

East Cambridgeshire Infrastructure Investment Plan

February 2013

Contents Page

Section 1: Introduction & Growth Context	5
1. Introduction.....	6
2. Housing Projections.....	9
3. Housing Mix and Tenure	12
4. Population Forecasts.....	14
5. Employment Assumptions.....	16
Section 2: Infrastructure Requirements	17
6. Education.....	18
7. Healthcare	31
8. Emergency Services.....	37
9. Community Facilities	41
10. Sports Space and Facilities.....	46
11. Open Space, and Green Infrastructure.....	50
12. Transport Infrastructure.....	57
13. Utilities	67
14. Infrastructure Overview	71

Section 1: Introduction & Growth Context

1. Introduction

- 1.1 East Cambridgeshire is a predominantly rural district located to the north-east of Cambridge. The district contains three market towns, Ely, Soham and Littleport, and 50 other villages and hamlets varying in size, including the fringe areas of Newmarket.
- 1.2 The East Cambridgeshire Pre-submission Draft Local Plan (published for public consultation on 11th February 2013) sets out the strategic vision and policies to guide the direction of future development in East Cambridgeshire to 2031. In particular the Local Plan identifies that over the period 2012 to 2031, 8,500 to 9,500 new homes will be delivered and a minimum of 9,200 additional jobs will be generated. The majority of development is expected to take place in the market towns of Ely, Littleport, Soham with more limited growth in villages (where there is identified community support for further development).
- 1.3 The East Cambridgeshire Draft Local Plan establishes the principle that developers should contribute towards infrastructure provision. Policy GROWTH 3 states that the development proposals will be expected to:
 - make contributions towards infrastructure in accordance with the Council's adopted Community Infrastructure Levy Charging Schedule¹ (which came into effect on 1st February 2013);
 - provide or contribute towards the cost of providing infrastructure and community facilities made necessary by the development, where this is not through the Community Infrastructure Levy - either through on or off-site provision (secured through planning condition or Section 106 agreement) or through financial payments.
- 1.4 Policy GROWTH 3 also sets out the key infrastructure requirements required as a result of the expected level of housing and employment growth to 2031 within the district.

PURPOSE OF THIS STUDY

- 1.5 This Infrastructure Investment Plan (IIP) forms part of the evidence base for the Pre-Submission Draft Local Plan. Full details of which are available to view on the district's Council's website (www.eastcambs.gov.uk/local-development-framework/east-cambridgeshire-local-plan). This study looks in detail at the likely infrastructure that is required to support the scale of development planned in the East Cambridgeshire Local Plan. It identifies the likely cost of provision and any existing or potential funding for infrastructure (where known).
- 1.6 It is not the role of the IIP to prioritise what infrastructure elements should be

¹ East Cambridgeshire Community Infrastructure Levy Charging Schedule: December 2012
<http://www.eastcambs.gov.uk/sites/default/files/final%20charging%20schedule%2013dec12.pdf>

delivered, and in particular what funds should be allocated to the delivery of infrastructure. These decisions will be taken by individual service providers and, in relation to Community Infrastructure Levy (CIL) through the governance arrangements established to allocate CIL monies. It should not be expected that all infrastructure identified in the IIP will be delivered, within the time frames identified, or at all.

- 1.7 Production of this study has involved consultation with local stakeholders and delivery providers. The methodology used is heavily based on that used in the East Cambridgeshire Infrastructure Investment Framework (IIF), which was commissioned by the Council in 2009, produced by AECOM and completed in February 2011. The Infrastructure Investment Framework looked at the implications of three different growth scenarios on infrastructure requirements to 2025 (timescale outlined in adopted Core Strategy). This study identifies the range of infrastructure required as a result of the scale of housing and employment growth to 2031 as set out in the Council's Pre-submission Draft Local Plan.

REPORT CONTENT AND STRUCTURE

- 1.8 This report identifies the infrastructure requirements associated with the delivery of the Local Plan levels of growth, the expected cost of delivering that infrastructure and the potential implications for delivery over time. The assessment of infrastructure requirements is set within a policy context and has involved consultation with local stakeholders and delivery providers.

- 1.9 The remainder of this report is based on the following chapters:

- An overview of the **housing projections** (Chapter 2)
- A detailed summary of the **housing size and tenure mix** assumptions which underpin the study (Chapter 3)
- The **population impacts** associated with the housing growth as outlined in the Pre-submission Draft Local Plan (Chapter 4)
- A detailed summary of the **employment** assumptions which underpin the study (Chapter 5)
- A review of the **education infrastructure** necessary to support growth requirements (Chapters 6)
- A review of the **healthcare infrastructure** necessary to support growth requirements (Chapters 7)
- A review of the **emergency services infrastructure** necessary to support growth requirements (Chapters 8)
- A review of the **community infrastructure** necessary to support growth requirements (Chapters 9)
- A review of the **sports and recreation infrastructure** necessary to support growth requirements (Chapters 10)
- A review of the **open space and green infrastructure** necessary to support growth requirements (Chapters 10)

- A review of the **transport infrastructure** necessary to support growth (Chapter 12)
- A review of the **utilities infrastructure** necessary to support growth (Chapter 13)

Note:

1. This is a high level strategic study – as individual sites come forward they will be assessed on their own merits by East Cambridgeshire District Council and be subject to transportation and environmental assessments as required which will determine the requirements in terms of mitigations and contributions as part of the planning process.
2. All highways costs produced in this report are “indicative” as appropriate for this strategic document.
3. This assessment assumes that development is possible in a way that is environmentally acceptable. It is recognised that further assessments are likely to be required for individual sites.

2. Housing Projections

GROWTH AREAS

- 2.1. The Pre-submission Draft Local Plan sets out housing targets which have been used to inform calculations of infrastructure needs in this document. The three market towns of Ely, Soham and Littleport will continue to be the focus of the majority of housing development as previously set out in the adopted Core Strategy (October 2009).
- 2.2. Six sub-areas have been identified to reflect the different growth and infrastructure requirements. The six sub-areas reflect the fact that the majority of growth will take place in the market towns and that outside of the Market Towns more modest growth will take place reflecting different infrastructure requirements in these locations. The six sub-areas are:
- Ely (city only)
 - Soham (Town only)
 - Littleport (Town only)
 - Burwell (village only)
 - Rest of district north: (including parishes of Coveney, Haddenham, Isleham, Mepal, Little Downham, Little Thetford, Soham, Stretham, Sutton, Wentworth, Wicken, Witcham, Wilburton, Witchford and the rest of Ely parish outside the city)
 - Rest of district south: (including parishes of Ashley, Bottisham, Brinkley, Burrough Green, Chippenham, Cheveley, Dullingham, Fordham, Kennett, Kirtling, Lode, Reach, Snailwell, Stetchworth, Swaffham Bulbeck, Swaffham Prior, Westley Waterless and Woodditton)

Outstanding Housing Growth

- 2.3. Table 2-1 sets out the total number of new dwellings likely to come forward over the Local Plan period between 2001 & 2031 and, the distribution of growth based on the Local Plan spatial strategy.

Table 2-1: Distribution of the Local Plan housing growth (2001/02-2030/31)

Sub Areas			
Ely	6,147	Market Towns	10,995
Soham	2,644	Growth Villages²	
Littleport	2,204	Barway	13
Burwell	789	Bottisham	245
Rest of District North	2,333	Burwell	789
Rest of District South	822	Cheveley	110
Rural Exceptions (windfall)	510	Fordham	215
		Haddenham	238

² Villages where housing allocations have been identified in the Pre-submission Draft Local Plan.

		Isleham	215
		Little Downham	226
		Prickwillow	53
		Pymoor	24
		Sutton	534
		Swaffham Prior	38
		Wentworth	20
		Wicken	49
Total	15,449	Total	13,764

These housing figures are built up from:

- Housing completions 2001-12 as at 31-03-12
- Outstanding commitments on large and small sites as at 31-03-12
- Windfalls (including commitments on small sites)
- Large potential sites within the settlement boundary
- New housing allocations as identified in the Pre-submission Draft Local Plan

2.4. Between 2001/02 and 2011/12, there were 6,049 completions across East Cambridgeshire. These were predominantly in Ely (with 2,243 completions).

2.5. Once these completions and commitments are accounted for, the outstanding housing requirement is reduced to a range of 8,043 dwellings. The precise impact on each growth location is identified in the table below and it is this outstanding housing growth requirement which will be used to inform the recommendations for infrastructure requirements.

Table 2-2: Outstanding Housing Growth Requirements (2011/12-2030/31)

Sub Areas	
	Outstanding housing growth
Ely	3,730
Soham	1,273
Littleport	851
Burwell	450
Rest of District North	840
Rest of District South	443
Rural Exception Sites (windfall)	510
Total	8,043

Source: East Cambridgeshire District Council 2013

2.6. In many cases infrastructure requirements will be triggered when a given number of dwellings or associated population threshold is exceeded. In these cases, accurate forecasting of the housing trajectory is essential for infrastructure projects to be phased appropriately.

2.7. There were 6049 completions between 2001/02 and 2011/12. Housing growth is expected to peak in 2017/18 when annual completions are expected to reach 764 dwellings across the District. After this point the average annual

rate of completions reduces to an average of 400 dwellings annually from 2018/19 to 2030/31.³

³ These figures are based upon the housing trajectory for the district which is included in the Housing Supply Paper (February 2013).

3. Housing Mix and Tenure

- 3.1 Infrastructure requirements are generally driven by changes in the local population base and so it is necessary to assess the population change that is likely to be associated with the housing growth set out in the previous chapter.
- 3.2 The general characteristics of a household, including Average Household Size (AHS) and Child Yield, will vary by unit size and tenure, and this section sets out the assumptions that will be used as part of this document. Where possible, the assumptions are aligned with local housing policy.

HOUSING TENURE

- 3.3 There are two affordable housing targets identified in the Pre-submission Draft Local Plan, reflecting the differing requirement in the north and south of the district. In the north of the district the Draft Local Plan states that 30% of dwellings on sites with more than five dwellings should be affordable. In the south of the district this figure rises to 40%.
- 3.4 Across the whole district, the affordable housing requirement is assumed to include 70% social rented and social rented properties and 30% intermediate properties.

Table 3-1: Tenure Mix

	Private Housing	Affordable Housing	Total
North of District	70%	30%	100%
South of District	60%	40%	100%
Affordable housing breakdown			
All of District		70% Social and Affordable Rented 30% Intermediate	100%

HOUSING SIZE MIX

- 3.5 Table 3-2 sets out the Council's preferred mix of housing sizes on development schemes, for private and affordable housing. The preferred housing size mix was produced by Cambridgeshire County Council Research Group (Cambridgeshire Housing Sub-Region Property Size Guide 2009), taking into account census data and market behaviour. The preferred affordable housing size mix has been determined by the East Cambridgeshire District Council housing Team, and is based on information of the needs of applicants, letting data on the availability of homes of various sizes, and the Council's vision to create sustainable balanced neighbourhoods.

Table 3-2: Housing Size Mix

House Type	1 bed	2 bed	3 bed	4 bed	Total
Private Housing	4%	18%	31%	47%	100%
Affordable housing	10%	45%	35%	10%	100%

4. Population Forecasts

INTRODUCTION

- 4.1. To accurately assess the infrastructure requirements associated with the proposed housing growth, it is necessary to model the likely impacts of the housing growth on the local population. To inform this document, local population growth is modelled on a development specific basis which refers to the number of people forecast to reside within new dwellings.
- 4.2. The development specific population growth is relevant when assessing the infrastructure requirements resulting from local population change. Examples include community facilities and primary education.

DEVELOPMENT SPECIFIC POPULATION GROWTH: METHODOLOGY

- 4.3. The development specific population change associated with housing growth is based on average household size and average child yield per dwelling, adjusted for tenure and size mix. The following table provides details of the assumptions made in relation to household characteristics, by tenure and dwelling type. All assumptions in this study are made at the district level. Table 4-1 contains the average dwelling occupancy rates for various sizes of dwellings, and has been used to inform all types of infrastructure requirement calculations. Table 4-2 has used data on the average number of children per dwelling has been used to inform education infrastructure calculations only.

Table 4-1: Dwelling occupancy rate

House Type	1 bed	2 bed	3 bed	4+ bed
All ages				
Private housing	1.3	1.4	2.4	2.9
Affordable housing	1.2	2.3	3.8	5.1

Source: Census 2001 / CORE data

Table 4-2: Child Multipliers

Phase	Age Range	Children/100 dwellings	Mid-point
Early Years	0 – 3	18 – 25	21.5
Primary	4 – 10	25 – 35	30
Secondary	11 – 15	18 – 25	21.5
Post 16	16 – 17	7 – 10	8.5

Source: Cambridgeshire County Council

Development Associated Population Forecasts

- 4.4. Using the assumptions on housing mix, size and tenure described previously it is possible to calculate the development specific population change. As explained in Section 2 only infrastructure requirements associated with housing growth post 2012 are considered as part of this report, therefore completions between 2001/02 and 2011/12 are discounted. Table 4-3 below sets out district wide Draft Local Plan housing growth after completions and outstanding commitments are discounted. It also sets out the population growth associated with that growth.

Table 4-3: Development Specific Population Forecasts 2012-2031

	No. of dwellings	Population increase
Housing growth	8,043	19,764

- 4.5. The development specific population change associated with each growth location is presented in Table 4-4 below. This spatial distribution along with the relative phasing of growth over the plan period will have different implications for infrastructure requirements across the district.

Table 4-4: Population Growth (2011/12-2030/31), by Growth Location

Sub Areas		Settlement type	
Ely	9,694	Market Towns	15,214
Soham	3,308	Growth Villages⁴	
Littleport	2,212	Barway	29
Burwell	1,195	Burwell	1195
Rest of District North	1,971	Cheveley	181
Rest of District South	1,369	Fordham	287
		Haddenham	304
		Isleham	265
		Little Downham	216
		Prickwillow	88
		Pymoor	39
		Sutton	502
		Swaffham Prior	72
		Wentworth	31
		Wicken	70
Total	19,749	Total	3,279

⁴ Villages where housing allocations have been identified in the Pre-submission Draft Local Plan.

5. Employment Assumptions

5.1 The population growth associated with the housing trajectory will increase the requirement for jobs. The extent to which these jobs are provided within East Cambridgeshire will affect sub regional commuting patterns and the requirement for transport infrastructure. Concentrations of employment may also increase the requirement for utilities infrastructure.

- Pre-submission Draft Local Plan 172.27 Ha of employment land

Table 5-1: Employment Land Growth

Settlement	Outstanding commitments	Allocations identified in Core Strategy (ha)	'New' Allocations (ha)	Total Allocations (ha)	Total (ha)
Ely	7.9	40.5	12 + North Ely + Station Gateway	52.2 + North Ely + Station Gateway	60.4+
Soham	2.08	11	8	19	21.08
Littleport	13.54	4.77	8.6	13.37	26.91
Bottisham		1		1	1
Burwell		5.5		5.5	5.5
Haddenham			0.8	0.8	0.8
Sutton	16.42				16.42
Fordham	0.01	7	29.5	36.5	36.51
Isleham	0.45		1	1	1.45
Swaffham Prior			1	1	1
Burrough Green	0.92				0.92
Stretham	0.07				0.07
Cheveley	0.09				0.09
Wicken	0.32				0.09
Total	41.46	69.77	60.97	130.67	172.27

5.2 These employment land projections are built up from:

- Outstanding commitments (as at 31.03.12).
- Currently unused employment allocations identified in the Core Strategy (adopted October 2009).
- New employment allocations identified in the Submission Draft Local Plan.

5.3 The extent to which new jobs are provided within East Cambridgeshire will affect sub regional commuting patterns within Cambridgeshire and the requirement for transport infrastructure. The implications of employment growth on infrastructure have also been taken into account when assessing transport and utilities infrastructure required to support future growth.

Section 2: Infrastructure Requirements

6. Education

OVERVIEW

- 6.1 Cambridgeshire County Council has a statutory requirement to provide school places for children living in the area who are of school age and whose parents want their child educated in the state sector. In line with this statutory duty, the County Council needs to ensure that sufficient school places are provided to meet needs arising from new housing developments.
- 6.2 This chapter provides an overview of the existing range of educational facilities in East Cambridgeshire and assesses the additional demand for educational facilities that is likely to arise from the proposed housing developments. These findings are used to inform recommendations on the additional level of educational infrastructure that is necessary to support the changing population, which were developed in partnership with Cambridgeshire County Council.
- 6.3 Given the local nature of provision, the demand for educational facilities is based on the Development Specific Population Growth set out in Chapter 4. District wide demographic projections have informed the recommendations, particularly in terms of anticipating potential levels of capacity in areas where growth is insufficient to trigger a new facility. It should be noted that final recommendations in relation to Primary School and Secondary School facilities will be informed by more detailed analysis carried out by Cambridgeshire County Council in partnership with ECDC.

POLICY CONTEXT

- 6.4 The County Council have undertaken a review and public consultation on secondary school provision across East Cambridgeshire. The review highlighted the need for a 5-6 FE Secondary School in Littleport and the expansion of existing provision to provide a total of 7-10 FE across the District. These requirements have been updated by the County Council to take account of the expected level of housing growth outlined in the Draft Local Plan.
- 6.5 The Cambridgeshire Education Organisation Plan for 2012-2013 explains how the County Council reviews demand for school places include any existing surpluses or deficits, existing pressures on school places and where temporary or permanent provision is required and will be delivered as part of the capital programme.
- 6.6 Cambridgeshire County Council has also indicated that they will allow primary schools that are up to three Forms of Entry (FE) or 630 places should this suit the context of the individual development. One Form of Entry equates to 30 pupils per class with one class per year.

EARLY YEARS FACILITIES

Existing Provision

- 6.7 Cambridgeshire County Council defines early years' provision as nurseries, pre-school playgroups and childminding. There are over 150 private childminders who provide childcare, ranging from 2 to 6 places each. Childcare provided through private childminders, however does not form part for this study as delivery would occur through independent providers on private premises. Early years settings have therefore been defined as nurseries and pre-school playgroups for children aged up to five years. Most early years' settings are clustered around the market towns and villages with a greater number of services, however there is some provision within rural areas.

Early Years Population Change

- 6.8 The assessment of early years facilities is based on development specific population growth projections, which can be used to measure the need associated with the new dwellings and does not consider long-term trends in the existing population. Table 6-1 below provides details of the total early years population that would be directly associated with the new dwellings that are projected to come forward within each location.

Table 6-1: Development Specific Early Years Population

Sub Areas	
	Early Years Population (Cumulative)
	2031
Ely	802
Soham	274
Littleport	183
Burwell	97
Rest of District North	185
Rest of District South	91
Total	1631

Infrastructure Requirements

- 6.9 In assessing the appropriate level of childcare provision, Cambridgeshire County Council discount the early years population as not all children aged 0-4 require early years services. To ensure consistency with the County Council approach, it is assumed that 45.01% of the early years population identified above require early years services. It is also assumed that of this total requirement for places, 31.76% will be for nursery provision, 50.86% for pre-school provision and 17.38% will be for childminders. This is in line with the approach adopted by Cambridgeshire County Council (see table 6-3).
- 6.10 Pre-school provision is required for all 3-4 year olds on a part time basis (15 hours per week) and the requirement for pre-school provision set out below is equivalent to all 3-4 year olds using pre-school places on a part time basis

Table 6-2: Cumulative demand for Early Years Places

Sub Areas	
	Early Years Places (Cumulative)
	2031
Ely	361
Soham	123
Littleport	82
Burwell	44
Rest of District North	84
Rest of District South	42
Rural Exception sites (windfall)	49
Total	734

Table 6-3 Childcare Type

	Day Nursery (Full day care)	Pre-school (inc Maintained Nursery Places)	Childminder
East Cambridgeshire	31.76%	50.86%	17.38%

Source: Cambridgeshire County Council

- 6.12 Cambridgeshire County Council does not have a standard size for day nurseries and pre-school facilities, however they advise that 16 place (or less) day nurseries or pre-schools may prove difficult to sustain. Each pre-school facility usually provides 26 places.

Pre-School

- 6.13 Table 6-4 sets out the number of pre-school places associated with the Development Specific Early Years Population. The figures are based on the County Council's standards and assume that 45.01% of 0-4 year olds will require childcare provision and of these, 50.86% will require pre-school places.
- 6.14 While the demand for a new facility is met by growth occurring in the north of the district and in the south of the district, this requirement will be spread over a broad area and it is unlikely that a single facility would meet the required demand. Furthermore, in light of the district wide demographic projections presented in Chapter 4, it can be expected that capacity will arise in existing facilities across the district and these may be used to accommodate the additional demand associated with housing growth that is not met by the facilities described above.

Table 6-4 Cumulative Demand for Pre-School Places

Sub Areas	
	Pre school Places (Cumulative)
	2031
Ely	184
Soham	63
Littleport	42
Burwell	22
Rest of District North	40
Rest of District South	23

Rural Exceptions (Windfall)	25
Total	373

6.15 Given the County Council policy that pre-school facilities provide 26 places, the pre-school places set out in the table above corresponds to the following recommendations for new facilities:

Table 6-5: Pre-School Facilities Recommendations

Sub Area	Infrastructure requirements	Expected phasing	Notes
Ely	104 pre-school places	2015-17	A new primary School in Ely (a 1FE school) is expected to open in 2015 which will be funded by the County Council and will provide 52 pre-school places. This school will need to be expanded to provide a further 52 pre-school places.
	52 pre-school places	2022-29	A second primary school will be required by 2022. This school will need to be expanded to become a 3FE Primary School by 2029.
Soham	Expansion of proposed Soham Primary School	2019-20 2026-27	New primary school to be expanded in two phases to provide additional pre-school places required by 2020 (1st phase and 2027 (2nd phase)
Burwell	Expansion of proposed Burwell Village College Primary School	2017-18	Expansion of Burwell Village College Primary School to provide additional pre-school places.
Rest of the District North	Permanent pre-school accommodation at Little Downham Feoffes Primary school. Additional primary school provision will be required at existing primary schools at Haddenham, Isleham, Little Downham, Stretham, Sutton, Wicken, Wilburton and Witchford.	2014-17	Replacement of existing pre-school accommodation at Little Downham Feoffes Primary school with permanent accommodation for existing and new population
Rest of the District South	Additional pre-school school provision will be required at existing primary schools at Bottisham, Fordham, Newmarket Fringe and Swaffham Prior.	Dependent upon settlement	

Rural Exception sites (windfall)	25 pre-school places	Dependent upon location	
---	----------------------	-------------------------	--

Nursery Places

6.16 Table 6-6 sets out the demand for nursery places associated with the Development Specific Early Years Population. The requirements are based on the County Council's standards and assume that 45.01% of 0-4 year olds will require childcare provision, and of these 31.76% will require nursery places.

Table 6-6 Cumulative Demand for Nursery Places

Sub Areas	
	Nursery Places (Cumulative)
	2031
Ely	115
Soham	39
Littleport	26
Burwell	14
Rest of District North	23
Rest of District South	14
Rural Exceptions (windfall)	16
Total	233

6.17 In the absence of a preference from the County Council the standard provision of 50 place nurseries has been assumed, which translates into the following recommended nurseries:

Table 6-7: Nursery Facilities Recommendations

Ely	2 x 50 place nurseries
Soham	1 x 50 place nursery
Littleport	1 x 50 place nursery

6.18 These are not intended to be final recommendations as the re-organisation or building of new facilities would be managed by Cambridgeshire County Council.

6.19 It should be noted that the recommendations in Tables 6-5 and 6-7 are for new facilities and there may be requirements for extensions to existing facilities in the smaller settlements in accordance with the figures identified in Tables 6-4 and 6-6.

PRIMARY EDUCATION

Existing Provision

6.20 There are a total of 26 primary schools located within East Cambridgeshire. A further 4 schools are located outside of the district but provide places for

children within East Cambridgeshire. There is a good spread of primary schools across urban and rural areas within East Cambridgeshire.

Primary School Aged Population Change

- 6.21 The pattern of primary school aged population change will not occur uniformly across the whole district. In particular, it can be assumed that the primary aged population will increase in areas associated with significant housing growth and decline in other areas.
- 6.22 Under the policy context, the preference for primary education to be provided within two miles of a child's dwelling suggests that there will be limited scope to utilise capacity arising in parts of the district to meet increasing demands elsewhere. Consequently, the assessment of primary school requirements is based on the development specific population growth, which can be used to measure the need associated with the new dwellings and does not consider the long term trends in the existing population.

Primary School Assumptions

- 6.23 Cambridgeshire County Council has a preferred maximum size for primary schools of two forms of entry (2FE), which corresponds to 420 places. A primary school form of entry is equivalent to one class of 30 pupils in each school year and provides a total of 210 places.

Infrastructure Requirements

- 6.24 The County Council has identified the need for the provision of the following: two new 3 FE primary schools in Ely, 3 FE primary school at Soham (by expanding the planned 1 FE primary school at the Shade), a new 2FE primary school in Littleport and expansion of Burwell Village College Primary School.
- 6.25 Once completions and outstanding commitments are accounted for, the outstanding housing requirement is reduced to a range of 3,894 dwellings. Table 6-8 outlines the cumulative demand for primary school places associated with that outstanding housing requirement.

Table 6-8 Cumulative demand for Primary school places as at 2031

Sub Areas	
	Primary School Places (Cumulative)
	2031
Ely	1119
Soham	382
Littleport	255
Burwell	135
Rest of District North	243
Rest of District South	141
Rural Exception sites (windfall)	153
Total	2276

6.27 Table 6-9 gives a breakdown of the scale of primary school infrastructure likely to be required as a result of outstanding housing growth.

Table 6-9: Primary School infrastructure requirements associated with outstanding housing growth

Sub Area	Infrastructure requirements	Expected phasing	Notes
Ely	2 x 3FE Primary Schools	2015-17	A new primary School in Ely (a 1FE school) is expected to open in 2015 to accommodate recent population growth which will be funded by Cambridgeshire County Council. This school will need to be expanded to become a 3FE Primary School by 2017.
		2022-29	A second 3FE primary school will be required at Ely. 2FE will be required by 2022 and a further 1FE by 2029.
Soham	2 FE expansion of proposed Soham Primary School	2019-20	A new primary school at the Shade, Soham (a 1FE school) is expected to open in 2013 to accommodate recent population growth which will be funded by Cambridgeshire County Council. A further 2 FE will be required to accommodate further housing growth anticipated over the plan period.
Littleport	1 x 2FE Primary school	2015 - 17	2FE primary school required by September 2017
Burwell	1FE expansion of Burwell Village College Primary School	2017 - 18	Expansion of existing primary school required by September 2017 to accommodate additional housing growth within the village.
Rest of District North	221 additional primary school places	Dependent upon settlement	Additional primary school places will be required at existing primary schools at Haddenham, Isleham, Little Downham, Stretham, Sutton, Wicken, Wilburton and Witchford.
Rest of District South	140 additional primary school places	Dependent upon settlement	Additional primary school places will be required at existing primary schools at Bottisham, Fordham, Newmarket Fringe and Swaffham Prior. Expansion of Fordham Primary School is likely to be required to accommodate recent population growth and further housing development.
Rural exception sites (windfall)	153 additional primary school places	Dependent upon location	

6.28 It is important to recognise that the requirement for primary school provision and the facility recommendations presented in this chapter will form part of a wider programme of reorganising the delivery of primary education across the district.

SECONDARY SCHOOLS

Existing Provision

6.29 There are four secondary schools located within East Cambridgeshire, each with a defined catchment area.

Secondary School Assumptions

6.30 Cambridgeshire County Council sets out its preferred minimum and maximum size for secondary schools based on secondary school forms of entry. Each form of entry represents a single class of 30 pupils in each year of secondary school and equates to 150 places. Cambridgeshire County Council sets out that no secondary school should be smaller than 4FE (or 600 places) or larger than 11FE (or 1,650 places). The minimum size is to ensure that the school is able to offer a choice of subjects for its pupils.

Infrastructure Requirements

6.31 Cambridgeshire County Council has a policy of providing secondary school places within three miles of a child's residence where possible.

6.32 The County Council has undertaken a review and public consultation on secondary school provision across East Cambridgeshire, during which time presentations were given to the East Cambridgeshire External Partnerships Group and Local Strategic Partnership. Numerous local and county Council Members also attended various consultation evenings. The review highlighted the need for a 5-6 FE Secondary School in Littleport and the expansion of existing provision to provide a total of 7-10 FE across the District.

6.33 The requirements identified provide an indication of how the educational system in East Cambridgeshire could be organised to adequately meet the demands associated with the proposed levels of growth. They are not intended to be final recommendations. Any reorganisation of existing provision would be managed by Cambridgeshire County Council after consultation with the affected schools and communities.

6.34 However, it is important to note that these recommendations are based on the levels of housing growth set out in the adopted Core Strategy.

6.35 Once housing completions and outstanding commitments are accounted for, the outstanding housing requirement is reduced to a range of 8,804 dwellings. Table 6-10 outlines the cumulative demand for secondary school places associated with that outstanding housing requirement.

Table 6 – 10 Cumulative demand for secondary school places

Sub Areas	
	Secondary School Places (Cumulative)
Ely	1119
Soham	382
Littleport	255
Burwell	135
Rest of District North	174
Rest of District South	102

Rural Exception sites (windfall)	110
Total	1631

- 6.36 An outstanding housing growth requirement for 8,804 dwellings creates a requirement for 1374 places (to be provided as part of a 6FE secondary school in Littleport) in Ely and Littleport, 382 places at Soham and 135 places at Burwell which will require either Soham Village College or Bottisham Village College to be expanded to accommodate additional housing growth.
- 6.37 It is important to recognise that the requirement for secondary school provision and the facility recommendations presented in this chapter will form part of a wider programme of reorganising the delivery of secondary education across the district.

Table 6-11: Secondary School infrastructure requirements associated with outstanding housing growth

Sub Area	Infrastructure requirements	Expected phasing	Notes
Ely	Interim solution at Ely Village College	2013-14	Littleport and Ely are currently served by Ely College which currently provides 8FE (1200 places).
	5FE contribution to new Littleport secondary school)	2015-17	A new secondary school is planned for Littleport which will serve Ely and Littleport. Prior to the development of the new secondary school additional secondary school provision will be required at Ely College.
Soham	2FE Expansion of either Soham Village or Bottisham Village college)	2019-20	
Littleport	1 X 6FE Secondary school)	2015-17	A new secondary school is planned for Littleport which will serve Ely and Littleport
Burwell	0.5FE contribution to expansion of Soham Village College or Bottisham Village college)	2025-26	Burwell is unique within the district in that it has a shared catchment (Soham Village College and Bottisham Village College).
Rest of District North	Potential 2FE Expansion of Bottisham Village College	2019-20	
	174 additional secondary school places	Dependent upon settlement	
Rest of the District South	102 additional secondary school places	Dependent upon settlement	

Post 16 Education

- 6.38 Post 16 Education is changing and there will be a requirement for participation up to the age of 18 which will be introduced later this year. However, such compulsory education can be delivered in a number of ways, including through the full or part time study and work place learning e.g. apprenticeships. Some courses will be based within schools and colleges or similar facilities on a full-time basis, where as others may be through a day release scheme or through work-based learning.
- 6.39 Furthermore, as the choice of where post 16 education is taken up is down to individuals, catchment areas for education no longer apply. Consequently, it will be difficult to predict in any precise way the requirements for 16-18 education.
- 6.40 The County Council's Post 16 Access and Capacity Review (December 2011) concluded that additional post-16 provision was not required in East Cambridgeshire District due to the availability of post 16 places at colleges, sixth form colleges and schools, elsewhere within the Cambridge Partnership Area (which also includes Cambridge City and South Cambridgeshire District). However the latest population projections produced by the County Council suggest that there may be a need for additional post 16 provision to be made within the partnership area towards the end of plan period.
- 6.41 The County Council is currently preparing an updated post 16 capacity review to be published in Spring 2013 which will assess the need for additional post 16 places (within the Cambridge Partnership area) and the extent to which new facilities may be required within East Cambridgeshire District.

EDUCATION INFRASTRUCTURE OVERVIEW AND COSTS

Education Requirements

- 6.40 The tables on the following pages provide more detail on the location and costs of the projects identified above. The assumptions set out in this chapter represent an early stage in the process of assessing education requirements and should be considered only as a preliminary response in respect of the scale of housing growth outlined in the Local Plan. The modelling only forecasts the scale of demand for education provision and it will be down to Cambridgeshire County Council to build on this work to identify the appropriate delivery solutions.

Table 6-12 Overview of Education Requirements

<p>Early Years</p>	<p>24 Pre-school places at expanded Burwell Primary school 2 x 52 pre-schools places as part of new primary schools at Ely Expansion of existing pre-school provision at Little Downham (to replace existing temporary accommodation)</p>
---------------------------	---

	52 pre-school places as part of new primary school at Littleport 2 x 54 pre-school places as part of new primary school at Soham Private day nursery provision at Ely
Primary Schools	2 x 3FE new primary schools at Ely 1 x 2FE primary school at Littleport 1FE expansion of Burwell Primary school Expansion of Little Downham Primary School Potential expansion of Fordham Primary School 2FE expansion of new Soham Primary school (to be completed in 2013)
Secondary Schools	1FE Interim solution required at Ely Village College 6FE secondary school to be provided at Littleport (will also serve part of Ely) 2FE expansion of either Soham Village College or Bottisham Village College (joint catchment)
Post 16 Facilities	TBC - following publication of County Council's Post 16 Capacity Review in Spring 2013

Source: ECDC/ Cambridgeshire County Council, 2013

Education Infrastructure Costs and Funding

- 6.41 Cambridgeshire County Council has identified that in recent years the most significant source of funding for new schools or expanding existing schools has been housing developers or S106 contributions.
- 6.42 The total cost of providing the necessary educational facilities is outlined in Table 6-13.

Table 6-13: Education Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Education	2 x 52-place Pre-School Facilities	Ely	£8,978,548	£0	
Education	2 x 54-place Pre-School Facility	Soham	£4,015,635	£0	
Education	52-place Pre-School Facility	Littleport	£3,624,368	£0	
Education	24 pre school places at Burwell Village College Primary School	Burwell	£1,276,766	£0	
Education	Expansion of pre-school provision at	Burwell	£308,895	£0	

	Burwell Village College Primary School				
Education	Pre-school places	Rest of the district North	£1,462,103	£0	
Education	Pre-school places	Rest of the District South	£2,471,567	£0	
Education	2 x.53 FE Primary Schools	Ely	£25,123,460	£0	S.106
Education	2FE Primary School	Soham	£11,223,185	£0	
Education	1 x 2FE Primary School	Littleport	£10,111,163	£0	
Education	Expansion of Burwell Village College Primary School	Burwell	£3,603,775	£0	
Education	Expansion of Downham Feoffees Primary School	Little Downham	£823,770	£0	
Education	Primary School places	Rest of District North	£4,015,635	£0	
Education	Primary School places	Rest of District South	£6,116,636	£0	
Education	6FE secondary school at Littleport and interim solution at Ely Village College	Ely/Littleport	£30,217,884	£0	
Education	2FE expansion of secondary school (Soham Village College or Bottisham Village College)	Soham/Bottisham	£12,675,204		
Education	secondary school places	Rest of the District North and South	£11,588,052		
Total Assumed Infrastructure Costs			£140,519,209		
Total Assumed Funding					
Total Assumed Funding Gap					

**The CIL system will result in the scaling back of S.106 agreements but will not replace them entirely. Section 106 agreements (and Section 278 Highways agreements and planning conditions) will still be used by the District Council to secure Development Specific Infrastructure on large sites. Large sites often necessitate the provision of their own development-specific infrastructure, such as primary schools, which are dealt with more suitably through a Section 106 agreement. The District Council wish to see a primary school delivered on-site in north Ely through Section 106 and this has been taken into account in the overall assessment of infrastructure costs.*

7. Healthcare

POLICY CONTEXT

- 7.1 Health and Social Care incorporates a broad range of social infrastructure, including GP surgeries, healthcare centres, dentists, pharmacies, optometrists, community and acute hospitals, childrens centres, care and extra homes and day care centres.
- 7.2 It is the responsibility of local authorities to ensure that adequate land is safeguarded for the provision of health and social care with the local NHS authorities and Primary Care Trusts (PCTs) being responsible for bringing these sites into active use. As a result of the Health and Social Care Act 2012, Strategic Health Authorities and PCT's will be abolished from April 2013 and the current commissioning responsibilities will pass to Clinical commissioning groups and the new NHS Commissioning Board. Public Health will transfer to Local Authorities and Public Health England. New 'Health and Well Being Boards' will oversee the local health agenda.

EXISTING PROVISION

Overview of Provision

- 7.3 East Cambridgeshire has a relatively strong coverage of GPs and Dentists, with all of the market towns and key service centres providing some level of provision. Neither Sutton or Haddenham in the north west of the district contain dentist surgeries, however both are located relatively close to Ely, which has the greatest level of dental provision within the district.
- 7.4 In addition to GP and dentist surgeries each of the market towns contains a health centre or community hospital. These are:
- **Princess of Wales Hospital** (Ely), which includes a Minor Treatments Centre, and a range of specialist out-patient services, in addition to an inpatient rehabilitation service.
 - Littleport Health Centre
 - **Soham Health Centre** which accommodates staff providing services to the wider East Cambridgeshire area.

Potential for Expansion

- 7.4 Focussing on the delivery of community based healthcare services within the market towns; NHS Cambridgeshire has highlighted the following key points.
- 7.5 **Ely:** The area is served by the Princess of Wales Hospital, also housing The Cathedral Practice, on the northern edge of Ely and the St Mary's Practice, located close to the town centre. The PCT have identified that the primary care facilities at the Princess of Wales Hospital are not of a high enough quality or of sufficient capacity. The site is strategically located in relation to the proposed future growth in north Ely and has potential for redevelopment.

Cambridgeshire PCT have confirmed that to meet future needs it will be necessary to provide additional facilities on the same site and, over time undertake a phased redevelopment of existing facilities, providing modern purpose built health facilities and potentially releasing parts of the site for other uses.

- 7.6 Provision at St. Mary's Practice is of a higher quality however it is currently operating at full capacity, with limited scope for expansion. Depending on the scale and timing of the new facility at Princess of Wales Hospital, it may be necessary to provide a 3rd GP facility at a later stage.
- 7.7 Soham: Served by relatively new premises with potential for expansion, however additional land would be required before this could be undertaken. Soham is also served by a separate Health Centre which is not owned by the PCT. Cambridgeshire PCT have stated that this facility has limited potential for refurbishment and it is located adjacent to Weatheralls Primary School (limiting scope for on-site expansion).
- 7.8 Littleport: Served by relatively new premises that offer scope for expansion (including the provision of a small operating centre). The first phase of expansion is planned for 2012/13.
- 7.9 Burwell: Served by a relatively modern premises that offer scope for expansion.

INFRASTRUCTURE DEMAND

Healthcare Approach

Healthcare Standards: Primary Care

- 7.9 The demand for healthcare facilities will vary according to a range of local factors, including the age and overall health of the local population and accessibility issues in more rural areas. However, it is possible to use nationally recognised standards to estimate the potential demand for healthcare facilities associated with a given level of housing growth. These standards are based on the total population growth and would reflect the mix of housing by size and tenure.

Table 7-1: Primary Care Infrastructure Demand Assumptions

Facility Type	Standards
GPs	1 GP per 1,800 people
Dentist	1 Dentist per 2,000 people

Source: National Health Service (GPs); Traffic light maps of Dentists distribution in England and Wales, 2004

- 7.10 These standards will be applied to the Development Specific Population Growth to forecast the demand for primary care facilities, as it is assumed that the provision of such services should be based on local and not district wide need.

Healthcare Standards: Acute Care

- 7.11 Cambridgeshire PCT has stated that demand for acute care should be assessed at the County level, An Acute Services Review is currently being undertaken. It is anticipated that it will recommend continuing the current policy of creating more capacity by shifting more care into community settings and building on advancements in medicine and technology to reduce hospital based activity. Community based care could include nursing, therapies and social care undertaken in a number of settings.

Primary Care - Primary Care Demand

- 7.12 The cumulative demand for GPs and dentists, based on the assumptions identified above and the housing trajectory set out in Chapter 2 is presented in the tables below. Over the whole of East Cambridgeshire, the level of growth associated with Draft Local Plan generates demand for 5 additional GPs and 5 additional dentists. Demand is concentrated within the market towns, with the growth in demand elsewhere being insufficient for an additional GP in any single growth location.

Table 7-2: Cumulative GP Requirements

	2031
Ely	5.4
Soham	1.8
Littleport	1.2
Burwell	0.7
Rest of District North	1.2
Rest of District South	1.3
Total	11

Table 7-3: Cumulative Dentist Requirements

	2031
Ely	4.8
Soham	1.8
Littleport	1.2
Burwell	0.7
Rest of District North	1.1
Rest of District South	1.2
Total	9.9

Primary Care Facilities Requirements

- 7.13 The following table sets out the investments in primary care facilities that would be necessary to meet the requirements associated with the housing growth. These are based on indicative-only recommendations from Cambridgeshire PCT concerning the most appropriate way of meeting increased demand within the market towns.

Table 7-4: Primary Care Facilities requirements

Ely	Provision of 8/9 GP facility on site of Princess of Wales Hospital or a smaller facility with the option of a 3 rd GP facility in Ely (later in the plan timeline). Expanded dental provision in town (1 dentists)
Soham	Expand Staploe Medical Centre (3.5 GP's) Expand dental provision in town (2 dentists)

Littleport	Expand St Georges Medical Centre (1.5 GPs) Expanded dental provision in town (1 dentists)
-------------------	--

- 7.14 Within Ely, the requirements associated with the Local Plan level of growth could be met through re-providing the Primary Care facilities at Princess of Wales Hospital. This site is currently at capacity and would need to be re-provided at a larger scale in order to provide capacity for existing and future residents. This would ideally occur on the hospital, site subject to feasibility, as the majority of planned growth will occur to the north of the hospital site. The PCT is currently considering the potential for redevelopment at the Princess of Wales site and therefore this new facility should be incorporated within any new design. The full costs for reprovision of Primary Care Facilities at the hospital is included in Table 7.6 as this is deemed related to the proposed level of housing growth. The Cambridgeshire PCT has stated that there is a need for further technical work to be undertaken to determine the expected cost of providing acute care facilities on the Princess of Wales site (in addition to that required for primary care).
- 7.15 The St Mary's Surgery, is an alternative site located close to the town centre, however it is also at capacity. With much of the growth in Ely in recent years being to the west of the town, it is important that capacity is maintained and expanded in the town centre area in order to provide reasonable access to residents in all parts of the town. Options to expand the existing Surgery in its current location have been explored but none of these are feasible. It may be necessary to relocate Primary Care facilities to another site in or close to the town centre. St Mary's Surgery have obtained additional use of a consulting room in the new Sainsburys store, which has created additional clinical capacity separate from the main surgery building. They are also in the process of moving some administrative functions out of the main surgery in order to further increase clinical capacity.
- 7.16 In Soham the current Staploe Medical Centre could be expanded, subject to land availability to meet the requirements associated with the Local Plan. The PCT indicate that it may be necessary to re-provide this facility, subject to future discussions with the County Council and Staploe Medical Centre, in which case the old Health Centre site has the potential for redevelopment.
- 7.17 Within Littleport the current Medical Centre was built with room for expansion of the existing building and the amount of growth planned under the Local Plan would not warrant an additional facility. However, it would require an extension and some reconfiguration to the existing building.
- 7.18 Elsewhere in the district there will be varying levels of impact on other services and facilities and the PCT recognise that some increase in workforce and physical capacity may be required, particularly in Burwell where an extension to the GP facility may be required in the longer term.

Acute Care

7.19 Cambridgeshire PCT has confirmed that it is not possible at this stage to determine the precise investments that would be required to serve the new communities that would develop within the market towns villages. However, the need to provide such community based care should be considered as part of the design of community spaces and health facilities recommended elsewhere in this report.

HEALTHCARE INFRASTRUCTURE OVERVIEW AND COSTS

Table 7-5 Overview of Healthcare Requirements

Primary Care	Provision of 8/9GP facility on site of Prince of Wales Hospital or a smaller facility on a hospital site and a 3 rd GP facility elsewhere in Ely Expanded Staploe Medical Centre (3.5 GPs) Expanded Littleport Health Centre (1.5 GPs) Expanded Dental Provision (4 dentists across 3 facilities)
Acute Care	Redevelopment of Princess of Wales Hospital

7.20 The assumptions set out in this chapter represent an early stage in the process of assessing healthcare requirements and should be considered only as a preliminary response in respect of the scale of housing growth outlined in the Draft Local Plan. As more detailed delivery models concerning community based care are developed the facility recommendations may change accordingly.

Healthcare Costs

7.21 The total cost of providing the necessary healthcare facilities is outlined in Table 7-6.

Table 7-6: Healthcare Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Healthcare	Redevelopment of Princess of Wales Hospital*	Ely	TBC	TBC	
Healthcare	Provision of 3GP (with room for future expansion to 9) facility on site of Prince of Wales Hospital	Ely	£3,300,000	£0	
Healthcare	Expansion of Existing Dentists (1 dentists)	Ely	£150,000	£0	
Healthcare	Refurbishment of Soham Health Centre (2 GPs)	Soham	£850,000	£0	
Healthcare	Expansion of Existing Dentists (2 dentists)	Soham	£300,000	£0	
Healthcare	Refurbishment of Littleport Health Centre (1 GPs)	Littleport	£2,450,000	£0	
Healthcare	Expansion of Existing Dentists (1 dentists)	Littleport	£150,000	£0	
Healthcare	Expansion of	Burwell	£150,000	£0	

	Existing Dentists (1 dentists)				
Total Assumed Infrastructure Costs			£7,350,000		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£7,350,000		

**The Cambridgeshire PCT has indicated that there is a need for further technical work to be undertaken to determine the expected costs of providing acute care facilities on the Princess of Wales site (in addition to that required for primary care).*

8. Emergency Services

POLICY CONTEXT

- 8.1 The need to ensure that housing development promotes community cohesion and creates safe neighbourhoods and environments is a central consideration of a broad range of strategies and policies including:
- The **Cambridgeshire Local Policing Plan for 2011 – 2014**, which sets out the strategic vision for Cambridgeshire Police (which will be replaced by the Police and Crime Plan to be prepared by the Cambridgeshire Police and Crime Commissioner);
 - The **Cambridgeshire and Peterborough Fire Service Annual Report 2011-12**, which sets out the Authority's vision as for the Service to be a key contributor to community safety; and,
 - The **East of England Ambulance Service NHS Trust**. E EAST's vision is to be the recognised leader in out of hospital emergency and urgent care. The focus is on responding to the demands of incidents, therefore the traditional model of a certain number of ambulances in a town station is not how the system is used today. Instead, vehicles and staff are sent out in response to predicted incident locations. The system is based on a quality-assured vehicles and preparation programme, designed to minimise cross infection and maximise patient safety.

EXISTING PROVISION

Overview

Police

- 8.2 There is one police station in East Cambridgeshire which is located in the main market town; Ely. There are currently 59 Police Officers and 44 Police Support Staff.

Fire Service

- 8.3 There are six fire stations in East Cambridgeshire. These are distributed throughout the three market towns, a number of key service centres and in smaller settlements. The provision of the Fire Service is based on levels of risk. East Cambridgeshire is considered a low risk area.

Ambulance Service

- 8.4 There is one Ambulance Station in East Cambridgeshire which is located in Ely as well as strategic placed vehicles. As with fire service, response times are critical. The strategic location of ambulances means that they are able to answer emergency calls within a specified period.

EMERGENCY SERVICES INFRASTRUCTURE REQUIREMENTS

Police

- 8.5 The police requirements are based on discussions with Cambridgeshire Police and provide an indication of the likely infrastructure requirements

associated with scale of housing growth outlined in the Pre-submission Draft Local Plan. Cambridgeshire Police aim to maintain policing services at the current ratio of police per population. Assumptions on the level of police services that should be applied to the scale of housing growth outlined in the Pre-submission Draft Local Plan are set out in Table 8.1 below.

Table 8-1: Police Service Assumptions

	Standard
Police officers	1 police officer per 564 households
Police Support Staff	1 Police Support Staff per 757 households
Custody Accommodation	1 sq m per 370 households

Source: Cambridgeshire Police 2009

- 8.6 Using the assumption identified in Table 8-1 it is possible to estimate the additional demand for police officers, support staff and custody areas associated with the housing growth.

Table 8-2: Demand for Additional Officers in the Police Service

	2031
Ely	6.6
Soham	2.3
Littleport	1.5
Burwell	0.8
Rest of District North	1.5
Rest of District South	0.8
Rural exception sites	0.9
Total	14.4

Table 8-3: Demand for Additional Police Support Staff

	2031
Ely	4.9
Soham	1.7
Littleport	1.1
Burwell	0.6
Rest of District North	1.1
Rest of District South	0.6
Rural exception sites	0.7
Total	10.7

Table 8-4: Demand for custody accommodation

	2031
Ely	10.1
Soham	3.4
Littleport	2.3
Burwell	1.2
Rest of District North	2.3
Rest of District South	1.2
Rural exception sites	1.4
Total	21.9

- 8.7 Discussions with Cambridgeshire Police confirm that it is more appropriate to describe infrastructure requirements at the district level rather than at

settlement level. District wide there is demand for 14.4 police officers, 10.7 support staff and 21.9 sqm of custody space. Further work is to be undertaken by Cambridgeshire Police to determine the capital costs of any additional space which is required.

Fire and Ambulance

- 8.8 In the case of the ambulance services, the level of proposed development is unlikely to require additional infrastructure, as individual ambulances are not permanently stationed in stations or depots. They may be located at strategic sites across the district to ensure that the appropriate response times are met.
- 8.9 In the case of the fire service, based on discussions with Cambridgeshire and Peterborough Fire Service it is envisaged that current provision at Ely, Soham and Littleport would not necessitate a change in fire cover.

EMERGENCY SERVICES OVERVIEW AND COSTS

- 8.10 Table 8-5 sets out an overview of the emergency services. The police service is the only emergency service that requires new facilities. The additional policing requirement includes additional custody space and space for additional support staff within the existing Ely police station, plus space for additional officers located at appropriate locations across the district.

Table 8-5 Overview of Emergency Service Requirements

Police	21.9 sq m of custody space and 10.7 support staff 14.4 additional officers across district (low capital costs)
Fire Service	No capital requirements anticipated
Ambulance	No capital requirements anticipated

- 8.11 The assumptions set out in this chapter represent an early stage in the process of assessing emergency service requirements and should be considered only as a preliminary response in respect of the scale of growth outlined in the Draft Local Plan.

Emergency Services Costs

- 8.12 All anticipated emergency services costs are associated with the expansion of local policing across the district.

Table 8-6: Emergency Services Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Emergency Services	22 sq m of custody space and 11 support staff	East Cambridgeshire	TBC	£0	
Emergency Services	14 additional officers across district (low capital costs)	East Cambridgeshire	TBC	£0	
Total Assumed Infrastructure Costs			TBC		
Total Assumed Funding			£0		
Total Assumed Funding Gap			TBC		

9. Community Facilities

POLICY CONTEXT

- 9.1 Community facilities can include a wide range of facilities and spaces which the public can use including libraries, village halls, community centres, provision of children's pre-school services, venues for community and adult learning, performance and creative spaces, etc. For the purposes of forecasting potential infrastructure requirements, this study is examining the demand for Libraries, Community Centres, Arts Venues and Museums as these spaces provide for a variety of public needs.
- 9.2 At the county level, there is a **Service Level Policy** which specifies the type and standards of service to be provided from groups of similar libraries across the County. These range from the smallest village / community libraries at Level One, through to the wide-ranging and specialist services at Cambridge Central Library - Level 4. The service level of a library is formulated on the basis of:
- the catchment population it serves
 - the number of items (books, videos, etc) it issues
 - the number of visitors it receives

Culture in terms of art and museums are also important elements of sustainable communities. Art activities create opportunities for community interaction and build a sense of place. They can inspire learning, support skills, and personal development as well as promote health and mental wellbeing.

EXISTING PROVISION

Overview

- 9.4 There are 24 community centres and village halls in East Cambridgeshire. These are relatively evenly distributed across the district throughout all the settlements.
- 9.5 There are 2 library and lifelong learning centres (Ely and Littleport), 2 libraries (Soham and Burwell) and 3 library access points (Bottisham, Little Downham, and Haddenham) located within the market towns and villages within the district.
- 9.6 Ely contains the majority of existing cultural facilities, including the Babylon Gallery, 2 private galleries, The Maltings (which is a 260 seat conference centre and hall and is used as a part time cinema), 3 museums (Ely Museum, Oliver Cromwell House and The Stained Glass Museum) and Library.
- 9.7 In the smaller communities, there is a Country-Life Museum in Burwell, a commercial gallery in Haddenham, Stretham Pumping Station and a Steam Museum in Prickwillow.

COMMUNITY FACILITIES INFRASTRUCTURE REQUIREMENTS

- 9.9 The following table provides an overview of the community facilities standards adopted within this study.

Table 9-1: Community Facilities Assumptions

Type of community facility	Amount per 1000 population (m2)	Amount per person (m2)	Source
Community meeting facilities	111m2 per 1000 population	0.1m2 per person	South Cambs District Council
Arts facilities	45m2 per 1000 population	0.045m2 per person	Arts Council England and Museum, Libraries and Archives Council
Libraries	30m2 per 1000 population	0.03m2 per person	Cambridgeshire County Council
Museums	28m2 per 1000 population	0.03m2 per person	Museum, Libraries and Archives Council

- 9.10 Community facilities should be provided where possible within and alongside communities and for this reason the recommendations for community facilities are based on the development specific population growth projections set out in Chapter 4. The total population change by each growth location is presented in the following table.

Table 9-2: Development Specific Population Growth Projections 2011 - 2031

Ely	9694
Soham	3308
Littleport	2212
Burwell	1195
Rest of District North	1,971
Rest of District South	1,369
Total	19,749

- 9.11 Outside of the identified growth locations, the demand for community facilities is likely decrease as district wide demographic projections forecast a declining population across the district in the absence of housing growth.

Community Space

- 9.12 Each of the five Sub-areas require additional community facilities. Feedback from local parish councils has identified that in some areas, such as Witcham, there is a need to improve local Village Hall facilities. The distribution of windfall developments and growth outside of the market towns and key service centres should be closely monitored as it is possible that small levels of housing and / or population growth in these areas may trigger sufficient demand for improved facilities.

Table 9-3: Requirement for Community Space (sqm)

	2031
Ely	1076
Soham	367
Littleport	245
Burwell	133
Rest of District North	248
Rest of District South	122
Total	2194

Libraries

- 9.13 Growth in Ely, Soham, Littleport and Burwell will trigger the need for additional library provision. Elsewhere within the district the County Council has stated that improvements will be made to existing library/lifelong learning services rather than providing new facilities e.g. additional stock.

Table 9-4: Requirement for Library Space (sq.m), by Growth Location

	2031
Ely	291
Soham	99
Littleport	66
Burwell	36
Rest of the District North	66
Rest of the District South	30
Total	559

- 9.14 Cambridgeshire County Council has stated that there is potential for on-site expansion of the existing Soham and Burwell libraries. However there is limited potential for on-site expansion of Ely and Littleport libraries due to the lack of space available on these sites. The County Council has therefore indicated that the existing libraries would be retained and additional library provision would be made elsewhere within these settlements as part of community hubs. Elsewhere within the District it is expected that existing library services e.g. mobile library provision will be improved rather than providing new library floorspace as set out in Table 9-8 below.

Art Facilities

- 9.15
- 9.16 Table 9-5 sets out the additional requirements for arts facilities across East Cambridgeshire. Arts facilities can include galleries, multi-use art centres, theatres and art production space. The standard sets out in Table 9-1 for art provision can include the provision of one of these facilities within the 45 sq m standard or a combination of a number of facilities. It should be noted however that these standards are for the provision of culture at the local level due to local population growth. Regional provision falls outside the scope of this study and would need to be assessed separately within other planning policies.

Table 9-5 Requirement for Art Facilities (sq.m)

	2031
Ely	436

Soham	149
Littleport	100
Burwell	54
Rest of District North	100
Rest of District South	50
Total	889

9.17 The appropriate facility type would need to be decided within each area in response to local issues. However, the figures identified in the table above provide an indication of the amount of space that could be supported.

Museum

9.18 Table 9-6 sets out the additional requirements for museum facilities across East Cambridgeshire.

Table 9-6 Requirement for Museum Space (sq.m)

	2031
Ely	271
Soham	93
Littleport	62
Burwell	33
Rest of District North	124
Rest of District South	31
Total	553

COMMUNITY FACILITIES OVERVIEW AND COSTS

9.19 The following table provides a summary overview of the community facilities requirements required. A more detailed table (Table 9-8) providing details of costs is provided at the end of this section. The assumptions set out in this chapter represent an early stage in the process of assessing community facility requirements and should be considered only as a preliminary response in respect of the scale of housing growth outlined in the Draft Local Plan

Table 9-7: Overview of Community Facility Requirements

Ely	1076 sq m community space; 436 sq m arts space, 271 sq m museum space; 291 sq m library space
Soham	367 sq m community space; 149 sq m arts space; 93 sq museum space, 99 sq m library space
Littleport	245 sq m community space; 100 sq m arts space; 62 sq m museum space, 66 sq m library space
Burwell	133 sqm community space; 54 sqm arts space; 33 sq m museum space, 36 sq m library space
Rest of District North	248 sq m community space; 100 sq m arts space, 124 sq m museum space, 66 sq m library space
Rest of District South	122 sq m community space; 50 sq m arts space; 31 sq m museum space, 30 sq m library space

Community Facilities Costs

Table 9-8: Community Facility Infrastructure Costs and Phasing

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Community Facilities	1076 sq m community space	Ely	£1,768,913	£0	
Community Facilities	436 sq m arts space	Ely	£545,261	£0	
Community Facilities	271 sq m museum space	Ely	£590,064	£0	
Community Facilities	291 sq m library space	Ely	£873,000	£0	
Community Facilities	367 sq m community space	Soham	£603,707	£0	
Community Facilities	149 sq m arts space	Soham	£186,090	£0	
Community Facilities	93 sq m museum space	Soham	£201,381	£0	
Community Facilities	99 sq m library space	Soham	£297,000	£0	
Community Facilities	245 sq m community space	Littleport	£403,578	£0	
Community Facilities	100 sq m arts space	Littleport	£124,401	£0	
Community Facilities	62 sq m museum space	Littleport	£134,623	£0	
Community Facilities	66 sq m library space	Littleport	£198,000	£0	
Community Facilities	133 sq m community space	Burwell	£218,056	£0	
Community Facilities	54 sq m arts space	Burwell	£67,215	£0	
Community Facilities	33 sq m museum space	Burwell	£72,738	£0	
Community Facilities	36 sq m library space	Burwell	£108,000	£0	
Community Facilities	248 sq m community space	Rest of District North	£407,156	£0	
Community Facilities	100 sq m arts space	Rest of District North	£125,504	£0	
Community Facilities	124 sq m museum space	Rest of District North	£270,440	£0	
Community Facilities	Improvements to existing library services	Rest of District North	£2,513	£0	
Community Facilities	122 sq m community space	Rest of District South	£200,827	£0	
Community Facilities	50 sq m arts space	Rest of District South	£63,074	£0	
Community Facilities	31 sq m museum space	Rest of District South	£66,691	£0	
Community Facilities	Improvements to existing library services	Rest of District South	£6,981	£0	
Total Assumed Infrastructure Costs			£7,535,213		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£7,535,213		

10. Sports Space and Facilities

POLICY REVIEW

National Planning Policy

- 10.1 Sports and recreation facilities can assist in creating sustainable communities by making an important contribution to the physical infrastructure of communities. They can provide a social focus and positively influence people's perception of their neighbourhood.
- 10.2 The **National Planning Policy Framework (NPPF) (March 2012)** highlights the importance of delivering sports and recreational facilities in order to foster sustainable communities. The NPPF highlights the important contribution sports and recreation facilities make to the health and well-being of communities and acknowledges that the planning system has an important role in helping to create an environment where activities are made easier and public health can be improved.

Local Policy

- 10.6 **The Sports Facilities and Play Area Assessment Report (2005)** illustrated the current supply and demand analysis for East Cambridgeshire, based on a national model which identified the recommended provision for the current population and identified the district's sports requirements to 2021.
- 10.7 The standards and requirements set out in the Sports Facilities and Play Area Assessment Report are in need of revision in light of the development that has occurred across East Cambridgeshire since 2005. However, in the absence of more recent information the standards and recommendations set out in that report will form the basis of our approach to identifying sports facility requirements.
- 10.8 **The Leisure Needs Assessment (2007)** examines demand for the procurement and development of leisure facilities in Ely. This study applies the methodology and sources set out in this report to identify the predicted demand for sports and leisure in Ely.

EXISTING PROVISION

Overview of Provision

- 10.9 According to the 2009 East Cambridgeshire Place Survey only 34% of local residents made use of local sports or leisure facilities at least once a month and only 40% were satisfied with local levels of provision. This is the lowest level of satisfaction across Cambridgeshire.

Built Facilities

- 10.10 The Sports Facilities and Play Area Assessment Report (2005) identified the following issues concerning the built leisure facilities within the district:
- The assessment identified a requirement for sports courts within the district. It suggests that this could be delivered through expansion of

the Paradise Centre and provision of a new facility at Ely, both of which must be easily accessible by public transport.

- Further provision of sports halls could be delivered by opening up existing school halls in Ely and Witchford for formal community uses.
- The provision of future swimming pools will be subject to a more detailed feasibility study however the preferred option is for a maximum six lane facility within Ely.
- Future provision of Synthetic Turf Pitches (STPs) should be focused within the larger settlements, notably Ely and Littleport.

10.11 The assessment provides standards for the future provision of open space and built leisure facilities, which are presented in the following section.

Sport and Recreational Spaces

10.12 The Sports Facilities and Play Area Assessment Report (2005) identified that in 2005 there were 99 pitches in secured community use in East Cambridgeshire, occupying 95.7 ha of land (or 1.33 ha per 1,000 people). It identified that overall the quality of pitches and ancillary facilities (including changing rooms) is fair, however improvements are required in some areas to ensure that all pitches are capable of two matches per week and that facilities are suitable for all users.

Other key issues identified by the assessment included:

- There may be a need to reorganise and rationalise football pitch provision within the district as some pitches are not in the appropriate locations
- A central venue for netball (potentially King's School, Ely) should be investigated

INFRASTRUCTURE DEMAND

Sports Facilities Approach

10.13 As identified above, standards from the East Cambridgeshire Sports Facilities and Play Area Assessment 2005 have been used to determine the appropriate level of sports facilities that should be provided to ensure that increased housing does not place additional pressure on existing facilities. These are set out in the following table and are applied to the development specific population growth projections set out in Chapter 0.

10.14 Leisure proposals in Ely are based on the 2007 Leisure Needs Assessment which identifies a current under-provision of swimming pool space of 378m². Future demand for swimming pool space is then calculated using the Sports Facility Calculator and then increased with an assumption of 10% increase in participation, as recommended by the 2007 study.

Table 10-1: Minimum Sports Provision

Facility	Standard
Pitches	1.33 ha/1000 people
Tennis	0.03 ha/1000 people
Bowls	0.044 ha/1000 people

Netball	0.014 ha/1000 people
Floodlit Multi Games Areas	0.038 ha/1000 people
Sports halls	0.26 courts/1000 people
Swimming pools	9.29 m2/1000 people
STPs Synthetic turf pitches	0.03 pitches/1000 people

Source: East Cambridgeshire Sports Facilities and Play Areas Assessment 2005

Sports Facilities Infrastructure Demand

- 10.15 The following table identifies the sports facilities requirements associated with the Pre-submission Draft Local Plan. They are based on the requirements per 1,000 people presented above and set out in the Sports Facilities and Play Areas Assessment (2005).
- 10.16 Outstanding housing growth demonstrates that there is sufficient demand for playing pitches (assuming an average size of 1.3 ha per pitch) within each of the 5 sub-areas. There is also sufficient demand for tennis courts, bowling greens and FMGAs.
- 10.17 The District wide requirement for sports halls and swimming pool provision identified in the Sports Facilities and Play Areas Assessment (2005) will be met through the provision of a Leisure Centre at Ely. Planning permission was granted for a Leisure Centre at Ely in 2010, including a 6 lane swimming pool, a 5 court sports hall and 100 fitness stations.

Table 10-2: Sport and Recreation Requirements

Sub-Areas	Pitches (ha)	Tennis (ha)	Bowls (ha)	Netball (ha)	Floodlit Multi-Games Areas (ha)	Sports Halls (Courts)*	Swimming Pools (m2)	Synthetic Turf Pitches (Pitches)
Ely	12.89	2.91	4.27	0.14	0.37	2.52	90.95	0.29
Soham	4.40	0.99	1.46	0.05	0.13	0.86	30.73	0.10
Littleport	2.94	0.66	0.97	0.03	0.08	0.58	20.55	0.07
Burwell	1.59	0.36	0.53	0.02	0.05	0.31	11.10	0.04
Rest of District North	2.94	0.66	0.97	0.03	0.08	0.58	20.57	0.07
Rest of District South	1.52	0.34	0.50	0.02	0.04	0.30	10.59	0.03
Total	26.3	5.9	8.7	0.3	0.8	5.1	183.6	0.6

* Calculation does not include existing under-provision and 10% increase in supply. This is factored into the recommended facilities in line with the 2007 Leisure Needs Assessment

- 10.18 It should be noted that recommendations for sports facilities in this chapter are not intended to be final. It is likely that areas that have high growth may require extra facilities for young people, for example informal sports areas, kick about areas, or skate parks, and that improvements and expansion to existing facilities could be required alongside additional housing growth.

SPORTS AND RECREATION OVERVIEW AND COSTS

10.18 Table 10-3 sets out an overview of sports and recreation infrastructure requirements based on the demand identified in the previous section.

Table 10-3 Overview of Sports and Recreation Requirements

Ely	12.89 ha playing pitches; 2.91ha tennis courts, 4.27ha bowling greens; 0.14ha Netball courts and 0.37ha FMGA
Soham	4.4 ha playing pitches; 0.99ha tennis courts; 0.05ha Netball courts, 1.46ha bowling greens; 0.13ha FMGA
Littleport	2.94 ha playing pitches, 0.97ha bowling greens, 0.03ha Netball courts, 0.08ha FMGA
Burwell	1.59 ha playing pitches, 0.36ha tennis courts; 0.53ha bowling greens; 0.02ha Netball courts, 0.05ha FMGA
Rest of District North	2.94 ha playing pitches; 0.66ha tennis court; 0.97ha bowling greens; 0.08ha FMGA
Rest of District South	1.52 ha playing pitches; 0.34ha tennis court; 0.50ha bowling greens; 0.04ha FMGA
Ely, Soham, Littleport and North of District	1 Leisure centre

Sports and Recreation Space Costs

Table 10-4: Sports and Recreation Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Sport and Recreation	Playing Pitches (12.89 ha)	Ely	£2,386,500	£0	
Sport and Recreation	1 leisure centre (incl. 6-lane swimming pool, 5 court sports hall and 100 fitness stations)	Ely, Soham, Littleport and Rest of District North.	£15,550,000 ⁵	£0	
Sport and Recreation	Playing Pitches (4.4 ha)	Soham	£814,000	£0	
Sport and Recreation	Playing Pitches (2.94 ha)	Littleport	£536,400	£0	
Sport and Recreation	Playing Pitches (1.6ha)	Burwell	£296,000	£0	
Sport and Recreation	Playing Pitches (2.94 ha)	North of district	£543,900	£0	
Sport and Recreation	Playing Pitches (1.52 ha)	South of district	£281,200	£0	
Total Assumed Infrastructure Costs			£20,480,000		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£20,480,000		

⁵ This figure is based upon the cost assessment undertaken in 2009 on behalf of the District Council.

11. Open Space, and Green Infrastructure

POLICY REVIEW

- 11.1 Within East Cambridgeshire, the **Sports Facilities and Play Area Assessment Report (2005)** identifies the district's play area requirements to 2021.
- 11.2 The standards and requirements set out in the Sports Facilities and Play Area Assessment Report are in need of revision in light of the development that has occurred across East Cambridgeshire since 2005. However, in the absence of more recent information the standards and recommendations set out in that report will form the basis of the approach to identifying play facility requirements.

- 11.3 Standards for informal open space are set out in the **East Cambridgeshire Informal Open Space Assessment**, which identifies a minimum standard of 2.5ha per 1000 people for casual play and informal recreation.
- 11.4 Green Infrastructure requirements are assessed at the strategic countywide level and the requirements of the whole county are set out in **Cambridgeshire Green Infrastructure Strategy 2011**. This Strategy demonstrates how Green Infrastructure can be used to help to achieve four objectives:
- To reverse the decline in biodiversity
 - To mitigate and adapt to climate change
 - To promote sustainable growth and economic development
 - To support healthy living and well-being
- 11.5 The Strategy is based on the analysis of public policy and key baseline data grouped into seven themes identified as important elements of Green Infrastructure, biodiversity, climate change, Green Infrastructure gateways, heritage, landscape, publicly accessible open space and rights of way. In addition, three cross-cutting/overarching issues were considered: economic development, health and well-being, and land and water management.
- 11.6 The Strategy identifies potential sites for development, key habitat areas, and highlights how to link green infrastructure creation with the proposed development of Ely, Soham and Littleport which are all identified as target areas.

OPEN SPACE

Overview of Existing Provision

- 11.8 In relation to Open Space, the Sports Facilities and Play Area Assessment Report (2005) identified that there are deficiencies in play provision across much of the district, however these are most pronounced in the larger settlements (Ely, Soham, Littleport, Burwell, and Sutton).
- 11.9 In Soham the Commons provide informal open space on the edge of the city, however these are currently underutilised and there is the potential to improve these areas so that local residents can make better use of them. In Soham and elsewhere the quality of local provision is an essential consideration when planning additional open space, particularly if improvements to existing provision would provide greater benefit to new and existing residents.
- 11.10 Parish Councils have also been asked to determine the local infrastructure requirements that would be triggered by small levels of housing growth in their areas. Youth provision was one of the main areas identified in deficit, and the provision of formal open space could significantly enhance the youth offer in these areas.

11.11 Furthermore, the rural nature of the District could be used as a basis for open space provision with the development of additional Rights of Way, Country Parks and long distance walks leading to destinations being a way of meeting a number of needs simultaneously.

Demand for Open Space

11.12 Open space standards were set out in the East Cambridgeshire Informal Open Space Study 2005 and play space standards in the East Cambridgeshire Sports Facilities and Play Areas Assessment 2005.

Table 11-1: Open Space Requirements

Open Space	Standard
Informal open space	2.5ha per 1,000 people
Toddler Outdoor Play Space	0.02ha per 1,000 people
Junior Outdoor Play Space	0.08ha per 1,000 people
Youth Outdoor Play Space	0.1ha per 1,000 people

Sports Facilities and Play Areas Assessment 2005

11.13 Informal space and play areas would be expected to come forward in a variety of ways, with some informal space being provided as part of and alongside developments and the remainder being provided at strategically accessible locations across the district.

11.14 The requirements identified in this chapter are those that are directly linked to housing growth. In areas where local deficiencies are identified, it may also be necessary to increase provision beyond the level set out here.

Open Space Demand

11.15 By applying the standards set out in Table 11-1 to the development specific population set out in Chapter 0 it is possible to project the open space requirements associated with housing growth.

11.16 Over the whole district there is a requirement for 62.5 ha of open space. Over 48 ha are required within the three market towns. Informal Open Space will form the majority of new GI developments with smaller provision made for juniors, young people, and toddlers. Informal open space may include country parks, city rivers, riverside open spaces, countryside access, rights of way, and nature reserves.

Table 11-2: Open Space Requirements (Ha)

Sub-Areas	Informal Open Space	Toddler Outdoor Play Space	Junior Outdoor Play Space	Youth Outdoor Play Space	Total Open Space
Ely	24.23	0.19	0.78	0.97	26.17
Soham	8.27	0.07	0.26	0.33	8.93
Littleport	5.53	0.04	0.18	0.22	5.97
Burwell	2.99	0.02	0.10	0.12	3.23
Rest of District North	4.3	0.03	0.1	0.2	4.6
Rest of District South	4.08	0.05	0.18	0.16	9.1

Total	49.4	0.4	1.6	2.0	53.4
--------------	-------------	------------	------------	------------	-------------

GREEN INFRASTRUCTURE

Green Infrastructure Requirements

11.17 The major green infrastructure scheme identified for the district is the Ely Country Park. The Ely Country Park Development Plan outlined a three-phase approach to the delivery of the County Park, which will seek to meet the strategic objectives of:

- Conservation and biodiversity improvement
- Improved circulation and sustainable movement
- The provision of facilities to encourage community engagement with the site and use it more frequently.

11.18 Phase 1 of the project aims to develop the majority of the built infrastructure proposed for the Country Park. This includes the development of a play space, visitor's centre, car park, new footpaths and cycle routes. Phase 1 will also aim to improve the ecological capacity of the site with additional landscaping to enhance the current nature of the Pocket Park and Ely Common areas of the site.

11.19 It is proposed that this new / improved infrastructure be located in areas of least ecological sensitivity and consequently the site is projected to improve the quality of the landscape without causing any negative impacts on the surrounding area's ecological capacity or social function.

11.20 Phase 2 of the Country Park development aims to develop further the circulation of people throughout the site and within Ely with further enhancements of footpaths and cycleways. In parallel to this, additional habitat creation and active conservation of the sites most sensitive areas will be promoted strongly in Phase 2.

11.21 Phase 3 outlined a number of aspirational visions for Ely Country Park including new engineering work to link the County Wildlife Site (CWS) on the south of the Great River Ouse to the Country Park and further access improvements to the south of the site.

11.22 Ely and a number of other Parishes in East Cambridgeshire suffer from a deficiency of open space (formal and informal) and green infrastructure. The size of the Ely Country Park development will go some way to redressing the open space deficit identified in Ely and other East Cambridgeshire parishes. The provision of a multi-functional location that provides facilities for formal and informal use the site will provide a much-needed location that has the capacity to allow a high number of simultaneous visits.

11.23 Although the site will be able to accommodate a high number of users simultaneously it will still only partially meet the ANGSt standards. Most residents within the city will be within a 2-kilometre walk but some residents in

the western and northern areas of Ely may not. Therefore although the Country Park will provide a location that meets the accessible 20 ha site within two kilometres for most Ely residents this will not be the case for all.

11.24 Ely Country Park is however a strategic project that acknowledges the potential development projected for Ely (especially Ely North). Its size and location have therefore been identified as a way of meeting some of the future open space/green infrastructure needs. However, with an increased population further developments will be needed locally to provide a network of spaces that function on the street of community level. The Country Park adds an infrastructure for the City but should not be seen as a way of meeting all the deficiency targets.

11.25 The development of additional open space / green infrastructure therefore needs to assess each location/parishes individually to meet their deficiencies in the first instance. Physical Links and wider lineages between locations, people, and the landscape can subsequently be developed after the immediate needs for facilities and spaces are met at a localised level.

11.26 In addition to the County Park, other projects have been identified and set out in the Cambridgeshire Green Infrastructure Strategy 2011. The Strategy divides Cambridgeshire into Strategic Areas with Strategic Area projects. These Strategic Areas are further broken down into Target Areas. Each of the Target Areas contain a list of projects that help deliver green infrastructure for the Target Area, and therefore contribute to the four objectives of the strategy that were outlined above at paragraph 11.4.

11.27 The Strategy does not identify the costs associated with the provision of this green infrastructure but it does identify CIL as a potential source of funding. Green infrastructure projects identified in the Strategy that are located wholly or partly in East Cambridgeshire are outlined in Table 11-3.

Table 11- 3 – Strategic green infrastructure

Strategic Area	Strategic Area Projects	Target Area	Target Area Projects
Strategic Area 4: Eastern Fens and Towns	Fens Adventurers Partnership: Green Fen Way (The Green Fen Way project aims to make significant improvements to countryside access networks (both Public Rights of Way (PRoW) and permissive paths) in the Fens Adventurers area with the aim of benefiting rural tourism and	Littleport	Littleport Urban Greenway
			New River Town Park
			Cycleway Improvements
			Woodland Creation
		Ely	Ely Country Park
			Woodland Creation
			North Ely Development
			Ouse SuDS

	businesses.) The Fens Waterways Link (FWL) will enhance river navigation to connect the Cathedral Cities of Lincoln, Peterborough and Ely as well as King's Lynn, Denver, March, Ramsey, Huntingdon and Cambridge.		Sustainable Access across A10
		Soham	Soham Commons Restoration
			Improved public open space and town parks
		Ely Ouse	Environmental stewardship schemes
			Eastern Gateway Green Infrastructure expansion
Strategic Area 5: Chippenham Fen		Chippenham Fen	Continued reserve management
			Water management investigation
Strategic Area 6: Cambridge and surrounding Areas		Wicken Fen and Anglesey Abbey	Wicken Fen Vision
			Wicken Fen Nature Trails

Source: Cambridgeshire Green Infrastructure Strategy 2011

OPEN SPACE AND GREEN INFRASTRUCTURE OVERVIEW AND COSTS

Open Space and Green Infrastructure Requirements

11.27 Table 11-3 sets out an overview of open space and green infrastructure requirements. The total provision of open space is directly linked to the total number of dwellings.

Table 11-3 Overview of open space and green infrastructure Requirements

	Submission Draft Local Plan
Open Space	49.4 ha Informal Open Space; 0.4 ha Toddler Outdoor Play Space; 1.6 ha Junior Outdoor Play Space; 2.0 ha Youth Outdoor Play Space
Green Infrastructure	Ely Country Park

- Open Space and Green Infrastructure Costs

The following table presents the costs and funding associated with the open space and green infrastructure requirements.

Table 11-4: Open Space and Green Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Open Space	Informal Open Space (24.23 ha)	Ely	£4,846,000	£0	S.106
Open Space	Junior Outdoor Play Space (0.78 ha)	Ely	£390,000	£0	S.106
Open Space	Youth Outdoor Play Space (0.97 ha)	Ely	£630,500	£0	S.106

Open Space	Toddler Outdoor Play Space (0.19 ha)	Ely	£95,000	£0	S.106
Open Space	Informal Open Space (8.27 ha)	Soham	£1,654,000	£0	S.106
Open Space	Junior Outdoor Play Space (0.26 ha)	Soham	£130,000	£0	S.106
Open Space	Youth Outdoor Play Space (0.33 ha)	Soham	£214,500	£0	S.106
Open Space	Toddler Outdoor Play Space (0.07 ha)	Soham	£35,000	£0	S.106
Open Space	Informal Open Space (5.53 ha)	Littleport	£1,106,000	£0	S.106
Open Space	Junior Outdoor Play Space (0.18 ha)	Littleport	£90,000	£0	S.106
Open Space	Youth Outdoor Play Space (0.22 ha)	Littleport	£143,000	£0	S.106
Open Space	Toddler Outdoor Play Space (0.04ha)	Littleport	£20,000	£0	S.106
Open Space	Informal Open Space (2.99 ha)	Burwell	£598,000	£0	S.106
Open Space	Junior Outdoor Play Space (0.10 ha)	Burwell	£50,000	£0	S.106
Open Space	Youth Outdoor Play Space (0.12 ha)	Burwell	£78,000	£0	S.106
Open Space	Toddler Outdoor Play Space (0.02 ha)	Burwell	£10,000	£0	S.106
Open Space	Informal Open Space (4.3 ha)	North of district	£860,000	£0	S.106
Open Space	Junior Outdoor Play Space (0.1 ha)	North of district	£50,000	£0	S.106
Open Space	Youth Outdoor Play Space (0.2 ha)	North of district	£130,000	£0	S.106
Open Space	Toddler Outdoor Play Space (0.03 ha)	North of district	£15,000	£0	S.106
Open Space	Informal Open Space (4.08 ha)	South of District	£816,000	£0	S.106
Open Space	Junior Outdoor Play Space (0.1 ha)	South of District	£90,000	£0	S.106
Open Space	Youth Outdoor Play Space (0.16 ha)	South of District	£104,000	£0	S.106
Open Space	Toddler Outdoor Play Space (0.05 ha)	South of District	£25,000	£0	S.106
Open Space	Ely Country Park	ECDC	£850,000	£0	
Total Assumed Infrastructure Costs			£12,180,000		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£12,180,000		

12. Transport Infrastructure

INTRODUCTION

- 12.1 This study provides a high level review of the key infrastructure requirements given the level of housing and employment growth as set out in the Draft East Cambridgeshire Local Plan. The infrastructure requirements listed in this chapter are based on requirements identified in the East Cambridgeshire Infrastructure Investment Framework and have been updated in collaboration with Cambridgeshire County Council.
- 12.2 The requirements identified have been based upon a review of the policy and strategy documents relevant to the area, discussions with key stakeholders and an appreciation of the major transportation issues facing the district. Detailed modelling work has not been undertaken as part of this study. .

KEY TRANSPORT ISSUES

- 12.3 Following a review of the main policy and strategy documents and discussions with stakeholders, a range of broad transport issues have been identified. The majority of these are current issues, however it is also believed that if not addressed, these will present significant barriers to delivering the projected levels of development for the region. These main issues are listed below. While they are categorised based upon the mode of transport for which they directly refer, a number of the issues are related across the modes.

Highways

- The operation of the A142 between Angel Drove and Stuntney Causeway
- Congestion on the A10 corridor between Ely and Cambridge
- The operation of the A14 junctions with the A10, the A142 and the B1047
- Junction capacity within the main settlements

Rail

- Concerns relating to the capacity of existing passenger services
- Future impact on the level crossing of additional use of the rail line through Ely by freight
- The need to redevelop the rail station to provide an attractive multi-modal interchange facility

Bus Services

- A lack of buses serving rural areas
- A need for additional services along key corridors
- Poor connectivity within urban areas to key destinations, particularly Ely rail station

- Lack of bus priority and park and ride sites to encourage use of the bus on a congested highway network

Walking & Cycling

- A general lack of quality facilities
- Poor connectivity to key destinations
- Increasing severance of the highway network as a result of increased traffic flows.

12.6 These issues are generally reflective of the key transport characteristics of East Cambridgeshire, with the rural nature of the district combined with the relative lack of local employment opportunities resulting in high levels of commuter trips, particularly by car, putting pressure on the strategic transport networks. There are also concerns relating to the coverage and quality of the public transport, walking and cycling networks, which also contribute to the high car use.

12.7 A number of potential infrastructure improvements have been identified to address these issues and provide a foundation for the future growth for the region. A common theme throughout these issues is the high level of vehicle trips and the lack of suitable alternatives. The spatial strategy acknowledges that there is a need for balanced, sustainable development within the district. This requires development to be appropriately located, with a mix of uses, and strong sustainable transport links between the growth areas and to other key destinations.

12.8 The location, design and infrastructure associated with new development would be expected to reduce the need to travel and encourage walking, cycling and public transport over individual private car use. As part of this approach, new developments would generally be expected to have a relevant travel plan which may include a package of measures such as new cycling facilities, car clubs, car sharing and shuttle buses, while there would also be expected to be a degree of parking constraint based upon Cambridgeshire's maximum standards.

IDENTIFIED TRANSPORT IMPROVEMENTS

12.11 Table 12-1 lists identified transport infrastructure requirements and is based on work carried out by AECOM for the East Cambridgeshire Infrastructure Investment Framework which has been updated in consultation with Cambridgeshire County Council.

12.12 Table 12-2 presents the costs and funding associated with transport infrastructure requirements.

Table 12-1 Transport Infrastructure requirements

Infrastructure Need/Requirement	Identification	Notes
1. Highways		
Highways Improvements	Ely Modelling	Delivered as part of the development of

Infrastructure Need/Requirement	Identification	Notes
<p>associated with the expansion of Ely to the north including:</p> <ol style="list-style-type: none"> 1. Fourth arm at the B1382 Ely Road / Prickwillow Road / Kings Avenue roundabout 2. New Access Road from B1382 Ely Road / Prickwillow Road / Kings Avenue roundabout to the A10 North New signalised junction between New A10 Access Road and Lynn Road 3. New Access Road leading to Cam Drive with a new roundabout on the A10 	Report (See No 1 - Figure 3.2)	<p>the Northern Expansion Area - will require additional assessment as part of updated Ely Saturn Model</p> <ol style="list-style-type: none"> 1. <i>Modelling assumes up to 1,000 dwellings</i> 2. <i>Modelling assumes above 1,000 dwellings</i> 3. <i>Modelling assumes above 1,000 dwellings</i>
Improvements to the A142 between Angel Drove and Stuntney Causeway (Possible Southern Link Road Scheme)	Ely Modelling Report (See No 2) + Policy & Strategy Documentation	<p>Improvements to the A142 are seen as vital given additional traffic growth and potential increases in the closure of the level crossing given increased rail freight, and to deliver improvements to the railway station. The County Council plans to deliver the scheme through prudential borrowing, with repayments made over time by direct beneficiaries of the scheme. Developer funding, through directly negotiated payments or through CIL will need to be part of this funding package if delivery is to be achieved.</p> <p>The current need for this project is not due to growth, however a scheme to relieve the area around the crossing will be required to facilitate growth.</p>
Dualling of the A10 between A142 Witchford Road and A142 Angel Drove	Ely Modelling Report (See No 3 - Figure 3.2)	Identified to relieve traffic pressure associated with the development of Lancaster Way. Will require additional assessment as part of updated Ely Saturn Model
Improvements to Queen Adelaide Way, with junction improvements with the A142 and a new link with Prickwillow Road	Ely Modelling Report (See No 3 - Figure 3.2)	<p>To relieve pressure associated with the growth around the north-east of the city. Will require additional assessment as part of updated Ely Saturn Model</p> <p>Modelling assumes 1,000 dwelling capacity at present</p>
Junction improvements along the A10 in Ely	Core Strategy	Will require additional assessment as part of updated Ely Saturn Model
Improvements to the A142 East Fen Common Junction	Core Strategy	Subject to additional individual assessment
Improvements to the Witcham Toll Junction	Core Strategy	Subject to additional individual assessment

Infrastructure Need/Requirement	Identification	Notes
Improvements to the A142 Barway Junction	Core Strategy	Subject to additional individual assessment
Improvements to the A142 James Black Junction	Core Strategy	Will require additional assessment as part of updated Ely Saturn Model
Capacity Improvements to A10 between Ely and Cambridge	Ely Masterplan	Requires further assessment and will be subject to impact of public transport improvements on this corridor.
Improvements to the A14 / A10 Junction (Milton Interchange)	Discussions with HA	<p>Identified by the HA as a serious concern. Significant capacity improvements are unlikely. East Cambridgeshire development to be sustainable to minimise impact at junction</p> <p><i>This scheme is not wholly down to ECDC growth, however HA may have concerns over further impact from development especially in the higher growth projections. Scheme costs of £5,000,000 discounted by 50% in infrastructure cost calculations to reflect this.</i></p>
Improvements to the A14 / A142 Junction (Exton Interchange)	Discussions with HA	<p>Identified by the HA as a serious concern. Significant capacity improvements are unlikely. East Cambridgeshire development to be sustainable to minimise impact at junction</p> <p><i>This scheme is not wholly down to ECDC growth, however HA may have concerns over further impact from development especially in the higher growth projections. Scheme costs of £5,000,000 discounted by 50% in infrastructure cost calculations to reflect this.</i></p>
Improvements to the A14 / B1049 (Histon Interchange)	Discussions with HA	<p>Identified by the HA as a serious concern. Significant capacity improvements are unlikely. East Cambridgeshire development to be sustainable to minimise impact at junction</p> <p><i>This scheme is not wholly down to ECDC growth, however HA may have concerns over further impact from development especially in the higher growth projections. Scheme costs of £5,000,000 discounted by 50% in infrastructure cost calculations to reflect this.</i></p>
2. Railways		

Infrastructure Need/Requirement	Identification	Notes
New Chesterton Railway Station	http://www.cambridge-news.co.uk/cn_news_home/DisplayArticle.asp?ID=452586	Included as part of bid for TIF funding. Second stage for remaining funding for £500m transport improvements in 2010 but was unsuccessful, is likely to be part of future bids.
Enhanced Passenger Rail Services with improvements to London to Cambridge Services	http://www.networkrail.co.uk/asp/4451.aspx	Network Rail West Anglia Route Plan. While these apply directly to services between London and Cambridge, they may be extended to begin / end at Ely.
Increase in frequency on Norwich to Cambridge services to half hourly (currently hourly)	http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/greater%20anglia/greater%20anglia%20rus.pdf	Greater Anglia RUS 2007 established that this would not offer value for money until the completion of work at Ely North Junction - currently scheduled for the 2014 - 2019 period.
Increased car parking and improved interchange facility at Ely Rail Station	Discussions with Rail Companies	Current issues with connectivity of station. In conjunction with possible Tesco development and improved PT interchange but tied to A142 improvements scheme
New Station at Soham	Discussions with Rail Companies	The scheme is at a preliminary stage. Patronage that would be achieved would justify train services stopping at Soham, and would relieve some pressure on the A142 and other routes.
3. Road-Based Public Transport		
Bus enhancement measures in Ely town centre including the closure of New Barnes Avenue to through traffic to provide less congested bus route, bus gate on Brays Lane and signal control at the junction of Kings Avenue / Lynn Road	Ely Modelling Report (See No 3 - Figure 3.2)	In connection with new shuttle bus service between Littleport and Ely Rail Station / Tesco
Improvements to bus interchange facilities, particularly Ely City Centre, Ely Railway Station, Soham Town Centre	Core Strategy / Ely Market Town Transport Strategy	
Provision of real-time bus information and improvements to bus infrastructure - including new shelters, low floor build ups, better signage, information and marketing	Core Strategy / Ely Market Town Transport Strategy	Ely Market Town Transport Strategy indicates a cost of circa £100 - £150K to upgrade the bus stops on the 9, 9A and X9 routes between Ely and Littleport
Introduction of bus priority measures on the A10 - to encourage mode-shift on key Ely to Cambridge corridor	Core Strategy / Ely Masterplan	
Demand responsive transport schemes within rural areas to facilitate access to urban areas -	Core Strategy / LTP	

Infrastructure Need/Requirement	Identification	Notes
e.g. Dial a ride		
Enhancement of existing bus frequencies and support for additional services within all main settlements, including new services between Littleport and Ely and serving Ely rail station	Core Strategy	
New Park & Ride Site off the A10 near Ely	Ely Masterplan Transport and Access Statement / LTP	Will require assessment as part of any future work looking at capacity on the A10 corridor. Not wholly attributable to development, so infrastructure costs discounted by 50% in cost calculations.
4. Walking and Cycling		
Pedestrian area streetscape enhancements in Ely and Soham centre	Ely Masterplan	
New cycle bridge over the A10 with upgraded bridle link to Lancaster Way	Ely Modelling Report (See No 3 - Figure 3.2)	
Provision of additional cycle routes within Ely to improve connectivity, particularly to the centre and railway station	Ely Masterplan / Ely Market Town Transport Strategy	
A10 Stretham to Little Thetford	Core Strategy	
A142 Sutton to Witchford	Core Strategy	
B1102 Lode to Stow-cum-Quy	Core Strategy	
Burwell Village Network and link to Exning	Core Strategy	
Soham Town Network	Core Strategy	
Water beach to Wicken Fen, including Upware Bridge	Core Strategy	
Connect2 cycle route between Cambridge and Wicken Fen	Core Strategy	
General Improvements to cycling infrastructure in Soham and Littleport	Core Strategy	
5. Other Schemes		
Development and Instigation of Workplace and Residential Travel Plans		All new development should be supported by a travel plan promoting sustainable modes of transport
Station Travel Plan	Discussions with Rail Companies	
Development of Car Parking Strategy for Ely	Ely Masterplan	

Infrastructure Need/Requirement	Identification	Notes
Promotion of Camshare	LTP	

Table 12-2 Transport Infrastructure Costs

Infrastructure category	Name	Growth Location	Total costs	Total funding	Funding source
Transport	A14 Improvement Scheme Ellington to Milton*	Multi area	£1,198,000,000		DfT/HA funding/tolling & local contributions
Transport	Ely transport improvements Fourth arm at the B1382 Ely Road/Kings Avenue	Ely	£500,000	£500,000	S106
Transport	Ely Transport improvements: New signalised junction between New A10 access road and Lynn Road	Ely	£450,000	£450,000	S106
Transport	New access road leading to Cam Drive with a new roundabout on the A10	Ely	£2,000,000	£2,000,000	S106
Transport	Improvements to the A142 between Angel Drove and Stutney Causeway (likely Southern Link Road)	Ely	£31,700,000		Some prudential borrowing along with local developer contribution
Transport	Dualling of the A10 between A142 Witchford Road and A142 Angel Drove	Ely	£2,000,000		
Transport	Improvements to Queen Adelaide Way, with junction improvements with A142 and a new link with Prickwillow Road	Ely	£3,525,000		
Transport	Junction improvements along the A10 in Ely	Ely	£1,500,000		
Transport	Improvements to the A142 East Fen Common junction	Ely	£500,000		
Transport	Improvements	Soham	£500,000		

	to Witcham Toll junction				
Transport	Improvements to the A142 Barway junction	Haddenham	£500,000		
Transport	Improvements to the A142 James Black Junction	Ely	£500,000		
Transport	Capacity improvements to A10 between Ely and Cambridge	Ely	£17,375,000		
Transport	Improvements to A10/A14 junction	Ely / Cambridge	£2,500,000		
Transport	Improvements to A142/A14 junction	Cambridge	£3,500,000		
Transport	Improvements to B1049/A14 junction	Cambridge	£4,000,000		
Transport	New Science Park Rail Station	Cambridge	£25,550,000		Prudential borrowing to be repaid by income from rail passengers
Transport	Enhanced Rail services with improvements to London and Cambridge	Cambridge			
Transport	Power supply upgrades to enable longer trains to operate from Cambridge				
Transport	Increase in frequency on services to Stansted Airport to half hourly				
Transport	Increase infrequency on Peterborough to Ipswich service				
Transport	Increased car parking and improved interchange facility at Ely rail station		£1,000,000		
Transport	Soham station	Ely	£6,150,000		
Transport	Littleport station car park extension	Soham	£500,000		
Transport	Closure of New Barnes Avenue to through traffic	Littleport	£666,667		
Transport	Bus gate on Brays Lane	Ely	£666,667		
Transport	Signal control at junction of	Ely	£666,667		

	Kings Avenue/Lynn Road				
Transport	Improvements to bus interchange facilities particularly Ely city centre, Ely railway station, Soham town centre	Ely	£120,000		
Transport	Real Time Bus Information and Improvements to Bus infrastructure	Ely / Soham	£1,250,000		
Transport	Introduction of bus priority measures on the A10	Ely / Cambridge	£700,000		
Transport	Demand responsive transport schemes within rural areas e.g. Dial-a-Ride	East Cambs	£4,000,000		
Transport	Enhancement of existing bus frequencies and support for additional services within all main settlements	East Cambs	£4,000,000		
Transport	New Park and Ride Site on the A10 near Ely	Ely	£1,050,000		
Transport	Pedestrian area streetscape enhancements in Ely and Soham centre	Ely	£500,000		
Transport	New cycle bridge over the A10 with upgraded bridleway link to Lancaster Way	Ely / Witchford	£1,000,000		
Transport	Additional cycle routes within Ely – to city centre and railway station	Ely	£700,000		
Transport	A10 Stretham to Little Thetford	Stretham	£900,000		
Transport	A142 Sutton to Witchford	Sutton	£1,500,000		
Transport	Burwell village network and link to Exning	Burwell	£1,000,000		
Transport	Soham Town Network	Soham	£100,000		
Transport	Connect2 cycle route between	Cambridge / Wicken	£3,000,000		

	Cambridge and Wicken Fen				
Transport	General improvements to cycling infrastructure in Soham and Littleport	Soham / Littleport	£6000		
Transport	Smarter choice measures, including residential and workplace travel planning	East Cambs	£2,500,000		
Transport	Development of Car Parking Strategy for Ely	Ely	£50,000		
Total Assumed Infrastructure Costs			£130,376,001		
Total Assumed Funding			£4,700,000		
Total Assumed Funding Gap			£125,676,001*		

**This figure excludes the expected cost of A14 improvements the majority of which will be located outside of East Cambridgeshire.*

13. Utilities

INTRODUCTION

- 13.1 The East Cambridgeshire Infrastructure Investment Framework (IIF) (February 2011) carried out an assessment of the major services infrastructure requirements to accommodate Core Strategy growth. This assessment can be found on the East Cambridgeshire District Council website at: <http://www.eastcambs.gov.uk/masterplans/district-growth-projectsstudies>.
- 13.2 Since then, a joint Outline Water Cycle Study (WCS) was completed with Fenland District to determine constraints that may be imposed by the water cycle in both districts. A further Detailed (Stage 2) WCS has been completed for East Cambridgeshire based on preferred broad growth areas identified in the Council's adopted Core Strategy, and a number of potential areas identified in the Ely, Soham and Littleport Masterplans. The Water Cycle Strategy can be found on the East Cambridgeshire District Council website at:- <http://www.eastcambs.gov.uk/masterplans/district-growth-projectsstudies>
- 13.3 More recently Anglian Water has provided updated information relating to the availability of water and wastewater infrastructure based upon the expected scale of growth outlined in the Draft Local Plan.

Electricity

- 13.4 As outlined in the IIF, EDF Energy made a high level assessment of the substations where reinforcements are likely to be required, when reinforcements should take place and general cost estimates. It is expected that this assessment will be updated to take account of the scale of growth expected in the Draft Local Plan with the assistance of the UK Power Networks. The potential cost of electricity infrastructure as identified by EDF Energy is outlined in Table 13-1.

Table 13-1: Potential Cost Profile for Electricity Infrastructure

Development Area	Feeder Primary Substation	Cost incurred before period:				Total Cost
		2009-2013	2014-2018	2019-2023	2024-2026	
Ely	Ely	0	£500,000	0	0	£500,000
Soham	Soham	£1,350,000	0	0	0	£1,350,000
Littleport	Littleport	0	£2,450,000	0	0	£2,450,000
Bottisham	Fulbourn	0	0	0	0	-
Burwell	Burwell	0	0	0	0	-
Haddenham & Sutton	Aldreth	0	£1,700,000	0	0	£1,700,000
Newmarket Fr	Exning	0	£2,450,000	0	0	£2,450,000
TOTAL		£1,350,000	£7,100,000	0	0	£8,450,000

SOURCE: AECOM 2010

Gas

- 13.5 As with EDF Energy, National Grid Gas is regulated by Ofgem. National Grid is required to put in place strategic improvements to the network that will satisfy expected growth in a realistic timescale. The Asset Management Plan (AMP) is prepared in advance of each period, currently 2010-2015, so expected growth should be sufficiently committed to allow the additional demand to be included.
- 13.6 In cases where the actual demand from a development exceeds the existing capacity or that predicted for the AMP, the shortfall in provision should be partially funded by the developer. Improvements to non-strategic mains cannot be included in the AMP and are expected to be funded by the developer, usually through S.106.

Telecommunications

- 13.1 The availability of broadband and high speed broadband is a key infrastructure issue for future growth in the district. Currently the majority of the District does not have next generation access to deliver superfast broadband (speeds of at least 24 MBps) allowing quicker and more reliable connections.
- 13.2 Cambridgeshire and Peterborough have successfully bid for funding to deliver broadband infrastructure to areas outside of private sector investment plans to 2015. The Connecting Cambridgeshire project aims to bring access to superfast broadband for at least 90% of homes and businesses across Cambridgeshire and Peterborough and better broadband for all other premises by 2015. A Cambridgeshire County Council contract to deliver this infrastructure is due to be signed in March 2013 with BT.

Water and Wastewater

- 13.3 The Detailed WCS study has shown that several Wastewater Treatment Works (WwTWs) have capacity to accept wastewater flow from proposed growth without the need for improvements to treatment infrastructure. This is the case for Isleham, the Newmarket fringes, Stretham, Wilburton, Ely and Mepal. Growth is not constrained by wastewater treatment in these locations.
- 13.4 At the remaining WwTWs, improvements are required in order to accommodate the growth to ensure that the increased wastewater flow discharged does not impact on the current quality of the receiving watercourses, their associated ecological sites and also to ensure that the watercourses can still meet with legislative requirements.
- 13.5 The improvements required at WwTWs in Soham, Haddenham, Witchford, Littleport, Little Downham and Witcham are achievable over the plan period within the limits of conventionally applied technology and hence, a solution can be implemented to allow growth in these catchments to proceed.

- 13.6 However, the detailed assessments have shown that improvements beyond conventionally applied technology are required at both Burwell and Bottisham WwTW (due to water quality).
- 13.7 The Water Cycle Strategy also states that the majority of major development sites in Ely, Soham and Littleport will need to fund upgrades or construction of new sewage capacity to ensure that wastewater from growth can be drained from WwTW's.
- 13.8 More recently improvements have been made to Burwell WwTW by Anglian Water (completed in 2012). They have also identified the need to make improvements to the Littleport and Soham WwTWs as part of their current asset management plan for 2010-15. These improvements are expected to be in place by Summer 2013 and will enable further growth in these locations to come forward.
- 13.9 Anglian Water have also stated that there may be a need for improvements to be made to Bottisham, Isleham, Stretham, Witcham, Witchford and Wilburton WwTWs to accommodate future growth.
- 13.10 They will explore potential opportunities to accommodate additional development before determining whether there is a need for these works to be upgraded. Anglian Water's current position relating to the need for WwTW improvements are outlined in Table 13-1.

Table 13-2: Potential Wastewater Treatment Capacity Infrastructure Requirements as identified by Anglian Water

Infrastructure Category	Name	Growth Location	Expected Timing
Wastewater Treatment	Littleport WWTW	Littleport	Summer 2013
Wastewater Treatment	Soham WWTW	Soham, Fordham and Wicken	Summer 2013
Wastewater Treatment	Bottisham WWTW	Bottisham, Lode and Swaffham Bulbeck	2015-2020
Wastewater Treatment	Isleham WWTW	Isleham	2015-2020
Wastewater Treatment	Stretham WWTW	Stretham and Little Thetford	2015-2020
Wastewater Treatment	Witcham WWTW	Witcham, Sutton and Wentworth	2015-2020
Wastewater Treatment	Witchford WWTW	Witchford	2015-2020
Wastewater Treatment	Wilburton WWTW	Wilburton	2015-2020

- 13.11 Where improvements to the wastewater infrastructure are required in advance of the next AMP, 2015, there is the option for developers to forward fund improvements to bring a specific site forward.

Water Supply

- 13.12 Anglian Water has confirmed that there is sufficient water supply to accommodate the level of growth expected in the Local Plan. However, the Detailed WCS has set out ways in which demand for water as a result of development can be minimised without incurring excessive costs or resulting in unacceptable increases in energy use.
- 13.13 Recommendations for water supply include: water efficiency in new homes, water efficiency retrofitting, water efficiency promotion, sewer separation, above ground drainage, and sustainable urban drainage systems and green infrastructure.
- 13.14 Site-specific utility issues will be dealt with by the individual developer concerned.

Waste Management

- 13.15 The delivery of new dwellings in the County will increase the demand for recycling facilities for households within the district. Cambridgeshire County Council has identified a need for the existing recycling centre located at Stirling Way, Witchford to be expanded toward the end of the plan period (2028 at the earliest). The potential cost of waste management infrastructure is outlined in Table 13-2.

Table 13-2: Potential Cost Profile for Waste Management Infrastructure

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Waste Management	Witchford Recycling Centre Extension	Witchford	£2,000,000- £3,500,000	£0	

14. Infrastructure Overview

INFRASTRUCTURE COSTS AND FUNDING

- 14.1 The following tables set out the headline costs and funding associated with the infrastructure requirements identified in Section 2. The figures are presented for each infrastructure category. It should be noted that the list of infrastructure requirements is not exhaustive and will have to be subject to review over the plan period.
- 14.2 Identified or committed funding is limited reflecting the limited availability of mainstream funding sources for infrastructure to support housing growth. It also reflects the difficulties in identifying funding sources for schemes at such an early stage of their planning or development. Once firm proposals for the schemes set out in this document are developed, it may be easier to identify potential funding sources.

Table 14-1: Infrastructure Costs and Funding by Infrastructure Category

	Infrastructure Costs	Project Funding	Project Funding Gap
Education	£140,519,209	£0	£0
Healthcare	£7,350,000	£0	£7,350,000
Emergency Services	£TBC	£0	£TBC
Community Facilities	£7,553,213	£0	£7,553,213
Open Space	£12,180,000	£0	£12,180,000
Sport and Recreation	£20,480,000	£0	£20,480,000
Transport	£130,376,001	£4,700,000	£125,676,001
Utilities	£11,950,000 ⁶	£0	£11,950,000 ⁷
Total	£330,408,423	£4,700,000	£325,708,423

