



# **Infrastructure Delivery Plan (IDP)**

**November 2017**

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## Executive Summary

The Infrastructure Delivery Plan (IDP) identifies the infrastructure requirements to deliver growth proposed in the Breckland District Local Plan over the plan period (to 2036). The IDP has developed alongside the emerging Local Plan. Previous versions were published in January 2015 as part of the Preferred Directions consultation and August 2017 to support the Submission consultation. The IDP has been revised to reflect specific proposals in the final version of the Local Plan. The IDP divides the information on infrastructure into a number of subheadings;

- Transport,
- Water,
- Energy,
- Telecommunications,
- Education,
- Community Facilities,
- Health,
- Community Safety,
- Green Infrastructure.

For each subheading, the IDP aims to outline what infrastructure is required, where and when in the plan period. One of the principal outcomes of the study is to identify the cost of delivering infrastructure to support the plan and the mechanism for delivery.

A range of evidence has been gathered to develop the IDP through the commissioning of evidence, consideration of existing sources of data and information and primarily through ongoing dialogue with infrastructure providers. This is explained in the introductory section of the report.

Each infrastructure issue has been examined in turn, focusing on the district wide requirements but also more specific infrastructure to support the proposed Strategic Urban Extensions at Thetford and Attleborough and the Market Towns of Dereham, Swaffham and Watton.

A combination of funding mechanisms will be used to deliver new and improved infrastructure in Breckland. The primary source of funding comes from developers and landowners through legal agreements accompanying the grant of planning permission. For major development the sites will be phased to ensure essential infrastructure is delivered or funding provided prior to the completion of new developments. Other sources of funding include grant aid from New Anglia Local Economic Partnership, public funding and private investment. Some improvements to infrastructure are not contingent on the Local Plan such as the Better Broadband for Norfolk initiative and improvements to the strategic road network such as the A47. The IDP aims to provide a comprehensive overview of infrastructure improvements applicable to the district.

The IDP is intended to be a living document which reflects the current stage of the Local Plan and costed according to the latest available data. It seeks to provide the most accurate picture of current infrastructure requirements and costs. Effort has been made to provide costing for all requirements but where such data is not available this is made clear in the text. Limitations of the IDP are explored in chapter 12.

The main findings of the report are outlined in table 10 in the concluding section 14 of the IDP. The table lists the infrastructure projects required to deliver the proposed allocations, the estimated costs, indicative timescale for delivery and delivery mechanisms. A more detailed trajectory is provided for the strategic development sites in Thetford and Attleborough.

The IDP links closely with the District Wide Viability Study 2016. Both documents seek to demonstrate that policies in the Local Plan are deliverable within the plan period. The evidence presented in these documents will be used to help inform consideration of a new Community Infrastructure Levy (CIL), should Breckland District Council choose to adopt a CIL Charging Schedule in the future.

# 1. Introduction

## Scope and Purpose

1.1. In order to ensure new development delivers sustainable communities; the infrastructure, facilities and service needs of these populations must be properly planned for.

1.2. The National Planning Policy Framework states at paragraph 157, “Crucially, Local Plans should plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of this Framework” and at paragraph 162, “Local planning authorities should work with other authorities and providers to: assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands”. Paragraph 177 explains that it is “important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion”.

1.3. Paragraph 173 of the NPPF highlights the need to pay “careful attention to viability and costs in plan-making and decision-taking” and stresses that “Plans should be deliverable”. This means that the scale of development and specific sites proposed for development should not be subject to obligations and policy requirements such as requirements for affordable housing, standards, infrastructure contributions, that compromise their viability or deliverability or that prevent landowners and developers to achieve a competitive return.

1.4. This Breckland Infrastructure Delivery Plan (IDP) aims to:

- Identify the District’s infrastructure needs for the plan period (up to 2036), in particular, those needs arising from new development;
- Set out the costs, funding sources and delivery mechanisms associated with these infrastructure needs;
- Improve lines of communication between key delivery agencies and the local planning authority, including identifying opportunities for integrated and more efficient service delivery and better use of assets;
- Provide evidence for the setting of a Community Infrastructure Levy (CIL), should the Council wish to implement such a funding mechanism in the future;
- Provide a ‘live’ document that will be used as a tool for helping to deliver infrastructure, regularly updated to reflect changing circumstances and needs and;
- Further strengthen relationships between the Council’s Corporate Plan and the Local Plan objectives.

1.5. The IDP links closely with the latest Local Plan and CIL Viability Assessment 2017 building on previous work preparing proposals for a potential CIL charging schedule. Clarifying the infrastructure requirements and the costs and mechanisms of providing these is a starting point to feed into future work on CIL.

1.6. Preparing an IDP aids the understanding of what demands may be made on developers in terms of contributing to infrastructure provision. This relates to costs arising from their particular development and, in some cases, those arising due to the cumulative impacts of development across the plan area or parts of it. This can then be considered alongside inherent development costs to calculate whether and what level of contribution(s) could be borne by individual developments.

1.7. This IDP provides a baseline position of the infrastructure requirements in the Breckland plan area but it is intended to be a live document. Breckland District Council will continue to work closely with relevant partners and infrastructure providers throughout the plan period to ensure that the IDP can be reviewed and updated to reflect progress on infrastructure delivery as well as changing needs, circumstances and priorities. Throughout this process, the IDP will aid the Council and relevant partners to prioritise spending on infrastructure and address funding gaps as well as helping to inform service and spatial planning decisions up to 2036 and beyond.

### **Infrastructure Definition**

1.8. The Town and Country Planning Act 2008 defines 'infrastructure' as including (but not limited to) the following:

- Roads, cycle ways and other transport facilities;
- Flood defences;
- Schools and other educational facilities;
- Medical facilities;
- Sporting and recreational facilities; and
- Open spaces.

1.9. Notably affordable housing had been included, but this was subsequently deleted by the Localism Act 2011 and Reg. 63 of the 2010 Regulations.

1.10. The provision of affordable housing, starter homes, extra care housing and sites for Gypsies, Travellers and Travelling Show-people will not be addressed through the Breckland IDP. The Breckland Corporate Strategy, Housing Strategy and Local Plan set out how the Council plans to meet its key objectives for all housing needs. Details of the Housing Strategy, Corporate Plan, Local Plan and supporting evidence studies can be found on the Breckland Council website.

1.11. Table 1 provides a comprehensive list of types of infrastructure.



Table 1 Infrastructure list

What constitutes infrastructure?	
<b>Physical</b>	Utility services (water, electricity, gas, telecommunications), foul surface water (wastewater/sewage), flood defences, transport facilities (rail, roads, public transport, cycle paths, footpaths), waste management and disposal, Information technology (broadband and wireless; public phones)
<b>Social</b>	Health and social facilities (hospitals, doctors/GP surgeries, dentists, residential centres), education (nursery and pre school, primary, secondary and further and higher education/adult learning), leisure and community facilities (libraries, community centres, sports facilities, culture facilities, village halls, places of worship), culture and leisure (museum/galleries, theatres/venues, cinemas, sports centres, swimming pools, events, festivals etc.) and emergency services (fire, ambulance and police)
<b>Environmental</b>	Open spaces, parks, woodlands, waterways, children’s play areas, cemeteries, allotments, sports pitches and courts and green corridors (green infrastructure)

## Funding Mechanisms

1.12. The IDP aims to provide certainty for infrastructure requirements, costs and the mechanisms for funding infrastructure, where possible, which is contained under the relevant chapter headings. In setting the context, a summary of the potential funding mechanisms is provided below.

1.13. S106 “Section 106 Agreements” is a form of Planning Obligations authorised by Section 106 of the Town and Country Planning Act 1990 as amended by the Planning and Compensation Act 1991 Section 12. Planning Obligations are usually completed following the resolution to grant planning permission (normally major developments) to secure community infrastructure to meet the needs of residents in new developments and/or to mitigate the impact of new developments upon existing community facilities or infrastructure.

1.14. S38: Where, as part of a development, it is proposed to construct a new estate road for residential, industrial or general purpose traffic the normal legal means by which the road becomes a public highway is via an agreement under Section 38 of the Highways Act 1980.

1.15. S278: Where a development requires works to be carried out on the existing adopted highway, an Agreement will need to be completed between the developer and the County Council under Section 278 of the Highways Act 1980.

1.16. CIL: The Community Infrastructure Levy (CIL) is a levy that local authorities can choose to

charge on new developments in their area. The money can be used to support development by funding infrastructure according to an adopted list of infrastructure priorities. At present Breckland Council has undertaken preliminary work regarding CIL but has not sought adoption of a CIL Charging Schedule pending imminent national policy changes. Should CIL be introduced in future, the IDP would require updating due to restrictions placed on the number of pooled contributions authorities can collect from developments towards infrastructure, having a fundamental bearing on what CIL could be used for. There can be no overlap in the use of CIL and S106 to avoid double charging.

1.17. Government Funding: Following successive rounds of spending cuts at national government level, public funding for infrastructure is now limited. Such funding usually requires bids to be submitted and some form of match funding. For example, Thetford received around £7million from Government as it was allocated a Growth Point. Some of this money is being used to build a new Bus Interchange. Thetford also received funding as part of the Healthy Town initiative.

1.18. In July 2017 Central Government introduced the Housing Infrastructure Fund. The Housing Infrastructure Fund is a government capital grant programme of up to £2.3 billion, designed to help to deliver up to 100,000 new homes in England. Breckland have submitted a bid to aid the delivery of the Strategic Urban Extension in Thetford which will additionally benefit the Thetford Enterprise Park. This is detailed in the report, with the outcome to be determined late 2017/early 2018.

1.19. Grants: Grants may be available for funding infrastructure depending on public or private initiatives at the time; however this cannot be relied on as a principal source of funding unless the bid has been successfully approved. The main source of grants for Breckland's infrastructure is provided by the Norfolk and Suffolk Local Economic Partnership, principally aiming to deliver economic growth to the two counties (see alternative sources of funding).

1.20. Anglian Water Services Price Review: This is a mechanism by which Anglian Water Services can claw back investment in infrastructure through the charges levied on customers.

1.21. Parish Spending: Whilst not a principal source of funding for infrastructure, Parish Councils may choose to spend parish precepts on facilities for the benefit of residents.

### **Alternative Funding Options**

1.22. New Homes Bonus: Breckland Council resolved in its December 2015 draft budget setting meeting to transfer its existing New Homes Bonus (NHB) reserve to a "growth fund" where NHB is received over and above the Council's required level of £2m. This will be added to the growth fund which will be used to secure housing and employment growth generating an on-going revenue return. The budget forecast shows a total of £1.8m accumulating in the growth fund over the medium term (2015-2020).

1.23. Norfolk and Suffolk Local Economic Partnership: Central government introduced Local Enterprise Partnerships (LEPs) to promote economic growth at a more local level. Norfolk

alongside Suffolk falls under the New Anglia LEP. Since 2015, LEPs have received funding for infrastructure directly from government.

1.24. The New Anglia LEP was allocated money through the national 'Growing Places Fund' to help support local economic growth. New Anglia LEP's total Growth Deal with Government is £290.8m to be invested in the region by 2021. The allocated money has been identified to help promote the delivery of infrastructure projects needed to unlock developments that can help to create jobs and homes in Norfolk. The fund is not intended to be gap funding to bridge viability gaps but it can help by financing up front infrastructure and thereby reducing financial risk associated with development schemes.

1.25. Funding is focused on the Growth Deals that have been agreed with the LEPs, together with the City Deal for Greater Norwich for 2015/16, and indicative funding through to 2020. Funds include both grants and loan opportunities for example under the Local Infrastructure Investment Fund.

1.26. European funding through Regional Policy: the key relevant components of European funding comprise the European Structural and Investment Funds (ESIF) and Interreg (Territorial Co-operation) for the period 2014 – 2020. European funding is unlikely to be available in its present form as of April 2017, due to the UK's decision to leave the EU. For this reason it is not a reliable source of future infrastructure funding if not already secured.

1.27. Range of other sources of external funds to promote growth: for example those which have opted in to support European and Structural Investment Fund activity such as the Growth Accelerator programme, the Manufacturing Advisory Service, UK Trade and Investment, and the Skills Funding Agency. Other potential sources of funding such as UK and European sources of finance - which includes the UK Green Investment Bank and the European Investment Bank – are considered less likely to be of relevance at this stage.

1.28. Innovative approaches to local growth funding are also potentially available: Local Authority Prudential Borrowing powers through the Local Government Act 2003 enable councils to borrow to invest in capital works and assets as long as the cost of that borrowing is affordable. In addition, the Business Rates Retention Scheme which was introduced in April 2013 enabled authorities to keep a proportion of the business rates revenue as well as growth on the revenue that is generated in their area. The government held a consultation in 2016 to allow Local Authorities to retain 100% of the business rates they collect locally. If this was to be brought in then coupled together, these can offer the potential to provide a strong financial incentive to promote economic growth.

1.29. This 'tax increment financing' (TIF) approach could be of particular relevance to the A11 Corridor. Based on the anticipated profile of development activity under the most recent A11 Growth Study, it is anticipated that new business premises could generate around £84 million in business rates growth over 25 years, subject to the business rates baseline reset in 2020 and at five yearly intervals thereafter. Allowing for local retention at 50%, this could generate more than £42 million (out-turn) in business rates income for the local authority partners based on

various assumptions defined in the study report.

## Geographic scope

1.30. The geographical scope of the IDP covers the whole of the District's administrative area. However, there is a clear functional area based on the A11 (as reflected in the previous Breckland Local Development Framework). The majority of the growth and regeneration in Breckland is still focused on the A11 corridor, and in particular, the settlements of Thetford and Attleborough and the strategic employment site at Snetterton Heath are due to experience substantial change over the plan period. This growth will require significant long-term infrastructure planning which will have considerable interdependencies.

1.31. The rest of Breckland's area away from the A11 corridor is predominantly rural including the three remaining market towns of Dereham, Swaffham and Watton which all serve wide rural hinterlands. There are also a number of larger villages that provide a range of services and facilities to support their local communities, and these are identified as Local Service Centre villages. For the purposes of the IDP it is useful to focus the study on district wide infrastructure and to consider the Key Settlements Attleborough and Thetford allocated for large scale Strategic Urban Extensions (SUE) separately. Due to scale of the district and the diversity of the settlements it is difficult to divide the study area into further functional areas.

## Methodology

1.32. This Infrastructure Delivery Plan (IDP) has been prepared based on continual information gathering, consultation and dialogue with relevant partner organisations, service-providers and communities. This has taken place over several years as part of the preparation of the Adopted Thetford Action Area Plan; draft Attleborough and Snetterton Action Area Plan (since aborted); preparation for the introduction of CIL (current status 'on hold' pending new Government guidance), and the Local Plan; along with the findings of evidence base studies prepared to inform these documents and the continuing review of the strategies, plans and projects of relevant partners. Breckland also participates in the Infrastructure Group – Norfolk Strategic Framework, made up of all the Norfolk Local Authorities. Work will continue and will feed into periodical review and updating of the IDP to ensure that the document remains relevant and reflects changing circumstances and priorities.

1.33. Under the Localism Act (Section 110), Local Authorities are required to co-operate with each other and with key bodies to ensure that each has regard to the others' activities when preparing development plans. As set out in the Council's Statement of Compliance, in preparing the plan, the Council has complied with the duty to co-operate by working with other relevant local authorities and prescribed bodies to maximise the effectiveness of the plan. The bodies with which the Council has co-operated, strategic issues, arrangements already in place for continuing co-operation and details of strategic discussions with neighbouring authorities are documented in full in the Duty to Cooperate Statement. The Key Bodies and Organisations the Council has engaged with are listed in table 2.

Table 2 Key Bodies and Organisations

Organisation	Service responsibility
Norfolk County Council	Non-strategic highways network, cycle ways, rights of way, public transport, adult social care, waste disposal, education, fire and rescue, community safety, libraries, community centres, youth clubs and surface water drainage. Advisory service archaeology and ecology/ biodiversity
Norfolk Clinical Commissioning Group & NHS England	Health care
Sport England	General and site specific recreation
New Anglia Local Enterprise Partnership (LEP)	Economy
Norfolk Wildlife Trust	Ecology
Norfolk Biodiversity Partnership	Ecology
Natural England	Ecology/Geodiversity
RSPB	Ecology
Highways England	Strategic highways
Network Rail	National rail network
Historic England	Built and natural heritage
Environment Agency	Tidal and fluvial flooding
Anglian Water	Sewerage network inc. waste water treatment works
UK Power Networks and National Grid	Electricity and gas
Open reach on behalf of BT	Telecommunications
Neighbouring District Councils	Cross boundary issues
Relevant landowners, agents, developers	Potential delivery stakeholders

1.34. The IDP additionally draws information from studies and reports used to support plan preparation. These are listed as part of the evidence base for the Local Plan.

## Policy Context

1.35. The emerging Breckland Local Plan identifies the quantum amount and spatial distribution of housing and employment development required to meet the District needs up to 2036. In line with the Strategy, Breckland Council is planning to provide;

- A minimum of 15,298 dwellings (of which approximately 5,000 dwellings will be located in Thetford and 4,000 in Attleborough spanning beyond the plan period) and;
- A minimum of 64 hectares of new employment floor space (of which approximately 22 hectares will be located in Thetford; 20 hectares in Snetterton, and 10 hectares in Attleborough).

- 1.36. Proposed Local Plan Policy GEN 03 Settlement Hierarchy sets out three tiers of settlement hierarchy. It identifies Attleborough and Thetford as Key Settlements; Dereham, Swaffham and Watton as Market Towns; and 18 Local Service Centre villages. It sets out that the greatest proportion of new housing, employment and other development will take place in the Key Settlements of Attleborough and Thetford (50%), followed by a further 28% in the remaining Market Towns of Dereham, Swaffham and Watton, with 15% distributed throughout the 18 Local Service Centres. The remaining 7% will be made up of windfall development in the smaller villages and hamlets.
- 1.37. The Local Plan identifies land to meet the requirements for new housing and employment development in accordance with the settlement hierarchy and Breckland's strategic vision. The final plan document also identifies areas of public and amenity (non-public) open space and outdoor sports facilities across the District. It identifies a small number of sites that are proposed for Local Green Space.
- 1.38. The Breckland Local Plan also includes two key policies (INF 02 Developer Contributions & ENV 04 Open Space, Sport & Recreation) which aim to support the delivery of new infrastructure across the District. Policy INF 02 states that the Council will require new developments to secure improvements which are necessary to make the development acceptable by planning condition, CIL or obligations. It goes on to list examples of the types of infrastructure which developers are likely to be required to contribute towards. Policy ENV 04 Open Space, Sport & Recreation sets requirements for the delivery of new recreational space and facilities. The level and scale of provision accords to the size of the development proposal.

## Devolution

- 1.39. Further changes to governance and funding for infrastructure in Norfolk may take place within the plan period, although the outlook for devolution in East Anglia is very uncertain. The East Anglia Devolution Agreement was announced in the Chancellor's Spring budget 2016 seeking agreement between government and the leaders of 22 local authorities (at that time) with the support of the New Anglia Local Enterprise Partnership. Breckland District Council along with a few other Local Authorities opted out of the Devolution Agreement, and the proposals for a Norfolk and Suffolk wide agreement have now been withdrawn.
- 1.40. Suffolk and Norfolk may choose to bid for separate deals for each county but the future of devolution for the area is unknown. The withdrawn East Anglia Devolution Agreement also set out a requirement for local authorities to bring forward within six months a non-statutory strategic infrastructure delivery plan which identifies infrastructure needs to support the increase funding of new homes, and proposal to fund this through devolved infrastructure funds, through national programmes and through local funding. This would have represented a fundamental restructuring of the responsibility for strategic infrastructure planning, funding and delivery. If a form of devolution is pursued in future, the IDP may require review in line with an alternate strategic framework for infrastructure planning.

## 2. Transport

Transport Evidence Base		
Owner	Document	Date
A47 All	A47 Alliance – Gateway to Growth	2016
NCC	Consultation Response to Breckland Local Plan – Preferred Directions Consultation and Interim Sites and Settlement Boundaries consultation	2016
NSF	Norfolk Strategic Framework (NSF) – Infrastructure Group – Meeting Minutes	2015-2016
NCC	Norfolk Infrastructure Plan	2015
NCC	LTP Implementation Plan – 2015-2021	2014
NCC	Local Transport Plan (LTP), Connecting Norfolk 2011 Strategy	2011
GOV	Central government Road Investment Strategy	2014
LEP	New Anglia Local Enterprise Partnership - Growth Deal: Factsheets	2015
LEP	NALEP – Strategic Economic Plan	2014
BDC	Dereham Targeted Transport Study	2016
BDC	Attleborough Growth Transport Package – NCC HA	2015
BDC	Attleborough Urban Extension & Link Road Options	2015
BDC	Attleborough Link Road Study	08+13
BDC	Attleborough Smarter Choices	2013
BDC	Attleborough Town Centre Study	2013
BDC	Thetford Area Action Plan – Adopted DPD	2013
BDC	Thetford Transport Studies (Stage 1 & 2) Mott MacDonald	2008 2010

### Background

- 2.1. The district is sparsely populated and predominantly rural in character which necessitates a high degree of car dependency for the local population. Whilst the district contains 5 towns, major areas of employment including Norwich, Cambridge, and to a lesser extent King's Lynn and Bury St Edmunds, lie outside the district and influence commuting patterns.
- 2.2. The A47 is a strategic route used by HGV vehicles which also has high seasonal usage due to its connection from the Midlands and North of the UK to coastal destinations including Great Yarmouth. The A11 is a major trunk road connecting London to Norwich and runs through the District passing near Thetford and Attleborough. The remaining parts of Breckland are served by a network of non-trunk "A" category, secondary and minor roads.
- 2.3. Thetford and Attleborough are connected to the national rail network with regular services to Norwich and Cambridge, and beyond to London, Midlands and North of England. Rail investment is a regional commitment.
- 2.4. Public transport services in the district are principally provided by bus and focus on linking the District's market towns with shopping and employment destinations at Norwich, King's Lynn and Bury St. Edmunds. Infrequent services link rural areas with market towns, principally

on market days.

2.5. Further growth in the district must be supported by improvements to the transport network which accord to the level of allocation proposed and the resulting impact on the existing transport network. The Council have commissioned a number of studies which are listed at the beginning of this section to understand the impact of growth on the existing road network. These studies have identified a number of infrastructure solutions which can be costed into the development scheme and principally funded by the developer. These are further explained in this chapter.

## **Governance and funding streams**

2.6. Changes to governance and funding streams for strategic transport schemes in Norfolk have occurred in recent years. Norfolk County Council (NCC) remains the Highways and Transport Authority for Breckland District, with responsibility for preparation of the Local Transport Plan (LTP). This comprises two elements:

- Norfolk County Council's adopted third Local Transport Plan, Connecting Norfolk 2011 Strategy, and;
- Implementation Plan (4 year) rolled forward from 2015 until 2021 – the period over which Government has allocated LTP funding, the amount of Local Growth Fund available nationally and confirmed Trunk Road Programme.

2.7. Funding for major transport projects has been reduced following spending cuts by all tiers of government in the UK. Strategic schemes identified in the Local Transport Plan are now more reliant on bids to the Local Enterprise Partnerships (LEP's) and to central government for exceptionally high cost projects which provide a significant public benefit such as the Norwich Distributor Road (NDR).

2.8. The new funding arrangements have also brought about a major change in decision making and delivery structures. The New Anglia Local Transport Body (LTB), made up of representatives of the LEP and Norfolk and Suffolk County Councils is responsible for delivery of transport infrastructure projects funded in the Growth Deal. The LTB acts as a sub-group to the LEP Board.

2.9. The Norfolk County Council Connecting Norfolk Implementation Plan<sup>1</sup> outlines a number of smaller Norfolk wide projects that have been funded through successful bids to short term funding schemes (predominantly central government initiatives such as the 'pot hole challenge'). It is stated that over £34m has been awarded through the Local Growth Fund from 2015-21 with, potentially, further opportunities to secure additional money in future.

2.10. Further funding changes may arise if devolution plans for Norfolk and Suffolk are reconsidered in the future. The devolved authority may instigate projects for strategic transport

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<sup>1</sup> <https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/roads-and-travel-policies/local-transport-plan>



which would affect the district such as dualling the A47.

## Strategic Transport Projects

### A11

2.11. Following a high profile campaign, the remaining single carriageway section of the A11 between Thetford and Barton Mills was dualled during 2013 and 2014. This completes the dualling of the A11 between the M11 and Norwich. The main objectives of the scheme were to:

- Reduce congestion and provide additional capacity;
- Restrict access onto the trunk road;
- Improve road safety;
- Provide a bypass for the village of Elveden;
- Improve journey time reliability; and
- Minimise the impact of the improved road on the surrounding Breckland, a designated area of important landscape quality and a special landscape area.

2.12. The two Strategic Urban Extensions at Thetford and Attleborough will result in a total of 9000 homes close to the A11 and therefore a number of junction improvements will be required; to be funded by developers using S106 agreements. The improvements are described and costed under the Attleborough and Thetford headings. The recent dualling of the A11 has addressed the issue of pinch points in the network, therefore the focus for improvements is on the connection points to the A11.

### A47

2.13. Cumulative growth in the district will have an impact on the strategic route running west to east through the centre of the Breckland. The A47 is recognised in both Norfolk County Councils Infrastructure Plan and Transport Plan as a route which requires full dualling, however this can only be done in stages due to funding constraints.

2.14. The A47 Alliance comprises local authorities, local enterprise partnerships (LEP's), the business community, MP's and stakeholders stretching from Lowestoft to Peterborough. This body has presented a clear business case and lobbied to central Government to commit funding for improvements to the A47.

2.15. The Government has committed to investment of over £300m for improvements along the A47 for delivery in the early 2020's. The A47 Alliance's ultimate goal is full dualling with appropriate grade separation. The estimated cost of a fully dualled A47 is some £1.4bn.

2.16. In the 2014 Autumn Statement government committed the following schemes in Norfolk to the 2015-2021 Road Investment Strategy programme:

- A47 North Tuddenham to Easton Dualling

- A47 Blofield to North Burlingham Dualling
- A47/A12 Great Yarmouth Junction Improvements
- A47 Acle Straight Safety Measures
- A47/A11 Thickthorn Junction Improvement.

2.17. The A47 Norfolk strategic road network investment plan includes the following scheme within Breckland for which there is a commitment to start construction within the period 2015 to 2020: A47 Easton to North Tuddenham – dualling of the single carriageway section of the A47. This will complete the missing section and provide a continuous dual carriageway trunk road from Norwich to Dereham. Current estimates suggest that dualling this section (7.9 miles) would cost around £75m and it is unlikely to start until the end of the period in year 2019. The Highways Agency held a consultation on the proposed dualling of this section between 13<sup>th</sup> March and 21<sup>st</sup> April 2017. Meanwhile the Norfolk Councils continue to lobby for further improvements towards the ambition of full dualling of the A47 route. Current plans for the A47 are detailed in the A47 Alliance document: Gateway to Growth<sup>2</sup>.

2.18. In Breckland, planned growth in Dereham (750 houses) and Swaffham (600) will have the greatest impact in terms of additional traffic using junctions onto and exiting the A47. However, there are capacity issues with the transport network at Dereham and infrastructure improvements are required. These are explained under the ‘Transport – Dereham’ subheading. Discussion with Norfolk County Council indicated the level of growth at Swaffham could be accommodated by the existing junction and therefore strategic improvements would not be required to the junction.

### Smaller Highway Improvement Schemes

2.19. The Highway Authority has devolved capital programmes for smaller highway improvement schemes. Such schemes comprise any change to the highway layout, as opposed to maintenance which is maintaining the highway as it already exists. Highway and transport improvements could include:

- new sections of footway;
- cycling infrastructure;
- bus shelter grants to Parish Councils;
- dropped kerbs for disabled accessibility;
- new traffic signs;
- traffic calming;
- speed limits and other traffic regulation orders;
- road widening; creation of passing places;
- bitmac surfacing to unbound stone surfaces;
- new street lighting schemes;
- pedestrian crossings;
- junction visibility improvements;
- junction improvements; and

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<sup>2</sup> A47 Alliance (2016) ‘Gateway to Growth’ source: <http://www.a47alliance.co.uk/index.php/>

- handrails, pedestrian guardrail and other safety barriers.

2.20. Smaller scale allocations in the Local Service Centres may require one or more of the improvements in the list above. Consultation with Norfolk County Council on the preferred development options will highlight specific requirements which will be added to the final policy for the site in the submission version of the Local Plan.

## Rail Services

2.21. The district includes part of the Abellio Greater Anglia mainline railway network running from London, Liverpool Street to Norwich and beyond. Mainline railway stations within Breckland comprise Thetford, Harling Road, Eccles Road and Attleborough on the line running via Ely (and London, Stansted Airport).

2.22. Network Rail is the statutory undertaker responsible for maintaining and operating the country's railway infrastructure and associated estate. Network Rail owns, operates, maintains and develops the main rail network. This includes the railway tracks, stations, signalling systems, bridges, tunnels, level crossings, viaducts, car parks and development of services.

2.23. The main thrust of Network Rail's strategy for the Great Eastern Main Line is for a step change in services in terms of connectivity, journey time improvements and frequency through to London.

2.24. General increases in demand for rail services and use of stations are likely to be addressed at a local level by the train operating companies and station facilities operators in the first instance. Network Rail is keen to ensure that the rail network is protected and promoted wherever possible; this includes protecting the existing station car parks together with station improvements such as accessibility, security and information provision.

2.25. The railway line from London to Norwich is set to benefit from a major package of upgrades worth £170m, providing a better more reliable railway for passengers.

2.26. In addition to upgrades of the overhead lines, track and signalling, one of Network Rail's fleet of 'high output' machines will start working its way along the line from January 2016 to improve the reliability of the railway while also providing a smoother ride for passengers.

2.27. As Network Rail is a publicly funded organisation with a regulated remit, it would not be reasonable to require Network Rail to fund rail improvements necessitated by commercial development. Depending on the size and impact expected to result from a given development, it may be appropriate to require developer contributions to fund such railway improvements and to require contributions towards rail infrastructure where they are directly required as a result of proposed development and where the acceptability of the development depends on access to the rail network. In order to be reasonable these improvements would be restricted to a local level and would have to be necessary to make the development acceptable.

2.28. Contributions towards major enhancement projects that are already programmed as part of Network Rail's remit would not be sought. Developers may be required to fund any qualitative improvements required to level crossings as a direct result of the development proposed (i.e. cases where a development is likely to result in a material increase in the volume or a material change in the character of traffic using a level crossing over a railway). In some instances this may also mean increasing the capacity of car parks, as for example at Thetford, with the aim of promoting multi-modal journeys.

## **Transport – Attleborough**

### *Background*

2.29. Attleborough is identified in the Local Plan as a Key Settlement which is allocated a Sustainable Urban Extension (SUE) comprising approximately 4000 houses. It is estimated that this scale of development will be phased over a longer period than that covered by the emerging Local Plan which ends at 2036. This scale of growth requires significant investment in infrastructure to accommodate double the current population level of the town.

2.30. Although the A11 provides an effective southwest to northeast bypass of the town for strategic traffic, the southeast to northwest B1077 route passes through the centre of the town. This B1077 route involves a level crossing on the main Norwich to Cambridge railway line, a detour around a clockwise central one-way traffic gyratory system that includes the main shopping streets and, because industry is located to the east of the town, a preponderance of HGVs travelling through the town centre. The town centre could not accommodate additional traffic generated by 4000 houses.

2.31. It was identified at the earliest stage that planned new housing to the south of the town could not access the A11 without causing an excessive level of traffic congestion on the present road network.

### **Solutions**

2.32. In developing Breckland's adopted Core Strategy, the need for a new link road between the A11 in the south and the B1077 in the east was identified. This will minimise the impact of the housing and employment growth on the town centre and enable an HGV ban to be implemented to protect the town centre environment. The emerging Local Plan reviewed the options and the emerging policy 'GEN 04 – Development Requirements of Attleborough Strategic Urban Extension' puts forward the preferred option for a new link road and sets the policy direction to implement this.

2.33. An initial Link Road Study was carried out in 2008 to look at the options for providing a new road. This was followed up in the preparation of the Attleborough and Snetterton Heath Action

Area Plan Issues and Options consultation document, which was subsequently dropped in favour of developing a single Local Plan covering the whole district. Since the 2010 consultation a significant amount of additional work has been undertaken to assess the infrastructure and transport needs in terms of the SUE and the wider town.

2.34. Consequently, three further studies were completed in 2013:

- Smarter Choices: promoting modes of travel other than single- occupancy car use;
- Town Centre Study: examined the current town centre highway network including the gyratory; and
- Link Road Study: considered the technical feasibility of the proposed link road routes.

2.35. The plans for Attleborough are endorsed by Norfolk County Council, as Local Highways Authority. Norfolk County Council identified Attleborough town centre improvements and the Attleborough link road in the Norfolk Infrastructure Plan 2015. The projects are included in the 'Connecting Norfolk Implementation Plan' which accompanies Norfolk County Councils Local Transport Plan.

2.36. The allocation site is currently subject to an outline planning application 3PL/2017/0996/O. The Design and Access Statement supporting the planning application provides a more strategic overview of the transport measures envisaged by Ptarmigan, albeit at this stage the application has not been determined.

### *Attleborough Link Road*

2.37. In May 2013 Capita Symonds issued the 'Attleborough Link Road: Concept Options Report', reviewing possible alignments for a new Link Road, between London Road and the B1077 Attleborough Road, to the south of the town. As well as providing highway access to the identified proposals in the emerging Local Plan, it is Breckland Council's intention that the Link Road will be used as a means of avoiding the gyratory system in Attleborough town centre for journeys between the A11 Trunk Road and the B1077 Buckenham Road/Attleborough Road.

2.38. The Preferred Route is approximately 3.1 kilometres in length and will cross Hargham Road at grade with a new bridge over the Cambridge to Norwich Railway Line. Two new roundabouts will be constructed to join the new Link Road with London Road to the west and the B1077 to the east. The preferred design proposals allow for a combined pedestrian/cycleway for the full length allowing for additional links to the proposed developments along the new route.

2.39. The threshold for the delivery of the Link Road is upon completion of the 1200<sup>th</sup> home in the SUE (phase 2 of the development). The Link Road Final Report provided a detailed breakdown of costs estimated to complete the Link Road which totalled £10,655,224.15 (2013). Current estimates for the link road are £12.7 million. The Link Road is an essential piece of infrastructure and it will be delivered in the first three phases of the development.

2.40. There are still some outstanding contentions in relation to the precise location of the link road relating to the proposed junction at Hargham Road and impact on residents, and the

impact on Bunns Bank which is a Scheduled Monument. Discussions are ongoing between the developer, the Council, Norfolk County Highways Authority and Historic England to resolve issues as part of the planning application. The Local Plan shows the location of the link road as indicative for this reason.

### *Town Centre Improvements*

2.41. The Town Centre Study outlined a number of options to improve accessibility in and around the town centre. These have further been developed in response to discussions with Attleborough Town Council and work undertaken by the developer Ptarmigan. The town centre improvements are required prior to the completion and opening of the new link road in order to mitigate the impact of additional traffic in the town and to avoid exacerbating existing issues.

2.42. First stage Attleborough town centre traffic capacity improvements to be implemented by Norfolk County Council using the Local Growth Fund include:

- Surrogate Street
  - Re-introduce two-way traffic to Surrogate Street and Connaught Road. Realign the junctions of Church Street and Connaught Road. Install traffic lights at Church Street junction.
  - This removes unnecessary through traffic from Exchange Street and Church Street, creating an opportunity to improve the public realm and increase priority for pedestrians and cyclists within the key retail streets of the town centre by providing increased footway widths. These measures will help reduce congestion by preventing long queues of traffic in the town centre and reducing the number of vehicles turning right at Connaught junction and Exchange Street junction.
  - Works will commence early 2018 for completion before summer 2018.
- Queens Square car park (due to commence 2018) Railway Station car park (due to commence 2019)
  - Redevelopment of car parks to provide increased number of spaces and aesthetic improvements for increased level of residents/visitors.
- London Road cycle path
  - Extension to the existing shared use pedestrian and cycle path on London Road to develop missing section between Carr Road and Connaught Road.
- Queens Road to the sports hall pavement
  - Improving the footpath which is in poor condition with relatively few street lights.
  - Works expected to be completed by autumn 2018.
- High Street/Exchange Street
  - Junction realignment and improving existing pedestrian crossing facilities.
  - Works expected to commence autumn 2018 and to be completed by winter 2018.
- Queens Square Improvements
  - Improvements to the area to the front of the town hall, aiming to reduce through traffic and redevelop the area making it more space for hosting the market and special events.
  - Works likely to be completed spring/summer 2019.

2.43. Further improvements to accessibility are required including:

- New pedestrian footbridge at Leys Lane to replace the level crossing which is an existing Public Right of Way; and
- Disability Discrimination Act (DDA) compliant upgrades to existing pathways near the railway. The proposal is for a raised table for cyclists and pedestrians crossing Besthorpe Road up to 2.0m wide, between the Train Station and the site is proposed. In particular, this applies at the two bends on Station Road / B1077 Buckenham Road. The 2.0m width would provide enough room for wheelchairs to pass each other along this path. This can be achieved by narrowing the urban area of Station Road.

## Funding

2.44. Norfolk County Council made a successful bid to the Local Economic Partnership (LEP) for a £4.5 million Local Growth Fund to aid delivery of strategic infrastructure requirements for Attleborough. Approximately £2.6 million is allocated to the initial phase town centre improvements. The remaining amount was subject to consideration by the Attleborough Development Partnership, and resolved to be spent on a mixture of A11 roundabout improvements, part of the link road to be provided ahead of the development phases and some town centre measures.

2.45. Norfolk County Council have consulted on the first phase of the transport improvements focusing on Surrogate Street, Church Street junction and Connaught Road in the town centre. Subject to approval, construction is predicted to start at the end of 2017 at a cost of £800,000 from the Local Growth Fund.

2.46. Aside from the £4.5 million Local Growth Fund, the remaining identified transport improvements will be funded by the developer through a S106/S278 Agreement. Early discussions between Breckland Council and the developer have resulted in the following projects and costs being identified.

**Table 3 Transport infrastructure requirements funded by the developer and the Local Growth Fund**

	Estimated cost £
Link Road (including rail bridge)	12,700,000
Breckland Lodge Roundabout	500,000
Travel Plan	2,000,000
Public Transport Contribution	5,900,000
Town Centre Traffic Signals	1,500,000
Leys Lane Pedestrian/ Cycle Connection	1,500,000

## Implementation and phasing

2.47. The Attleborough Development Partnership board comprises representatives of local

Parish and Town Councils, Norfolk County Council, Breckland District Council, developer: Ptarmigan and community representatives. The Partnership is the governance body for the development of the Strategic Urban Extension. The Partnership holds regular meetings in order to progress proposals for the SUE which aided the developer to prepare the groundwork for forming the planning application.

2.48. The implementation of transport improvements to the town centre will be led by Norfolk County Council as the local Highways Authority. As noted above the County Council has consulted on the first phase of planned improvements and have listed proposed projects. The developer will take responsibility for on site transport infrastructure, which will be made in accordance with the phasing schedule.

2.49. Phasing will take place in 6 stages. These are set out in detail in Appendix 1.

## **Transport – Thetford**

### ***Background***

2.50. Thetford was identified for a Strategic Urban Extension of 5000 homes in the 2009 Core Strategy. The Thetford Area Action Plan was adopted in 2012. Whilst the Thetford SUE is not subject to examination in the current Local Plan, the strategy is proposed to be taken forward as saved policies and therefore it is useful to provide an overview of the infrastructure requirements in this IDP as cumulative growth in the district will have an impact on Thetford town.

2.51. Outline planning permission for all 5000 homes, retail and employment with associated schools, open space and facilities was granted in December 2015 (Ref: 3PL/2011/0805/O) coupled with an agreed masterplan and signed Section 106 and 278 legal agreements committing to infrastructure provision. No further allocation is proposed in the Local Plan, however the delivery is scheduled to extend to after the end of the current plan period (past year 2036) and therefore the planned growth in Thetford and committed infrastructure provision is relevant to the current Local Plan. A summary table (Table 10) detailing the house numbers, phasing and broad requirements of the S106 agreement is provided in chapter 13.

2.52. In terms of transport and highway contributions, the developer is required to provide a:

- Travel Plan Contribution - £2,600,000 (calculated as £520 per dwelling)
- Travel Plan bond of £50,000.
- Provision of a bus bridge by Joe Blunts Lane or an alternative route for buses.

2.53. Access into the site will be taken from the existing network, the A11 to the north and Norwich Road and Croxton Road. Improvements to a number of junctions on the A11 will be made by Highways England including A11/A1075, A11/ Croxton Road, A11/ Mundford Road and A11/ London Road and will be developer funded.



2.54. Norfolk County Council Highways will be responsible for delivering improvements to Joe Blunts Lane, Bus Bridge, A1066/ Croxton Road, Croxton Road Cycle Link and A1066/ Norwich Road.

### *Thetford Enterprise Park*

2.55. Access to the Thetford Enterprise Park is subject to access upgrades in the form of a roundabout. With funding approved in January 2017 of £1.98m from the Local Growth Fund (LEP funded), Norfolk County Council commenced outline design work in March 2017. The majority of the outline design work has been undertaken and the project is on schedule for completion by June 2019.

### *Public Transport*

2.56. The Thetford SUE submitted development will fund the provision of a high frequency public bus service operating at five minute intervals at peak time. Bus priority routes will be provided within and outside the development and all development will be within five minutes walking distance of a bus-stop.

2.57. Three new bus services are proposed to connect to the town centre and the development's key employment sites and the Thetford Enterprise Park.

### *Cycling/walking*

2.58. The development will include attractive cycling and walking routes for day to day journeys and recreational use. The scheme will also integrate with the Thetford Loops circular walking routes. The main pedestrian and cycle routes are Croxton Road, Norwich Road and Kilverstone Road. It is proposed to retain Joe Blunts Lane as a walking and cycling link with a new bridge being proposed over the railway line which will also be used for public transport.

2.59. With the exception of a section of Norwich Road the development will provide that all streets and lanes will have footways or shared surfaces, ensuring all new homes are located in close proximity and suitably linked to local services and employment areas.

### **Transport – Dereham**

#### *Background*

2.60. Dereham is the currently the second largest town in the District. Several in the town suffer from congestion at peak times. Junctions in Dereham which require further consideration of capacity issues include:

- Tavern Lane/ Yaxham Road signals
- Yaxham Road/ Greens Road signals
- A47 Westbound/ Yaxham Road roundabout

- Matsell Way/ Norwich Road signals
- Tavern Lane/ South Green
- Shipdham Road/ Westfield Road

2.61. Due to existing issues regarding congestion it is important that any future growth is planned with necessary mitigation measures and improvements to the transport network to ensure existing issues are not exacerbated by new developments. It is not the responsibility of developers to fix existing problems with the network, however new development often provides the opportunity to make improvements to existing transport infrastructure when mitigating the impact of the specific development.

2.62. In order to provide a more in depth overview of the transport impacts of proposed land use developments in Dereham and the surrounding area, Breckland Council commissioned consultants to produce a Transport Study for Dereham. The scope and methodology was agreed by the Norfolk County Council as Highway Authority. The study presents findings of the transport impacts of the committed and potential land use developments in Dereham and the surrounding area of Breckland District. The report shows how development is likely to affect the transport network and the new transport measures that will be required to mitigate the cumulative impacts of this development. The study focuses on Dereham but also takes account of the committed and potential development in Mattishall and Yaxham.

2.63. The study tested a number of scenarios based on different levels of growth and on development in different areas of the town. The scenarios were modelled and tested over different timescales (2020, 2026 and 2036). The results suggest that certain junctions on the existing highway network are already over capacity, largely caused by the constraint at the Tavern Lane/Yaxham Road signalised junction. This junction would need to be improved under all growth scenarios. The South Green / Tavern Lane junction is also at risk of over-capacity in all scenarios. The issues are caused by background traffic growth which requires a high scale of intervention. New development is not required to address existing problems but must not exacerbate congestion and traffic related issues.

2.64. Different levels of development would require different mitigations measures at certain years within the Local Plan period to mitigate the impact of additional traffic using the transport network. The Study provides a basis for consideration of the transport issues in Dereham, but as the IDP is a living document, further work is being produced and negotiations are ongoing to determine definitive conclusions on the options, costings and site specific solutions required to mitigate the impact of new growth in the town.

### *Evidence*

2.65. The Dereham Transport Study provides a starting point for consideration of potential mitigation schemes. Schemes have been designed for the key junctions that were identified in the study as having insufficient capacity for the emerging Local Plan proposals (table 4). The study presents a series of options, with different estimates of costs. It presents two scenarios;

desirable works and essential works.

2.66. Norfolk County Council, Breckland District Council, representatives of Dereham Town Council and the developers are considering the findings and determining whether further work is required. The study presents lower cost and higher cost improvement options concluding that it is possible to deliver solutions and improve network capacity for the proposed growth. At present no one option has been agreed upon, however the study provides a basis for continued analysis and negotiations with the relevant parties.

2.67. Since the original Dereham Transport Study was produced; Breckland District Council has commissioned a further update to the Dereham Transport. The update will address issues raised during the Interim consultation with regard to the Dereham Transport Study. The results of this work and the outcome of negotiations with Norfolk County Council Highways Authority will inform specific mitigation measures and costings which will be presented in the next iteration of this IDP.

### *Infrastructure costs*

2.68. Preliminary cost estimates have been produced for the suggested mitigation schemes in the Dereham Transport Study (table 4) including caveats and contingencies, relating to underground utilities, land costs and potential risk contingencies. Optimism Bias has been applied at 44%, in line with Department for Transport guidance and approved by NCC. The level of Optimism Bias will reduce once some ground investigation has been done and more detailed design work is carried out. Land and Compulsory Purchase Order costs have been excluded.

2.69. Table 4 provides an indication of the lower cost (essential) mitigation measures and the higher cost (desirable) mitigation measures from the Dereham Transport Study. Specific mitigation measures and costs provided in the next iteration of this IDP but are likely to form a mix of lower cost options presented below with additional measures, rather than any one option presented in the study.

### *Funding and implementation*

2.70. Funding will be derived from S106/S278 agreements with developers for the allocated sites in Dereham and will relate to specific junctions and infrastructure which will be impacted by further development at that site.

Table 4 Mitigation Scheme Cost Estimates (WYG)

Cost Element	Junction 1 Tavern Lane / Yaxham Road / Greens Road Option 1 – Small scale improvement	Junction 1 Tavern Lane / Yaxham Road / Greens Road Option 2 – Signalised Roundabout	Junction 3 Tavern Lane / South Green  Option 1 – Signalised Junction	Junction 4 Tesco Roundabout Yaxham Road / A47 Option 1 – Minor Widening
Capital cost estimate	£32,500	£762,500	£182,000	£10,000
Prelims/Surveys	£6,000	£124,000	£32,000	£2,500
Underground Utilities	£0	£100,000	£25,000	£0
Land	£0	Unknown	£0	£0
Design and Professional Services	£6,000	£148,000	£36,000	£2,000
Contingency (@15%)	£6,000	£148,000	£36,000	£2,000
Optimism Bias (@44%)	£17,000	£434,000	£105,500	£5,500
<b>TOTAL</b>	<b>£67,500</b>	<b>£1,716,500</b>	<b>£416,500</b>	<b>£22,000</b>
Commuted Sum (for ongoing maintenance)	£7,700	£197,000	£48,000	£0

### Solution

2.71. A number of planning applications for strategic sites in Dereham are currently pending in advance of the completion of the Local Plan. This has necessitated a more proactive approach facilitated by Breckland District Council to ensure that adequate mitigation measures are addressed in the applications and coordinated between the separate development sites. However, the applications have not yet been determined and therefore no decisions on current proposals or potential proposed transport mitigation measures have been reached. Negotiations are ongoing between the Local Planning Authority, Norfolk County Council Highways Authority and developers of three sites to identify the necessary mitigation measures to support each proposal and, if permitted, would be funded through S106 agreements. Mitigation measures are likely to form a mix of lower cost options presented below with additional measures, rather than any one option presented in the study. The proposed solutions for two preferred allocations currently subject to planning applications are detailed below.

#### *Land off Swanton Road LP[025]023 (application ref. 3PL/2015/1487/O)*

2.72. The application is supported by a Transport Assessment which reaches the same conclusions regarding the need for improvements at the Tavern Lane/Yaxham Road signals and proposes a similar scheme to that identified as Option 1 in the Dereham Transport Study (table 4). The solution is based on modifying the existing signal controlled junction which through modification of the timing of the MOVA control and the potential introduction of intelligent PUFFIN control for pedestrians. In terms of local highway improvements the development would provide a new 4 arm roundabout to Swanton Road to provide an entry feature into Dereham and help to reduce speeds on this approach. The roundabout will also serve as an access into both sides of the site. In addition, the applicant will provide improvements to the

Mid Norfolk Railway crossing and to the pedestrian facilities at the Theatre Street/King's Street junction.

### *Land off Shipdham Road LP[025]030 (application ref. 3PL/2015/1490/O)*

2.73. The application is supported by a Transport Assessment and subsequent update which addresses issues identified by Norfolk County Council Highways Authority. In terms of local highway improvements the development is expected to provide:

- an upgrade to the bridge over the Mid Norfolk railway line (possibly traffic signals), complemented by a footbridge which would be adjacent to the existing railway bridge.
- New link from Yaxham Road to Shipdham Road, changing the priority of Westfield Lane and Westfield Road as shown with a 2m verge and 3m footway/carriageway on one side and a 2m verge and 2m footway on the other side.
- Provision of land at the junction of the new link road and Shipdham Road for the future provision of a roundabout.

## **Transport - Swaffham**

### *Background*

2.74. Swaffham is a busy market town with one principal through road in the town which joins the town's supermarkets and the A47 strategic road junctions to the north. The through road often becomes congested in summer months and on market days. All proposed allocations currently have outline planning permission and will cumulatively deliver an additional 700 homes to the east and south of the town

2.75. Informal consultation with the Highways Authority has indicated that the A47 junctions can cope with additional traffic proposed in the plan period. The principal issue is the cumulative impact of traffic on the town centre, however the relatively limited number of homes (in comparison to the SUE's) and the piecemeal applications in various locations to the east and south mean that development is spread around the town. Therefore new residents will use a variety of routes to access facilities, dispersing additional traffic to some extent and reducing the impact on a single route.

2.76. The limited number of homes also means that a bypass or link road is not a feasible or viable solution for the town at this stage, but may be considered in later plan periods. For the proposed allocations the most appropriate solution to help mitigate the impact of additional traffic from new development is to ensure that all new residents on the allocated sites, some of which are considered slightly remote to the east of the town, have a regular public transport service and good footpath/cycling linking new development to the town centre and facilities.

2.77. The A1065 runs through the centre of the town and is the main through route for both local traffic and for traffic travelling to North Norfolk. The layout of the town leads to frequent traffic congestion and this leads to elevated concentrations of NO<sub>2</sub>. The council is

monitoring air quality in the town and exploring options to improve the town centre transport network with Norfolk County Council in order to improve air quality. The Council are also undertaking a detailed assessment of the issue to determine whether it is necessary to establish an Air Quality Management Area which will focus improvements. Ensuring new developments are accessible by public transport will offer a more sustainable option for new residents to access the town centre therefore reducing the negative impact on air quality.

### *Public Transport*

2.78. Swaffham town centre is accessible by the bus service network which offers a sustainable transport solution for local residents.

2.79. Planning applications to the east of the town have resulted in early discussions between developers and Norfolk County Council to determine how to serve the new development sites using an extension to the existing bus service network. Developers for site allocations 018 (land to the north of Norwich Road) and 010 (Land to the south of Norwich Road) have committed in principle to contributing £150,000 and £168,000 respectively to divert existing buses to Norwich Road providing hourly stops at peak times and two hourly services at other times for a minimum period of 5 years. The other allocation sites will also generate a contribution to supplement the bus service.

### *Localised transport infrastructure improvements*

#### **East Swaffham**

2.80. Site 006 (Days Field in New Sporle Road) has outline planning permission for 51 houses. Early discussions with Norfolk County Council have indicated the developer should provide a contribution of £22,650 towards local public transport facilities. The development will also deliver localised road widening and additional footway provision.

2.81. For site allocations 018 (land to the north of Norwich Road) and 010 (Land to the south of Norwich Road), transport improvements will focus on providing a continuous footway/cycleway & pedestrian crossing for Norwich Road to link Captains Close to the town centre.

2.82. Site 13 (Land off Sporle Road) has outline permission for around 100 dwellings. The outline permission refers to necessary local highway improvements including provision of a continuous 6m carriageway with pedestrian crossing, 2m footpath, visibility splays and extension to the 30mph limit. No approximate cost has been identified at this point in time.

#### **South Swaffham**

2.83. Site 009 (Land to the west of Watton Road) forms part of a larger permission to the south

of town adjoining existing Taylor Wimpey and Avant Homes developments, some of which have been completed. Principal access for the proposed 175 dwellings would connect with adjacent new development connecting to Brandon Road (A1065). This access has been created to a standard which could already serve 335 dwellings and the Highways Authority are satisfied that it could serve the additional proposed dwellings. Pedestrian and cycle links would be provided to Watton Road, together with an emergency access, providing an alternative route for residents to the town centre. No approximate cost has been identified at this point in time.

### ***Funding and Implementation***

2.84. All funding will be provided by developers in S278 agreements. Some contributions have already been agreed in principle during the outline applications. These are included in the final summary table (table 10).

### **Transport – Watton**

#### ***Background***

2.85. Watton is a market town which has developed east to west in a linear pattern along Norwich Road (B1108) and is intersected by the Thetford Road (A1075) running north to south which forms a crossroads in the centre of the town. In comparison to the Key Settlements and other Market Towns, Watton is relatively distant to major transport routes including the A47 and A11.

2.86. A number of major development proposals have been permitted outside the Local Plan process. This sets a comparatively low housing target in the Local Plan for 175 dwellings, relative to the other Market Towns which are subject to allocations for 750 dwellings. Each permitted application has resulted in specific transport measures to mitigate the impact of new development on the local transport network. The scale of new allocations proposed in the plan necessitates further mitigation measures to address the impact of proposed new development on the local transport network.

2.87. Watton has benefitted from lottery funding and funding from Norfolk County Council which delivered a traffic free route connecting Watton to Griston encouraging walking and cycling. The central routes in the town are all accessible on foot but pedestrians and cyclists may be discouraged by the volume of traffic using the central routes. Opportunities to provide safer and quieter walking and cycling routes around the town should be a consideration when creating new developments, as well as opportunities for open space.

#### ***Public Transport***

2.88. Watton is connected to larger towns by a frequent bus service running east to west via Norwich Road and north to south via Thetford Road. All proposed development sites are able to utilise the existing network and are within walking distance to bus stops on Norwich Road.



### *LP[104]008 Land off Saham Road and LP[104]019 Land off Sharman Avenue*

2.89. These two adjoining sites are under separate ownerships but together form a 6.6ha site which is proposed for allocation of 160 dwellings. Norfolk County Council Highways Authority require consideration of a link road through the site (if beneficial), providing a vehicular connection between Saham Road and Sharman Avenue with additional infrastructure to support the new connections. The two landowners have accepted the principle of a link road, which enables the site to be developed comprehensively. The site is within walking distance to local services, facilities and existing bus stops and a pedestrian crossing on Norwich Road. Norfolk County Council Highways Authority have indicated that footway improvements would be required to Saham Road in addition to junction improvements to the B1108/Saham Road at an estimated cost in excess of £100,000. The development is required to be supported by a transport assessment which will identify further measures necessary to mitigate the impact of the development on the surrounding local transport network.

### *LP[104]015 Land North of Norwich Road*

2.90. The site is accessed directly onto Norwich Road. Norfolk County Council Highways Authority have not raised any specific concerns with regard to transport and access issues with the site. The site is immediately adjacent to bus stops on Norwich Road. Further opportunities to provide safe pedestrian crossing points across Norwich Road alongside wider transport and access improvements will require consideration as part of a transport assessment to support any planning application. Consideration will need to be given to general accessibility to services, facilities and on site open space as well as any safety concerns specific to the proposed use of part of the site for a care home.

## **Local Service Centres**

### *Background*

2.91. Smaller scale allocations in the Local Service Centre's have been selected following consultation with Norfolk County Council as the local highways authority. Sites which were identified by NCC as having insurmountable highways constraints were not selected as allocations. For all potentially reasonable options Norfolk County Council have provided detailed comments on each site which identifies necessary highway improvements to deliver the development. In line with Norfolk County Council Planning Obligations Standards 2015, developers may be required to provide transport related mitigation measures including travel planning, public transport provision including infrastructure, measures to improve road safety/capacity, or facilities to enable non-motorised users of the highway. Specific measures will be refined for each preferred site and detailed at submission stage in the policy for the specific allocation. This will provide certainty for developers regarding what transport infrastructure is required and will provide basis for further discussion at planning application stages.



### *Infrastructure Cost*

2.92. The cost is dependent on the specific site characteristics and will be identified once the site has been allocated and is subject to a planning application. At this stage in the plan process it is not anticipated that any one site has such significant transport infrastructure requirements that the site would not be viable to deliver. Sites with significant constraints were not selected for allocation. Should significant viability issues be identified as a result of the Interim Consultation, further supporting work will be undertaken and presented in a subsequent version of the IDP, or the site will not continue to be allocated.

### *Funding and Implementation*

2.93. Consultation with Norfolk County Council on the preferred development options will highlight specific requirements. The detailed requirements will be added to the final policy for each site in the submission version of the Local Plan. The policy requirements will trigger detailed costings and implementation methods at planning application stage but then will not be presented in this IDP.

### 3. Water

Water Evidence Base		
Owner	Document	Date
AW	Consultation Response to Breckland Local Plan – Interim Consultation	2016
BDC	Strategic Flood Risk Assessment	2017
BDC	Water Cycle Study	2017
BDC	Sequential Test	2017

#### Water Cycle Study

3.1. A detailed Water Cycle Study (WCS) was originally completed for Breckland District Council in 2010 and assessed growth as planned in the Local Development Framework (LDF) for implications on the water environment and water infrastructure provision in the District. With a revision to the growth strategy proposed for the subsequent Local Plan development in 2015, an update to the assessment of water environment and water infrastructure provision was required, taking into account differences in growth targets and locations as well as changes in infrastructure capacity and planning to that assessed in 2010. The update was completed in 2017 following further work to align both the WCS and SFRA with proposals in the submission version of the Local Plan. Extracts from the WCS Executive Summary provide an overview of the key infrastructure constraints and solutions in the District.

#### Wastewater treatment works

3.2. Assessment of the revised growth locations and numbers has demonstrated that additional treatment capacity will be required at four Wastewater Treatment Works (WwTW) serving the District as a result of additional wastewater likely to be generated by the proposed growth. Improvements or new discharge permits are required at these WwTW to ensure that water quality targets, set to meet the requirements of European legislation such as the Water Framework Directive (WFD) and Habitats Directive (HD) are not exceeded within the rivers which will receive the additional treated wastewater flow. This affects growth proposed in Attleborough, Dereham, Garboldisham (Elm Grove) and Watton (described in more detail under area subheadings).

#### Wastewater network capacity

3.3. Policies in the plan for the majority of sites would require at least some upgrades to the piped wastewater network to increase capacity with the exception of Mattishall, Yaxham and Old Buckenham where only a few sites would require upgrades. Weeting and Great Ellingham were identified as areas where upgrades may affect phasing of sites; however, there are no allocations in Weeting due to environmental constraints or Great Ellingham, where the housing target has been exceeded.

3.4. It is recommended that Local Plan policies for all sites in identified locations specify that development proposals for sites highlighted with a potential constraint are accompanied by a pre-development enquiry with Anglian Water Services to demonstrate that sufficient capacity is available to transfer wastewater for treatment and to demonstrate where a developer needs to financially contribute to that provision.

### Water resource availability

3.5. Raw water availability within the District is currently limited and issuing of licences to abstract water from the District's rivers and underlying aquifers is restricted by the Environment Agency in all conditions except high river flows. As a result, supply of water for additional demand from new development is dependent on strategic management of resources by Anglian Water Services.

3.6. Anglian Water Services has set out how future demand in the District will be met as part of its current Water Resources Management Plan (2015). A twin-track approach is proposed whereby existing demand is managed and new supply sources are provided. Demand would be managed through a reduction of leakage within the supply network and through reductions in consumption via water efficiency measures. The preferred option for additional resources is a winter storage reservoir in the Norfolk Fens in the longer term.

3.7. Anglian Water Services has confirmed that the level of growth assessed within the WCS update is factored into the current Water Resources Management Plan which has been approved by the Environment Agency and Defra. The WCS update therefore concludes that a sufficient sustainable water supply is available to meet planned demand without impacting adversely on the environment.

### Water efficiency

3.8. Water availability within the District is finite and that, to compliment proposals within Anglian Water Service's Water Resources Management Plan, consideration is given towards minimising water use in planned development through the use of development management policy and contributing to controlling of demand from the existing population within the District. To set out how this could be achieved, the WCS has considered the feasibility of attaining a 'water neutral' position in the District, whereby the District's total demand for water at the end of the plan period is equal to (or less than) current demand levels in 2016. The assessment demonstrated that water neutrality is theoretically attainable by the end of the plan period, but would require new development to be built to the highest efficiency specifications based on technologies (such as greywater recycling) which are not yet widely adopted in the UK. It would also require an extensive and expensive programme of retrofit of water use control measures and systems to existing properties throughout the District, for which a funding source has not been identified.

3.9. Although water neutrality is unlikely to be a feasible option for the District, the WCS update has provided a 'pathway' for how the District could move towards a more neutral position, including requirements for policy, funding and technological requirements. The WCS has made

a recommendation that consideration be given to a policy for new development being built to the optional Building Regulations standards for water efficiency in some location. This could also contribute to a reduction in wastewater treatment pressures, such as Dereham.

### Site Specific solutions

3.10. The WCS has assessed growth proposed in the district. This section provides more detailed information for growth locations highlighting the individual solutions required to accommodate proposed development in the Local Plan.

### Attleborough

#### Waste Water Treatment Works

3.11. Attleborough WwTW has some available flow headroom in its existing discharge permit and can accept growth of approximately 1,800 dwellings (from the 4,000 allocated), after which the volumetric discharge permit will be exceeded.

3.12. When considering all growth at the end of the plan period for Attleborough, the WwTW would require the implementation of new and improved treatment technologies to ensure that water quality in the receiving river can continue to meet the required legislative targets.

3.13. Anglian Water Services (in conjunction with water companies nationally) are currently undertaking a programme of treatment trials to test enhanced technology aimed at achieving improved treatment quality on discharge. The outcome of trials to date suggests that treatment quality required to meet in-stream water quality targets will be attainable and that in the next water company investment period (2020 to 2025), these solutions could be implemented. This suggests that a workable solution in the long term can be achieved to ensure that growth proposed for Attleborough is sustainable. In the short to medium term (to 2022), sufficient capacity is available to serve the initial planned phasing of growth proposed in Attleborough.

#### Ecological Assessment

3.14. A review of hydrologically linked Habitats Directive site has determined that there are no sites downstream of the discharge point that would be affected by water quality changes as a result of the preferred solution.

#### Flood Risk

3.15. Assessment of the hydraulic capacity of the River Thet to cope with additional flow concluded that the additional flow would have a negligible effect on flood levels and extent for all assessed flood events (up to the 1 in 100 year with an allowance for climate change).

### Thetford

#### Thetford Water Supply

3.16. The first housing phase will use all remaining water capacity in Thetford. Anglian Water has provided a strategy for upgrading their potable water network to serve the housing development, a large employment area on the SUE and an adjacent large employment area known as the Thetford Enterprise Park (TEP). This includes a proposed rising main from Barnham Cross/Nunnery Lodge to increase capacity at the Mundford Road Reservoir with a new rising main from the reservoir to serve each development.

#### Thetford Sewage Scheme

3.17. The first housing phase will use all remaining sewage capacity in northern Thetford. An outlet with sufficient spare capacity has been identified to the north west of Thetford and an outline scheme design has been produced. The project would serve the sewage disposal requirements of the Thetford SUE, several large employment areas on the Thetford SUE and an adjacent large employment area known as the Thetford Enterprise Park.

#### Thetford Enterprise Park (TEP)

3.18. An outline design for a new Foul and Surface Drainage scheme for the TEP has been drawn up. This would connect to an existing Anglia Water outlet point to the west of the TEP site and would require an under railway track crossing. Network Rail has agreed the principle of the scheme and further discussions are taking place to confirm the specification and costs of the scheme.

## Dereham

#### Waste Water Treatment Works

3.19. The solution for Dereham WWTW is for the continued management of treatment headroom through several measures including: reducing water use (and hence wastewater generation) within the existing properties in the town; and, monitoring changes in occupancy rate. If headroom is exceeded, enhanced treatment technologies as proposed for Attleborough would be considered to ensure downstream water quality targets are met. The overall solution requires ongoing discussion between Breckland District Council, the Environment Agency and Anglian Water Services regarding the planned phasing of growth in Dereham. The WCS update recommends that all applications for development proposals in Dereham are accompanied by a pre-development enquiry with Anglian Water Services to demonstrate that sufficient capacity is available to treat wastewater from the proposals.

3.20. A number of planning applications for major residential development on sites identified in the Local Plan have been submitted prior to completion of the plan. The favoured solution for waste water treatment in the short term is to link sites using a piped network to the existing Waste Water Treatment Works at Swanton Morley which currently has capacity. Negotiations are ongoing as the planning applications have not yet been determined. Anglian Waters latest consultation response to the Local Plan (Oct 16) indicates that it is important that the timing of planned development is understood, and if necessary phased, in order to serve the proposed growth. It is likely that large development sites will require to be phased which could be

achieved using a planning condition.

- 3.21. The Water Cycle Study states that based on the evidence, the growth trajectory for Dereham will need to be limited to a number of units per annum between 2021 and 2036 (or when the existing permitted flow is exceeded) to be agreed between Breckland District Council, AWS and the Environment Agency. The study recommends that water consumption within Dereham should be minimised through the use of specific policy on water efficiency and usage targets for new property.

#### Ecological assessment

- 3.22. Wendling Beck is a tributary of the River Wensum SAC which is approximately 8.5km downstream of Dereham WwTW. The Environment Agency RoC process has led to improvements to many of the WwTW's within the River Wensum catchment to reduce phosphate concentrations.
- 3.23. Should the proposed solution for the Dereham WwTW catchment (as detailed above) prove insufficient to supply treatment headroom, it is likely that a scheme similar to that proposed at Attleborough would be required to provide treatment using non-conventional methods, to allow the WwTW to meet a more stringent P permit condition. A combination of these measures should be sufficient to ensure no detriment to the River Wensum SAC. Should the housing targets proposed increase significantly beyond those proposed in the Local Plan, then this position would need to be reviewed.

#### Flood Risk

- 3.24. Assessment of the hydraulic capacity of the Wendling Beck to cope with additional flow concluded that the additional flow would have a negligible effect on flood levels and extent for all assessed flood events (up to the 1 in 100 year with an allowance for climate change).

### Watton

- 3.25. Waste Water – Watton WwWT has available flow headroom in its existing discharge permit for 19 dwellings. Water Quality monitoring has shown that in order to maintain the current WFD status of the Watton Brook with predicted volumes (from new connections), the permit conditions on discharge quality for BOD and ammonia should be tighter. AWS have confirmed planned investment, including a revised ammonia permit by April 2017 which will require process upgrades at Watton WwTW.
- 3.26. Improvements required at the WwTW serving Watton are relatively straightforward and readily achievable within the limits of conventional treatment methods and would not present a barrier to growth, nor affect phasing of development for sites in Watton.
- 3.27. Flood Risk – The physical capacity of Watton Brook is likely to be sufficient to accommodate the additional wastewater discharge generated by the growth in the town, without increasing flood risk downstream.

## Snetterton

3.28. In response to the Local Plan Interim consultation, Anglian Water has indicated potential issues with the proposed employment allocations at Snetterton Heath. The foul water sewer flows from future growth will have an impact on the existing foul sewerage network and all sites will require a local connection to the existing sewerage network. There is insufficient capacity in the foul sewerage network to accommodate the proposed major employment site allocations; as such substantial off-site infrastructure will be required. The solution is to ensure developers liaise with Anglian Water to ensure they can make timely improvements in order to meet the additional demand. If necessary, this may affect the phasing of development.

## Local Service Centres

3.29. Anglian Waters latest consultation response to the Local Plan (Oct 16) indicates that Ashill is also served by the Watton Water Recycling Centre and that it is important that the timing of planned development is understood and if necessary phased in order to serve the proposed growth.

## Garboldisham (Elm Grove)

3.30. Waste Water – Garboldisham (Elm Grove WwTW has no available headroom in its discharge permit. Water quality modelling in the WCS show that in order to maintain the current water framework directive status of the Little Ouse with predicted discharge volumes (from new connections), a new permit condition should be set at 3.0mg/l mean limit for phosphate. Improvements required at the WwTW serving Garboldisham (Elm Grove) are readily achievable within the limits of conventional treatment methods and would not present a barrier to growth, nor affect phasing of development in this location.

## East Harling

3.31. Anglian Water has an encroachment policy that sets out a risk based approach to developments that are in close proximity to any assets.

3.32. In East Harling, the preferred site: Land off Kenninghall Road is in close proximity to an existing pumping station. The layout of the site should be adjusted so as not to encroach on the protection zone. Development should be located a minimum of 15 metres from Pumping Stations.

## Summary table – Key water infrastructure requirements identified in the WCS

The following table summarises the preceding text, highlighting areas and facilities with capacity issues (marked by ✓).

Table 5 Summary table outlining areas/facilities with identified water infrastructure requirements

Settlements	Identified Issues			Summary
	WWTW	Piped Waste-water Network	Water Supply Network	Solutions, Funding and Implementation
Attleborough	✓	✓		Solutions - short term (to 2030): sufficient capacity identified 1,800 dwellings, long term: implement new technologies. Implementation: Cooperative working between developer, EA, AW and BDC + pre-development enquiry with AW required + phased development. Funding – mix of AW Investment Funds (2020-2025) and developer funding through S106 agreement.
Dereham (WWTW serves Dereham and Beetley)	✓	✓	✓	Solutions - short term: continued management of treatment headroom up to 230 dwellings + new sites connect to Bylaugh WWTW, long term: implement new technologies. Negotiation of solutions: BDC, AW and EA. Implementation: pre-development enquiry with AW required for new sites. Funding – mix of AW Investment Funds (2020-2025) and developer funding through S106 agreement.
Swaffham		✓	✓	Solution: some upgrades to the piped wastewater network and to the water supply network to increase capacity. Implementation: pre-development enquiry with AW required for new sites. Funding: developer funding through S106 agreement.
Watton (WWTW serve Watton and Saham Toney)	✓	✓		Solution: improvements to the WwTW serving Watton are relatively straightforward and readily achievable within the limits of conventional treatment methods and would not present a barrier to growth, nor affect phasing of development in these locations.
Garboldisham	✓	✓		Solution: Improvements to the WwTW serving Watton are relatively straightforward and readily achievable within the limits of conventional treatment methods and would not present a barrier to growth, nor affect phasing of development in these locations. Some upgrades to the piped wastewater network to increase capacity. Implementation: pre-development enquiry with AW required for new sites. Funding: developer funding through S106 agreement.



Figure 1 Summary of the RAG assessment of the WwTWs within the Breckland WCS study area, Breckland District Council Water Cycle Study Update, AECOM (March 2017)

WwTW	Is Headroom Available for all planned growth to 2036?	Is there a flood risk concern with additional discharge?	Is a quality permit update possible within LCT?	Solution Available?
Attleborough	No	No	No	Yes – with significant new investment
Bylaugh - near church	Yes	No	N/A	
Dereham	No	No	No	Yes - with significant new investment
East Harling	Yes	No	N/A	
Garboldisham -Elm Grove	Limited	No	Yes	Yes – with minor process upgrades
Great Ellingham	Yes	No	N/A	
Great Hockham LT Hockham Rd	No	No	Yes	Yes – with minor process upgrades
Hockering - by A47	Yes	No	N/A	
Litcham	Yes	No	N/A	
Mattishall	Yes	No	N/A	
Mundford	Yes	No	N/A	
Narborough	Yes	No	N/A	
Necton	Yes	No	N/A	
North Elmham	Yes	No	N/A	
Old Buckenham STW	Yes	No	N/A	
Shipdham - Carbrooks Road	Yes	No	N/A	
Swaffham	Yes	No	N/A	
Thetford	Yes	No	N/A	
Watton	No	No	Yes	Yes – with minor process upgrades
Weeting	Yes	No	N/A	

## Summary

3.33. In order to address capacity issues identified in the WCS, Local Plan policies will specify that development proposals for sites highlighted with a potential constraint, are accompanied by a pre-development enquiry with Anglian Water Services to ensure that sufficient capacity is available to transfer treated water and to demonstrate where a developer needs to financially contribute to that infrastructure. Solutions to individual allocation sites will be determined at planning application stage through consultation with Anglian Water and the Environment Agency therefore it is not possible to determine the precise cost of water related infrastructure for the District at this stage. Areas which are likely to incur additional costs due to water related infrastructure improvements are noted in the final IDP summary table (table 10).

3.34. In response to the Local Plan Interim consultation, Anglian Water stated that they are at the early stages of preparing the next business plan and a long term plan for Water Recycling Centres. This plan will identify the need for further investment to accommodate growth within the Anglian Water region. Local Plan growth targets and the timing of the development of sites will be a key source of information to inform their business plan and they seek to work with the Local Planning Authority to ensure that any future investment is based on the best available information. The draft business plan proposals will be subject to a consultation.

## Flood Risk

3.35. In comparison to low lying fen landscape in West Norfolk and The Broads network of rivers in east Norfolk, Breckland District in the centre of Norfolk is not subject to such extensive flood risk. However, the District is crossed by a network of rivers and settlements that have developed alongside rivers are at risk of fluvial flooding, particularly if flood defences are breached by flash floods. Additionally, Breckland is one of the driest regions in the UK and therefore sudden storm events or prolonged periods of rain can lead to surface water flooding and groundwater flooding. The likelihood of extreme weather events is increasing due to climate change. Breckland's Strategic Flood Risk Assessment (SFRA) provides detailed mapping of all settlements and their relative flood risk, including the likely flood extent in future according to predicted climate change.

3.36. Developers should refer to national planning guidance and guidance produced by Norfolk County Council in addition to local planning policies to ensure that sufficient information on flood risk is provided at the planning application stage. In terms of specific sites, no allocations have been made in locations at risk of flooding (flood zones 2, 3a and 3b) in the Local Plan and therefore no specific infrastructure is identified in this report. However all development sites which are 1 hectare or greater will be required to have a Flood Risk Assessment undertaken, given the potential increased impermeable area as part of the planning application in accordance with proposed Local Plan policy ENV 09. Sites in designated groundwater Protection Zones and/or Critical Drainage Catchments, or other areas where there is evidence that there is likely to be elevated risk of surface water flooding will also need to be accompanied by Flood Risk Assessments.

3.37. The accompanying evidence base statement on the Sequential Test to support Breckland's Local Plan outlines which sites are at risk of surface water flooding and groundwater vulnerability zones. Flood Risk Assessments provided at planning application stage for these sites will determine whether a specific engineering solution is required. Since April 2015 Local Authorities have responsibility to ensure that SuD's are provided for all major development schemes, unless demonstrated to be inappropriate. Therefore it is an infrastructure requirement which is factored into a developers costing for major sites.

## 4. Energy

Energy Evidence Base		
Author	Document	Date
National Grid	Consultation Response to Breckland Local Plan – Preferred Directions Consultation	2016
BDC	A11 Energy Study (3 stages)	2007
BDC, FHDC, SNC	A11 Growth Corridor Feasibility Study – Delivering the Economic Growth Potential of the A11 Corridor	2015
BDC	Snetterton Heath Business Case (submission bid to the LEP)	2016
NCC	Norfolk Infrastructure Plan	2016

4.1. New residents living in the District as a result of growth proposed in the Local Plan will place higher demands on energy capacity and infrastructure. The National Grid are a statutory consultee in the plan making process and have made comments at previous stages of the plan. The focus for increased demand is in the A11 corridor due to the large scale of growth proposed at Thetford and Attleborough and because increased energy capacity is a critical issue for the delivery of the employment allocation at Snetterton.

### Electricity

4.2. National Grid owns and operates the high voltage electricity transmission system in England and Wales. National Grid has one overhead line within Breckland’s administrative area which runs between King’s Lynn and connects to Norwich. National Grid owns and operates the local electricity distribution network and have not indicated any issues with electricity capacity in the District. However, there are known deficiencies for energy supply for the growth areas around the A11 corridor.

4.3. Breckland District Council, South Norfolk Council and Forest Heath District Council commissioned the A11 Energy Study back in 2007 to understand capacity constraints, demand and solutions to help unlock growth around the A11. The study has evolved in three stages with the final report produced in June 2015. The study identifies major opportunities for economic growth for advanced manufacturing, engineering and agri-tech provided the A11 can be marketed as a technology corridor and that identified infrastructure constraints can be addressed. The study covers a number of sites including Thetford SUE, Thetford Enterprise Park, Harling, Attleborough and Bunn’s Bank in Breckland District (see subheadings for Attleborough and Thetford).

### Gas

4.4. National Grid owns and operates the high pressure gas transmission system in England. New gas transmission infrastructure developments (pipelines and associated installations) are periodically required to meet increases in demand and changes in patterns of supply. Developments to the network are as a result of specific connection requests e.g. power

stations, and requests for additional capacity on the network from gas shippers. Generally network developments to provide supplies to the local gas distribution network are as a result of overall demand growth in a region rather than site specific developments.

4.5. There are 4 high pressure gas transmission pipelines within Breckland District and 11 low pressure and 4 intermediate transmission pipelines. These were taken into account when considering development options.

4.6. Thetford SUE was the only location which required upgrades to both the gas and electricity network to deliver planned growth.

## **Renewable Energy**

4.7. The new Local Plan seeks to promote renewable energy in line with objectives in the National Planning Policy Framework. Proposed policy ENV 10 provides policy criteria for renewable energy applications with the ultimate aim of encouraging the use of more sustainable energy sources where this is compatible with the landscape and other material factors. The plan does not allocate or identify land for any renewable energy developments but notes that the rural landscape of Breckland is particularly suited to solar farms.

4.8. Breckland's administrative boundary does not connect to the Norfolk coastline, however there have been a number of permitted offshore windfarms in neighbouring authorities which require connection to the national grid. The planned Dudgeon windfarm approx. 32km off the North Norfolk coastline has led to applications for an electricity substation to be constructed to connect to the main electricity power line between King's Lynn and Norwich which lies in Breckland District. Siemens Transmission and Distribution Limited, which is constructing the Dudgeon onshore substation just outside the village of Necton in Norfolk, commenced work on site in March 2015, and construction, equipment testing and commissioning continued until November 2016. Proposals for further applications around this site are anticipated.

## **Energy constraints - Snetterton Heath (Employment allocation 20ha)**

### ***Infrastructure constraints***

4.9. Existing total electricity power available at the site is approximately 3MVA and this capacity is now close to 100% usage by the existing site occupiers. Although the Biomass Powerstation will generate significant power, it has been designed to feed one-way to the national grid and currently there is no economically viable scheme to make the one-way power feed into a two-way feed-receive system.

### ***Options***

4.10. Breckland Council committed an initial financial outlay to secure a contractual option prior to October 2016 from UK Power Network ("UKPN") providing an additional 6MVA of electricity

power to Snetterton Heath. In order to deliver this additional power it is necessary to install two 11KV cables from Attleborough Primary Substation to a new substation at Snetterton Heath. Further local distribution to employment sites north and south of the A11 will be required. The Council are in discussion with the land owners who will finance onward distribution from the substation to their business premises.

4.11. The proposed scheme has come about as a result of technical consultancy commissioned by Breckland Council in 2015 and undertaken by SMS Plc. Two options were identified, these being;

- Option 1 (the proposed project) is to install two 11KV cables from Attleborough Primary to a new substation in Snetterton Heath, giving an additional 6MVA of capacity at Snetterton.
- Option 2 is to split the cable that is currently under construction from Snetterton Biomass to Diss – and implement various other infrastructural improvements - which would also give an additional 6MVA capacity at Snetterton but with the capability for further longer term increases and more integration into the national grid. This has a estimated cost of £8.5m and is considered to be economically unviable at the present time, but remains an option for consideration in the longer term.

### *Solution*

4.12. A consortium of local landowners at Snetterton has been formed which meet regularly with Breckland District Council. After consultation with local land owners, Breckland Council took the decision to secure the contractual option for Option 1. Breckland District Council submitted a bid to the Norfolk and Suffolk Local Economic Partnership to secure additional funding. The bid proved successful and was approved by the LEP in September 2016, therefore securing the delivery of option 1. The project will be delivered through a mix of funding sources: local landowners, LEP and Breckland District Council. The project is expected to be completed during 2018/2019.

### *Progress*

4.13. The project has been scoped and costed by a specialist electricity power consultant in consultation with the appropriate private and public sector bodies relating to feasibility and deliverability of the project. LEP funding has been secured. The consortium of landowners have agreed to enabling development on their land and are committed to bringing the project forward. Breckland District Council is continuing to facilitate delivery of the project by holding stakeholder meetings.

4.14. Through further investigation into the project, the proposal has altered to establish a 33Kv Primary Substation at Snetterton with the capability to draw electricity power from the new 33kV cable linking the Snetterton BioMass generator to the UKPN Grid point at Diss (as opposed

to linking to Attleborough). This scheme is more expensive initially but is more efficient and will enable further capacity in the longer term.

### *Cost and funding*

4.15. Breckland District Council made a successful bid for £2.309 million to the New Anglia LEP. Landowners will finance the cost of local distribution of power to their employment sites. The project will be funded by a blended finance package from Breckland District Council, the LEP and a percentage of match funding and is expected to be in the region of £4 million total.

### *Energy constraints – Thetford SUE and Thetford Enterprise Park*

4.16. Thetford SUE and Thetford Enterprise Park are already allocated in the adopted Thetford Area Action Plan. Both areas have outline planning permission for development in accordance with the policies in the adopted plan and therefore requirements in relation to energy have been previously considered. Thetford SUE has 5 distinct development phases (Appendix 1).

### *Infrastructure constraints*

4.17. Capacity in Thetford for additional electricity power is limited and the ultimate solution would be for a new electricity substation to serve the town. At present, developers are seeking incremental additional capacity from UK Power Networks (UKPN). Pigeon has secured power for the first phase (300 dwellings) through an arrangement with UKPN. A more substantial solution is required to ensure there is sufficient power for the entire SUE and Thetford Enterprise Park.

### *Options, cost and funding*

4.18. Thetford area has been identified in Norfolk County Council's Infrastructure Plan (2015) as in need of increased power supply. It is proposed that a new primary substation 'Thetford North' is constructed to cater for the 5000 dwellings to the north of the town. The cost of the new substation is estimated in the region of £6.5 million.

### *Solution*

4.19. Breckland District Council are currently consulting with the site promoters and landowners to agree how best to fund this energy project. After securing a power solution for Snetterton, Thetford has become the highest priority for the District Council in terms of addressing energy supply to enable later phases of the SUE and Thetford Enterprise Park to be delivered. A realistic option relies on public sector borrowing to fund the substation which is recouped by a placing a tax on each new build property. In addition to negotiations with UKPN and the developer, Breckland Council has also made a bid to the Homes and Communities Agency (HCA) for funding in the form of the Housing Infrastructure Fund. Due to the project being a high

priority for both Norfolk County Council and Breckland District Council and as the Thetford SUE and Enterprise Park are allocated in the AAP; there is a high level of confidence that a specific solution will be devised with UKPN during 2017. The outcome of the Housing Infrastructure Fund bid is expected late 2017/early 2018.

## **Energy constraints – Attleborough**

### *Infrastructure constraints*

4.20. Attleborough has sufficient electricity power to meet the immediate need of new development and there is capacity for incremental development. However, the planned growth for 4000 homes, in addition to employment sites will necessitate further upgrades to the network.

4.21. The current primary sub-station for Attleborough is to the north of the railway which runs east to west through the settlement. The Strategic Urban Extension is planned to the south of the settlement. Connecting to the existing substation will be more costly as a result.

4.22. National Grid indicated that the Strategic Urban Extension is underlain by a gas main pipeline. This has been factored into the level of housing allocation and will also be taken into account in the masterplan for the site in line with guidelines and during the construction phase.

### *Options and funding*

4.23. Breckland District Council has held discussions with UKPN and Norfolk County Council to establish options to address the long term need for increased electricity supply. Options are dependent on whether the principal source will connect to the biomass plant in Diss or connect to Norwich. Proposals are being worked up which will be implemented on a program based approach. The program and costings are in the process of being devised between the partner organisations.

## **5. Telecommunications**

5.1. All settlements in the District have access to broadband and mobile networks but in the more rural areas broadband speeds can be very low and mobile coverage patchy to non-existent. This issue is not specific to Breckland and applies to most rural parts of Norfolk. Solutions have been proposed at a wider level than just the District, and schemes are currently being rolled out to improve broadband speed across Norfolk. Telecommunications is not considered to be a key infrastructure constraint at this point, but as technology innovation continues it is crucial to ensure that Breckland keeps pace with the rest of the UK, particularly in the A11 Technology Corridor which is likely to require further initial investment to ensure superfast fibre optic broadband is available to attract and retain companies in a competitive market. Bids to the LEP for energy solutions also encompass provisions for superfast



broadband.

### **Landlines and home broadband**

5.2. In relation to the provision of new landline and home broadband services, the Open Reach New Sites team that covers Breckland work on a site-by-site basis. This approach means that the costs of providing this infrastructure are not known in advance. Required changes to the existing network infrastructure (such as moving a connection pole to accommodate a site) are paid for by the developer, whilst Open Reach pay for the on-site connections required and agreed in collaboration with the developer.

### **Mobile networks**

5.3. In order to work, mobile phones require a network of base stations in places where people want to use them to transmit and receive the necessary radio signals. There is ever-increasing demand for network upgrades and expansion so that customers can use their mobile phones when and where they want; furthermore, mobile devices are increasingly being used to access a wide range of data services by mobile broadband.

5.4. Communications infrastructure is however not considered to be a major critical concern in terms of future infrastructure planning. Demand for additional infrastructure is consumer led and consequently it is difficult to quantify what level of need may arise from additional development. Also, it is not possible for any telecommunications operator to give a clear indication of their likely infrastructure requirements in 5, 10, 15 or 20 years time.

5.5. This demand-led approach means that the rollout of additional base station infrastructure tends to be reactive rather than proactive. The cost of required infrastructure is therefore not known in advance but is paid for by the Mobile Operators. Annual Rollout Plans are submitted to Local Planning Authorities each October to give an indication of plans.

5.6. It should be noted that telecommunications infrastructure is a rapidly evolving technology and therefore there may be need over the plan period for further infrastructure development to meet changing technological demand and for new ways of improving quality of coverage and/or network capacity to be developed.

### **Broadband Access**

5.7. Breckland District Council's Core Strategy and Development Management Policies, specifically policy DC 10, highlight the Council's support for the improvement of the telecommunications infrastructure, specifically regarding technological advances. The Council's emerging Local Plan, through 'Policy INF 01 Telecommunications', outlines the Council's support for increased broadband coverage and the improvement of broadband speeds across the District.



- 5.8. In order to reflect the rural nature of the District as part of this scheme, 'Better Broadband for Breckland' invested £950,000 pounds to help people and businesses across the district access superfast broadband. The money will be focused on establishing good broadband connections for the hardest to reach homes and businesses in the district while also improving Broadband speeds.
- 5.9. This investment is in addition to improvements being made as part of Norfolk County Council's multi-million pound partnership with BT and Broadband Delivery UK (BDUL), 'Better Broadband for Norfolk (BBfN)', set to transform broadband speeds across the country.
- 5.10. In the first phase of the project NCC, the Department of Culture, Media and Sport and BT committed £41m to ensure that by the end of 2015 more than 80% of Norfolk's premises could access superfast broadband (24 Megabits per second and above). The Better Broadband for Norfolk (BBfN) programme was completed ahead of schedule in September 2015, having given 186,000 extra Norfolk premises access to high-speed broadband.
- 5.11. A second phase of the project has committed more than £12m – from Central Government, the New Anglia LEP and Norfolk County Council, with further investment to come - to help reach the national target of making high-speed broadband available to at least 95% of UK homes and businesses by March 2018.
- 5.12. Around 190,000 homes throughout the county are now benefitting from superfast broadband following an extension to the Better Broadband for Norfolk project. Homes in Dereham and Watton and seven Breckland villages are amongst the latest to benefit from the programme, and improved superfast connections. As of March 2017, 81.8% of Breckland District has access to superfast broadband<sup>3</sup>.
- 5.13. The BBfN programme should address deficiencies in current broadband provision and ensure that new development is connected to a faster network. It is therefore important that any constraints regarding electricity (see chapter 4) are addressed to support delivery of superfast broadband.

## 6. Education

Education Evidence Base		
Author	Document	Date
NCC	Consultation Response to Breckland Local Plan – Preferred Directions Consultation and Interim Sites and Settlement Boundaries Consultation	2016
NCC	Planning Obligation Statement	2015

- 6.1. Norfolk County Council Children's Services are responsible for ensuring the provision of school places for children in resident in the county between age 5 and 16. In terms of the Local

<sup>3</sup> Think Broadband (2017) accessible from: <http://labs.thinkbroadband.com/local/breckland,E07000143>

Plan, the Council has, and will continue to liaise with the County Council to assess the potential impacts of the proposed distribution of growth on school provision in the districts settlements. Discussions with Norfolk County Council have continued as the Local Plan document has evolved. The Education Authority have not raised any significant concerns regarding school places as a result of the housing proposed in the Local Plan on the basis that contributions are made to expand and/or improve education facilities to accommodate pupils.

6.2. The distribution of development proposed in the Preferred Directions document was altered for most Local Service Centres in the Interim Consultation version of the Local Plan. Specific sites were identified for allocation, which helps NCC determine the impact of proposed housing on specific catchment areas for schools. The County Council uses a standardised model to determine how many school places would likely be required based on the number of homes proposed.

6.3. Where a school has unfilled capacity and therefore sufficient places to accommodate the number of potential additional children there may be no requirement for additional infrastructure. For the majority of sites in Breckland, there is limited capacity in most schools to accommodate extra pupils. Norfolk County Council has confirmed that this is not a barrier to growth for any area of Breckland and that potential solutions have been identified. Such solutions include; limiting the intake of new pupils to the immediate catchment area, using developer contributions for school expansion, new build or additional infrastructure or reconfiguring local schools which are currently separated into infant and junior schools.

6.4. Norfolk County Council sets planning obligations standards which include costings for contributions to schools arising from development. Where there is no capacity for places at a school, but there is potential to expand, the total cost per dwelling is currently £6,956<sup>4</sup>. Larger scale housing developments such as the Strategic Urban Extensions require new schools and the costs for this are dependent on the type of school (primary or secondary), size of school and the site constraints.

**Table 6 NCC Education requirements – Response as of Jan 2017**

Settlement	Proposed allocation (Jan 2017)	Capacity Y/N or L Limited	Solution – identified through consultation with Norfolk County Council
Attleborough	2,650 (4000 in total)	N	Short term: 1 x new all through primary, existing junior school becomes all through primary. Long term: up to 2 new primary schools. Increase capacity of Attleborough Academy (see detailed text)
Thetford	0 (5000 in Area Action Plan)	N	Up to 3 x new primary. Expansion of Thetford Academy (see detailed text)
Dereham	750	L	Issues with capacity for both primary provision at present. Planned extension at Scarning Primary for

<sup>4</sup> Norfolk County Council (April 2016) Planning Obligations Standards

			Sept 2017 will increase intake. Toftwood primary has potential to expand (see full text). Limited capacity in both High Schools but also potential to expand. Places available at Northgate Secondary.
Swaffham	700	L	Notes capacity in the High School but as it is an Academy, expansion would require approval. Children's Services are reviewing primary provision in the whole area but have indicated that Necton primary is suitable for expansion and there is potential to extend Swaffham primary.
Watton	400	N	Wayland Academy has capacity. NCC Children's Services are working with the Transforming Education in Norfolk (TEN) group to consider the best options for both primary and secondary school provision for Watton for the future– potential to create all through primaries as opposed to separate infant and junior schools (see detailed information).
Ashill	50	Y	Ashill Primary under pressure for places due to existing permissions. New allocation will not make a significant difference. Children's Services are reviewing options including potential expansion.
Banham	55	L	Permissions plus allocation will but pressure on Banham Primary. Children's Services to review options to determine where additional capacity could be provided. New Buckenham Secondary School has places.
Bawdeswell	30	Y	Bawdeswell Primary School has capacity to meet the potential need for this number of dwellings.
Garboldisham	35	Y	Garboldisham Primary School historically meets the need of pupils outside the catchment and has capacity to meet the potential need for this number of dwellings.
Great Ellingham	40	Y	Great Ellingham Primary School historically meets the need of pupils outside the catchment and has capacity to meet the potential need for this number of dwellings.
Harling	85	L	This allocation would support school expansion for an additional 45 places.
Hockering	25	N	Limited capacity at the school. Some pupils may be accommodated at schools in the surrounding area.
Kenninghall	35	Y	Capacity at the School.
Litcham	20	Y	Capacity at the School.
Mattishall	105	L	Option for school expansion. .
Narborough	40	L	Capacity for school expansion. The allocated housing alone will not trigger the need for expansion. The school is an academy so permission must be sought.
Necton	75	L	Option for school expansion, subject to agreement of the Diocese.
North Elmham	55	L	Option to expand school. However pupil preference for Brisley School reduces the pressure on North Elmham Primary.
Old	50	L	Old Buckenham Primary School is a 210 place school

Buckenham			with scope to expand on its existing site. An additional 50 dwellings in the village would not put pressure on the local school, which currently admits pupils from outside the catchment area.
Shipdham	80	L	School could be expanded subject to Diocese approval. An additional 80 dwellings in this village will not impact on the capacity of this school to admit pupils.
Sporle	35	Y	Sporle Primary School has capacity to meet the potential need for this number of dwellings.
Swanton Morley	85	L	School expansion is being considered regardless of allocation.
Rural Areas	150		Development limited to small scale infill sites and therefore not anticipated to result in pressure for additional capacity in any one area of the district.
Total	5,625		

## Attleborough

### Primary

6.5. Children’s Services have planned for all through Primary School provision in the town (the current schools are infant/junior) in response to current capacity issues and to plan for the proposed 4,000 new homes. A new site for the school has been purchased in a location to serve existing residents and permission has been granted. The building of a new school will allow the existing infant school to move to the new school building and expand to an all through primary school. At a similar time, the existing junior school can begin to take reception age children and grow year by year to an all through primary also. Moving the infant school will release space on the High School site for future expansion.

6.6. Children’s Services are working closely with Attleborough Academy to masterplan the site for future expansion. A further two new primary phase schools are being considered to serve new housing in the long term which will be located within the SUE. Norfolk County have provided indicative costs for primary provision for the entire allocation based on providing two new schools which would total approximately £13 million. The source of funding for the schools is a mixture of developer planning obligations and funding from Norfolk County Council. The developer has provided an indicative phasing scheme with the outline planning application for the SUE which outlines that the schools would be provided in phase 2a Town Oaks (approx. year 2021-2023) and phase 4 Poplar Meadow (approx. year 2039-2044).

### Secondary

6.7. Children’s Services have worked closely with Attleborough Academy to plan for the future of the school in response to the planned 4000 new homes in the town. At present the school is over capacity and therefore requires expansion to become a 1,700 place 11-19 high school. A master plan is being developed and both the school and Children’s Services are confident that children generated from these houses will be accommodated at Attleborough Academy. Norfolk County Council has provided indicative costs for the extension, totalling

£13.5 million in addition to land plus the cost of a Multi Use Games Area (MUGA).

## **Thetford**

### **Primary**

6.8. Children's Services have been working closely with the primary phase schools in Thetford and re-organisation and expansion to several schools have taken place and work is still in progress at some. Once complete, there will be 12 Forms of Entry available at Reception level for the foreseeable future not only to allow for forecasted demographic growth but also to take account of new housing development.

6.9. A signed S106 agreement for the urban extension of Thetford allows for potentially 3 new primary phase schools with land allocated and a contribution of £6.4m for each school. Land has already been transferred to Thetford Academy and further funding in the region of £4.3m to allow expansion of this school to follow once housing gets underway. The total contribution for schools is £23,500,000.

### **Secondary**

6.10. The High School, which is an Academy is now on one site and is being expanded appropriately to accommodate children from the proposed 5000 new homes. A significant contribution for education is included in the s106 agreement for the urban expansion.

## **Dereham**

### **Primary**

6.11. Primary phase provision is under pressure for places and historically Dereham relies heavily on both Scarning and Toftwood to provide places for some children who live in the Town. Norfolk County Council are working with Scarning Primary to increase their capacity to 420 places to help with the Dereham 'overflow' and they will take their full 60 pupils in reception in September 2017. The proposed solution is to expand Toftwood School to accommodate additional pupils necessitating the provision of infrastructure e.g. toilets, hall space in addition to classroom space.

### **Secondary**

6.12. Dereham is served by two High Schools and a separate 6<sup>th</sup> form centre. Both the High Schools are on sites which are around the right size for the current numbers. The 6<sup>th</sup> form centre is under pressure for places and the proposed solution is to expand the 6<sup>th</sup> form centre to accommodate additional pupils. Children's Services has indicated that with good master planning it is possible that both High Schools could be expanded on their current sites, in the longer term.

## **Swaffham**

### **Primary**

6.13. Forecasts indicate that 3 forms of entry will be required for Swaffham in the future so further development in Swaffham may put pressure on local schools. Children's Services will

need a review of primary provision in the whole area including outlying schools such as Necton and other smaller Diocese run schools.

### *Secondary*

6.14. The High School in the town is the Nicholas Hammond Academy. This school sits on a site that is large enough to accommodate a much larger school and the school as it currently stands has plenty of spare capacity. However, the school being an Academy, any expansion plans would need their approval. With approval, large scale growth could be accommodated.

### **Watton**

#### *Primary*

6.15. The County Council continue to review options around Watton and Carbrooke for the future. Pupil forecasts indicate 120 places in each year group will be required in Watton at Primary level for the future including housing. The infant school currently operates at 90 pupil entry. Discussions in Watton between NCC and the Transforming Education in Norfolk (TEN) group who operate both the junior school and the high school in the Town, continue with regard to the future of primary education in Watton which include a possible new school on a new site.

#### *Secondary*

6.16. Wayland Academy serves Watton Town and the surrounding villages. The school sits on a fairly large site which could accommodate a larger school. The school is not under pressure currently having places for 750 children but only 598 on roll. Moderate scale growth could be considered but the school is an academy so any planned expansion must be agreed by the school. There is an existing plan allocation.

### **Summary Cost – District wide**

6.17. Norfolk County Councils Planning Obligations Standards (April 2016) sets a standard contribution per house of £6,956 per dwelling on the assumption that there is no capacity at the recipient schools. All areas identified for allocation have limited capacity in their local schools and therefore a general calculation made for the housing proposed in the district outside the SUE's totalling £20,694,100. It should be noted that this is not a definitive figure as contributions are dependent on the scale of development, viability, type of development and the impact of the proposed development on the capacity of schools within the catchment area.

## **7. Community Facilities**

Community Facilities Evidence Base		
Author	Document	Date
NCC	Consultation Response to Breckland Local Plan – Preferred Directions Consultation	2016
NCC	Planning Obligation Standards	2017

7.1. Most parishes have at least one building used as a meeting space such as a community centre or village hall in addition to local churches. It plays an important role in drawing the community together for parish meetings and community, health and social functions and can aid community cohesion, particularly where it serves both existing and new residents. Where new communities are to be built and are not currently served by a community centre, contributions will be sought to fund the cost of a new facility.

7.2. Libraries are another important service for communities and are provided by Norfolk County Council. Due to the rural nature of the district, many parishes are served by a mobile library service which visits the community on a regular basis.

7.3. Norfolk County Council set standard contributions towards libraries in the Norfolk Planning Obligations document (2016). The cost is subject to the type of provision and whether a new library, or extension to an existing library is required. The minimum cost is £75 per dwelling for upgrading of existing library facilities and £75 per dwelling for equipment and stock. For the purposes of estimating costs in the IDP, smaller allocations in Local Service Centre's and the Market Towns have been attributed the standard £75 tariff per house which equates to £223,135 in total. For major applications in the Market Towns additional contributions may be required, therefore the estimate is expressed as a minimum.

7.4. For the most part, new development will not require new facilities on site but major developments may be required to contribute to improving or expanding existing community facilities in recognition of the increased pressure as a result of an increased local population. In some cases the specific facility may form part of the proposed policy wording, in other cases, consultation with the County Council, local Parish Council and the community will identify community facilities at risk as part of the planning application consultation process. Contributions to community facilities will be sought from the developer during S106 negotiations.

## Thetford

7.5. Thetford has recently benefitted from investment of £8m which delivered the Thetford Riverside leisure complex featuring a new cinema, hotel, and series of restaurants within the town centre. Leisure uses and the primary shopping area are located in the town centre which are further supported through the designation of retail areas in the Local Plan. Despite the scale of the SUE at 5000 houses on the northern outskirts of the town, the strategy for the SUE is to ensure it complements the regeneration of the town centre and does not directly compete with it in terms of new community and leisure facilities.

7.6. For a development of 5000 dwellings, it is important that the new community has the opportunity to access local facilities. Within the SUE, a site for a community facility will be provided and transferred to either the District Council or County Council under the terms of the S106 agreement. The cost of the facility is estimated in the region of £2,825,000. Developers for the SUE will also contribute towards an extension to Thetford Library which is estimated at

£1,165,000. Local centres within the SUE will provide smaller facilities such as convenience shops for the benefit of the community and are included in the masterplan.

## Attleborough

7.7. Like Thetford, the policy for Attleborough SUE is designed to enable a large scale development which will complement the existing town centre, rather than compete with it. Primary retail and leisure uses remain in the town centre but the new development will contain a number of smaller local centres to serve new residents. Norfolk County Council have sought contributions to library provision which is estimated at £976,000. At this stage, the focus for the strategic vision for Attleborough is to provide a comprehensive masterplan for the site which will ensure that community needs are considered from the outset. The outline planning application for the SUE outlines that a new community facility forms part of the indicative facilities identified to serve a development of 4,000 homes alongside a convenience store, pub/restaurant, small retail units, petrol filling station and a supermarket.

7.8. The Attleborough Neighbourhood Plan seeks new and improved sports facilities for the community and has aspirations for an indoor and outdoor sports hub within the SUE development area. The Council has commissioned new evidence on sports facilities which will help to inform the final policy for Attleborough in the Local Plan (see chapter 11 for detail). The Attleborough Partnership which has been formed to help deliver the SUE are working to refine specific proposals, priorities, costings and funding for the SUE; the developer will be required to submit a masterplan which ensures that the extension is developed comprehensively.

## Dereham

7.9. Growth proposals for Dereham are smaller in scale than that for Attleborough and Thetford and development is distributed on sites around the town. Development will therefore support existing local centres helping to integrate new residential estates with the existing community and supporting existing local services and facilities.

7.10. The modern 'Statement Building' located at the gateway to Dereham was completed in 2005 and provides library and IT based learning services for the local community and services a mobile library vehicle. As the library is a modern facility it is not anticipated that a further extension to the building is required as a result of the growth levels proposed in the plan. However Norfolk County Council will seek contributions from major application sites towards the provision of specific projects including the provision of library equipment/furniture e.g. book shelves; tables; computer desks at Dereham Library.

## Swaffham

7.11. Development proposals for Swaffham are spread on a number of sites around the outskirts of the town. Similarly to Dereham, the scale of development is not likely to facilitate demand for new community facilities but will help to support existing local services as well as higher order retail and leisure facilities in the town centre. Contributions to library improvements will be sought in line with Norfolk County Councils Infrastructure Plan.



## Watton

7.12. Ad hoc development permitted outside the Local Plan process, in addition to proposed allocations has resulted in a number of development sites coming forward in locations around the outskirts of the town. The town has traditionally developed in a predominantly linear pattern with a smaller local centre along Norwich Road as well as the central High Street. The proposed new allocations for the town are within walking distance of local services and bus stops and therefore there is no specific new community facility identified as required however financial contributions will be sought towards Watton Library.

## 8. Health

Health Evidence Base		
Author	Document	Date
NCC	Consultation Response to Breckland Local Plan – Preferred Directions Consultation	2016
NCC	Projected NHS Norfolk and Waveney healthcare requirements 2036	2016
Norwich City & Broadland Council and NCC	Planning in Health – An engagement protocol between Local Planning Authorities, Public Health and health sector organisations in Norfolk	March 2017

8.1. The NHS underwent a major transformation in 2013 with the implementation of the Health and Social Care Act, 2012. Planning and purchasing healthcare services for local populations, which had previously been performed by the Primary Care Trusts, is now largely performed by Clinical Commissioning Groups (CCGs), led by clinicians. CCGs now control the majority of the NHS budget, though some highly specialist services and primary care are commissioned by NHS England. The Act also provided the legislation to create Public Health England (PHE), an executive agency of the Department of Health. PHE's role is advisory, and its aim is to protect and improve the nation's health and to address health inequalities. The Act further established local public health departments, which had formerly been part of the NHS primary care trusts, within upper tier and unitary local authorities.

8.2. Through discussion with South Norfolk CCG it is evident that both locally and nationally there is difficulty with GP and clinical support recruitment and retention. In Norfolk this issue is more profound, for reasons such as rurality, deprivation, an aging GP population close to retirement, etc., with younger GP's preferring to undertake locum work, live closer to large cities or emigrate. As a result, remaining GPs are seeing their work load continually increase.

8.3. NHS England has committed to recruiting an additional 5,000 GP's into primary care but this will take time to achieve. NHS England has released the GP Five Year Forward View, which outlines how the NHS can best support local primary care.

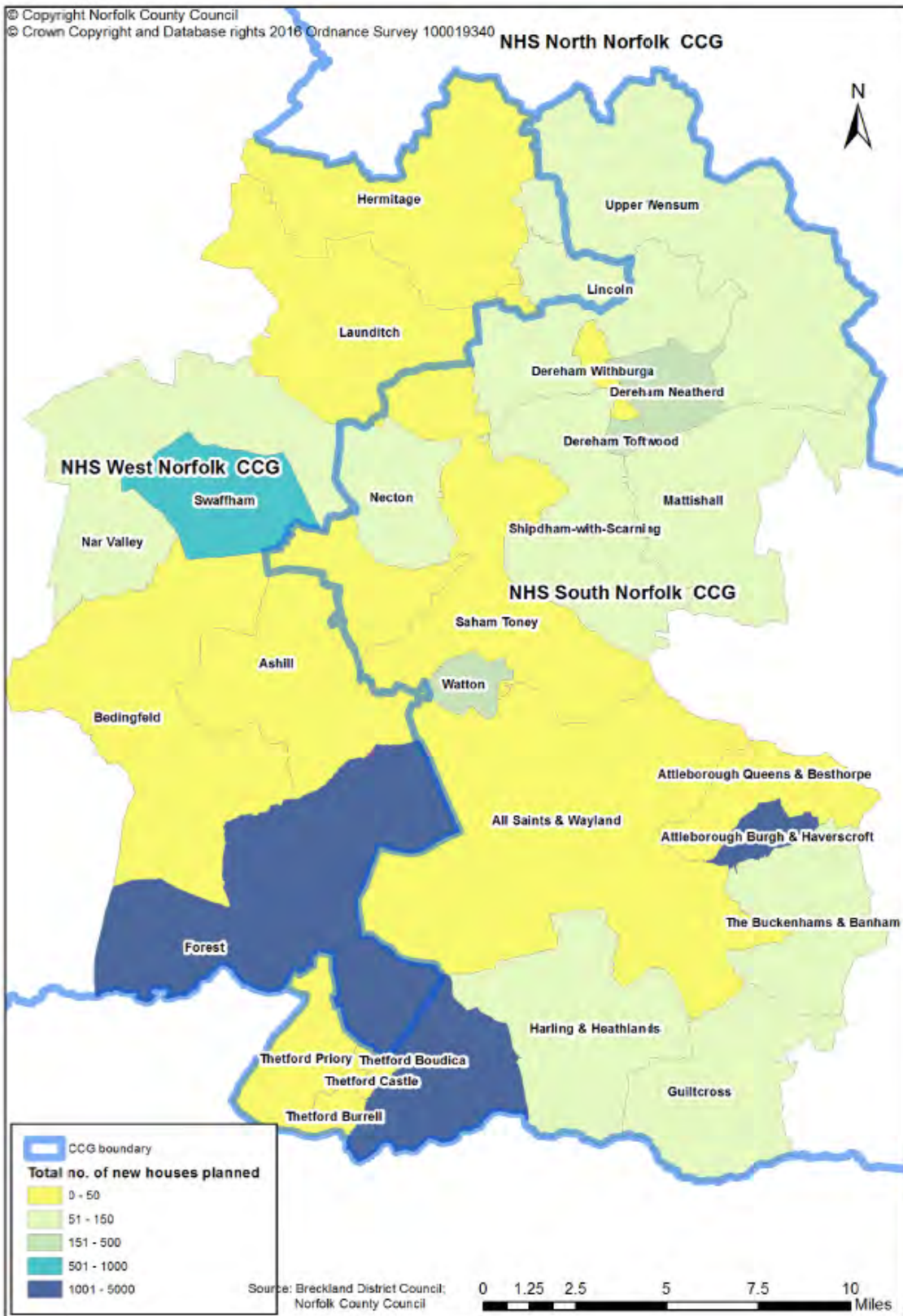
### NHS Clinical Commissioning Groups:

8.4. In Norfolk there are five local CCGs each with its own commissioning budget and responsibility for commissioning the majority of health services for the population in Norfolk, including hospital treatment and community health care. The CCGs in Norfolk are:

- Great Yarmouth & Waveney CCG
- North Norfolk CCG
- Norwich CCG
- South Norfolk CCG
- West Norfolk CCG

8.5. In Breckland two CCGs are responsible for the provision of Health Care: South Norfolk CCG and West Norfolk CCG. This can be seen in the following map (figure 1). Figure 1 was produced by Norfolk County Council to illustrate the impact of housing growth proposed in Breckland Local Plan at ward level across the 2 CCG areas. This map will be used to inform further discussion with the CCG's over infrastructure requirements.

Figure 2



## NHS England

8.6. NHS England authorises the Clinical Commissioning Groups and commissions a wide range of specialist NHS services, including prison health services, medical services for the armed forces, and primary care medical and dental services. This means that all GP practice contracts are between NHS England and the local GP provider.

There are two main types of funding associated with ownership of general practice premises:

- The practice is a tenant with a landlord (leased)
- The practice owns the premises (owner/ occupier)

8.7. It is the role of the relevant commissioning health bodies to determine how best to address the health care needs resulting directly from specific new developments.

8.8. In conjunction with NHS England, CCGs are required to produce Local Estates Strategies looking 5 years ahead, working with a wide range of local stakeholders. The strategies are intended to allow the NHS to rationalise its estates, maximise the use of facilities, deliver value for money and enhance patients' experiences. Local Planning Authorities also have a 'duty to cooperate' on plan making. This requires the Council to work with CCGs and NHS England, as well as other local authorities, (and other prescribed bodies), to cooperate on strategic cross boundary matters such as health infrastructure.

8.9. Information on existing growth and emerging strategies has already been shared with health authorities and as the local plan emerges updated data will be available which will, along with an improved understanding of the implementation of new housing schemes, provide a valuable evidence base to assist public health in planning for health needs in the medium and long term.

8.10. Determining the specific locations in which housing development is to be allocated will assist the 2 CCG's in identifying health investment priorities. It will also be possible for health care commissioners to propose specific sites to be allocated for health infrastructure development to meet medium to long term needs. The CCG's use data at ward level to inform health care delivery.

8.11. The engagement of Norfolk County Council Public Health in Local Plans (and consequently planning proposals), is vital for helping Local Planning Authorities justify policies that give the best chance of negotiating development that promotes the population's health and wellbeing. The requirement for Health Impact Assessments to be undertaken by developers for large and complex proposals, and to undertake a healthy planning checklist for development of 5 dwellings or more to assess how their proposals will create healthy communities and provide adequate health facilities can only be set through a Local Plan policy. Emerging Policy PD 10 Healthy Lifestyles seeks to set the policy context to ensure appropriate dialogue and engagement is undertaken between developers, the plan process and health providers.

## Norfolk Strategic Framework – Health

8.12. The NSF Group have used projected growth data from councils in Norfolk in the plan period – to 2036. Norfolk County Council have provided modelling estimates based on the different housing growth scenarios, for the total and additional health care needs required in Norfolk and Waveney up until 2036 taking into account projected growth. These figures contribute to understanding the potential strategic needs for CCG areas. The data will be used by Norfolk County Council to consider the impact of growth in the county and will help to inform negotiations for contributions to additional health related infrastructure.

8.13. As a result of cooperative working by the NSF in collaboration with the NHS the group have produced a Planning Health Protocol (March 2017). This forms an engagement protocol between local planning authorities, public health and health sector organisations in Norfolk. The protocol sets the process for health commissioner’s engagement in planning both at the plan making stage and for detailed planning applications with an additional section on implementation. This protocol will help to improve the assessment of housing allocations and detailed planning applications on health infrastructure and services ensuring financial contributions are sought from new development where required.

## South Norfolk CCG

8.14. Consultation with South Norfolk CCG indicated that the potential growth will have a significant impact on the provision of integrated health and social care delivery within the identified localities, with affected services including:

- General Practice
- Community Care
- Social Care
- Acute provision (hospitals)
- Ambulance and emergency service
- Care / nursing homes / intermediate care beds
- Patient transport
- Mental health service
- Dentistry
- Pharmacy
- Third sector and voluntary organisations

8.15. Additional GP’s required: According to the British Medical Association (BMA) Safe Working in General Practice the average General Practitioners (GP) list size (not surgery list size) is approximately 1,600 patients per Whole Time Equivalent (WTE) GP. South Norfolk CCG provided an indication for the following settlements for additional GP’s required for Attleborough and Dereham:

**Table 7 Number of additional G.P's required, South Norfolk CCG**

Location	Number of houses	Individuals per house = 2	Individuals per house = 4	Number of additional GPs required
Attleborough	4,000	8,000	16,000	5 - 9 WTE
Dereham	750	1,500	3,000	1 – 2 WTE

8.16. The effective clinical management of a GPs list size is dependent on;

- Nursing support (practice nurses, nurse prescribers, etc.)
- Other clinical support, e.g. Emergency Care Practitioners (ECPs), community nurses,
- Health Care Assistant (HCA) support
- Reception teams
- Adequate premises to deliver services from

Supported in turn with the list of service providers above.

8.17. Using a worst case scenario, as outlined above, if 11 additional WTE GPs were required, they would require, either directly or indirectly, between 20 -30 staff to support the entire additional patient population.

8.18. The CCG have indicated that recruitment of G.P's is a key issue for some settlements in Breckland and that development will result in the need for additional GP's. However new developments cannot contribute directly to the recruitment of GP's. Improvements to GP's will form part of surgery investment plans as they operate as private businesses. However, where major development will have a significant localised impact on existing health services, financial contributions can be sought towards new physical infrastructure. This is a consideration of masterplanning the Thetford and Attleborough SUE's.

### **Thetford**

8.19. Consultation with West Norfolk and South Norfolk CCG determined that a contribution was required towards health facilities in the vicinity of the housing development.

8.20. The S106 agreement for the SUE stipulates a primary care contribution of £178,200 towards primary care facilities at Thetford Healthy Living Centre, Grove Surgery, The Surgery at School Lane or other facility within or in vicinity of site.

### **Attleborough**

8.21. Discussions with South Norfolk CCG are at an early stage regarding the impact of the proposed growth in Attleborough on primary care. The local GP surgery is currently at maximum capacity. In order to meet the health requirements of the increased population, the practice will require expansion or will need to develop a new build. South Norfolk CCG have

indicated all build options are currently under review.

8.22. Further correspondence with the CCG has indicated that 4,000 homes, equates to a potential population increase of between 4,000 to 16,000 patients. On average an individual GP list size is in the region of 1,800 – 2,000 patients, equating to 5-9 new GPs supported by at least one nurse each, Health Care Assistants, admin and back office staff. The existing GP premises within Attleborough could not accommodate such an increase in patient population; hence a new build would be required.

8.23. To accommodate the potential housing and population growth within Attleborough, new GP premises will be required to house integrated health and social care teams, with initial costings indicating up to £4,000,000 plus to construct. Attleborough surgery is in the process of exploring new build options. They are considering site options for a dual use care facility, and preparing with both the doctors and the NHS team to make linked planning applications for enlarging the GP surgery and Health Care facilities at Station Road.

8.24. The Local Plan policy for the site will include a clause requiring that a financial contribution will be made to local health care provision, which will ensure health needs are addressed by the planning application.

## Dereham

8.25. South Norfolk CCG made comments on Dereham during the interim Local Plan consultation highlighting that the impact of the proposed developments on local GP facilities should be fully assessed and mitigated. This will require consideration in the NHS funding programme for the delivery of primary healthcare provision within these areas and specifically within the health catchment of the development.

8.26. At present, 3 of the 4 GP practices in the Dereham locality are operating closed lists, therefore not accepting new patients. The problems do not relate solely to the population levels but also to difficulties in recruitment of G.P's and practice nurses (a Norfolk wide issue), the increasing demand on primary care services by the general public and some primary care services not being fit for purpose in providing primary care provision. New development in Dereham can only mitigate the demand placed by new residents, rather than addressing existing deficiencies in service provision.

8.27. A number of major applications in Dereham have been submitted which are also proposed allocations, prior to the completion of the Local Plan. South Norfolk CCG are aware of these applications and are engaged in the process of determining the applications and developing S106 contributions, where required. In terms of mitigating the impact of growth, solutions centre around improving the existing primary care premises to a modern standard, in some cases to provide extensions to the existing facilities.

8.28. South Norfolk CCG are currently defining the projects for extensions and improvements to the existing 3 surgeries in Dereham, including:



- Orchard Surgery;
- Theatre Royal Surgery;
- Toftwood Surgery

8.29. The specific scope of the projects and costs are currently being determined and would be partly or wholly funded by S106 agreements for major application sites in Dereham.

8.30. Communications will continue with the CCG as the Local Plan progresses and for any subsequent permitted planning applications, to ensure that funding is secured where required to mitigate the impact of new development on local health facilities.

## Watton

8.31. When taking into account committed planning applications and the proposed allocations in Watton in the Local Plan; NHS England suggest a new health centre to serve the Watton area is not currently required. However, Watton has a high level of recent committed development growth and Watton Medical Practice is at premises capacity. NHS England have indicated that the proposed allocations would require primary healthcare mitigation through Section 106 in line with CCG strategies, however, the size of these developments would more likely generate a requirement to increase capacity at the existing Watton Medical Practice.

8.32. South Norfolk CCG are presently developing their Sustainability Transformation Plan (STP) for the area. Significant cumulative development growth in Watton is noted and will need to be considered within their strategies.

## Local Service Centres

8.33. South Norfolk CCG have provided an indicative view on the areas of the District where health services would be under greater pressure due to proposed growth in the plan period. The CCG considers that potentially new premises and/or extensions would be required in Mattishall, East Harling, North Elmham, Dereham and Humbleyard ward.

8.34. They note a lesser potential impact on the following areas; Dereham, Watton, Thetford, Mattishall, Narborough, Necton, North Elmham, Shipdham and Swanton Morley. Although Swaffham is outside the CCG area, any negative impact in Swaffham, could have a knock on effect upon Thetford and Watton, as has occurred before.

8.35. Further discussion is required with South Norfolk and West Norfolk CCG to determine the precise impact of proposed allocations on the identified areas currently under pressure and to determine whether it is appropriate to seek contributions towards improvements. This is more feasible in settlements with larger allocations due to the level of impact of new housing and due to issues related to the viability of the development. Where applicable, Local Plan policies will reference the need to consider, and contribute towards improved local health facilities.

## 9. Community Safety: Emergency response

9.1. The main growth locations in Breckland are generally well served by police stations and safer neighbourhood teams. There are 5 Fire Stations in the District providing a broad coverage of the District. There are three ambulance Stations in the District as well as strategically positioned fast response across the district to ensure appropriate levels of coverage. Breckland District is served by hospitals in neighbouring authority areas.

9.2. Housing and employment growth will place more pressure on existing police, fire, rescue and ambulance services. In general, the cost for additional community safety measures would be met by the service budgets uplifted over time by the additional council tax and general tax receipts accruing. Where large scale growth is planned in the Strategic Urban Extensions, contributions will be sought from the Norfolk Police Constabulary and the NHS to meet the greater need. For Thetford, the S106 agreement for the SUE indicates £175,000 is required by the developer by the end of the first phase of building (to 2018) for the extension of Thetford police station; two vehicles, uniforms and equipment and 2 PCSO's on site. Whilst there is no precise costings for Attleborough at this stage, based on assumptions made for Thetford it is estimated that contributions to police could total approximately £140,000.

9.3. South Norfolk CCG expressed concern regarding the current road infrastructure in Dereham and whether it would adequately cope with an increase of traffic, especially with regards to emergency service vehicles (ambulance, police and fire service) for which increased traffic may adversely impact on achieving timely incident responses. As noted in chapter 2 - Transport, the Dereham Transport Study provides a consideration of transport issues in Dereham and negotiations are ongoing relating to determination of a number of major planning applications allocated in the Local Plan.

## 10. Crematoria & Cemeteries

10.1. Crematoria and cemeteries are not a type of infrastructure that is required to be addressed through the Local Plan process. However, as no crematoria facility currently exists in Breckland; the Council is supportive of the need for a crematorium through the development management process. At present, the closest facilities are located outside the district at Norwich, Kings Lynn and Bury St Edmunds. Travel from a number of key service centres in the district to the closest crematoria exceeds 30 minutes in travel time. The Planning Inspectorate in previous appeal decisions has accepted that a funeral party should not have to undergo more than 30 minutes travel time to a crematorium. In addition to the issue of travel distance/time, neighbouring crematoria appear to be operating above capacity, resulting in a lengthy wait for services. There is an existing need for a crematorium as Breckland has a higher than average percentage of people over 60. Additionally, demographic trends show that the District has an ageing population and that the population is expected to grow, this means that demand for a crematorium is likely to increase throughout the Plan period.

10.2. A 4.5ha site was identified in Breckland's Site Specific Policies and Proposals document

(2012) at land east of Dereham Town Football Club. The site is currently being built and together with the proposed crematorium should address any deficiencies in provision within the District. This position will be kept under review.

## 11. Green Infrastructure

Education Evidence Base		
Author	Document	Date
NCC	Consultation Response to Breckland Local Plan – Preferred Directions Consultation	2016
BDC	Thetford Green Infrastructure Study	2008
BDC	Dereham Green Infrastructure Study	2008
BDC	Indoor Sports Study - under production	2017

### *Background*

11.1. The NPPF requires Local Authorities to plan for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure (GI). The term green infrastructure provides open space and green features with the same level of importance as other forms of infrastructure.

11.2. As a predominantly rural district, Breckland has a vast network of accessible green areas, predominantly comprising Public Rights of Way (PRoW), village greens, Common Land and outdoor play spaces. Due to the sporadic and dispersed nature of the settlements it is not always feasible to connect these to create a comprehensive network. However, in more urban locations such as Market Towns, Strategic Urban Extensions and for villages which are in close groupings or where services are split amongst connecting villages, opportunities should be taken to create a network of green spaces and corridors for recreation and to promote walking and cycling over car use. Connecting green spaces also improves ecological networks, preventing the fragmentation of wildlife habitats or rebuilding links where possible.

11.3. Whilst the green infrastructure network has not been formally presented in a district wide green infrastructure study, two Green Infrastructure Strategies have been produced for the Districts largest towns; Thetford and Dereham. Additionally, the Districts' Open Space Strategy (2014) provides a comprehensive audit of all open space in the District. Norfolk County Council is currently undertaking a project to map existing green infrastructure across Norfolk County as part of the work to produce a Norfolk Strategic Planning Framework. This initial work will provide a greater level of detail on cross boundary green infrastructure networks and can be used to inform new GI projects.

11.4. The emerging Local Plan includes a specific policy for green infrastructure (ENV 01). The policy requires the safeguarding, retention and enhancement of green infrastructure and ensures that development that fails to exploit opportunities to incorporate green infrastructure are unlikely to be considered acceptable. Policies for all site allocations will provide

consideration of existing publicly accessible green spaces and will identify opportunities for improving linkages, where applicable.

### *Outdoor Sports and Children's Play Areas*

11.5. The Open Space Assessment and accompanying parish schedule was completed in 2015. This assessment provides information regarding the existing quantity, quality and accessibility of open space, outdoor sports facilities and children's play areas in Breckland. The quantity of outdoor sports facilities and children's play areas has been assessed against the benchmark national standards set by Fields in Trust for outdoor sport and play. The Fields in Trust standard includes Breckland within its rural classification and sets a standard of 1.76 ha per 1,000 population for outdoor sports and 0.8ha per 1,000 per population for children's play space.

11.6. The 2015 assessment indicates that 70% of the parishes within Breckland do not meet the Fields in Trust standard for both children's play and outdoor sports. Within this, Lexham is the only parish within Breckland to meet the children's play standards, whilst all five of the market towns have deficiencies in outdoor sports. New development is not required to address existing deficiencies in open space provision but some major developments can provide a wider benefit where it is of a sufficient scale that it triggers the requirement to provide new open space and/or play facilities. This is one example of the benefit of major developments in terms of the provision of new infrastructure. Development of a few minor developments which are beneath the threshold to provide open space will have a greater impact on existing provision.

11.7. The Preferred Directions Local Plan includes policy ENV04 Open Space, Sport and Recreation. This policy seeks to retain existing designated open space to protect it from development pressures. The policy proposes that all new residential dwellings are expected to contribute towards outdoor sports and children's play and sets different levels of provision according to the amount of houses proposed. For sites of 25 dwellings or more, open space will be required to be provided onsite, unless robust evidence supports off-site provision.

11.8. Standardised cost assumptions for types of children's play areas and outdoor sport areas are provided in the Open Space Assessment (2015). For the SUE's, detailed provision, costs and phasing are provided in Appendix 1 and 2.

11.9. Using the preferred options for allocation and draft policy ENV04 as a guide, the following table shows the provision of new facilities and the estimated cost district wide (excluding Attleborough and Thetford).

**Table 8 Provision of Recreational Facilities and estimated cost district wide (exc. Attleborough and Thetford)**

	Est. number required	Initial cost	Maintenance + inspection (10 years)	Mid Year Renewal	Total
Local Areas for Play (LAP)	19	£388,075	£62,700	£17,955	£468,730
Local Equipped Area	12	£747,444	£137,880	£131,580	£1,016,904

for Play (LEAP)					
Outdoor Sport Area	3	£151,545	£16,350	£118,260	£134,761
Neighbourhood Equipped Area for Play (NEAP)	1	£150,195	£44,800	£39,420	£703,245
					<b>£2,323,640</b>

11.10. The policy ENV04 sets requirements for LAP's, LEAP's and NEAP's but these can also be complemented by Multi Use Game Areas (MUGA's) and facilities such as skate parks etc.

### *Indoor Sports*

11.11. Breckland Council commissioned an Indoor Sports Study which assesses the provision, accessibility, and range of indoor sports facilities in the District. This forms the key evidence for a specific policy on indoor sports in the Local Plan. Stage 1 of the Indoor Sports Study has been completed. Further iterations of the IDP will address this infrastructure requirement in greater detail, focusing on specific facilities and improvements which can be funded in part, or wholly by proposed development in the Local Plan. A summary of the initial findings of stage 1 of the draft report is provided below:

#### **Swimming Pools**

- Over the period to 2031 there will be the need to maintain the quality of the swimming pools and modernise the venues.
- The scale of unmet demand in 2016 because of the lack of access to a pool is insufficient to support provision of a swimming pool at either location (Swaffham & Watton). The facilities planning model assessment identifies sufficient demand based on projected population growth in Swaffham for a smaller 20m x 4 lane swimming pool in 2031.

#### **Sports Halls**

- Maintain and protect the existing supply of sports halls.
- The facilities planning model assessment demonstrates that by 2020 there is sufficient demand to justify the provision of a new sports hall in Attleborough to replace the existing centre (6 badminton court size sports hall of 34m x 27m).
- The findings also support there being sufficient demand by 2020 to justify the provision of a replacement sports hall in Swaffham (4 badminton court sports hall of 34.5 x 20m).
- The assessment also identified the area of highest demand for sports halls in both 2016 and 2031 is in Dereham and to the north of Dereham (4 badminton court size of 34.5m x 20m, a suitable location being Northgate High School).

#### **Artificial Grass Pitches**

- Maintain the existing supply of AGPs across Breckland.
- There will be a need to resurface all pitches over the period to 2031. The average age for a pitch carpet is around 6-8 years, depending on the level of use.

- There is scope to convert the pitches at both Watton Sports Centre and Breckland Leisure Centre.

### **Indoor Bowling**

- Maintain but keep under review the need for the three indoor bowling centres over the period to 2031.
- The quality of the centres is good and the main quality requirement over the period to 2031 will be replacement of the carpet every 8-10 years, depending on the amount of play. There will also be a need to maintain and improve lighting systems.

### **Indoor Tennis**

- No indoor tennis courts/centres in Breckland.
- No requirement to consider the provision of an indoor tennis centre until there is an increase in tennis participation and a viable club base that can create sufficient demand for at least 2 indoor courts. The potential provision of an indoor centre could then be subject to a detailed feasibility study.

### **Squash**

- Maintain the existing courts and venues at Breckland Leisure Centre, Watton Sports Centre and Swaffham Sports Centre.
- There is no need to provide further squash courts in Breckland up to 2031. Further development of the sport is dependent on rates of participation stabilising, then increasing and attracting a younger age group of players.

### **Health and Fitness**

- Maintain the existing provision of health and fitness in terms of scale, location and accessibility. Maintain a watching brief on trends in health and fitness provision and participation. It will be important to monitor how these changes reflect the current supply and demand balance- quantitatively, spatially and across all providers (See provide comments).
- Parkwood Leisure is considering expanding its health and fitness offer at both Dereham Leisure Centre and the Breckland Centre. Based on a sound business case this should be supported.

## **SANGS (Suitable Alternative Natural Greenspaces)**

11.12. Internationally designated sites which are protected for their identified qualifying features (rare species of flora and fauna) are vulnerable to recreational pressure. Providing alternative green spaces for recreation, known as SANG's enables the local population to have greater choice in where to undertake recreation therefore reducing the number of users of more sensitive sites. A form of SANG will be provided for both the SUE's.

11.13. In Breckland District the greatest extent of designated sites are situated in and

around Thetford. The Thetford Area Action Plan contained a number of policies to protect biodiversity, provide green infrastructure, allotments and a green route at Joe Blunts Lane. This is outlined under the following subheading.

## Thetford

### Green Infrastructure – on site

11.14. The permitted scheme for the SUE proposes green spaces throughout the fringes of the development comprising heathland, playing fields, sustainable urban drainage ponds and parkland. These will also function as green pedestrian and cycle connections. There will be green across the site both east-west and north-south. These will function as ecological corridors as well as pedestrian/cycle routes.

11.15. The scheme seeks to maintain a diverse woodland structure which will allow for the dispersal of wildlife across the site. Existing hedgerows and tree belts will be retained where possible and enhanced by additional bands of allotment gardens and street trees. As part of this it is proposed to provide 5 hectares of allotment throughout the development. Landscaping, layout and specific details will be refined through the reserved matters application.

11.16. The developers have allocated £6.3 million in financial contributions to deliver 19ha of outdoor sport and recreational areas for the entire scheme. Indoor sport provision has not been identified in the scheme but has been secured through conditions. Plans for indoor sports facilities will be addressed in detail at the submission stage and will be informed by the district wide study on Indoor Sport Provision which is currently being developed. The strategic open space, formal open space and allotments will be delivered in phases as detailed in appendix

### Ecology Mitigation – off Site:

11.17. Off site ecological mitigation comprises permanent alternative natural habitat sites for species situated off the development site which are not accessible for public recreation. These sites compensate, to an extent, the loss of natural habitats on the development site and also for disturbance in the wider vicinity due to the development (from people, pets, walkers and vehicles). The off-site ecological mitigation for the Thetford SUE will be informed by an Ecological Management Plan funded by the developer and comprises:

- 2.5 ha of mitigation land at the Hillsborough Estate for woodlark and nightjar
- 7 ha of mitigation land at the Hillsborough Estate for Stone Curlew
- The creation and management of habitat around the Scheduled Ancient Monument at Gallows Hill and around the A11 corridor for BAP Beetle

11.18. Delivery and maintenance of the off site mitigation has been secured in the S106 agreement. The S106 agreement also specified an Urban Effects of Recreational Disturbance (UERD) Contribution of £18,500 to be put towards car park, way finding and a community wildlife team at the East Wretham Heath Site.

## Attleborough

11.19. Proposals for green infrastructure, open space and indoor sports provision are still in development for the Attleborough SUE; however it is clear that the scale of development warrants significant green space provision to serve the needs of new residents. Early plans for the SUE include a linear park running through the centre of the development consisting of a series of linked spaces.

11.20. Attleborough Town Council has produced a Neighbourhood Plan which is at an advanced stage having finished their Reg. 14 consultation in August 2016. The plan has a number of policies for sports, leisure and community facilities and green infrastructure. Whilst the Neighbourhood Plan has not yet passed examination and referendum, it provides a steer for early masterplanning of the SUE and consideration of community priorities, some of which could be addressed and funded by the development. Extracts from the draft policies of relevance in the Neighbourhood Plan are listed below (note these are subject to change):

- Policy SLC.P1 – Seek a site for a new indoor sports hub, with an area of search on or near the Academy
- Policy SLC.P2 – Allocate a new outdoor sports hub at Gaymers Field with new pavilion incorporating changing, storage, parking and social facilities, and an Artificial Games Pitch (AGP)
- Policy SLC.P3 – Allocate an adjoining field to the south of Gaymers Field as an extension to the facilities here.
- Policy SLC.P4 Specify the required outdoor play facilities (NEAP+) at the recreation ground on Station Road to be implemented once formal sporting uses relocate.
- Policy SLC.P5 – Approval will be given to the provision of, and contribution to maintenance from the developers for a new linear park running east to west...  
....the linear park route along the Attleborough stream south of the rail line is indicated as a linked series of green spaces on the proposals map – as determined in the SUE masterplan.
- Policy SLC.P6 – Seek site for allotments in new developments.

11.21. Norfolk County Council have outlined the following GI improvements sought in their Planning Obligations Statement for Attleborough which was originally drafted in 2011 but was updated in April 2016 to reflect current proposals and costs. The GI list comprises:

- A contribution towards the feasibility study into the development of a Green Way linking Norwich, Wymondham, Attleborough and Thetford. This project would include foot and cycle paths, biodiversity management, and woodland planting. Estimated contribution: £10,000;
- Habitat management, connectivity, and buffering work on the arc of SSSIs and CWSs along the Thet (south of Attleborough) including Swangey Fen, Old Buckenham marshes and stretching through to New Buckenham Common. Estimated contribution: £30,000;



- Creation of a community woodland and orchard. Part of this would be a community engagement project. Estimated contribution: £10,000;
- Biodiversity for Outdoor Learning in Schools. This would include the development of sensory gardens, woodland areas, cultivation beds, and outdoor classrooms. The size of any school site provided for this development would need to be adequate to allow for these Outdoor Learning features. Estimated contribution: £20,000.
- Public Rights of Way (PROW): This major development will require adequate green space within the development, as well as non motorised routes within the site, which link to the wider PROW network. Any existing PROW directly affected by the development, will require protection and enhancement.

11.22. Further work between Breckland Council, Norfolk County Council and the developers will refine the green infrastructure, open space and sports requirements for the SUE. This will be finalised in the developer's masterplan.

## Dereham

11.23. Most preferred sites in Dereham are subject to outline planning applications and therefore detailed consultation on proposals for individual sites is already at an advanced stage. Breckland Council has an added resource of a Green Infrastructure Strategy for Dereham, which whilst being published in 2008, still retains value as a record of existing GI and connectivity issues as a background to the current Local Plan proposals. It also enables a more strategic overview of provision in the town.

### North Dereham

11.24. Site 023, Land off Swanton Road and site 29, Land to the rear of Dereham Hospital are adjacent to County Wildlife Site: Neatherd Moor (also registered Common Land). NCC requires S106 contribution to ensure impacts on CWS are considered and mitigated for and to accommodate increased footfall on ProW. There is also a requirement to provide a physical connection to ProW network from the site and informatively through literature provision.

11.25. There is currently an outline application for site 23 pending determination which specifies a number of on-site mitigation measures such as improved buffer planting around existing ditches, new swales and attenuation ponds, particularly in the south east corner and wildflower enriched grassland and scrub mosaic. Two reptile and amphibian hibernacula's are also proposed and significant species would be identified and moved prior to construction. This provides an indication of the types of mitigation strategies that could be provided by the developer. The mitigation plans are only indicative and the outcome of the application has not been determined.

### East Dereham

11.26. Site 007, Land to the west of Etting View – The site is adjacent to two popular areas for recreation: Shillings Lane forms part of a circular walking route promoted by Norfolk County Council and Neatherd Moor is used informally by dog walkers. Neatherd Moor has recently been designated as a County Wildlife Site. Norfolk County Council seek to ensure that

new development will create a connection to the local ProW and should provide literature information to new residents (at a cost of £1000). A contribution of £5000 would be provided to NCC to protect and enhance biodiversity of the common through new planting and adaptive management.

11.27. The developers have submitted an outline planning application with detailed information relating to mitigating impacts on Neatherd Moor. The developers have shown a designated access onto Shillings Lane. They propose that Information boards could be created, gaps in hedgerow will be infilled with native planting and post and rail fencing will discourage multiple access points from being formed. The footpath will be improved and contributions have been discussed with Norfolk Wildlife Trust. The application is currently pending determination so the outcome of the application and associated mitigation plans are subject to determination.

## **South Dereham**

11.28. Site 030, Land to the east of Shipdham Road and Site 011, Land to the west of Shipdham Road – Norfolk County Council have advised that the development will require a physical connection to the local ProW network to the south and informatively through literature provision; to enable local access to the countryside and integrate development with the local GI network.

11.29. There is currently an application for 291 dwellings, link roads, open space and recreational space pending determination. In forming the application, the applicant has stated they have had regard to the Dereham Green Infrastructure Study proposing 12.63ha of publicly accessible open space equating to 49% of the site. This is due to the fact that part of the application site includes a County Wildlife Site. The proposals include a football pitch along with informal open space used for informal play. The development could provide 3.4km of new footpaths and cycleways for recreational use which will improve connectivity between Shipdham and Yaxham Road. The mitigation plans are only indicative and the outcome of the application has not been determined.

## **Swaffham**

As all preferred sites have outline permission for housing, green infrastructure provision and connectivity has been considered as part of each individual application. As the sites are within close proximity to each other, there is an opportunity to improve public access to the east and south of the town, promoting walking and cycling.

## **East Swaffham**

11.30. Site 006 (Days Field in New Sporle Road). This site consists of former allotments and the Ecology Report submitted with the Outline Planning Application has determined that the site has limited ecological value in its present state as scrubland. Proposals include

enhancing the north east corner of the site to provide habitat for amphibians and reptiles, consideration of a public footpath link at this point to connect to a neighbouring development area therefore enhancing connectivity of the site. Public open space will be created in the centre of the site and hedges would be retained where possible. Connections to the existing ProW will be explored at the reserved matters stage.

11.31. Site allocations 018 (land to the north of Norwich Road), 010 (Land to the south of Norwich Road), Site 13 (Land off Sporle Road) are all close to ProW and informal recreation routes including a former railway line which is maintained by the District Council. Norfolk County Council have provided input to the planning applications and consideration of the Local Plan and have recommended contributions of 74pprox.. £250-£290 per dwelling (slight variations for each application site) to implement improvements to the adjacent network of footpaths and green infrastructure. This would include surface improvements, steps, vegetation clearance and signage/interpretation. Each development site must also meet the conditions of proposed Local Plan policy ENV04 ensuring that each site provides a local outdoor play space commensurate to the level of new residents. The final policies for these sites will include clauses to ensure the connectivity of sites to the east of Swaffham, and green infrastructure within, and adjacent to the sites is further considered at reserved matters stage.

### **South Swaffham**

11.32. Site 009 (Land to the west of Watton Road) is the remaining portion of land adjacent to a large, partly built set of developments to the south of Swaffham. This final development site for 175 dwellings will deliver a large public open space which will be centrally located for the surrounding development sites in addition to green corridors to the east and southern boundary. Existing hedgerows will be retained.

### **Watton**

11.33. The two proposed sites for housing in Watton require onsite recreational space to serve the needs of new residents, in line with the existing and emerging local policy regarding provision of open space.

### **LP[104]008 Land off Saham Road and LP[104]019 Land off Sharman Avenue**

11.34. These sites are situated at the north east part of Watton and are adjacent to designated open space for Richmond Park Golf Club and open space connected to Watton Youth Centre which is run by the Town Council. Neither of these existing designated open spaces are publicly accessible and therefore new onsite open space is required, in line with Local Plan policy ENV 04 Open Space, Sport and Recreation. New development will be required to be accompanied by onsite open space including a minimum of 1 Local Equipped Area for Play (LEAP). The site is currently divided into 3 agricultural fields, and established vegetation is limited to boundary trees and hedgerow. Opportunities for landscaping should be explored, which in addition to private gardens should improve the biodiversity value of the new development.

## LP[104]015 Land North of Norwich Road

11.35. This site is situated on the west side of Watton, accessed directly onto Norwich Road and surrounded by existing development except for on the northern boundary of the site. This part of Watton has historically been deficient in public open space which led to the allocation of a site in the adopted Site Specific Policies and Proposals DPD immediately south of the proposed allocation site and Norwich Road for 72 dwellings and 5 hectares of open space (site W2 Land to the South of Norwich Road). An application for the site has been permitted subject to S106 and therefore should be developed prior to completion of the proposed allocation. Additionally onsite open space will be required to serve the needs of new residents. Due to the specific allocation of a care home, onsite provision should be of an appropriate type to suit the needs of the development and should be easily accessible in line with policy ENV 04.

## Local Service Centres

11.36. Norfolk County Council has identified the areas which will require mitigation and enhancements to the surrounding green infrastructure network and to environmentally designated sites. These are summarised in the table below. The cost of such measures will be determined through negotiation with developers and landowners at planning application stage.

Table 9 Local Service Centre sites requiring additional GI contribution

Location	Site Ref.	Feature of Interest/ ProW	Planning Obligation
Ashill	LP(001)008 Land west of Sporle Road	Site adjacent to NCC promoted trails circular walk	S106 contribution towards enhancements and infrastructure for local ProW including signage infrastructure, surface improvements to mitigate impact from increased footfall and provision of literature for residents.
Banham	LP(001)003 Land south of Greyhound Lane		S106 contribution towards enhancements and infrastructure for local ProW inc. signage infrastructure, surface improvements to mitigate impact from increased footfall and provision of literature for residents.
Garbold- isham	LP(031)004 Land to the west of Hopton Road	Site close to 2 CWS: Broomscot Common and Old Fen	Developer will need to create a physical connection to the local ProW network to the south. S106 contribution to literature provision, and integrate development with local GI network.
Great Ellingham	LP(037)004 Land adj. Methodist Church		Enhancements or adaptations to Great Ellingham FP8 may be required.
Hockering	LP(044)004B land to the east of Heath Road	Site within 400m of Hockering Wood SSSI accessible by FP1, FP4, FP2	S106 contribution required towards ongoing maintenance of SSSI mitigation measures for increased footfall and production of literature for new residents on local recreational opportunities and the SSSI.
Kenninghall	LP(51)008	Close proximity to	S106 contribution – enhancements to ProW to

	south of Wood Close & LP(051)003 Land off Powell Close	RB21 and FP17	mitigate impacts from increased footfall.
Litcham	LP(054)005B North of Litcham Hall	Site within 500m River Nar SSSI and Litcham Common Local Nature Reserve	S106 contribution – connection to East Lexham Trails circular walk and mitigation towards increased footfall on Nar Valley Way, Litcham Common and Nar Valley SSSI.
Mattishall	LP(061)015 West of Rayners Farm		Require development to facilitate a physical connection to the local ProW network to the south. S106 contribution to literature provision; to enable local access to the countryside for daily informal recreation and integrate development with the local GI network.
	LP(061)015 Malthouse Buildings, Norwich Road		Require a contribution to facilitate literature provision; to promote access to the countryside for daily informal recreation and integrate development with the local GI network.
Sporle	LP(092)005 North of Essex Farm	Close to Peddars Way Trail	Require the development to facilitate a physical connection to the ProW network, particularly to the Peddars Way Trail. S106 agreement for literature provision; to promote access to the countryside for daily informal recreation and integrate development with the local GI network.
Swanton Morley	All sites	Close to Wensum Way Trail	Require the development to facilitate a physical connection to the ProW network, particularly to the Wensum Way Trail. Require literature provision; to promote access to the countryside for daily informal recreation and integrate development with the local GI network. Require contribution for enhancements to local ProW to mitigate impact from increased footfall.

## 12. Summary

12.1. A summary of the infrastructure requirements, costs, funding and delivery is provided in Table 10. The table is divided into categories reflecting whether the infrastructure is considered critical, essential or desirable as explained below:

- Critical – The development is dependant on the delivery of this infrastructure and will not be permitted without it. Examples include a new electricity power substation to provide power to businesses at Snetterton, where there is currently insufficient electricity capacity for expansion.

- Essential – The infrastructure is essential to the delivery of the development but there may be a number of options for the type of infrastructure provision and the costs associated with it. The infrastructure is necessary but is not so critical that the entire development is dependant on securing a specific identified piece of infrastructure.
- Desirable – Infrastructure that is sought to enhance the development. The development is not entirely dependent on this infrastructure.

12.2. To reflect the report, Table 10 (pages 67-76) highlights District wide infrastructure, the Key Settlements of Attleborough and Thetford, in some cases Dereham and Swaffham and the Local Service Centres. The plan period has been divided into the first five years (2017-2022), five to 10 years (2023-2028) and the end of the plan period (2029-2036). For both the Attleborough and Thetford SUE's. Development is expected to span beyond the plan period and therefore some infrastructure may be delivered beyond year 2036, however it is predicted that all infrastructure will have been started before 2036 in line with the development phasing.

12.3. Appendix 1 presents the estimated costs and phasing for development at Thetford SUE. Appendix 2 presents the estimated costs and phasing for development at Attleborough SUE. Work on delivery of both of the Sustainable Urban Extensions is ongoing and therefore the precise costs and phasing of infrastructure may be subject to change.

## 13. Limitations

13.1. The IDP is based on the most up to date information available and aims to provide a strategic overview of the type of infrastructure and cost of provision to deliver the Local Plan. Even the most reliable sources of data such as specific infrastructure studies to support the plan, can only ever provide a best estimate of the cost of infrastructure as delivery may be subject to unforeseen circumstances such as poor weather or difficult ground conditions etc.

13.2. The final figures presented in the summary table are a guide to the overall cost of infrastructure in the District. Some figures cannot be precisely determined until further investigation and site specific studies are produced to accompany the planning application, or it is dependant on negotiation with infrastructure providers. For developers, the final cost will be determined in the legal S106 agreement which also takes into account viability issues.

## 14. Conclusion

14.1. In developing the Local Plan, Breckland Council have considered a variety of evidence sources to determine what infrastructure is required during the plan period (to 2036) to deliver the planned growth in the District. New evidence has been commissioned where necessary and advice has been sought from infrastructure providers. This evidence has framed further discussion with infrastructure providers, developers, landowners and other relevant parties in order to identify new infrastructure requirements, seek solutions to constraints, and to

establish the cost of delivery. The key findings of the IDP are summarised in the table overleaf 'District wide infrastructure to 2036'.

14.2. The IDP provides indicative costs and identifies funding sources for a variety of projects and infrastructure items. The IDP sits alongside the Plan wide Viability Study in supporting policies in the Local Plan. Viability is a key factor in delivery of new development and therefore figure in the IDP present a guide to costs and requirements, which will ultimately be clarified through the determination of planning applications.

## Table 10 District wide infrastructure to 2036

The following calculations are based on:

District Wide (DW) 2,975 allocated dwellings for Market Towns and LSC's excluding Thetford and Attleborough

Attleborough (A) 2,650 allocated dwellings to be delivered in the plan period

Thetford (T) 3,717 allocated dwellings to be delivered in the plan period

The following table (explained in detail in Chapter 12 illustrates phasing of infrastructure and the requirement for the infrastructure marked by ✓).

Table 10 Summary table of infrastructure requirements relating to growth in the Local Plan

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
<b>TRANSPORT</b>										
	Strategic	A47 North Tuddenham to Easton Dualling	75,000,000 <sup>5</sup>	✓	✓				✓	Central Governments committed investment programme to improving the A47 resulting in dualling the A47 between Dereham and Norwich.
	Thetford SUE	Thetford SUE Travel Plan Contribution	2,600,000	✓	✓			✓		Developer S106/S278 agreements
		Thetford SUE Travel Plan bond	50,000	✓				✓		Developer S106/S278 agreements
		Provision of cycle/pedestrian/public transport bridge by Joe Blunts Lane	Not confirmed.		✓	✓	✓			Developer S106/S278 agreements
	Attleborough SUE	Spine Road (inc. rail bridge)	12,700,000 <sup>6</sup>	✓	✓		✓			Developer S106/S278 agreements + contributions from the £4.5 million LEP Growth Fund
		Breckland Lodge	500,000	✓			✓			Developer S106/S278 agreements

<sup>5</sup> Source: S106 agreement (27/12/15) and Pidgeon/Breckland phasing and cost estimate schedule (Appendix 1)

<sup>6</sup> Source: Ptarmigan/Breckland phasing and cost estimate schedule (Appendix 2)



Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		Roundabout								
		Travel Plan	2,000,000	✓	✓	✓		✓		Developer S106/S278 agreements
		Public Transport Contribution	5,900,000	✓	✓	✓		✓		Developer S106/S278 agreements – Note figure under reconsideration
		Town Centre Traffic Signals	1,500,000	✓				✓		Developer S106/S278 agreements
		Leys Lane Pedestrian/Cycle connection	1,500,000	✓				✓		Developer S106/S278 agreements
	Dereham – Strategic	Package of improvements to key junctions serving new development inc. Yaxham Rd, Tavern Lane, Shipdham Rd etc	Subject to negotiation	✓	✓		✓			Contributions sought from all Dereham developments proposed in Local Plan through developer S106/S278 agreements. Cost and package of improvements currently subject to negotiation, informed by NCC.
		LP(025)029 Land to the rear of Dereham Hospital	Not confirmed	✓				✓		Developer S106/S278 agreements. Not currently subject to outline application. Transport infrastructure improvements subject to negotiation with BDC and NCC
		LP(025)023 Land off Shipdham Road	Not confirmed	✓			✓			Developer S106/S278 agreements. Traffic improvements yet to be determined. Potential improvements inc. crossing facility and widening the road over the railway subject to agreement with Mid Norfolk Railway. Access roundabout to the north east of the development. Improved walking/cycling links inc. along Swanton Road. Mitigation for impact on Tavern Lane/Yaxham Road and London Road/Station Road.

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		LP(025)007 Land to the west of Etling View	Not confirmed	✓			✓			Developer S106/S278 agreements. Construction Traffic Management Plan. New junction to the east of development connecting to Etling View, pedestrian/cycle link and connection to the north of site to Shillings Lane. Road surfacing.
		LP(025)030 Land to the east of Shipdham Road		✓	✓		✓			Developer S106/S278 agreements. Traffic improvements yet to be determined. Potential improvements inc. link road between Shipdham Road and Westfield Lane with a 3m wide footway/cycleway along one side. Speed reduction measures and appropriate visibility splays. Links with public transport network. Mitigation for the impact on Tavern Lane/Yaxham Road junction and the Westfield Lane/Yaxham Road junction. Mitigation for the bridge over Westfield Lane.
		LP(025)011 Land to the west of Shipdham Road	Not confirmed	✓	✓			✓		Developer S106/S278 agreements. Not currently subject to outline application. Transport infrastructure improvements subject to negotiation with BDC and NCC.
	Swaffham	LP(097)006 Days Field in New Sporle Road	22,650 <sup>7</sup>	✓				✓		Developer S106/S278 agreements. Contributions towards local public transport facilities, localised road widening and additional footway provision.
		LP(097)013 Land off Sporle Road	Not confirmed	✓	✓			✓		Developer S106/S278 agreements. Local highway improvements including provision of a continuous 6m carriageway with pedestrian crossing, 2m footpath, visibility splays and extension to the 30mph limit.

<sup>7</sup> Source: NCC Highways Authority response (planning application ref 2014/1355/O)

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		LP(097)018 Land to the North of Norwich Road	150,000 <sup>8</sup>  65,000  Not confirmed	✓				✓		Developer S106/S278 agreements. Bus service diversion to serve development stopping on Norwich Road to access town centre and supermarkets – hourly peak service and two hourly off peak for 5 years  Travel Plan performance bond  Continuous footway/cycleway & pedestrian crossing for Norwich Road to link Captains Close to the town centre.
		LP(097)010 Norwich Road	168,000 <sup>9</sup>  65,000  Not confirmed	✓	✓		✓			Developer S106/S278 agreements. Bus service diversion to serve development stopping on Norwich Road to access town centre and supermarkets – hourly peak service and two hourly off peak for 5 years  Travel Plan performance bond  Continuous footway/cycleway & pedestrian crossing for Norwich Road to link Captains Close to the town centre.
		LP(097)009 Land to the west of Watton Road	Not confirmed	✓						Developer S106/S278 agreements. Contributions to public transport and travel plan.
	Watton	LP(104)008 and LP(104)019 Land off	Est. >100,000	✓	✓					Developer S106/S278 agreements. Footway provision on Saham Road, potential link road,

<sup>8</sup> Source: NCC Highways Authority response (planning application ref 2015/0550/O)

<sup>9</sup> Source: NCC Highways Authority response (planning application ref 2015/0917/O)

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		Saham Road and Sharman Avenue								junction improvements. Transport Assessment.
		LP(104)015 Land North of Norwich Road	Not confirmed	✓	✓					Developer S106/S278 agreements. Transport Assessment to consider mitigation measures, accessibility, potential safe crossing over Norwich Road, measures specific to care home use.
	Local Service Centres	Each site allocation will require highway improvements to address site specific requirements.	Determined for site specific proposals	✓	✓	✓	✓			Developer S106/S278 agreements. Subject to negotiation between NCC, BDC and developer. Such as travel planning, public transport provision including infrastructure, measures to improve road safety/capacity, or facilities to enable non-motorised users of the highway.
<b>WATER</b>										
	Waste Water Treatment Works	Affects: Attleborough, Dereham, Watton, Garboldisham,	Determined for site specific proposals	✓	✓	✓	✓			Developer S106 agreements, subject to pre-application enquiry with Anglian Water. Long term solutions for Attleborough and Dereham supplemented by AW Investment funds (2020-2025)
	Piped wastewater network	Affects: All Market Towns and Local Service Centres	Determined for site specific proposals	✓	✓	✓	✓			Developer S106 agreements, subject to pre-application enquiry with Anglian Water. Long term solutions for Attleborough and Dereham supplemented by AW Investment funds (2020-2025)
	Water Supply/Sewage Scheme	Thetford SUE and Thetford Enterprise Park	Not confirmed	✓	✓		✓			Majority funded by Anglian Water, part of cost borne by developer/public funding depending on viability constraints.
<b>ENERGY</b>										
	Thetford SUE	New primary sub-station in Thetford	£6.5 million			✓	✓			Plans for a new substation and funding options are under development between Breckland District Council, UK Power Networks, developers and

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
										landowners.
	Snetterton Heath	Snetterton	£3,007,000 <sup>10</sup>	✓			✓			£38,000 Breckland District Council, £2,309 million New Anglia Local Economic Partnership, additional contribution sought from landowners
<b>TELECOMMUNICATIONS</b>										
	District wide	Better Broadband for Breckland	950,000 committed	✓				✓		Investment provided by Breckland District Council to support BBfN scheme.
	Strategic	Better Broadband for Norfolk (BBfN)	12,000,000	✓				✓		Phase 2 of the project £12,000,000 from Central Government, NCC and the LEP.
<b>EDUCATION</b>										
	District wide	Education (extension)	20,694,100 <sup>11</sup>	✓	✓	✓		✓		Developer S106 agreements Standard charge per dwelling £6,956 (Norfolk Planning Obligations Standards 2016) This figure is indicative and does not reflect individualised solutions.
	Thetford	3 primary schools (£6.4 m each) Thetford Academy expansion (£4.3 m)	23,500,000 <sup>12</sup>			✓	✓			Signed developer S106 agreement. First 2 primary schools and Thetford Academy extension considered critical.
	Attleborough	1 2FE 420 place primary school (£8m) and 1 x 3FE 620 place new school with nursery provision.	12,000,000 <sup>13</sup>	✓	✓	✓	✓			Developer S106 agreements (informed by NCC). Primary – free transfer of land in the region of 1.95ha (2FE school) and 2.8ha (3FE school) would be required.

<sup>10</sup> Source: Breckland District Council New Anglia LEP Grant application 2016

<sup>11</sup> Using NCC Norfolk Planning Obligations Standards (April 2016) multiplier of £6,956 per dwelling for all sites – 2975 dwellings (excluding Thetford & Attleborough)

<sup>12</sup> S106 Agreement land north of Thetford(27/12/15)

<sup>13</sup> Draft County Council Planning Obligation Requirement:-Proposed Housing Developments in Attleborough (4,000 dwellings) (April 2016)

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		High School Expansion	14,000,000							Secondary – plus land and delivery of MUGA.
<b>COMMUNITY FACILITIES</b>										
DW	District wide	Library (minimum)	223,125 <sup>14</sup>	✓	✓	✓			✓	Developer S106 agreements Library services – increased stock and floor space provision £75 per house minimum (Norfolk Planning Obligations Standards 2016)
	Thetford	Library	1,165,000 <sup>15</sup>		✓			✓		
	Thetford	Community Centre	2,825,000 <sup>16</sup>			✓		✓		Signed developer S106 agreements
	Attleborough	Library extension	976,000 <sup>17</sup>		✓			✓		Developer S106 agreements (informed by NCC)
<b>HEALTH</b>										
	District wide	Primary care contribution	Determined for site specific proposals	✓	✓	✓		✓		Contributions from developer S106 agreements particularly Matishall, East Harling, North Elmham.
	Thetford	Primary care contribution Thetford Healthy Living Centre, Grove Surgery, The Surgery at School Lane	178,000 <sup>18</sup>			✓		✓		Signed developer S106 agreement
	Attleborough	Station Road Surgery expansion	Approx. £400,000		✓	✓		✓		A mix of NHS funds supplemented by contributions from developer S106 agreements (informed by South Norfolk CCG)
	Dereham	Projects for extensions	Not		✓	✓		✓		A mix of NHS funds supplemented by contributions

<sup>14</sup> Using NCC Norfolk Planning Obligations Standards (April 2016) multiplier of £75 per dwelling for all sites - 2975 dwellings (excluding Thetford & Attleborough)

<sup>15</sup> Source: S106 agreement (27/12/15) and Pidgeon/Breckland phasing and cost estimate schedule (Appendix 1)

<sup>16</sup> Source: S106 agreement (27/12/15) and Pidgeon/Breckland phasing and cost estimate schedule (Appendix 1)

<sup>17</sup> Draft County Council Planning Obligation Requirement:-Proposed Housing Developments in Attleborough (4,000 dwellings) (April 2016)

<sup>18</sup> Source: S106 agreement (27/12/15) and Pidgeon/Breckland phasing and cost estimate schedule (Appendix 1)

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		and improvements to the existing 3 surgeries in Dereham	confirmed							from developer S106 agreements (informed by South Norfolk CCG)
<b>EMERGENCY SERVICES</b>										
	Police	Police	Not confirmed	✓	✓	✓		✓		Service budget uplifted over time from additional council tax and general tax receipts accruing
	District wide	Fire Hydrants	48,552 <sup>19</sup>	✓	✓	✓		✓		Developer S106 agreements Fire Hydrants £16.32 per house minimum (Norfolk Planning Obligations Standards 2016)
	Thetford	Police	175,000		✓			✓		Signed developer S106 agreement
	Attleborough	Police	140,000 estimate <sup>20</sup>		✓			✓		Developer S106 agreements (informed through negotiation with Norfolk Constabulary)
<b>INDOOR SPORT FACILITIES</b>										
	District wide	Maintenance of facilities – Indoor bowling, squash courts, health & fitness centres, artificial grass pitches	Dependent upon specific improvements/upgrades		✓	✓			✓	Private investment
	Attleborough	Provision of new sports hall (6 badminton court 34m x 27m)	Not confirmed		✓				✓	Private investment plus consideration of developer funds from S106 agreements for the Attleborough SUE
	Dereham	Provision of new sports hall (4 badminton court size 34.5 x 20m)	Not confirmed			✓			✓	Private investment

<sup>19</sup> Using NCC Norfolk Planning Obligations Standards (April 2016) multiplier of £16.32 per dwelling for all sites – 2975 dwellings (excluding Thetford & Attleborough)

<sup>20</sup> Based on assumptions used for Attleborough, not an agreed figure with Norfolk Constabulary or developers.

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
	Swaffham	Replacement sports hall (4 badminton court size 34.5 x 20m)	Not confirmed		✓				✓	Private investment
		Swimming pool (20m x 4 lane)	Not confirmed			✓			✓	Private investment, consideration of developer/Council funds
<b>GREEN INFRASTRUCTURE</b>										
	District wide	Local Areas for Play	468,730 <sup>21</sup>	✓	✓	✓		✓		Developer S106 agreements
		Local Equipped Area for Play	1,016,904	✓	✓	✓		✓		Developer S106 agreements
		Outdoor Sport Area	134,761	✓	✓	✓		✓		Developer S106 agreements
		Neighbourhood Equipped Area for Play	703,245	✓	✓	✓		✓		Developer S106 agreements
	Thetford	On-site provision - 19ha outdoor sport and recreational areas	6,900,000 <sup>22</sup>	✓	✓	✓		✓		Signed developer S106 agreement
		Off-site provision – 2.5 ha mitigation land Woodlark and Nightjar and 7ha mitigation land for Stone Curlew	Developers own land	✓			✓			Signed developer S106 agreement.
		UERD contribution East Wretham Heath	18,500		✓				✓	Signed developer S106 agreement.
	Attleborough	Feasibility Study of a Green Way Link	10,000 <sup>23</sup>		✓	✓			✓	Developer S106 agreement will pay a £10,000 contribution towards the wider study.
		Habitat management,	30,000		✓	✓			✓	Developer S106 agreement.

<sup>21</sup> Based on draft policy ENV04 criterion and standardised cost assumptions for types of children's play areas and outdoor sport areas in the Open Space Assessment (2015) multiplied by number of dwellings - 2975 dwellings (excluding Thetford & Attleborough)

<sup>22</sup> Source: S106 agreement (27/12/15) and Pidgeon/Breckland phasing and cost estimate schedule (Appendix 1)

<sup>23</sup> Draft County Council Planning Obligation Requirement:-Proposed Housing Developments in Attleborough (4,000 dwellings) (April 2016)



Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
		connectivity and buffering work on arc of SSSI's and CWS's along the River Thet								
		Community woodland, orchard and community engagement	10,000		✓	✓			✓	Developer S106 agreement.
		Biodiversity for outdoor learning in schools	20,000		✓	✓			✓	Provided on new school site. Developer S106 agreement.
		Public Rights of Way (PROW)	Not confirmed		✓	✓			✓	Developer S106 agreement.
	Dereham	LP(025)029 Land to the rear of Dereham Hospital	Not confirmed	✓				✓		Mitigation for impact on CWS and for increased footfall on PROW. Connection to PROW network, literature provision. S106 agreement
		LP(025)023 Land off Shipdham Road	Not confirmed	✓				✓		Mitigation for impact on CWS and for increased footfall on PROW. Connection to PROW network, literature provision. S106 agreement
		LP(025)007 Land to the west of Etling View	£6000	✓				✓		£1000 promotion of routes, £5000 new planting, adaptive management. 1.56 ha open space. S106 agreement.
		LP(025)030 Land to the east of Shipdham Road		✓	✓			✓		physical connection to PROW network to the south, literature provision; to enable local access to the countryside and integrate development with the local GI network. S106 agreement
		LP(025)011 Land to the west of Shipdham Road	Not confirmed	✓				✓		Not specified.

Ref	Infrastructure Project		Estimated Cost £	Plan period			Requirement			Delivery
				0-5	6-10	11-18	Critical	Essential	Desirable	
	Swaffham	LP(097)006 Days Field in New Sporle Road	Not confirmed	✓				✓		Potential enhancement to habitat in NE corner of site, central open space and footpath connection
		LP(097)013 Land off Sporle Road	28,729 <sup>24</sup>	✓	✓			✓		Mitigation for additional use of Breckland disused railway for recreation. S106 agreement
		LP(097)018 Land to the North of Norwich Road	37,500 <sup>25</sup>	✓				✓		Maintenance and mitigation for new and existing GI features. S106 agreement
		LP(097)010 Norwich Road	Not confirmed	✓	✓			✓		South-east boundary/landscape improvements and GI provision. Footpath provision. S106 agreement
		LP(097)009 Land to the west of Watton Road	Not confirmed	✓				✓		Large centrally located public open space connecting to wider developments and GI corridor E & S boundary. S106 agreement
	Watton	LP(104)008 and LP(104)019 Land off Saham Road and Sharman Avenue	Not confirmed	✓	✓					Minimum of 1 Local Equipped Area for Play and onsite open space. Additional consideration of landscaping and opportunities to enhance biodiversity.
		LP(104)015 Land North of Norwich Road	Not confirmed	✓	✓					On site open space of an appropriate type to serve the needs of new development and easily accessible to residents of the proposed care home.
	Local Service Centres	Each site allocation will require consideration of green infrastructure to address site specific requirements.	Determined for site specific proposals	✓	✓	✓		✓		Developer S106/S278 agreements. Subject to negotiation between NCC, BDC and developer. Such as connections to PROW's, literature provision, new planting, pedestrian/cycling access (see chapter 11 for specific proposals).

<sup>24</sup> Source: NCC GI comments Planning application (3PL/2015/1155/O) based on £287.29 per dwelling multiplied by 100 dwellings

<sup>25</sup> Source: NCC GI comments Planning application (3PL/2015/0550/O) based on £250 per dwelling multiplied by 150 dwellings

# Appendix 1

Thetford

Table 11 Thetford SUE housebuilding and infrastructure phasing

Infrastructure Type	Delivery Body	Phase	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Infrastructure Type	Annual delivery		20	50	100	150	150	200	225	225	225	225	225	250	250	250	250	230	250	200	200	200	200	200	200	200
	Cumulative delivery		20	70	170	320	470	670	895	1120	1345	1570	1795	2020	2270	2520	2770	3020	3250	3500	3750	4000	4250	4500	4750	5000
	Highways England	A11/A1075																								
Transport	Highways England	A11/Croxton Road																								
	Highways England	A11/Mundford Road																								
	Highways England	A11/London Road																								
	NCC Highways	Joe Blunts Lane																								
	NCC Highways	Bus Bridge																								
	NCC Highways	A1066/Croxton Road																								
	NCC Highways	Croxton Road Cycle Link																								
	NCC Highways	A1066/Norwich Road																								
	Community	Community Centre																								
NCC Libraries		Libraries																								
Police	Norfolk Constabulary	Police																								
Health	Norfolk PCT	Health care																								

Infrastructure Type	Delivery Body	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	
	Phase	1						2						3			4						5			
	Annual delivery	20	50	100	150	150	200	225	225	225	225	225	225	250	250	250	250	230	250	200	200	200	200	200	200	200
	Cumulative delivery	20	70	170	320	470	670	895	1120	1345	1570	1795	2020	2270	2520	2770	3020	3250	3500	3750	4000	4250	4500	4750	5000	5000
Education	NCC Children's Services	Primary School 1											£6,400,000													
	NCC Children's Services	Primary School 2													£6,400,000											
	NCC Children's Services	Primary School 3																				£6,400,000				
	NCC Children's Services	Secondary School												£1,071,750		£1,071,750	£1,071,750		£1,071,750							
Utilities	Anglian Water/Developer	Foul drainage																								
	National Grid/Developer	Electricity																								
	National Grid/Developer	Gas																								
Open Space	Developer	Strategic Green Space																								
	Developer	Formal Open Space																								
Ecology	Developer	Ecology Offsite																								
	Developer	Ecology Onsite																								
	BDC/Norfolk Wildlife Trust	UERD East Wretham Heath Site																								

## Appendix 2

Attleborough (Note – 6 phases in total to approx. year 2044)

Table 12 Attleborough SUE housebuilding and infrastructure phasing

Infrastructure Type		2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	
	Phase	1 Town Oaks						2a Town Oaks			2b Borough Lane					3 Town Oaks			
	Annual delivery	25	50	80	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	Cumulative delivery	25	75	155	315	475	635	795	955	1,115	1,275	1,435	1,595	1,755	1,915	2,075	2,235	2,395	
Transport	Link road (including rail bridge)	£1,355,000	£1,355,000	£1,355,000	£1,355,000	£1,355,000	£1,355,000	£1,523,333	£1,523,333	£1,523,333	£0	£0	£0	£0	£0	£0	£0	£0	
	Breckland Lodge roundabout	£500,000	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	
	Travel Plan	£56,667	£56,667	£56,667	£56,667	£56,667	£56,667	£66,667	£66,667	£66,667	£76,000	£76,000	£76,000	£76,000	£76,000	£100,000	£100,000	£100,000	
	Public transport contribution	£167,167	£167,167	£167,167	£167,167	£167,167	£167,167	£196,667	£196,667	£196,667	£224,000	£224,000	£224,000	£224,000	£224,000	£295,000	£295,000	£295,000	
	Town centre traffic signals	£1,500,000	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	
	Leys Lane pedestrian/cycle connection	£1,500,000	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	
Green infrastructure	Open Space	£470,333.33	£470,333.33	£470,333.33	£470,333.33	£470,333.33	£470,333.33	£553,333.33	£553,333.33	£553,333.33	£630,800	£630,800	£630,800	£630,800	£630,800	£830,000	£830,000	£830,000	
Education	Primary School	£0	£0	£0	£0	£0	£0	£3,250,000	£3,250,000	£0	£0	£0	£0	£0	£0	£0	£0	£0	
	Secondary School	£396,667	£396,667	£396,667	£396,667	£396,667	£396,667	£466,667	£466,667	£466,667	£532,000	£532,000	£532,000	£532,000	£532,000	£700,000	£700,000	£700,000	
On site	On-site	£1,864,333	£1,864,333	£1,864,333	£1,864,333	£1,864,333	£1,864,333	£2,193,333	£2,193,333	£2,193,333	£2,500,400	£2,500,400	£2,500,400	£2,500,400	£2,500,400	£3,290,000	£3,290,000	£3,290,000	
Off site	Off-site	Tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	
ANNUAL TOTAL		£7,810,167	£4,310,167	£4,310,167	£4,310,167	£4,310,167	£4,310,167	£8,250,000	£8,250,000	£5,000,000	£3,963,400	£3,963,400	£3,963,400	£3,963,400	£3,963,400	£5,215,000	£5,215,000	£5,215,000	

Infrastructure Type		2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43	2043/44	2044/45	2045/46	TOTAL	S106 contribution TOTAL (✓ = payable S106)	
	Phase	3	4 Poplar Meadows						6 Poplar Meadows					
	Annual delivery	160	160	160	160	160	160	160	160	160	165	4,000		
	Cumulative delivery	2,555	2,715	2,875	3,035	3,195	3,355	3,515	3,675	3,835	4,000			
Transport	Spine road (including rail bridge)	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£12,700,000	✓	
	Breckland Lodge roundabout	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£500,000	✓	
	Travel Plan	£100,000	£80,000	£80,000	£80,000	£80,000	£80,000	£80,000	£80,000	£80,000	£60,000	£60,000	£2,000,000	✓
	Public transport contribution	£295,000	£236,000	£236,000	£236,000	£236,000	£236,000	£236,000	£236,000	£177,000	£177,000	£5,900,000	Subject to revision	
	Town centre traffic signals	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£1,500,000	✓	
	Leys Lane pedestrian/cycle connection	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£1,500,000	✓	
Green infrastr	Open Space	£830,000	£664,000	£664,000	£664,000	£664,000	£664,000	£664,000	£664,000	£498,000	£498,000	£16,600,000	Provided by developer	
Education	Primary School	£0	£3,250,000	£3,250,000	£0	£0	£0	£0	£0	£0	£0	£13,00,000	✓	
	Secondary School	£700,000	£560,000	£560,000	£560,000	£560,000	£560,000	£560,000	£560,000	£420,000	£420,000	£14,000,000	✓	
On site	On-site	£3,290,000	£2,632,000	£2,632,000	£2,632,000	£2,632,000	£2,632,000	£2,632,000	£2,632,000	£1,974,000	£1,974,000	£65,800,000	Provided by developer	
Off site	Off-site	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc	tbc		
ANNUAL TOTAL		£5,215,000	£7,422,000	£7,422,000	£4,172,000	£4,172,000	£4,172,000	£4,172,000	£4,172,000	£3,129,000	£3,129,000	£133,500,000	£44,200,000	