6 The Hatton's Road attenuation ponds area is bordered to the west by the B1050 and to the east, south and north by agricultural fields.
- 2.7 Approximately 58 ha of agricultural land to the north of the primary development site is identified in the adopted *Northstowe Area Action Plan* (2007) as strategic reserve land to form part of Northstowe. The settlement of Willingham lies to the north east of the primary development site, Rampton lies to the east and Oakington to the south.

- 2.8 The A14 runs approximately 3 km to the south west of the primary development site and the B1050 Hatton's Road / Longstanton western bypass runs north from the A14 to a new roundabout adjacent to the primary development site.

The future of the site in the absence of the proposed development

- 2.9 In the absence of the proposed development, it is likely that the site will continue in its current use.

The parameter plans

- 2.10 Four parameter plans provide the strategic framework that establishes the principles of development. Future details will be brought forward as part of the reserved matters applications in accordance with this framework. The parameter plans comprise:
1. The land use and open space plan, which shows the various land use components of the development and the proposed areas of open space and landscape planting.
 2. An access and movement strategy, which shows the proposed road and footpath / cycleway networks.
 3. A building heights strategy, which shows the lower and upper parameters in respect of the heights of buildings across the site.
 4. A density strategy, which shows the various proposed housing densities across the site.
- 2.11 These plans are contained within this ES as figures 2.2 to 2.5. Together they indicate the spatial principles of the proposals and provide a framework for the detailed design of the development. It is this framework that has been subjected to EIA.

Land use and open space

- 2.12 Figures 2.2a (primary development site) and 2.2b (Hatton's Road attenuation ponds) illustrate the proposed distribution of land uses across the site. The predominant land use will be residential development and this will accommodate up to 1,500 dwellings. It is proposed that up to 35% of these dwellings will comprise affordable housing units.
- 2.13 A 3 ha site for a three-form entry, 630-place primary school and an interim community hub is proposed in the centre of the site.
- 2.14 A 5 ha employment area, including a household recycling centre, is proposed in the north of the site, adjacent to the Park and Ride, and approximately 3.75 ha of employment land will be provided in this area. It is proposed that this will accommodate up to 12,740 m² of employment floorspace, split into approximately 6,370 m² of B1 (business), approximately 5,096 m² of B2

(general industrial) and approximately 1,274 m² of B8 (storage and distribution) uses. The area will also include a 1.25 ha site for a household recycling centre, which will provide a facility for residents to bring household waste for sorting and recycling, and a foul water pumping station.

- 2.15 A 1.22 ha mixed use local centre will be provided to the south of the proposed employment area, adjacent to the B1050. This area will include ground floor retail uses covering 1,500 m², a 900 m² community building, approximately 450 m² of other commercial / retail / food and drink / community uses and some of the dwellings discussed above.
- 2.16 Approximately 6.17 ha of formal recreation / sports pitches is proposed in the west of the site, adjacent to Longstanton, together with changing facilities. Approximately 1.57 ha of allotments are proposed to the north of the sports pitches, with smaller community gardens in the centre of the site. In addition, around 23 ha of informal open space will be provided across the site, much of which will be in the east adjacent to the Cambridgeshire Guided Busway. Equipped play areas will be distributed across the site within the informal open space. Two green corridors will be provided running west-east through the site.
- 2.17 Existing tree groups in the west of the site will be retained and new structural planting is proposed along the western boundary. Some of the existing hedgerows along the site boundaries and along the field boundary in the south east of the site will also be retained. New habitat creation in the Hatton's Road attenuation ponds area will include species rich grassland, marshy grassland, structural planting and areas of scrub (figure 2.2b).

Building heights

- 2.18 The building heights strategy has been designed with regard to the sensitivity of the location of Longstanton village at the site's western edge and the importance of the main roads through the site (figure 2.3). Residential buildings along the western edge of the proposed development will be up to two storeys in height, with a maximum ridge height of 9 m. Residential buildings along the main roads through the site will be up to four storeys, with a maximum ridge height of 14.5 m. The remainder of the residential buildings will be up to three storeys, with a maximum ridge height of 11 m.
- 2.19 The majority of buildings in the proposed local centre will have a maximum ridge height of up to 14.5 m, although a potential location for a landmark building (up to 25 m) is identified on the edge of the local centre. The school will have a maximum height of up to 9 m, while the employment buildings and recycling centre will have a maximum height of up to 13 m. The changing facilities will have a maximum height of up to 8 m.

Density

- 2.20 The site will be developed at a range of densities, from 30-34 dwellings per hectare (dph) along the western edge to 38-42 dph along the main roads through the site (figure 2.4).

Access and movement

- 2.21 The access and movement strategy is shown on figure 2.5. Vehicular access to the site will be via four new junctions with the B1050, one of which will be a dedicated access for the proposed employment land. The B1050 will be realigned where it passes through the north of the site.
- 2.22 The existing public footpaths and byway on site will be retained and a new network of on and off road cycle and pedestrian routes will be created through the site (figure 2.5), which will also link the proposed development with Longstanton to the west and connect into the existing off site public right of way network. A new pedestrian / cycle only crossing will be provided across the B1050 where it passes through the site, to connect the local centre with the proposed residential area to the west of the B1050.
- 2.23 Land will be safeguarded through the centre of the site for the first length of an internal busway link for the Cambridgeshire Guided Bus (figure 2.5).

Service provision

Surface water drainage

- 2.24 The proposed surface water drainage strategy consists of an attenuation area in the east of the primary development site, adjacent to the Cambridgeshire Guided Bus route, which will contain two ponds designed as permanent water features. The surface water runoff generated from the proposed development will be conveyed to the ponds by gravity via a combination of a conventional piped system and arterial green corridors running west to east that discharge to the ponds. To isolate the site from any existing residual flood risk from Beck Brook, a flood bund with a height of 7.5 m AOD will be constructed within the proposed area of informal open space adjacent to the Cambridgeshire Guided Bus route. The site development levels will be raised above the existing flood level.
- 2.25 The attenuation ponds will be designed to store the 1 in 200 year plus climate change storm event, with additional capacity provided in the adjacent area of public open space to cater for extreme storms in excess of the design event. The attenuation area will be designed to contain all the runoff from the site, assuming the source control measures discussed below have no effect, which provides a reasonable worst case storage capacity. The attenuation area will be designed to provide a substantial amount of storage if a second storm occurs whilst the area is draining down. The exact volume of storage required will be confirmed at the detailed design stage, although at this stage the area has been

designed with a capacity of approximately 300,000 m³ of storage up to a level of 7.0 m AOD.

- 2.26 It is proposed to provide the attenuation area with a single outfall discharging into the Reynolds Drain. During flood conditions within the Beck Brook and Reynolds Drain, it is intended that the ponds will not discharge and all runoff will be stored on site until flood conditions in the adjacent watercourses subside. It is anticipated that, following recession of flooding within the receiving watercourses, it will be possible to discharge using a variable discharge rate depending on the hydraulic capacity within the downstream catchment. In order to provide a degree of flexibility in the outflow to cater for normal dry weather and storm conditions, it is proposed to regulate discharges from the outfall using a telemetry system linked to a number of sensors to provide water level information within the downstream sections of the Cottenham Lode catchment, including the confluence with the River Great Ouse.
- 2.27 In order to regulate flows and maintain water quality in runoff, the proposed development will include a range of source control sustainable drainage systems (SuDS) measures, such as 'living roofs', lined porous paving in courtyards etc. The exact form of SuDS will depend on specific local constraints associated with individual areas of the site and will be included into the relevant design codes at the reserved matters stage.
- 2.28 In addition to the attenuation ponds proposed on the primary development site, flood mitigation for existing flooding within Longstanton is proposed in the form of the Hatton's Road attenuation ponds to the south of the village. Two attenuation ponds of approximately 4.0 ha and 5.5 ha will be provided, with a storage volume of approximately 47,000 m³ and 58,000 m³ respectively, adjacent to Longstanton Brook. The ponds will have off-line connections to the brook and will be designed to reduce peak flows in the brook. Side inlet weirs will be used to channel some of the existing flood flows into the attenuation area, with culverts to allow the water to drain out once flood flows have passed. This means that normal flows will bypass the ponds, but flows will be diverted into the ponds in extreme flood events, reducing flood flows through Longstanton. The brook will be locally diverted around these ponds so that they can be integrated into the landscape whilst reducing the extent of the required earthworks.
- 2.29 Full details of the proposed drainage strategy are provided in the flood risk assessment in technical appendix H.

Foul water treatment

- 2.30 Anglian Water is the sewerage undertaker for the area. Anglian Water's network in Longstanton and Oakington is at capacity and there are existing flooding problems from the foul drainage system in Longstanton. The existing foul flow from Longstanton is pumped to Over Sewage Treatment Works.

- 2.31 It is proposed that foul sewage from the site will be pumped to Uttons Drove Sewage Treatment Works. The works will need to be updated as part of Anglian Water's investment plan. Anglian Water has confirmed that it can provide capacity for the development through implementation of its upgrade plans.
- 2.32 The discharge of treated sewage from Uttons Drove is the subject of a number of technical studies to ensure that any increase to the flow does not increase the flood risk downstream. A land drainage scheme has been agreed in principle with the Swavesey Internal Drainage Board, the Environment Agency, Anglian Water and South Cambridgeshire District Council. It incorporates two stages, as follows:
- Stage 1: Upgrade to the watercourses between Uttons Drove and Webb's Hole Sluice, which is likely to be undertaken in 2011-2013
 - Stage 2: Installation of a pumping station at Webb's Hole Sluice, capable of pumping 1 m³/s, to pump out the extra flows when the sluice is closed
- 2.33 The proposed stage 1 works have been modelled with a temporary pump that has been installed at Webb's Hole Sluice, capable of pumping 40 l/s, to accommodate the original Cambourne development. Modelling undertaken by the Environment Agency has demonstrated that the scheme can accommodate additional dwellings at Cambourne and the proposed development. Anglian Water has confirmed that it intends to use this additional capacity to serve the proposed development.
- 2.34 A terminal pumping station will be constructed in the north of the site to transfer sewage to Uttons Drove Sewage Treatment Works. The foul drainage from the proposed development will drain to the terminal pumping station generally by gravity, with local lifting stations as necessary to prevent excessive sewer depth.

Water supply

- 2.35 Cambridge Water supplies the area around Northstowe from the Cherry Hinton reservoir to the south east of Cambridge. Water is transferred from there to the Coton and Madingley reservoirs to the west of Cambridge. Madingley reservoir feeds trunk mains that pass northwards to the west of Oakington and Longstanton to supply areas to the north of Over. Villages on each side, including Oakington and Longstanton, are supplied by branch mains from these trunk mains.
- 2.36 Cambridge Water has confirmed that it has adequate water resources to serve the proposed development and that this can be delivered with planned reinforcement in the form of a new 300 mm diameter branch main from the trunk main to the north of Longstanton, following the route of the bypass.

Renewable energy

2.37 The energy strategy for the proposed development has been devised to meet the following exemplar standards to create a development that is able to mitigate the effects of, and be adapted to, climate change, with dwellings that are energy efficient, useable and comfortable to live in, now and in the future, offering maximum value and affordability for residents:

- To exceed the planning policy targets for energy efficiency, reduction in carbon dioxide emissions and inclusion of low carbon or renewable energy technologies, with a proportion (currently expected to be 65%) of the proposed development being built to the government's 'zero carbon home' standard
- To prioritise energy efficiency measures over low carbon or renewable energy technologies and provide a flexible approach in responding to emerging exemplar standards in each phase over the development period as these come forward

2.38 The Energy Statement submitted in support of the application concludes that a strategy based on exemplar levels of energy efficiency and microgeneration of low carbon or renewable energy, principally solar thermal and photovoltaic panels, supplemented by high efficiency gas boilers, is most appropriate for the proposed development. This takes account of the low density of the proposed development and the need to ensure that energy is affordable for residents. The key sustainable energy measures proposed are therefore:

- High levels of energy efficiency in line with the Zero Carbon Hub Fabric Energy Efficiency requirements for the 'zero carbon home'. It is expected that the proposed development will reduce carbon dioxide emissions by 8% over Building Regulations (2010) through energy efficiency alone. The carbon dioxide reduction for the dwellings will be higher than this
- Dwellings from 2016 will be built to amended Building Regulations (2016) requirements and any subsequent revisions. This will take account of the government's final decision on low / zero carbon requirements, including the proposed Fabric Energy Efficiency Standard, Carbon Compliance and Allowable Solutions. This is the exemplar standard for the energy performance of dwellings
- Generation in excess of 10% of total energy from low carbon or renewable energy technologies

Other services

Electricity

2.39 UK Power Networks (UKPN) is the electricity supplier for the area around the site. The site and surrounding villages are currently supplied from a strategic 132 kV substation at Histon, which is connected to a primary 33/11 kV substation adjacent to Hatton's Road, to the south of Longstanton. There are plans to upgrade the strategic infrastructure that supplies the whole of the

Cambridge sub-region, and the projected electricity requirements for Northstowe are included in these plans.

- 2.40 UKPN has advised that there is very little spare capacity in the area of the site, and reinforcements will be needed for the proposed development. An overlay of the 33 kV cables from Histon substation to Longstanton substation will be required for the proposed development and a new 11 kV cable will be required from Longstanton substation to the site.

Gas

- 2.41 National Grid is the regional gas supply company for the area around the site. The main supply in the area is an 8 inch intermediate pressure gas main that runs along the western verge of the A14. This supplies a 4 inch intermediate pressure main leading to a pressure reduction station in Oakington, which then supplies Oakington and Longstanton with medium pressure gas. National Grid has confirmed that it has adequate resources to supply the proposed development and that this can be delivered to the site with the planned reinforcements set out below.
- 2.42 National Grid has confirmed that there is sufficient capacity in the low / medium pressure network to supply at least 750 units without significant infrastructure upgrades. Connections for these can be taken from the medium pressure main in Longstanton. To supply the whole of the proposed development, it is envisaged that some off site reinforcements will be required to the intermediate pressure network.

Telecommunications

- 2.43 Gallagher is working with a number of providers to design and deliver a 'fibre to home' broadband network to ensure the new residents will have a high speed connection for future telecommunications, IT and media purposes.

Construction

Construction phasing

- 2.44 The proposed construction phases are shown on figure 2.6a to 2.6d and summarised in table 2.1. It is envisaged that construction works will commence in 2014 and be completed in 2021.

Table 2.1: Proposed construction phasing

Phase	Years	Activity
1-1	1 to 3	<ul style="list-style-type: none"> • Earthworks commence to form the attenuation pond, platform levels and first greenway • Strategic landscaping to the water park, greenway and other areas to commence, including the open space at the site entrance • On site infrastructure to commence to serve the first release of land parcels • A dedicated construction route will be established along the route of proposed roads, connecting to the B1050, together with a main compound and delivery holding area within the proposed employment area • The sports hub and allotments will be established • Off site provision of utilities required will be commenced • The first phase of residential development will be commenced
1-2	2 to 4	<ul style="list-style-type: none"> • Earthworks for the attenuation pond and the area between the two greenways will continue to form the land platform • Strategic landscaping to the water park, greenways and other areas, including around the sports hub and the buffer along the western boundary • The sports hub will be finally graded and seeded, the pitches will be laid and the sports hub building will commence • The school will commence • Infrastructure works will continue to service land parcels released, including utilities • Play areas included in the completed open space areas will be established • Employment areas will be marketed and released as required, commencing in year 3, including the established of the household recycling facility • The local centre parcel will be marketed and released as required • Residential development will continue
1-3	3 to 4	<ul style="list-style-type: none"> • Earthworks complete • Strategic landscaping to the water park, greenways and other areas, including around the sports hub and the western buffer, continues • Sports hub complete • School complete • Local centre parcel continues to be marketed and released as required • Infrastructure works will continue to service land parcels released, including utilities • Play areas included in the completed open space areas will be established • Employment areas continue to be marketed and released as required • Residential development will continue
1-4	4 to 6	<ul style="list-style-type: none"> • Strategic landscaping to the water park, greenways and other areas, including around the sports hub and the buffer along the western boundary continues until complete • Infrastructure works will continue to service land parcels released, including utilities • Employment areas continue to be marketed and released as required • Residential development will continue
1-5	5 to 8	<ul style="list-style-type: none"> • Infrastructure works will continue to service land parcels released, including utilities • Employment areas continue to be marketed and released as required • Residential development will continue until complete

Earthworks and spoil

- 2.45 The principal aim of the earthworks strategy is to lift ground levels above the 1-in-100 year flood level (including an allowance for climate change) to provide flood protection where necessary and to enable the proposed development to be drained to the proposed attenuation ponds in the south east

of the site. This will be achieved by a proposed strategy that will give a cut and fill balance within the site boundary for the primary development site and Hatton's Road attenuation ponds area. This will minimise the movement of material within the site and will assist in keeping the amount of material to be imported / exported to the overall proposed development to an absolute minimum by incorporating an allowance for construction arisings generated during the development of the plots.

2.46 The strategy will be completed in two phases as follows:

- Stage 1: the two attenuation ponds and one greenway will be excavated and constructed, with the excavated material being spread over the area to the north of the greenway and the western half of the land between the two greenways. The secondary flood protection bund on the eastern edge of the site will also be constructed
- Stage 2: The Hatton's Road attenuation ponds area and second greenway will be constructed and the excavated material will be spread over the remaining primary development site

2.47 A summary of the proposed cut and fill volumes for each part of the earthworks strategy is shown in table 2.2. Topsoil will be stripped and stored separately for later re-use within the proposed development and landscaped areas for phase 1 and later phases. Any contaminated spoil would need to be removed to an appropriately licensed landfill for disposal, but quantities are likely to be minimal.

Works	Cut (m³)	Fill (m³)
Excavate larger pond	104,000	-
Excavate smaller pond	6,000	-
Excavate first greenway	23,000	4,000
Construct bund	-	10,000
Development north of first greenway	28,000	79,000
Western half of development between greenways	-	56,000
Second greenway	8,000	4,300
Excavate materials from Hatton's Road attenuation ponds	215,000	-
Remaining development between greenways	18,800	186,500
Development south of second greenway	-	59,300
Total	402,800	399,100

Employment

2.48 Based on experience of other schemes of similar scale, it is estimated that an average of 200 to 250 people will be employed during the construction phase. This assumption has been used in the ES. However, at this outline stage, detailed estimates of employment numbers to be generated during the construction phase are not available.

Working hours

- 2.49 It is anticipated that the standard working hours for all construction activities will be from 07:30 to 18:00 Mondays to Fridays and 08:00 to 13:00 on Saturdays. No continuous 24-hour activities are envisaged at this stage and neither is external Sunday or Bank Holiday working.

Plant and machinery

- 2.50 The plant and equipment that is likely to be employed at the site during the enabling / infrastructure phase of construction may include scrapers, dozers, 360° excavators, backhoe loaders, dumpers, dump trucks, rollers and compressors. The construction of the proposed buildings may also utilise other heavy equipment, such as lifting plant, cranes and fork lift trucks. The precise nature and quantity of plant employed during construction will vary with each stage of the development.

Construction materials

- 2.51 It is anticipated that the construction materials required will be those normally associated with a development of this nature, including for example bricks, windows, roof tiles, blockwork, bulk timber, timber trusses, ready mixed concrete, plasterboard, dense bitumen / stone macadam, concrete kerbing and sub-base crushed concrete.
- 2.52 In terms of construction practices, fuel and oil will be confined to specified areas and stored in a manner to prevent contamination of soil or groundwater through accidental spillage. Contractors will be required to follow health and safety regulations regarding the use of any toxic or hazardous materials. Further details are provided in the Construction Management Strategy submitted in support of the application.

Construction traffic

- 2.53 Construction traffic will be routed to and from the site via the A14 Bar Hill Interchange, along the B1050 to the site accesses. To minimise the impact of construction traffic on the A14, HGVs will not be permitted to enter or leave the site during the peak hours (08:00 to 09:00 and 17:00 to 18:00). HGV traffic from the aggregate works to the north of Willingham will be subject to agreement with Cambridgeshire County Council and South Cambridgeshire District Council, which will reflect existing restrictions.
- 2.54 The estimated number of HGV movements generated during the construction phase has been calculated based on construction traffic trip rates for different construction activities agreed with the Highways Agency for the 2007 application, and an estimation of build out rates (see Construction Management Strategy for further details). The calculations suggest that the construction phase will generate an average of 19 additional HGV movements per day, rising to a maximum of 39 additional HGV movements per day during the peak of construction activity in 2017 / 2018. Based on the analysis

undertaken in 2007, it is estimated that approximately 30% of the HGV trips will use the A14 (east) and 70% will use the A14 (west).

Post-construction

- 2.55 In order for the potential post-construction effects to be assessed, a number of assumptions have been made.
- 2.56 The predicted increase in population arising from the proposed development has been calculated by Cambridge Econometrics, based on the predictions set out in their 2007 *Northstowe Demographic Report*, as revised in *Updated Demographic Projections for Northstowe* (2011). The revised report contained predictions specifically for phase 1 (table 2.3). It should be noted that the report estimated the population for 1,540 dwellings, rather than 1,500, so this is considered as providing a reasonable worst case prediction of the development's population.

Table 2.3: Projected population of the proposed development (2021)

Age	Population
0-15 years	957
16-19 years	102
20-29 years	760
30-49 years	1,635
50-59 years	298
60-64 years	90
65-74 years	123
75+ years	119
Total	4,089
Primary school age children (ages 4-10)	421
Secondary school age children (ages 11-15)	200
Secondary school age children (ages 16-17)	56

- 2.57 The number of jobs estimated to be created by the proposed development post-construction is set out in table 2.4.

Table 2.4: Estimated job creation post-construction		
Element of proposals	Assumption	Number of jobs
B1 floorspace	1 job per 20 m ² (Based on a combination of floorspace multipliers) ¹	319
B2 floorspace	1 job per 35 m ² (Based on a combination of floorspace multipliers) ¹	146
B8 floorspace	1 jobs per 60 m ² (Based on a combination of floorspace multipliers) ¹	21
Local centre	1 job per 18 m ² (Based on a combination of multipliers for potential local centre uses from <i>Employment Densities Guide</i> (Homes and Communities Agency, 2010))	108
School	1 staff member per 11 pupils (Based on Department for Education <i>School Workforce in England January 2010</i>)	57
Household recycling centre	Based on similar facility at Witchford, East Cambridgeshire	15
Total	--	666

2.58 For the purposes of carrying out the EIA, it is assumed that existing residents in the area, both around the site and along the principal access roads, represent the most sensitive human receptors to potential effects. The assessment will therefore primarily consider potential effects on the existing sensitive receptors.

Alternatives

- 2.59 The location of the wider Northstowe new town has been tested over several years. Following the identification of the Longstanton / Oakington area as the preferred location for a new town in *Regional Planning Guidance 6* (2000), the *Cambridge Sub-Regional Study* was commissioned by the Standing Conference of East Anglian Local Authorities to undertake an initial assessment to identify possible new town locations. Cambridgeshire County Council then built on this work during the preparation of the *Cambridgeshire and Peterborough Structure Plan* (2003), with a detailed alternative sites assessment of seven potential locations. South Cambridgeshire Council also undertook an evaluation of six possible sites for locating a new town in 2001.
- 2.60 Following the above studies, the allocation of Northstowe for a new town was confirmed in the adopted *Cambridgeshire and Peterborough Structure Plan* (2003), and subsequently in the adopted *East of England Plan* (2008), the adopted *South Cambridgeshire Core Strategy* (2007) and the adopted *Northstowe Area Action Plan* (2007). In light of the range of alternative sites studies undertaken, and the allocation of Northstowe in adopted policy

¹ These factors were based on a combination of floorspace multipliers provided in *Employment Densities: A Full Guide* (English Partnerships, 2001), Appendix D of *Employment Land Reviews* (Department for Communities and Local Government, 2004) and *Employment Densities Guide* (Homes and Communities Agency, 2010).

documents, it was not considered appropriate to investigate potential alternative sites further.

2.61 The master plan for the proposed development has evolved through consultation with South Cambridgeshire District and Cambridgeshire County Councils, the Parish Forum and public exhibitions, further details of which can be found in the Statement of Consultation submitted in support of the application. The main aspects of the master plan that were revised as a result of these consultations are as follows:

- The street network was strengthened to provide additional cycle and pedestrian connections to Longstanton
- Connections with the Cambridgeshire Guided Busway, cycle path and Longstanton were improved
- Commuter and strategic cycle routes were incorporated through the scheme, linking with the wider strategic network and surrounding settlements
- The guided bus will run on the central dedicated carriageway through the proposed development, with a dedicated cycleway running parallel. Within this corridor, local traffic is only permitted along defined stretches of the route
- The junction arrangements off the B1050 were revised to improve pedestrian and cycle links and aid with the distribution of traffic
- The location and configuration of the local centre, primary school and sports hub evolved over several potential layouts to strengthen connectivity between these key amenity and social infrastructure facilities and facilitate their delivery and long term management
- The employment zone was moved westwards, closer to the B1050 and the park and ride. The interface between employment, retail and residential land uses was considered further to ensure scale, building heights and massing harmonised and so that the layout responded to key routes
- The proposed drainage ditches were made more linear to reflect the characteristics of fen edge drainage
- The proposed greenways were widened to improve amenity and ecological value and enhance opportunities for informal play
- The layout of parking was reviewed to minimise courtyard parking
- The character of the principal routes into the site, including the B1050 and access from the Cambridgeshire Guided Busway, were explored further, with the objective of establishing attractive urban corridors into the settlement and a strong sense of arrival
- The proposed housing parcels were refined to increase variety and strengthen the open space and landscape structure

2.62 Further details of the evolution of the master plan can be found in the Design and Access Statement submitted in support of the application.