

South East Lincolnshire Infrastructure Delivery Plan 2016

Final Report

On behalf of **Lincolnshire County Council**, Boston Borough Council, South Holland District Council



**South East Lincolnshire
Joint Strategic Planning Committee**

Project Ref: 36529 | Date: November 2016



Document Control Sheet

Project Name: South East Lincolnshire Infrastructure Delivery Plan 2016

Project Ref: 36529

Report Title: Final Report

Date: November 2016

	Name	Position	Signature	Date
Prepared by:	Shilpa Rasaiah	Associate	SR	8 th October 2016
Reviewed by:	Chris Quinsee	Partner	CQ	13 th October 2016
Approved by:	Chris Quinsee	Partner	CQ	13 th October 2016
For and on behalf of Peter Brett Associates LLP				

Revision	Date	Description	Prepared	Reviewed	Approved
Final Report	14 th November 2016	Minor text amends to Oct 2016 Final Report	SR	SR	CQ

Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

Contents

EXECUTIVE SUMMARY	1
1 STUDY SCOPE APPROACH AND POLICY	4
1.1 Introduction.....	4
1.2 Research and consultations.....	4
1.3 Study approach.....	5
1.4 National policy on infrastructure and developer funding.....	5
PART 1 GROWTH PLANS	9
2 PLANNED GROWTH AND INFRASTRUCTURE	10
2.1 Introduction.....	10
2.2 Development context.....	10
2.3 Unconsented growth.....	10
2.4 Plan housing growth.....	11
2.5 Plan employment growth.....	3
2.6 Plan retail growth.....	4
PART 2 INFRASTRUCTURE ASSESSMENT	6
3 APPROACH TO INFRASTRUCTURE ASSESSMENT	7
3.1 Introduction.....	7
3.2 Planning Act definition of infrastructure.....	8
3.3 Assessing infrastructure requirements.....	8
3.4 When is infrastructure required?.....	10
3.5 What are the infrastructure priorities?.....	10
3.6 Categories of infrastructure outside the scope of this assessment.....	11
3.7 Caveats to this study.....	12
4 TRANSPORT INFRASTRUCTURE	14
4.1 Introduction.....	14
4.2 National transport networks affecting the Local Plan area.....	14
4.3 The local transport network and context.....	15
4.4 Lincolnshire Local Transport Plan and other transport strategies.....	16
4.5 The Spalding Transport strategy.....	17
4.6 Spalding Western Relief Road.....	18
4.7 The Boston Transport Strategy.....	19
4.8 Boston Distributor Road.....	19
4.9 Summary of transport costs and funding.....	26
5 FLOOD MANAGEMENT INFRASTRUCTURE	28
5.1 Introduction.....	28
5.2 The Boston Tidal Barrier.....	28
5.3 The Black Sluice Pumping Station and South Forty Foot Catchment.....	30
6 EDUCATION INFRASTRUCTURE	33

- 6.1 Introduction 33
- 6.2 Infrastructure capacity 33
- 6.3 Infrastructure requirement and cost assumptions 34
- 6.4 Summary of education infrastructure costs and funding 35
- 7 HEALTH INFRASTRUCTURE 39**
- 7.2 Consultation..... 39
- 7.3 Infrastructure provision and capacity..... 39
- 7.4 Infrastructure requirements to support planned growth 40
- 7.5 Summary of health infrastructure costs and funding..... 42
- 8 SPORT LEISURE AND GREEN INFRASTRUCTURE 44**
- 8.1 Introduction 44
- 8.2 Summary of sport, leisure and green infrastructure costs and funding..... 44
- 9.1 Introduction 46
- PART 3 INFRASTRUCTURE COSTS AND FUNDING 56**
- 10 INFRASTRUCTURE FUNDING 57**
- 10.1 Introduction 57
- 10.2 Non developer funding 57
- 10.3 The Local Plan whole plan viability assessment 59
- 10.4 Developer funding 60
- 10.5 Estimate of developer contributions 62
- 11 INFRASTRUCTURE COSTS AND FUNDING GAP 64**
- 11.1 Introduction 64
- 11.2 Infrastructure cost summary 64
- 11.3 The infrastructure funding gap 67
- 11.4 Focusing on priority infrastructure projects 68
- 11.5 Summary of infrastructure costs and funding by local authority 69
- PART 4 CONCLUSIONS AND RECOMMENDATIONS 72**
- This section sets out the study conclusions and recommendations. 72
- 12 CONCLUSIONS AND RECOMMENDATIONS 73**
- 12.1 Introduction 73
- 12.2 The Infrastructure Delivery Plan 73
- 12.3 A developable and deliverable plan 74
- 12.4 Delivery of the safeguarded transport corridors 77
- 12.5 Education and social infrastructure 79
- 12.6 Utilities infrastructure 81
- 12.7 Recommendations for the delivery of the utilities infrastructure 82
- 12.8 Infrastructure related to the delivery of employment sites 83

Appendices

- Appendix A Consultees
- Appendix B Anglian Water RAG assessment
- Appendix C Education assumptions

EXECUTIVE SUMMARY

1. Peter Brett Associates LLP (PBA) was commissioned by Lincolnshire County Council on behalf of the South East Lincolnshire Joint Strategic Planning Committee to prepare this South East Lincolnshire Infrastructure Delivery Plan (IDP). This takes forward the South East Lincolnshire Infrastructure Baseline (IB) Study (2015) prepared by Lincolnshire County Council.
2. The scope of this study was to assess the infrastructure requirements, costs, priorities and funding relating to planned growth in the South East Lincolnshire Local Plan (2011 to 2036). The study has looked at transport, education, social (health, leisure, sport and open space) and utilities infrastructure.
3. The assessment has been informed by consultation with various infrastructure service providers. Most of this consultation took place during summer 2016.

Estimated infrastructure costs and funding gap

4. Although South East Lincolnshire is remote and generally sparsely populated, it has seen one of the largest percentage increases in population nationally since the 2001 Census. This increase in population has impacted on the available infrastructure capacity. Thus future growth will need to be accompanied with significant new infrastructure investment.
5. Table 1 overleaf summarises the identified infrastructure costs, known and assumed funding and the plan level funding gap. The IDP assessment has identified that the infrastructure costs to meet the total unconsented plan period growth is estimated at £211m.
6. Two major transport schemes, the Boston Distributor Road (BDR) and the Spalding Western Relief Road (SWRR) make up approximately £92m of this total cost.
7. Education infrastructure costs to meet future growth requirements amount to approximately £75m. This includes the provision of two new secondary schools in Spalding and Boston, the expansion of existing secondary schools at Old Leake, Deeping St Nicolas, Holbeach, Long Sutton, and Donnington and various new and expanded primary schools.
8. Together transport and education infrastructure costs make up over 79% of the total IDP infrastructure costs. After taking account of known and assumed infrastructure funding over the plan period the total infrastructure funding gap is estimated at £104m.
9. Based on emerging draft findings of the Viability Study, developer contributions associated with the planned development could contribute in the region of £33m in South Holland DC and £13m in Boston Borough Council, combined to provide an estimated total of £46m. Providing the funding can be secured in compliance

with the CIL Regulations, the developer contribution could help to reduce the total funding gap of £104m to approximately £58m over the 15 year period. This gap can be further managed by focusing on critical and essential infrastructure and some desirable infrastructure costs.

Table 1 Summary of infrastructure costs, priority and funding gap

Estimated infrastructure cost and funding gap	Plan period (2016 - 2036) estimate total cost	Assumed public funding sources	Assumed developer funding	Funding gap
Critical	£27,000,000	£0	£27,000,000	£0
Boston Distributor Road	£11,000,000	£0	£11,000,000	£0
Spalding Western Relief Road northern section	£6,000,000	£0	£6,000,000	£0
Spalding Western Relief Road southern section	£10,000,000	£0	£10,000,000	£0
Essential	£105,412,071	£59,553,535	£1,000,000	£44,858,535
Holbeach - Boston Road roundabout	£295,000	£295,000	£0	£0
Holbeach - Peppermint Junction	£5,400,000	£4,400,000	£1,000,000	£0
Primary school extension	£13,232,310	£6,616,155	£0	£6,616,155
Primary school new building	£19,489,997	£9,744,998	£0	£9,744,998
Secondary new school building	£26,870,400	£13,435,200	£0	£13,435,200
Secondary school extension	£7,868,916	£3,934,458	£0	£3,934,458
Six form new school building	£5,393,984	£2,696,992	£0	£2,696,992
Six form school extension	£1,861,464	£930,732	£0	£930,732
Spalding Western Relief Road northern section	£15,000,000	£7,500,000	£0	£7,500,000
Spalding Western Relief Road southern section	£10,000,000	£10,000,000	£0	£0
Desirable	£78,626,753	£19,313,376	£0	£59,313,376
Allotments	£1,215,000	£607,500	£0	£607,500
Boston Distributor Road - South Forty Foot crossing	£40,000,000	£0	£0	£40,000,000
Cemeteries / church yard	£2,193,000	£1,096,500	£0	£1,096,500
Children's play	£967,500	£483,750	£0	£483,750
GP facilities	£10,754,753	£5,377,376	£0	£5,377,376
Green Infrastructure	£1,372,000	£686,000	£0	£686,000
Parks and gardens	£715,000	£357,500	£0	£357,500
Sport and leisure	£21,409,500	£10,704,750	£0	£10,704,750
Grand Total	£211,038,823	£78,866,912	£28,000,000	£104,171,912

10. A decision is yet to be made on whether to introduce a community infrastructure levy by South Holland Borough Council. The introduction of a CIL is possible based on the viability assessment and it could help to simplify the delivery of strategic infrastructure such as the SWRR, secondary school provision, strategic leisure and health facilities.

11. The introduction of CIL may not result in any more developer contribution than might be secured via S106, and is not likely to plug the funding gap, however due to the CIL Regulations introduced in 2010, the adoption of a CIL would provide greater certainty and transparency to both the infrastructure service providers and the developers contributing to the strategic infrastructure. Service providers can use the knowledge of future CIL proceeds to bid for other funding, and can plan for the delivery of infrastructure with greater certainty over the amount of funding that might come from this source. However, the introduction of a CIL does take time and some of the major development schemes currently in the pipeline may already be consented in the short term before a CIL can be introduced.

12. In the case of Boston Borough Council, due to the nature of development linked to the BDR and the limited coverage in viability after taking account of the affordable housing policy, the Borough Council is not expected to introduce a CIL. However, not having a CIL in place could limit the use of developer funding to

contribute towards infrastructure such as a secondary school and other strategic infrastructure due to pool restrictions. Though in most cases site specific infrastructure developer contributions are likely to contribute to identified primary school and open space projects.

13. This IDP cost assessment does not include the Boston Barrier flood defence infrastructure project, which at a cost of approximately £107m, is potentially one of the single most expensive infrastructure projects in the area. This scheme is identified as part of the National Infrastructure Plan for funding directly from Central Government.
14. Based on the broad growth assessment to utilities, no technical or licensing barriers to growth have been identified, that would prevent the delivery of the bulk of the planned growth; apart from the proposed allocations of growth at Gedney Hill for some 110 dwellings, which Anglian Water has identified as not having an existing foul sewerage network in the area. If this site is to be retained at part of the plan growth, then deliverability of this critical infrastructure should be confirmed.
15. The electricity utilities service providers have indicated where possible capacity issues may arise associated with potential locations of growth, these include various locations serviced by the Donnington, Holbeach and Boston 11 kv transformer (based on information known at this point in time). These are outlined in the utilities section.
16. This IDP should be treated as a live document, updated annually. This should be accompanied with a proactive project management and infrastructure prioritisation mechanism to ensure the timely delivery of infrastructure to support the planned growth. There should be regular engagement with the utilities providers, possibly establishing a Utilities Forum, and with other infrastructure service providers to inform and support the delivery of the planned growth.
17. There are short-term issues in education infrastructure capacity to meet short term planned growth and consented scheme requirements. It is understood that LCC Education Team are exploring various options to meet the current requirements for education places. These options have not been released to inform the IDP. Thus a priority for the South East Lincolnshire Local Plan delivery consideration will be to maintain continued engagement with the Education Team at LCC and seek assurance that there are clear deliverable investment plans for education infrastructure. Once the education investment options are finalised they will need to be reflected in future revisions of the IDP.
18. Based on an assessment of the type of infrastructure to be delivered, introducing a CIL is considered appropriate for South Holland District (charging authority). Even though a CIL is unlikely to provide any extra funding to a S106 mechanism, it is more suited as a developer funding mechanism to support the delivery of strategic infrastructure items such as the SWRR and other items taking account of the planned growth.

1 STUDY SCOPE APPROACH AND POLICY

1.1 Introduction

- 1.1.1 Peter Brett Associates (PBA) LLP was commissioned by Lincolnshire County Council on behalf of the South East Lincolnshire Joint Strategic Planning Committee to undertake this 2016 Infrastructure Delivery Plan (IDP). The Committee is a partnership of Boston Borough, South Holland District and Lincolnshire County Councils who are working together to create a single Local Plan for the area of South Holland District and Boston Borough.
- 1.1.2 A previous IDP (2015) study undertaken by Lincolnshire County Council (LCC) provides a wealth of context information by setting out the structure of the main companies responsible for providing infrastructure, current capacity, recent investments undertaken, and the physical location of existing infrastructure. This background document will be referred to as the 'South East Lincolnshire Infrastructure Baseline Study (2015)'.
- 1.1.3 The focus of this 2016 IDP study is to provide an evidence base to support the delivery of planned growth proposed in the South East Lincolnshire Local Plan (2011 – 2036).

Study scope

- 1.1.4 This IDP 2016 builds on the baseline assessment undertaken by Lincolnshire County Council by responding to the following questions:
- What are the infrastructure requirements and costs of meeting the planned growth and when is the infrastructure likely to be needed.
 - What is the estimated developer and mainstream infrastructure funding likely to meet this requirement?
 - How should infrastructure be prioritised to support delivery of planned growth?
 - What other funding sources, efficiency or innovative service delivery measures are needed to help support infrastructure delivery?
 - What else might assist the delivery of infrastructure to support the planned growth?

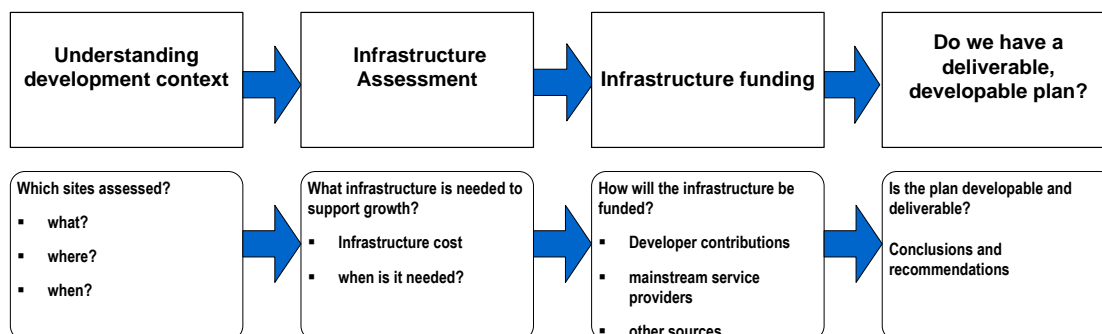
1.2 Research and consultations

- 1.2.1 The bulk of our primary research informing this study was originally undertaken during 2015 by LCC as part of the Infrastructure Baseline Study. As part of this IDP 2016, a number of focused interviews were undertaken with infrastructure service providers (see Appendix A for a list of consultees).

1.3 Study approach

1.3.1 Figure 1.1 illustrates the study approach to assess the deliverability of the planned growth.

Figure 1.1 Study approach process diagram



Source: PBA 2015

1.3.2 The study approach as illustrated in figure 1.1 is outlined below.

Understanding the development context

1.3.3 The starting point of the study is to establish an understanding of the planned growth. The quantum and timing of development in the local plan will influence the amount of infrastructure required at a given point in time.

Infrastructure assessment

1.3.4 This section of the study sets out what infrastructure is required to support the unconsented planned growth. We look at how much that infrastructure costs, when it is needed, and how it might be funded.

Infrastructure costs and funding

1.3.5 This section investigates how infrastructure might be paid for. We investigate whether public sector mainstream funding might help pay for development, what developer funding mechanism will be used (e.g. S106, CIL or developer enabling investment) and any other funding sources. We rely on external work commissioned by the Councils to inform the viability assessment of developer contributions.

Delivery recommendations

1.3.6 This section pulls together the findings from the infrastructure assessment to inform the conclusions and recommendations for the study.

1.4 National policy on infrastructure and developer funding

Infrastructure planning is a strategic priority

- 1.4.1 Infrastructure planning needs to be part of the 'strategic priorities' for the Local Plan preparation. The NPPF requires authorities to demonstrate that infrastructure will be available to support development.
- 1.4.2 The NPPF states 'Local Plans should: ... plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of this Framework' (paragraph 157).
- 1.4.3 In addition the NPPF requires that Plans should be 'viable' and any requirement for infrastructure should take account of the whole policy ask. paragraph 174 states:

'Local planning authorities should set out their policy on local standards in the Local Plan, including requirements for affordable housing. They should assess the likely cumulative impacts on development in their area of all existing and proposed local standards, supplementary planning documents and policies that support the development plan, when added to nationally required standards. In order to be appropriate, the cumulative impact of these standards and policies should not put implementation of the Plan at serious risk, and should facilitate development throughout the economic cycle. Evidence supporting the assessment should be proportionate, using only appropriate available evidence.'

- 1.4.4 The NPPF also requires considerations of deliverability to be taken account of. paragraph 177 states:

'It is equally important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. To facilitate this, it is important that local planning authorities understand district-wide development costs at the time Local Plans are drawn up.'

- 1.4.5 It is within this context of the NPPF that we have assessed the infrastructure delivery of the South East Lincolnshire Local Plan.

The importance of viability testing to ensure the Plan is deliverable

- 1.4.6 The NPPF requires a proportionate evidence base to be submitted to support the plan (paragraph 158). In particular, the NPPF requires that Local Plans pay careful attention to viability to ensure that the plan is deliverable. With regards to this, paragraph 173 of the NPPF states:

'The sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing standards, infrastructure contributions or other requirements should when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.'

Deliverability and developability considerations of the Plan

- 1.4.7 Specifically in relation to housing, NPPF (paragraph. 47) requires local planning authorities to:
- identify and update annually a supply of specific deliverable sites sufficient to provide five years' worth of housing against their housing requirements and
 - identify a supply of specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15;
- 1.4.8 The NPPF uses the two concepts of 'deliverability' (which applies to residential sites in Years 0-5 of the plan) and 'developability' (which applies to year 6 onwards of the plan). The NPPF defines these two terms as part of paragraph 47 footnote 11 as follows:
- To be deliverable, 'sites should be available now, offer a suitable location for development now, and be achievable, with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable.' paragraph 47 footnote 11
 - To be developable, sites expected in Year 6 onwards should be able to demonstrate a *'reasonable prospect that the site is available and could be viably developed at the point envisaged'*. paragraph 47 footnote 12
- 1.4.9 The NPPF advises that a more flexible approach may be taken to the sites coming forward in the period after the first five years.
- 1.4.10 The National Planning Practice Guidance (NPPG) provides further guidance on viability and delivery aspects of plan making. In respect of delivering land for housing development the NPPG sets out what should be considered deliverable and developable. In particular it states that assessments should identify:
- The potential type and quantity of development that could be delivered on each site/broad location;
 - Reasonable estimate of build out rates;
 - How any barriers to delivery could be overcome and when;
 - An indicative trajectory of anticipated development and consideration of associated risks
- 1.4.11 Based on the preliminary conclusions of the Inspectors examining the Local Plans, it is also important for this study to demonstrate that a strong plan is in place to support the delivery of strategic infrastructure needed to support the longer term planned growth.

Community Infrastructure Levy and strategic sites

- 1.4.12 The Community Infrastructure Levy (CIL) is a planning charge that became available to local authorities on 6 April 2010. The levy allows local authorities in England and Wales to raise contributions from development to help pay for infrastructure that is needed to support planned development. Local authorities who wish to charge the levy must produce a draft charging schedule setting out CIL rates for their areas.
- 1.4.13 The impact of higher development costs sometimes associated with strategic sites is recognised by the CIL guidance; this states that a charging authority should take development costs into account when setting its levy rates, particularly those likely to be incurred on strategic sites or brownfield land. A realistic understanding of site specific requirements for strategic sites is essential to the proper assessment of viability and charge setting.
- 1.4.14 The purpose of CIL is to enable the charging authority to carry out a wide range of infrastructure projects. CIL is not expected to pay for all infrastructure requirements but could make a significant contribution. However, development specific planning obligations (commonly known as S106) to make development acceptable will continue with the introduction of CIL. In order to ensure that planning obligations and CIL operate in a complementary way, CIL Regulations 122 and 123 place limits on the use of planning obligations. Our assessment of the infrastructure has taken account of the latest legislation relating to developer contributions.

PART 1 GROWTH PLANS

This stage is important, because the amount and timing of planned development in the area will influence the amount of infrastructure required at a given point in time.

2 PLANNED GROWTH AND INFRASTRUCTURE

2.1 Introduction

2.1.1 This section outlines the development plan context, planned growth and population projections which inform the infrastructure assessment.

2.2 Development context

2.2.1 South East Lincolnshire is predominantly a rural area, much of which is sparsely populated; however the area has seen one of the largest increases in population nationally since the 2001 Census. The population of Boston Borough has increased by 19.3% since 2001 (to 66,500 residents) and in the same period, South Holland has seen an increase of 18.1% (to 90,400).¹ This compares with a population growth for Lincolnshire of 13.1%.

2.2.2 A significant impact on the past population and future projections is the impact of international migration. Following the expansion of the European Union in 2004 and 2008, there was an influx of workers from Poland, Latvia and Lithuania in particular. Furthermore the area attracts some 14,000 seasonal workers in agriculture and horticulture annually.

2.2.3 This growth in population is significant, particularly given the areas remote location away from the conurbations of the East Midlands.

Local plan

2.2.4 The vision statement in the draft South East Lincolnshire Local Plan specifically refers to the delivery of key infrastructure, 'including strategic highway improvements and measures to reduce the causes and impacts of flooding, will be phased in line with growth to ensure that new development is both sustainable and deliverable.' This is because improving transport and flood mitigation is vital to the longer term sustainability of this area and to its role in making an important contribution to the national food supply.

2.3 Unconsented growth

2.3.1 Being clear about the planned growth being assessed is important, because the amount and timing of development in the area will influence the amount of infrastructure required at a given point in time.

2.3.2 To avoid double counting, this study looks at infrastructure for growth without planning permission ('unconsented growth'). This is because it is assumed that if development already has permission, then sufficient infrastructure to cope with the demand arising from this consented development will already be in place or contributions secured to provide it. If it was not, then planning

¹ Draft Local Plan based on mid year population estimates 2014 – Office of national Statistics

permission could not have been granted. Any other approach would risk double-counting infrastructure requirements, and therefore arriving at an artificially high infrastructure requirement for growth in the area.

- 2.3.3 Whilst this study does not formally assess cost of infrastructure delivered or secured as part of consented growth plans, account is taken of this, as planned growth may absorb or provide additional capacity or create additional infrastructure capacity.
- 2.3.4 The proposed planned growth which is yet to receive planning permission will require investment in infrastructure to deliver the sustainable communities and jobs which are planned. The main infrastructure requirements are identified and tested in this report.

2.4 Plan housing growth

- 2.4.1 Table 2.1 provides an over view of the planned housing growth used to inform this IDP. The residual housing requirement informing this IDP assessment is highlighted in table 2.1 forms the basis for this IDP assessment.
- 2.4.2 The information is based on the Strategic Housing Land Availability Assessment (SHLAA) July 2016, and covers the South East Lincolnshire Local Plan period commencing from 2011 to 2036. In some instances, the total theoretical housing quanta included in the SHLAA were greater than the total residual requirement for the settlements.
- 2.4.3 To avoid any over estimation of infrastructure requirements, any surplus between the residual requirement and theoretical total included in the SHLAA, have been moved to the post plan column of table 2.1.
- 2.4.4 The table 2.1 overleaf shows the housing requirements, completions, commitments and the residual requirements. This is broken down for Boston Borough and South Holland District Council area and amalgamated for the South East Lincolnshire area.

Table 2.1 Planned growth used to inform the IDP assessment

Boston BC settlement	Settlement hierarchy	Requirement (2011-2036)	Completions (1st April 2011 to 31st March 2016)	Commitments (31st March 2016)	Residual IDP assessment growth	Phase 1: 2016/17 to 2020/21	Phase 2: 2021/22 to 2025/26	Phase 3: 2026/27 to 2030/31	Phase 4: 2031/32 to 2035/36	Post plan period
Bicker	Minor Service Centre	50	0	1	49	40	9	0	0	0
Boston - land south of Chain Bridge Rd	Sub- Regional Centre	0	0	0	1066	0	400	500	166	833
Boston - land south of north Forty Foot bank	Sub- Regional Centre	0	0	0	1044	0	400	500	144	334
Boston (excluding SUEs)	Sub- Regional Centre	0	0	0	1450	599	735	116	0	0
Boston overall	Sub- Regional Centre	5,900	513	1,827	0	0	0	0	0	0
Butterwick	Minor Service Centre	70	4	5	61	33	24	4	0	0
Fishtoft	Minor Service Centre	50	0	0	50	50	0	0	0	16
Kirton	Main Service Centre	500	4	297	199	50	149	0	0	57
Old Leake	Minor Service Centre	100	35	36	29	29	0	0	0	19
Sutterton	Main Service Centre	300	25	35	240	58	125	57	0	31
Swineshead	Main Service Centre	400	41	68	291	198	93	0	0	30
Wigtoft	Minor Service Centre	30	0	1	29	22	7	0	0	0
Wrangle	Minor Service Centre	100	8	40	52	24	28	0	0	0
Boston BC Total		7500	630	2310	4560	1103	1970	1177	310	1320

South Holland DC settlement	Settlement hierarchy	Requirement (2011-2036)	Completions (1st April 2011 to 31st March 2015)	Commitments (31st March 2016)	Residual IDP assessment growth	Phase 1: 2016/17 to 2020/21	Phase 2: 2021/22 to 2025/26	Phase 3: 2026/27 to 2030/31	Phase 4: 2031/32 to 2035/36	Post plan period
Cowbit	Minor Service Centre	120	12	52	56	56	0	0	0	29
Crowland	Main Service Centre	500	50	143	307	182	118	7	0	4
Deeping St Nicholas	Minor Service Centre	80	2	7	71	50	21	0	0	0
Donington	Main Service Centre	400	89	16	295	212	83	0	0	4
Fleet Hargate	Minor Service Centre	150	7	8	135	100	35	0	0	4
Gedney Hill	Minor Service Centre	120	4	6	110	81	29	0	0	10
Gosberton	Minor Service Centre	270	3	31	236	169	67	0	0	10
Holbeach	Main Service Centre	1,420	85	105	1,230	135	339	350	406	781
Long Sutton	Main Service Centre	560	96	160	304	110	157	37	0	3
Moulton	Minor Service Centre	90	17	6	67	46	21	0	0	0
Moulton Chapel	Minor Service Centre	130	1	10	119	81	38	0	0	7
Pinchbeck	Main Service Centre	240	85	26	129	77	52	0	0	3
Quadring	Minor Service Centre	130	1	21	108	74	34	0	0	7
Spalding (excluding SUE)	Sub-Regional Centre	0	0	0	1,959	570	989	352	48	990
Spalding - Land to north of Vernatts drain Pinchbeck	Sub-Regional Centre	0	0	0	640	0	60	205	375	4,223
Spalding overall	Sub-Regional Centre	5,880	674	2,607	0	0	0	0	0	0
Surfleet	Minor Service Centre	180	12	17	151	131	20	0	0	17
Sutton Bridge	Main Service Centre	210	21	22	167	50	117	0	0	0
Sutton St James	Minor Service Centre	70	9	7	54	35	19	0	0	0
Tydd St Mary	Minor Service Centre	40	2	0	38	24	14	0	0	0
Weston	Minor Service Centre	310	8	5	297	180	117	0	0	5
Whaplode	Minor Service Centre	80	8	5	67	53	14	0	0	4
South Holland DC Total		10980	1186	3254	6540	2416	2344	951	829	6101
South East Lincs Total		18480	2329	7391	11100	3519	4314	2128	1139	7421

Source: South East Lincolnshire SHLAA July 2016 (with some adjustments to the theoretical totals by PBA and client team to inform IDP)

Phasing of planned growth

2.4.5 Table 2.2 overleaft summarises the phasing periods and quantum of growth planned for each phase.

Table 2.2 Phasing of planned growth

Phase	Plan timeframes	SE Lincs total housing numbers
Pre – adoption – completions and commitments	2011 - 2016	13000
Phase 1	2017 – 2021	3,519
Phase 2	2021 – 2025	4,314
Phase 3	2026 – 2030	2,128
Phase 4	2031 – 2036	1,139
Total residual plan period (Phase 1 – 4)	2017 - 2036	11,100
Post plan growth	2037 and beyond	7,421+

Source: S E Lincs SHLAA July 2016

- 2.4.6 Some of the plan growth is already built or committed and forms part of the 2011 to 2016 pre adoption period. The post plan growth is included in this assessment as it helps to inform the potential delivery of the strategic road schemes which will be completed beyond the plan period.
- 2.4.7 Before finalising the planned growth options, the South East Lincolnshire Joint Strategic Planning Committee consulted on the Preferred Sites for Development' for residential, employment and other uses during July through to 12th August 2016. This consultation sets out a spatial hierarchy, with Boston (including parts of Fishtoft and Wyberton Parishes) and Spalding identified as the sub regional centres where the bulk of the planned growth is directed. The trajectory at table 2.1 shows the relevant settlement hierarchy for each settlement where planned growth is proposed.

Planned growth linked to the delivery infrastructure

- 2.4.8 The growth strategy for the two sub regional centres of Spalding and Boston is starting to focus planned growth in locations which offer the greatest opportunity to integrate with the delivery of the safeguarded transport corridors.

Delivery of growth in the Spalding sub regional centre

- 2.4.9 In the case of Spalding, the consented Holland Park urban extension and various sites along the safeguarded Spalding Western Relief Road will help to deliver this piece of long term infrastructure.

Holland Park urban extension

- 2.4.10 Outline planning consent was granted in May 2012 for the Holland Park scheme to Broadgate Homes Ltd. The site is situated south west of Spalding and has access from The Broadway. Development has started on phase 1 of the scheme in 2015. This scheme relates to a development comprising 2,250 dwellings, a district centre, two local centres, primary school, health centre, extra-care facility, community building /changing rooms, informal public open space, formal outdoor sports facilities, children's play areas, allotments, waste recycling facilities, access and estate roads, cycle parking, travel plan. The scheme will include 15% of Life time Homes standards, and affordable housing at 33%.

Delivery of growth in the Boston sub regional centre

- 2.4.11 In the case of Boston the consented Quadrant 1 and proposed Quadrant 2 and Wes 002 sites will help to deliver sections on the safeguarded Boston Distributor Road (BDR) to the south and west of Boston during the plan period.

Quadrant 1 consented urban extension commitments

- 2.4.12 Consent was granted to Chestnut homes for the Quadrant – Q1 urban extension in March 2015 for a hybrid application for a mix of uses including; up to 500 dwellings, new food store, commercial and leisure uses, 60 bed hotel, and a new community football stadium. The site to the south of Boston and includes the building of the first section of the BDR. Work on this initial section commenced in June 2016.

2.5 Plan employment growth

- 2.5.1 Local Plan policies 7 –9 of the draft for Public Consultation (January 2016) set out the proposed approach to the delivery of employment development to meet the identified need over the plan period. The Preferred Employment Sites were subsequently refined as part of the Preferred Sites for Development consultation which took place during July to August 2016.
- 2.5.2 The following sites are taken forward as Preferred Options Proposed Main Employment Area Allocations:
- Endeavour Park, Boston;
 - Riverside Industrial Estate, Boston;
 - Wardentree Lane, Spalding;
 - Clay Lake, Spalding;
 - Crease Drove Business Park, Crowland;

- Thorney Road, Crowland;
- Bridge Road Industrial Estate, Long Sutton;
- Bridge Road, Long Sutton;
- Enterprise Park, Sutterton;
- Wingland, Sutton Bridge;
- Enterprise Park, Freiston;

2.5.3 The following sites are taken forward as Preferred Options Proposed Local Employment Site Allocations:

- Love Lane, Sutterton;
- Railway Lane Industrial Estate, Sutton Bridge;

2.5.4 The following sites are taken forward as Preferred Options Proposed Mixed Use Development Site Allocations (where employment generating uses will complement the B Use provision, or in the case of Q2: The Quadrant, residential development):

- Q2: The Quadrant, Boston;
- Lincs Gateway, Spalding;
- Food Enterprise Zone, Holbeach;
- Kirton Distribution Park, Kirton;

2.5.5 These allocations will provide 85ha of land for B Use development.

Other employment opportunities

2.5.6 A range of other opportunities for employment will be identified at the Specific Occupier Sites, the ports and power stations, and other sites throughout the area.

2.6 Plan retail growth

2.6.1 Local Plan policy 24 summaries the scale of retail growth anticipated during the plan period which includes:

- Up to 30,000 sq.m net additional comparison retail floorspace in Spalding and Boston town centres.
- Some 3,500 sq.m of convenience floor space between 2021 and 2031.

- 500 sq.m convenience floor space as part of Local Centres or strategic urban extensions.
 - 100 sq.m to 500 sq.m of local floor space subject to demonstrating a deficiency.
- 2.6.2 No preferred sites have been identified, and a call for retail sites was issued as part of the public consultation held in July – August 2016 to establish whether any, more sequentially preferable sites were available to the Lincolnshire Gateway option that had been previously considered. The new Local Plan will provide the policy framework for the consideration of out of centre retail development should they forward over the plan period.

Infrastructure assessment related to employment and retail uses

- 2.6.3 The main infrastructure requirements related to employment and retail uses is likely to be for site specific transport infrastructure, utilities upgrades and site specific flood mitigations. These will be met as part of the site opening requirements by the site promoters. Any strategic impacts are identified through the emerging LTP transport plans.
- 2.6.4 The screening to identify sites as part of the Employment Land Technical Paper 2016 took account of the availability or capacity to provide utilities infrastructure capacity and proximity to a higher order settlement in the Local Plan settlement hierarchy.

PART 2 INFRASTRUCTURE ASSESSMENT

This part of the report sets out what infrastructure is required to support unconsented planned growth, including how much that infrastructure will cost and when it is likely to be needed.

3 APPROACH TO INFRASTRUCTURE ASSESSMENT

3.1 Introduction

3.1.1 Before assessing specific infrastructure categories, we first set out our approach to the infrastructure assessment.

Primary and secondary infrastructure

3.1.2 We distinguish between two main categories of infrastructure - primary and secondary infrastructure. It is important to be clear about the distinction between these two categories because the approach to their assessment will vary. Thus to avoid any double counting and over complication of analysis at this stage we make a clear distinction of what we include in the assessment of each category from the outset. In this study, we defined these as follows.

3.1.3 **Primary infrastructure** is infrastructure required to accompany development in order to allow new households and jobs to function within a wider community. This infrastructure will be largely used by the community living and working in the development but others would not be excluded from using these facilities such as schools, health facilities, leisure centres and community centres.

3.1.4 **Secondary infrastructure** is infrastructure intended to create accessible, serviced and developable sites. Developers usually factor in 'site enabling costs' into their viability assessment of the site. This will typically include infrastructure costs relevant to the site development within the red line boundary, such as internal access roads, drainage, SUDS, sewers, gas, electricity, and telecoms. This category may also include some open space and play spaces, plot landscaping, footpath and cycleways within the site. These costs are required to prepare the site for development and it is assumed these costs will be borne by the developer. In addition, depending on the site location and nature of the site, there will be 'site abnormal costs' which will be factored into the appraisal by the developer. Examples of abnormal costs include unusually high infrastructure costs such as creating new main roads to remote sites, any unusually extensive connections to utilities services, burying pylons or remediating contaminated land.

3.1.5 In respect of the strategic sites the opening cost allowance to reflect the generic costs of secondary infrastructure will be incorporated in the whole plan viability assessment. This study is focused on assessing the primary infrastructure requirements. The focus is also on capital (physical assets) infrastructure and not revenue investment such as staffing costs or maintenance costs.

3.2 Planning Act definition of infrastructure

3.2.1 The 2008 Planning Act section 216 (2) provides an inclusive list of infrastructure to include the following:

- roads and other transport facilities;
- flood defences;
- schools and other educational facilities;
- medical facilities;
- sporting and recreational facilities; and
- open spaces

3.2.2 As this list is 'inclusive', the Act effectively gives a very broad definition of infrastructure, covering all generally understood meanings of the term and certainly those things listed. The Planning Act 2008 and subsequent CIL regulations are deliberately drafted to give local authorities as much discretion as possible over deciding what is included in their definition of infrastructure.

3.2.3 The Baseline Phase 1 IDP study 2015 prepared by Lincolnshire County Council provides a baseline position statement for a wide range of infrastructure items. This also informed the focus this IDP Phase 2 study. The infrastructure categories which form the focus of this study include the following:

- Transport
- Flood management
- Education
- Health
- Police
- Sport, Leisure, and green infrastructure
- Utilities (electricity, gas, water and sewage)

3.3 Assessing infrastructure requirements

3.3.1 This section sets out some guiding principles in informing the infrastructure requirements.

Infrastructure requirements of future unconsented growth

- 3.3.2 This infrastructure assessment will focus on the infrastructure requirements of housing and jobs growth from 2016 to 2036. The assessment focuses on infrastructure requirements of unconsented growth (see paragraph 2.3.2). As those sites with planning permission have already been subject to negotiated developer contributions or an assessment of capacity in existing infrastructure.
- 3.3.3 The assessment also includes an assessment of infrastructure costs and funding for growth beyond the plan period for urban extensions in Spalding and Boston.
- 3.3.4 Where required, a figure of 2.3 persons per household across both South Holland District and Boston Borough has been adopted based on input from the client team which is derived from 2011 Census.

Consented sites excluded from this assessment

- 3.3.5 The Holland Park and The Quadrant (Q1) strategic site consented schemes are not included in the assessment, however these will form part of the five year and longer term housing supply and will impact on the current delivery and capacity of infrastructure. Growth relating to unconsented applications currently going through the planning process and pending S106 agreements (e.g. at two applications at Holbeach) are included in the infrastructure assessment.
- 3.3.6 A slightly different approach is used to assessing transport requirements. We take account of schemes intended to address existing deficiencies and planned growth in the IDP as often it is difficult to disaggregate the two. Incremental S106 agreements on undeveloped sites with planning permission can mitigate very local transport impacts of growth but can fail to capture the cumulative impacts of growth on strategic transport infrastructure². To deal with transport requirements, the assessment has included all requirements (growth related and existing deficit).

Published data and service provider inputs

- 3.3.7 This South East Lincolnshire Infrastructure Delivery Plan (IDP) takes forward the South East Lincolnshire Infrastructure Baseline Study (2015) undertaken by Lincolnshire County Council which set out the wider infrastructure context. Much of the evidence and interviews informing this IDP 2016 took place during June to August of 2016, though work and initial consultations had commenced in January 2016. Appendix A lists the consultees who have informed this assessment.
- 3.3.8 The assessment has relied on service providers' calculation of population projections to inform future infrastructure requirement estimates.

² This is less of a problem with infrastructure such as schools or primary care, because growth impacts are generally confined within catchment areas.

Understandably these will need to be monitored to ensure the projections reflect actual requirements. Where possible, this assessment has used service providers' own estimates of the cost of their infrastructure requirements based on their knowledge of delivery and recent examples. These cost estimates are based on current prices.

Approach to infrastructure requirements

- 3.3.9 It is not desirable to load an infrastructure assessment with a gold-plated "wish list" of perceived needs. The NPPF is clear about ensuring a balance is struck between infrastructure requirements and the need to ensure deliverable plans:

'Theplan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened....' NPPF paragraph 173.

- 3.3.10 A pragmatic approach has been adopted that balances deliverability with providing sufficient infrastructure to ensure that sustainable growth is properly catered for. It has not been the purpose of this study to negotiate with service providers in order to strip unrealistic infrastructure requirements out of their plans, but inevitably there will be greater clarity on infrastructure that is required to make development acceptable at the planning application stage.

3.4 When is infrastructure required?

- 3.4.1 Where available, we have used the site promoters and service provider inputs to inform the assessment of when infrastructure might be required to support different sites and phases of development. We caution that this is not always an exact science. This very much depends on actual take up, economic cycles, the degree of 'congestion or stress' that might be considered acceptable, technological change and so on. In some instances, more detailed assessments maybe needed closer to delivery timescales to inform thresholds levels for when capacity will be reached.

3.5 What are the infrastructure priorities

- 3.5.1 The final decisions on priorities will rest with elected representatives and informed by their officers, this study provide a technical input to assist the process of making these decisions. We have categorised different infrastructure costs into the following levels of priority, in the expectation that subsequent work will review the choices made (see paragraphs 3.5.4 and 3.7).
- 3.5.2 Ultimately, it will be necessary to prioritise both within theme areas (say, prioritising the most important transport projects) and also between theme areas (say, deciding to invest in transport facilities, rather than education facilities).
- 3.5.3 The following categorisation has been adopted for this study:

- **Critical enabling** this category would apply to infrastructure which would be required as a direct result of the proposed growth and would have to be implemented if the development was to go ahead (for instance utilities, sewerage, drinking water, site access).
- **Essential mitigation** this category includes all infrastructure that we believe is necessary to mitigate the impacts arising from the development. The usual examples of essential mitigation are projects which mitigate impacts from trips or population associated with a development, including school places, health requirements and transport infrastructure.
- **Desirable** this defines all projects that are deemed to be of benefit but would not prevent, on balance, the development from occurring or from being acceptable if they were not taken forward.

3.5.4 The final decisions on future spending priorities and classification will rest with the Councils; this study provides a starting point to inform the process.

3.6 Categories of infrastructure outside the scope of this assessment

3.6.1 The following categories of infrastructure are excluded from this study:

- Nationally provided infrastructure is outside our scope (e.g. courts, prisons).
- Privately owned “infrastructure” is outside our scope (e.g. petrol stations, pubs, post offices). Generally, costs that are borne by the private sector are excluded from this assessment.

3.6.2 We have excluded the following categories of health care from the study:

- Hospitals. Some of the latest NHS asset options being considered include significant primary health care provision within local community extended GP facilities as part of a remodelling of service delivery and to take the strain off hospitals. For this study, in consultation with the main stakeholders, the costs of acute health care provision which might be provided through service remodelling, have not been included in the IDP. These costs can be significant and will be part of a government review of NHS service provision.
- Pharmacies and Optometrists. The NHS does not financially support the initial provision or ongoing costs of pharmaceutical and optometric premises. This is a private sector function and is therefore excluded from our study.
- Dental Premises. Dentists are contracted by the NHS to provide an agreed level of units of dental activity. For this they receive an income. Running costs are charged against this income.

3.7 Caveats to this study

- 3.7.1 There are a number of important points which must be borne in mind when using this document, these are set out below.
- 3.7.2 It is important to note that the assessment undertaken relates to infrastructure requirements for the purposes of the local plan and at a level of detail appropriate for that strategic level. As plans are developed further, then specific development based infrastructure assessments will be carried out that will identify more accurately the actual infrastructure needs and costs based on greater detail and understanding of requirements and capacity at that point in time. It is therefore certain that as more detail emerges further refined assessments will supersede the requirements, costs and funding assessments made at this stage.
- 3.7.3 Infrastructure planning is not static - any assessment is based on information available relating to capacity at a point in time and this will be continuously changing. As such, it will be important for the Councils to continue to maintain an ongoing dialogue with service providers, to proactively manage the delivery of planned growth.
- 3.7.4 Infrastructure providers reserve the right to update the information provided. As might be expected, there are some gaps in knowledge and understanding of what is needed and how it might be paid for. Estimates will need to be refined. The service providers are at different stages in their planning processes. In many cases further work is needed to identify specific infrastructure requirements. Most service providers do not plan for infrastructure beyond three to five years ahead, and are not able to clearly forecast their precise requirements in (say) ten years' time. This means that long term infrastructure requirements can only be estimates based on current forecasts and will need to be updated regularly and will need to be treated with a degree of flexibility to reflect future changes.
- 3.7.5 This study is for a longer term plan and service providers will be expected to identify mainstream funding sources to contribute towards the cost of infrastructure requirements. 'Double funding' via developer contributions must be avoided. Service providers are not to assume that because their infrastructure item is included in this study, it will necessarily be entirely funded via developer contributions.
- 3.7.6 The estimates of infrastructure requirements, costs and funding provided here involve generalisation. It is not realistic or appropriate at the plan making stage to achieve the degree of precision that might be possible at planning application stage. For this reason we frequently round numbers to reflect the headline findings and to avoid giving the impression that this study reflects detailed precision – which it does not.
- 3.7.7 This infrastructure assessment is not itself a policy document. Information included in the assessment does not override or amend the various

agreed/adopted strategies, policies and commitments which local authorities and other infrastructure providers currently have in place.

- 3.7.8 Public services, and hence the infrastructure required for delivery, are in a constant state of flux and are affected by changes in growth, population, and national policy. Technology changes too are likely to affect infrastructure requirements in ways which may be difficult to predict. For instance, there may be greater delivery of services via the internet, thus reducing the space required for certain services.
- 3.7.9 In other service areas, joint use of community, education and health related buildings infrastructure will change the future delivery and cost of these services. Funding levels vary with economic trends and political decision.

4 TRANSPORT INFRASTRUCTURE

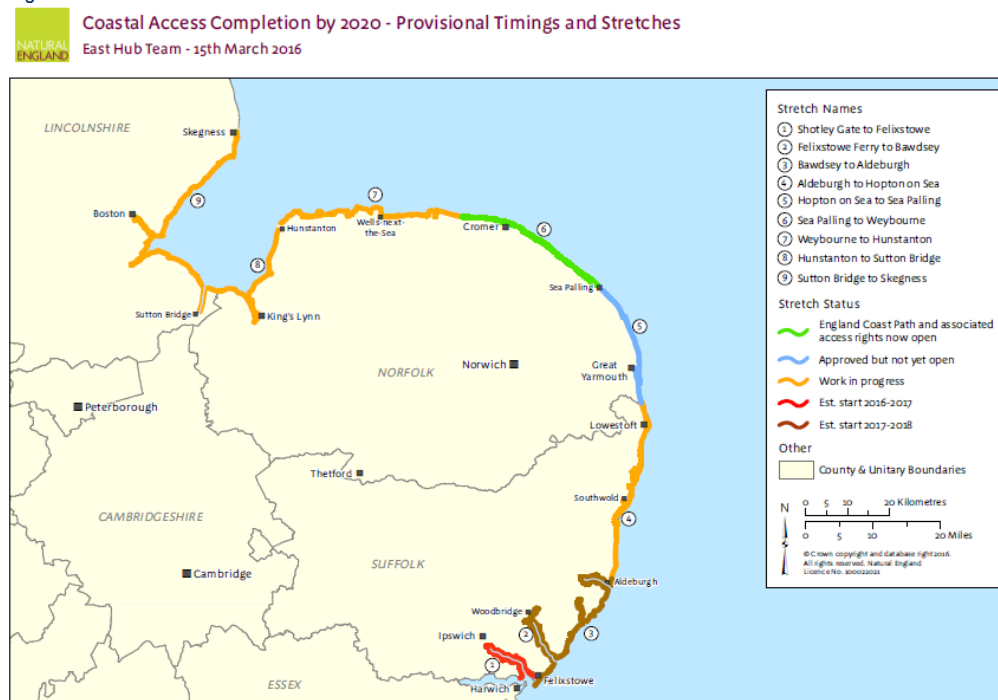
4.1 Introduction

4.1.1 This section sets out the estimated transport infrastructure requirements, cost and funding stemming from planned growth. The requirements have been informed by the County and local transport strategies and assessments, consultations with the transport lead officers at Lincolnshire County Council, strategic site promoters and local Council representatives.

4.2 National transport networks affecting the Local Plan area

- 4.2.1 Highways England has confirmed to the client team that no section of the strategic road network runs through the plan area, (the nearest section being the A1, which is approximately 16km to the west). They have no plans for the strategic road network in the vicinity of the plan area and do not expect that the proposed development in South East Lincolnshire would cause any significant impact on the strategic road network.
- 4.2.2 Work is underway to create the England Coastal Path, a new National Trail around England coastal³. The path is intended to give people right of access around England's entire open coast for the first time. As shown in figure 4.1 below, 92km stretch of the path between Sutton Bridge, Boston and Skegness runs through the plan area and new access is expected to be ready in 2018.

Figure 4.1 Lincolnshire section of the National Coastal Path



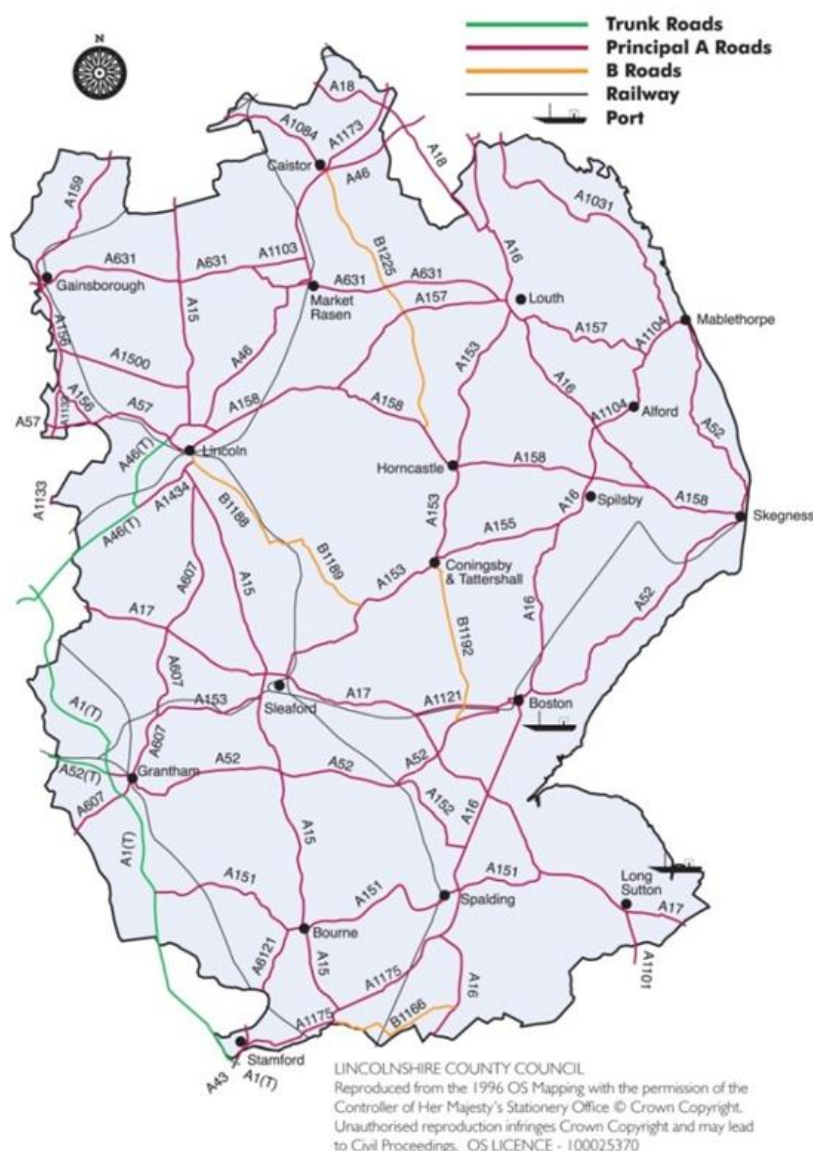
³ <https://www.gov.uk/government/collections/england-coast-path-improving-public-access-to-the-coast> and <https://www.gov.uk/government/collections/england-coast-path-sutton-bridge-to-skegness>

4.3 The local transport network and context

- 4.3.1 The location of South East Lincolnshire at the southern limit of coastal Lincolnshire is recognised as being poorly connected, especially by the highway network, to the rest of the region / country. There are no motorways here. The following two Principal 'A' Roads connect the area:
- A16 Provides main link between Boston and Spalding along with access to Peterborough in the south and Spilsby, Louth and the Humber Ports to the north;
 - A17 From Sleaford, past Holbeach and onto Long Sutton – leading to Norfolk to the east;
- 4.3.2 These are heavily used by a considerable volume of HGVs and farm vehicles and other slow moving vehicles (such as caravans accessing the Lincolnshire and Norfolk coasts in the summer months especially).
- 4.3.3 Passenger transport outside the area is mainly by bus or rail with services to Grantham and Peterborough and beyond at hourly intervals or longer. There are four railway stations within the plan area; Boston, Hubberts Bridge, Spalding and Swineshead.
- 4.3.4 Freight traffic is also a user of the rail network with trains passing through the area to access the various ports including Boston and Felixstowe and other specific terminals in the midlands and the north of England. This affects Spalding in particular and to a lesser extent Boston with rail crossing downtime causing waiting times for highway users.
- 4.3.5 The area is also served by two operational ports, one at Boston and the other at Sutton Bridge which handle a variety of cargoes from local and international markets. Both are reliant on good access to an efficient highway network for easy distribution of cargo. The Port of Boston also benefits from a limited direct train link to the West Midlands.
- 4.3.6 There has been a considerable focus on encouraging walking and cycling in previous Local Transport Plans (LTP) and this is due to continue during the LTP4 which runs to 2023. Access by bicycle to places of work in Boston is nearly double that of Lincolnshire and four times the national rate⁴. The rate for South Holland is comparable with the rest of Lincolnshire. The Draft Local Plan includes policies to incorporate greater cycle storage facilities at workplace (policy 32).
- 4.3.7 Figure 4.2 overleaf shows the main highway, rail and port networks.

⁴ Draft local Plan paragraph 2.1.7

Figure 4.2 Lincolnshire's main transport networks



Source: Lincolnshire County Council

4.4 Lincolnshire Local Transport Plan and other transport strategies

- 4.4.1 The Lincolnshire Local Transport Plan (LTP4)⁵ sets out the overarching transport framework. The South East Lincolnshire Authorities have been working with the Local Highway Authority (LCC) and Highways England to determine the transport principles that have informed the Local Plan policies. Work will be on-going in relation to bringing forward the proposed Sustainable Urban Extensions and which will have a timespan that extend beyond the Local Plan Period. Joint working between the officers from the various

⁵ <http://www.lincolnshire.gov.uk/transport-and-roads/strategy-policy-and-licences/local-transport-plan/4th-lincolnshire-local-transport-plan/102070.article>

authorities seeks to ensure that the LTP4 and the IDP are integrated effectively and reflect what is required to enable growth in South East Lincolnshire. Any new schemes identified in LTP review will be included in future IDP schedules.

4.4.2 Other key plans and strategies which have informed the transport infrastructure requirements for South Lincolnshire include:

- Spalding Transport Strategy 2014 – 2036⁶
- Boston Transport Strategy 2006 - 2021⁷ (Currently being updated to 2036)

Findings from initial transport modelling

4.4.3 Lincolnshire Local Plan Tool (LLPT) models the high level impact of planned growth on Lincolnshire's highway network. Findings from the first run of the model indicate that based on the level of growth proposed there will be some areas of network stress around central Boston, the A16 around Spalding, and strategic links on the A16 south of Boston and A17. Further work has been undertaken in respect of Boston, Spalding and strategic links (and other areas of the county) to test the local road network in more detail taking account of committed and proposed highway schemes and to identify further mitigation which will be required to support the delivery of the Local Plan. The results of this work are incorporated in the Lincolnshire Local Plan Tool Upper Tier Report (this can be found at document 108 in the library at the following link <https://www.n-kesteven.gov.uk/central-lincolnshire/planning-policy-library/>).

4.5 The Spalding Transport strategy

4.5.1 Spalding Transport Strategy (2014 - 2036) sets out various measures for managing transport within the town.

East – west movement delays due to rail level crossing

4.5.2 Some of the key issues identified in the strategy is the severance created by the railway line, and river in Spalding and also the associated 'downtimes' due to level crossing gate closures associated with the rail freight traffic. These restrict movement of traffic and cause congestion, particularly to east-west movements during peak periods. This congestion and down-time is expected to increase as more rail freight is used, thus lengthening east – west journey time even more. In addition, some 3,500 pupils attend the three local secondary schools in Spalding generating significant movements of pupils through the town on the eastern side of the railway and river.

⁶ <http://www.southeastlinclslocalplan.org/wordpress/transport/>

⁷ <http://www.lincolnshire.gov.uk/transport-and-roads/strategy-policy-and-licences/transport-strategies/boston-transport-strategy/transport-strategy-for-boston-2006-to-2021-and-beyond/100484.article?tab=downloads>

4.6 Spalding Western Relief Road

- 4.6.1 The proposed Spalding Western Relief Road (SWRR), when completed is expected to provide faster access to areas to the north, west and south of the town and by reducing the car journeys currently passing through Spalding town centre along the A151, it is likely that the delays at the railway level crossings will be reduced.
- 4.6.2 Where the SWRR route has not been clearly defined, the Local Plan includes a safeguarding corridor to protect the broad area within which the route is expected to proceed. Although fairly complicated in detail, the SWRR is best considered in three sections – Northern, Central and Southern⁸. The Southern and Northern sections of the SWRR are expected to be delivered during the plan period alongside the delivery of planned growth, whilst the Central section is likely to be delivered beyond this plan period.

Southern section of the SWRR

- 4.6.3 The Southern section of the SWRR starts at the B1172 Spalding Common Road, crosses the Spalding to Peterborough railway line via a bridge and continues to provide access into the consented Holland Park urban extension for some 2,250 dwellings. The Southern section of the SWRR is estimated to cost £20m. The scheme will be jointly funded by Lincolnshire County Council and S106 developer contribution associated with the consented Holland Park scheme and will be implemented by Lincolnshire County Council.

Northern section of the SWRR

- 4.6.4 The Northern section of the SWRR starts with a junction at Spalding Road with Enterprise Way. This section of highway then continues south-westwards in parallel with the Vernatt's Drain, including a bridge crossing of the Joint Line railway, and concludes with a roundabout situated a short distance past Two Plank Bridge. This roundabout will enable access to housing land forming part of the 'Vernatts urban extension'. Pending completion of that part of the Central section (see paragraph 4.6.5 below linking the Northern section with the A151 Bourne Road), the number of new dwellings that can be accessed by the Northern section alone will be restricted. The precise nature of the restriction off the Northern section is currently being modelled by Lincolnshire County Council. The Northern section of the SWRR is estimated to cost £21m. The scheme is expected to be funded by Lincolnshire County Council, other funding bids and developer contributions and is expected to be implemented by Lincolnshire County Council.

Central section of the SWRR

- 4.6.5 The Central section of the SWRR, (associated with the delivery of post plan period growth), will link the Northern to the Southern section of the SWRR.

⁸ At the time of preparing this IDP, concept plans for SWRR were not available to include in this report.

This section includes a carriageway, a crossing of the Vernatt's Drain, a junction to Bourne Road and crossing / junction at Horseshoe Road. This Central section of the SWRR is estimated to cost £30m and will feature in the post plan growth. The scheme is expected to be funded by Lincolnshire County Council, other funding bids and developer contributions and is expected to be implemented by Lincolnshire County Council.

Cost estimates for the SWRR

- 4.6.6 The total estimated cost for the SWRR based on a very high level assessment by Lincolnshire County Council is between £71m rising to £100m after allowing for approximately 40% optimism bias. Detailed cost estimates have not been undertaken for the SWRR scheme apart from the Southern section, (which was undertaken in 2013 and has since been updated for inflation).
- 4.6.7 The cost estimates included in this IDP are based on comparing the scheme composition with the cost estimates for the Southern section. However, these costs estimates will need to be treated with caution and as high level estimates. The scheme costs will be refined as SWRR design is developed over time.
- 4.6.8 Each section of the SWRR delivery could be further broken down to align with available funding and planned development coming forward. The SWRR will only be delivered when there is certainty of the planned growth taking place - this may require a legal agreement between developers and Lincolnshire County Council to provide some assurance that any upfront investment in the SWRR will be linked to the delivery of growth.

Other interventions required in Spalding

- 4.6.9 The Spalding Transport Strategy 2014 to 2036 sets out a wide range of short, medium and longer term transport measures which respond to the assessed issues identified in the strategy. Projects currently known have been included in the IDP.

4.7 The Boston Transport Strategy

- 4.7.1 The original Boston Transport Strategy 2006 - 2021 is being refreshed and the new strategy will be aligned to the South East Lincolnshire Local Plan up to 2036. The updated Boston Transport Strategy is due to be released in March 2017.

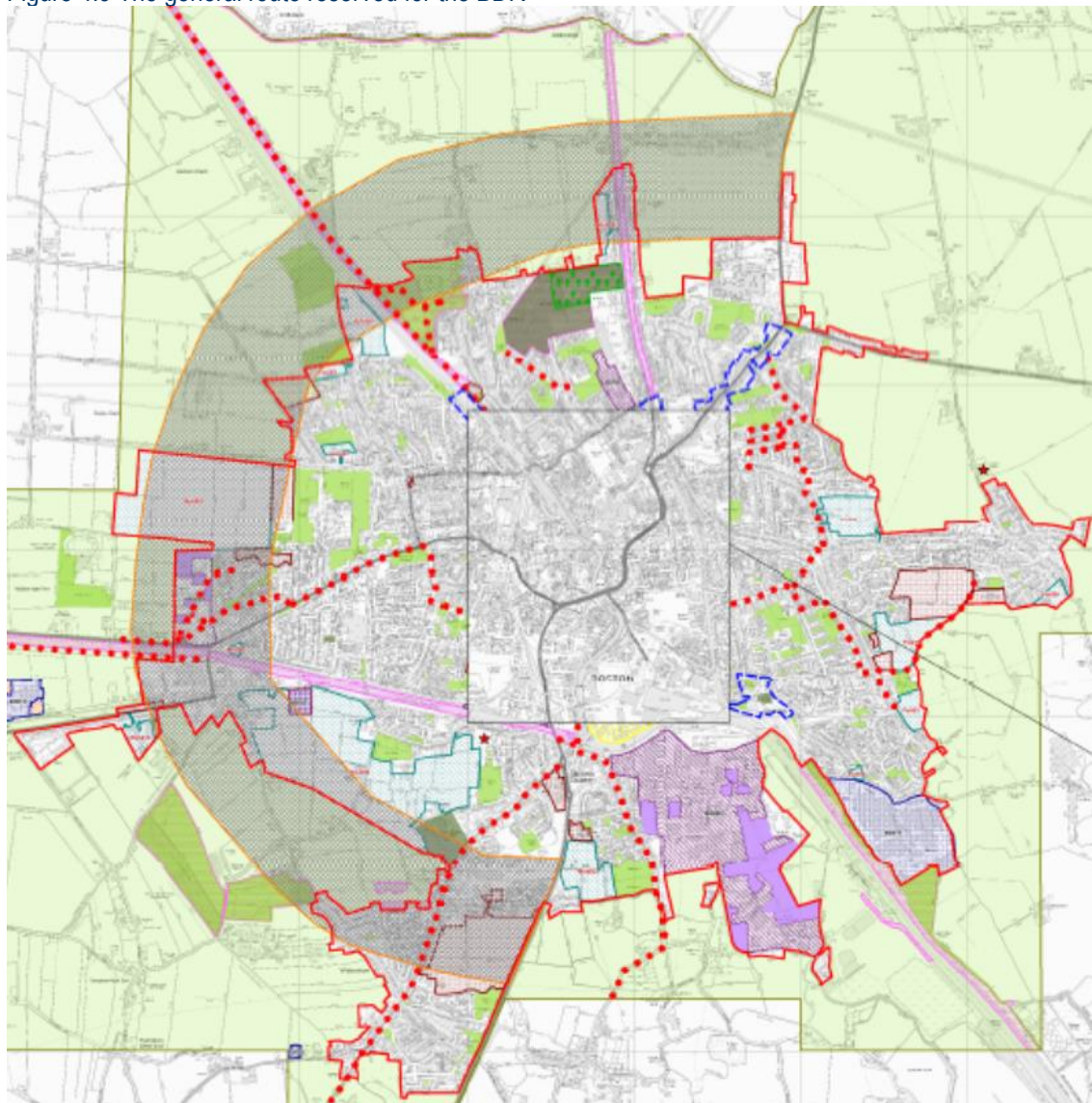
4.8 Boston Distributor Road

- 4.8.1 The transport strategy recognises the need for the Boston Distributor Road (BDR) to provide traffic with an alternative route to travelling through and around the town centre. The aim of the Boston Distributor Road is to unlock delivery of the proposed housing land and also relieve the traffic that starts or finishes (or both) in Boston, as well as providing an alternative route for

through traffic. This is to be achieved by having a number of junctions and links back into Boston, thereby maximising opportunities for Boston traffic to access the BDR instead of travelling through the town centre.

- 4.8.2 The current investigatory work focused on a route to the west of the town linking the A16 to the south via the A52/A1121 to the West and onto the A16/A52 to the north. A route to the west ties in with the development aspirations of the emerging Local Plan and provides a direct link between the busy A16 South and A52 / Boardsides to alleviate traffic that currently goes through the town centre.
- 4.8.3 The BDR will be brought forward in sections as development opportunities arise and is currently planned to be linked closely with the delivery of sustainable urban extensions to the south and west of the urban area. The first phase of this, which started on site in June 2016, is 'The Quadrant' by Chestnut Homes, which links the A16 with the adjacent London Road. Providing sections of the distributor through proposed urban extensions will serve those developments and could lead to a coherent route in the long term, i.e. beyond the plan period.
- 4.8.4 The 4th Lincolnshire Local Transport Plan states that 'it is anticipated that areas of land will be identified for future development which may help facilitate the possibility of a distributor road to the west of Boston. This forms an important part of the longer term highway improvements within the adopted Transport Strategy'.
- 4.8.5 Figure 4.3 overleaf shows the general direction of the entire BDR to the west of the town and the subsequent figures show how areas of future development may help to facilitate the delivery of parts of the BDR in the safeguarded corridor.

Figure 4.3 The general route reserved for the BDR



Source: Extract from the Preferred Options Housing Paper June 2016

Section of BDR linked to the consented Quadrant scheme

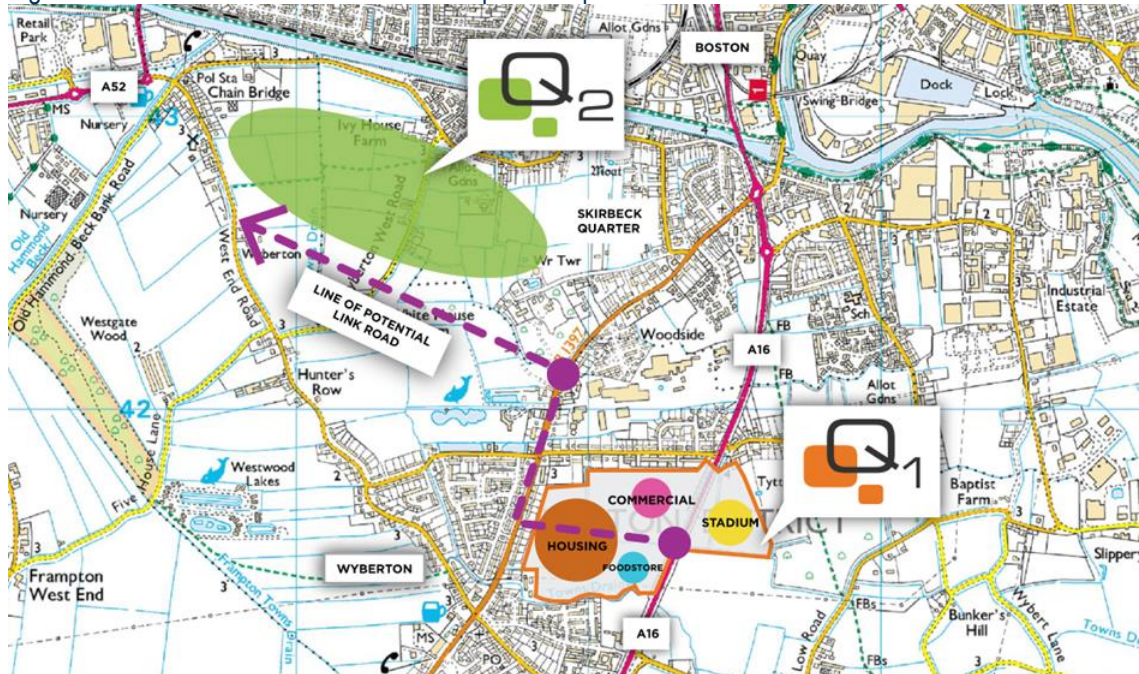
- 4.8.6 Consent was granted to Chestnut homes for the Quadrant (Q1) urban extension in March 2015 for a hybrid application for a mix of uses including; up to 500 dwellings, new food store, commercial and leisure uses, 60 bed hotel, and a new community football stadium. The site is land either side of the A16, south of Tyton Lane East, Boston. Plans for Q1 include the building of the first section of the BDR. Work on this initial section commenced in June 2016 and will join the A16 with London Road as shown in the figure 4.4 overleaf.

Section of the BDR is linked to the preferred option Sou 006 / Q2 site

- 4.8.7 As part of the Quadrant 2 (Q2) scheme for some 1,900 dwellings, the BDR would be extended to link towards the A52/Boardsides during the

development of Q2 as shown in figure 4.4. Delivery of this scheme is assumed as part of the development site opening costs based on interviews with the site promoters.

Figure 4.4 Quadrant 1 and Quadrant 2 concept masterplan

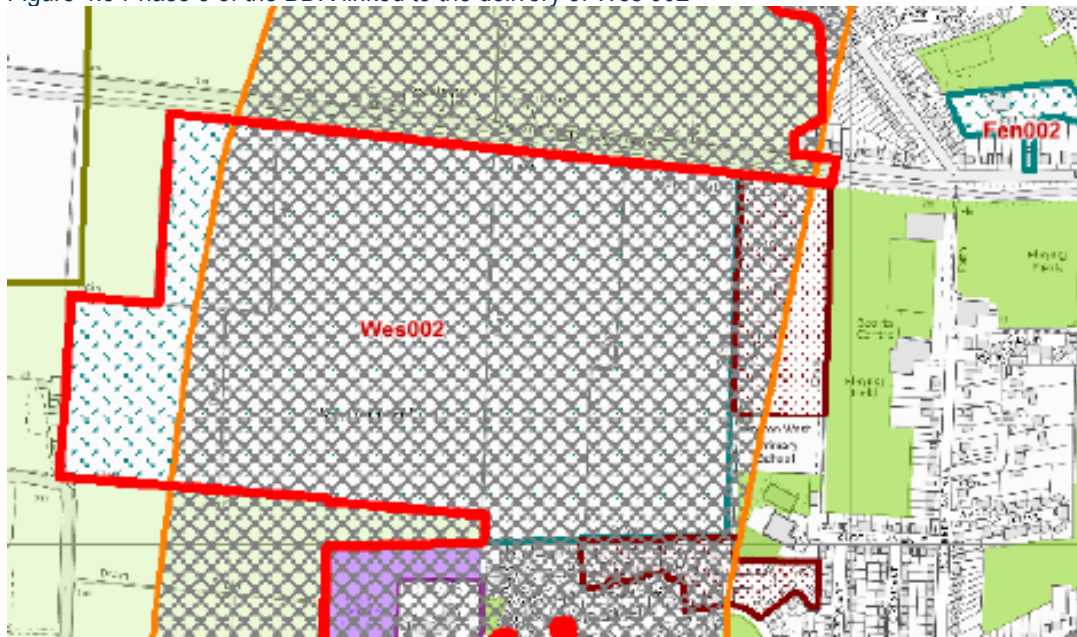


Source: Chestnut Homes – <http://thequadrantboston.co.uk/wp-content/uploads/2013/08/The-Quadrant-Map.jpg>

Sections of the BDR linked to the delivery of preferred options site Wes 002

- 4.8.8 The Wes 002 SUE (see figure 4.5 overleaf) promoted by Broadgate Homes for approximately 1,400 units will be phased over medium to longer term. This is likely to entail the delivery of approximately a half mile section of the BDR scheme, going through the Wes 002 site, by proposing to extend Gilbert Road towards the North Forty Foot Bank. Broadgate Homes are seeking pre application advice at the time of writing. This section of the scheme is assumed to be funded by the developer as part of the site opening costs, though no scheme costs are available to include in the IDP.

Figure 4.5 Phase 3 of the BDR linked to the delivery of Wes 002

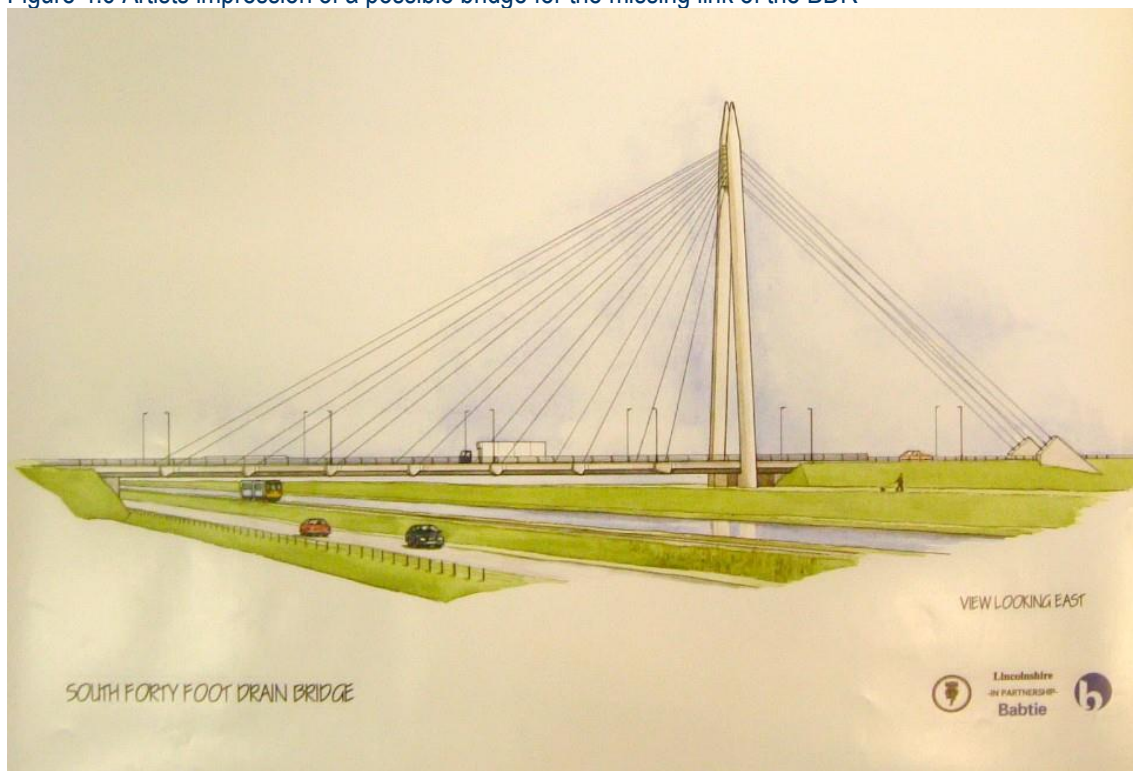


Source: Extract from the Preferred Options Housing Paper June 2016

The bridge linking Quadrant 2 and Broadgate Homes Wes002 site of the BDR

- 4.8.9 A significant bridge crossing is needed to connect Q2 / Sou 006 and Wes 002. This would aid the traffic flow along BDR, without which would be impeded by the existing railway level crossing and mini roundabout at the junction of the A52/A1121/Sleaford Road.
- 4.8.10 The current railway level crossing at the three way junction of the A52, A1121 Boardsides and Sleaford Rd in Boston is a pinch point within the local network, especially for vehicles travelling north/south at this point.
- 4.8.11 A South Forty Foot Drain Bridge would provide an improved crossing from the A52 to A1121. It would cross this watercourse, and also provide an alternative crossing for the railway (which runs in parallel with the watercourse) forming part of the proposed BDR. A historic (2010) artist impression of a possible bridge crossing at this point is shown in figure 4.6 overleaf.
- 4.8.12 There are particular challenges to providing this link bridge as it needs to cross the South Forty Foot Drain, the railway and A1121 Boardsides and as such is estimated to be a costly structure.

Figure 4.6 Artists impression of a possible bridge for the missing link of the BDR



Source: Lincolnshire County Council 2010

- 4.8.13 A bridge crossing does not form part of the LTP funding or is not part of any planned growth and it is currently not clear how or when this will be delivered. If a new crossing is not provided across the South Forty Foot Drain and adjacent railway, then the proposed development of BDR, combined with the associated housing developments, is expected to add to the congestion already experienced at the mini roundabout point where Boardsides meets the Sleaford Rd and the A52.
- 4.8.14 Boston B C officers are aware of the challenges to the delivery of this section of the BDR, and have adopted a pragmatic approach. This section of the BDR is seen as 'desirable' to reduce congestion at the mini roundabout and also to alleviate the general town centre congestion. However, it will not impede the delivery of planned growth, and will be provided as and when funding can be secured.

Indication of the post plan period BDR scheme

- 4.8.15 Once the BDR scheme which forms part of the plan period scheme at Wes 002 (Broadgate Homes) site is in place (which would extend the existing Gilbert Drive to the north), the BDR will potentially need to then (post plan period) interact with the following features as it travels North and East:
- North Forty Foot Drain watercourse
 - North Forty Foot Bank (Rd)

- Punchbowl Lane
- Washdyke Lane
- Fenside Road
- River Witham WATERCOURSE
- Tattershall Road
- Rawsons Lane
- B1183 Horncastle Rd
- East Coast Railway Line RAILWAY
- Maud Foster Drain WATERCOURSE
- Willoughby Rd
- A16 North

4.8.16 Note too that the River Witham crossing is navigable and so will need a suitable bridge. To cross the B1183 / Railway / Maud Foster and Willoughby Road is likely to require significant transport structures. Whilst no work has been conducted to date to estimate the scheme cost in relation to this potential post plan period works for the BDR scheme, it is likely at current estimates to be in the region of £80M - £100M.

Cost, funding and delivery of future sections of the BDR

4.8.17 The total very high level estimate with a scheme design is estimated to be approximately £135m to £155m – this includes elements beyond the plan period. The Local Plan and associated SHLAA can currently demonstrate long term development land availability within the BDR safeguarding corridor as shown in figure 4.3 earlier.

4.8.18 Parts of the plan period BDR will be delivered as part of Q1, Q2 and Wes 002 urban extensions, leaving a gap in the bridge crossing of the South Forty Foot Drain to be met by other funding which will be explored further as part of the Boston Transport Strategy.

Peppermint Junction at Holbeach, South Holland

4.8.19 The junction of the A17 and A151 has had 22 injury related accidents in the last ten years. The junction's layout discourages some drivers from using it, preferring instead to drive through the centre of Holbeach. Until these problems are resolved the junction is stifling both residential and employment growth in the Holbeach area.

- 4.8.20 The Peppermint Junction scheme has been designed to improve road safety whilst also providing access to land for residential development to the east of the A151, and land for commercial development / possible Food Enterprise Zone (FEZ), to the west of the A151, thereby helping to create opportunities for expansion of the food industry in the area.
- 4.8.21 Work on this scheme is expected to commence in spring 2017. The estimated cost of the scheme is £5.4m (this includes an optimism bias of 25%). Funding sources for the scheme include £2.4m from the Greater Lincolnshire LEP Growth Deal 2 (2018 – 2020) which will be forward funding the scheme. £1m is expected from S106 developer contributions for the residential schemes currently being considered at Holbeach and the balance and forward funding will be LCC Capital.

Boston Road roundabout Holbeach

- 4.8.22 Boston Road roundabout is located to the east of Peppermint Junction on the A17 in Holbeach. Traffic modelling from Peppermint Junction confirms that significant congestion is likely to arise at this junction by 2032 if no action is taken. LCC has conducted a feasibility study to consider capacity improvements at this roundabout. The current intention is to delivery these improvements in parallel with the Peppermint Junction scheme. This would form part of a wider strategy along the A17 to create overtaking opportunities, thereby improving journey times and road safety. The cost of this is estimated at £295k, and funding has been confirmed from the LCC Integrated Transport Block fund.

4.9 Summary of transport costs and funding

- 4.9.1 Table 4.1 below is a summary of known transport costs and funding. Further details will be developed as part of the transport strategies.

Table 4.1 Summary of transport estimate cost by phase and priority

Estimated transport infrastructure costs	Cost phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total cost
Transport	£18,695,000	£16,000,000	£10,000,000	£53,000,000	£97,695,000
Critical	£8,000,000	£11,000,000	£3,000,000	£5,000,000	£27,000,000
Boston Distributor Road Q2	£0	£3,000,000	£3,000,000	£5,000,000	£11,000,000
Spalding Western Relief Road northern section	£3,000,000	£3,000,000	£0	£0	£6,000,000
Spalding Western Relief Road southern section	£5,000,000	£5,000,000	£0	£0	£10,000,000
Essential	£10,695,000	£5,000,000	£7,000,000	£8,000,000	£30,695,000
Holbeach - Boston Road roundabout	£295,000	£0	£0	£0	£295,000
Holbeach - Peppermint Junction	£5,400,000	£0	£0	£0	£5,400,000
Spalding Western Relief Road northern section	£0	£0	£7,000,000	£8,000,000	£15,000,000
Spalding Western Relief Road southern section	£5,000,000	£5,000,000	£0	£0	£10,000,000
Desirable	£0	£0	£0	£40,000,000	£40,000,000
Boston Distributor Road - South Forty Foot crossing	£0	£0	£0	£40,000,000	£40,000,000
Boston Distributor Road - post plan period growth	£0	£0	£0	£0	£0
Spalding Western Relief Road central section	£0	£0	£0	£0	£0
Grand Total	£18,695,000	£16,000,000	£10,000,000	£53,000,000	£97,695,000

Source: PBA 2016

Funding for transport infrastructure

4.9.2 The main funding sources to support the delivery of transport infrastructure is expected to come from the following sources:

- Developer funding will also be sought either via S106 or CIL.
- Lincolnshire County Council Capital – for major schemes, such as the SWRR, BDR.
- Lincolnshire County Council Integrated Transport Block Capital Funding.
- Funds available through the Local Enterprise Partnership aimed at private sector investment and/or growth
- Central government funding through the Department of Transport (DfT) to target specific areas of transport, recent examples include the local Pinch Point Fund, Green Bus Fund, and the local Sustainable Transport Fund.
- Network Rail – level crossings, railway infrastructure improvements funding.
- Public transport operations – bus and rail service improvements.

5 FLOOD MANAGEMENT INFRASTRUCTURE

5.1 Introduction

- 5.1.1 South East Lincolnshire lies to the west and south-west of the Wash estuary in the south eastern corner of the East Midlands region. Its proximity to the coast continues to exert its influence on future planned growth and flood mitigation infrastructure requirements. A huge part of the land area has been reclaimed through a vast network of drainage systems to create some of the richest and most extensive agricultural and horticultural resources in the country. The concentration in the sector has also contributed to the area's growth in population, and hence the need for housing and associated infrastructure requirements, including flood mitigation infrastructure.
- 5.1.2 The flat character of the land and its proximity to the Wash estuary also mean that the main watercourses, such as the River Witham, River Welland, River Nene and connected drainage channels have tidal influences which require everyday management through the operation of pumping stations and sluices. Even a minor flood event has the potential to inundate valuable farmland with saline water and negate productivity for many years.
- 5.1.3 Ensuring appropriate flood mitigation measures are in place is vital to the agricultural economy in particular, but also to support the delivery of new housing and environment considerations. The draft Local Plan recognises that one of the most significant challenges to be addressed is that of meeting housing needs in an area of flood risk. Especially in the case of Boston, where the Local Plan recognises the threat posed by flood risk, but also acknowledges that Boston urban area will continue to be an area of choice for most residents and therefore flood mitigation infrastructure is a major consideration for the delivery of the Local Plan Strategy.

5.2 The Boston Tidal Barrier

- 5.2.1 The Boston Barrier flood defence scheme is identified as part of the National Infrastructure Plan and will be constructed downstream of Black Sluice Lock on the Boston Haven. It is part of a phased approach responding to the Boston Combined Strategy⁹, to reduce the risk of tidal flooding to 14,300 existing properties in Boston over the next 100 years. The Boston Barrier flood defence project has been prioritised by the Environment Agency and government for funding following the tidal surge in December 2013. It is designed to accommodate future climate change guidance and provide a consistent and improved level of protection to Boston and the surrounding area. As such it is not linked directly to planned growth. However, given the scale and significance of this scheme, a mention of it is included in this report and in the IDP schedule. The Boston Barrier will provide Boston with a 1 in

⁹ Copies of Boston Combined Strategy are available on request from the Environment Agency.

300 (0.33%) chance standard of protection each year, allowing for climate change over the next 100 years. In addition to the construction of the barrier, this will also be achieved through improvements over time to the Haven Banks to adapt to future sea level risk.

- 5.2.2 The Boston Combined Strategy identified a multifunctional barrier that both reduces tidal flood risk and manages water levels. This Water Level Management, (WLM), element would look to hold stable water levels upstream of the barrier to reflect those in the river Witham throughout the boating season. This would create an attractive and vibrant riverside environment and encourage the town to “turn towards the river” and celebrate its waterways heritage, attracting private sector investment to meet new demands from tourists, visitors, maritime visitors and residents.¹⁰ WLM was also proposed to create a safe and reliable non-tidal link between the River Witham at Grand Sluice and Black Sluice Lock on the South Forty Foot Drain – forming phase 2 of the Fens Waterways Link (FWL). However, the priority is to protect Boston from tidal flooding as soon as possible and with a lot of detail around the WLM element still to be resolved, this part of the project has been removed from the scheme but with a commitment to provide it in the future.
- 5.2.3 Lincolnshire County Council committed £11million towards WLM. Further economic studies in 2014 confirmed that most benefits for Boston come from holding high water levels for as long as possible and attracting leisure boats from the sea as well as from inland waterways. However, this needed further appraisal work. Therefore, following a Lincolnshire County Council Executive Committee decision in February 2015 and a Project Board confirmation in spring 2015 it was agreed that the work surrounding WLM should not delay the tidal flood defence project. Water Level management has now been removed from the scope of the Boston Barrier project and Lincolnshire County Council has now separated its £11million contribution from the scheme. It is reviewing how best to invest the funding to maximise its regeneration impacts and to allow additional fund raising opportunities to be identified.
- 5.2.4 The Boston Barrier is projected to have a £107.5million whole life cost and its primary function is to reduce the risk of tidal flooding but steps have been taken so the barrier has the potential to retain water levels through the town at a later date. Construction of the Barrier and associated works are expected to start in late 2017 and be completed by 2019.
- 5.2.5 A Transport and Works Act Order (TWAo) application will be submitted to the Secretary of State in summer 2016 to authorise the Environment Agency to construct and operate a new tidal barrier with associated works. The Environment Agency is obtaining funding for the project through an allocation of capital Flood Defence Grant in Aid (FDGiA) from the government.

¹⁰ Extract from ‘Common vision for Water Management in Boston and the Surrounding Areas’ March 2015.

5.3 The Black Sluice Pumping Station and South Forty Foot Catchment

The Black Sluice Catchment

- 5.3.1 The Black Sluice Catchment covers 640km² (247 miles²) in south Lincolnshire. All rivers and streams in the catchment flow, or are pumped into, the main watercourse - the South Forty Foot Drain (SFFD). This watercourse in turn flows out to the tidal River Haven in Boston, via the 'Black Sluice' outfall. The outfall comprises 2 gravity sluices (one of which doubles as a lock) and the Black Sluice Pumping Station (BSPS). Figure 5.1 overleaf shows the Black Sluice catchment area.
- 5.3.2 The Black Sluice Catchment Works (BSCW) project is examining the way that flood risk management is currently undertaken in this river catchment. There is flood risk from a number of sources in the area. The current flood risk management structures and practices for both flood risk and drainage are extensive. Some of the flood risk management infrastructure now requires significant investment. The whole system is currently being reviewed - the structures and their management to provide the optimum standard of protection against future flooding in the most sustainable, efficient and resilient way. This includes the Black Sluice Pumping Station in Boston which was flooded during the tidal surge on 5 December 2013, when 3 of the 5 pumps were damaged beyond repair. The remaining pumps are now over 50 years old and need replacing.
- 5.3.3 An action plan will be developed as a result of the BSCW project which is likely to identify physical flood mitigation infrastructure requirements – when this has been prepared and made available, it can inform future stages of the IDP.

Figure 5.1 The Black Sluice Catchment showing the main rivers (which are operated by the EA)



South Forty Foot Steering Group

5.3.4 Following the consultation on the future of the Black Sluice Pumping Station and the South Forty Foot catchment which took place in 2015, the South Forty Foot Steering Group has been established to assist in shaping the future of both. This group will include representation from the BSIDB, the EA, Lincolnshire County Council and the Greater Lincolnshire Local Enterprise Partnership. The Steering Group will focus on four areas for flood risk associated development:

- **Catchment wide asset management for land drainage and flood risk management** - A detailed plan for operating and maintaining the flood risk infrastructure in the catchment will be jointly written by all Risk Management Authorities (RMAs)¹¹ involved in managing flood risk. It will outline each partner's roles and responsibilities and identify funding sources and arrangements, to ensure that the work is affordable and fully funded.

¹¹ Organisations that have a key role in flood and coastal erosion risk management as defined by the Act. These are the Environment Agency, Natural Resources Wales, LLFAs, district councils where there is no unitary authority, internal drainage boards, water companies, and highways authorities.

- **Water Resource** - opportunities will be sought to optimise the use of water within the catchment to generate economic growth.
 - **Water Level Management for Navigation** - existing and new aspirations will be considered when developing works arising from the above to ensure Water Level Management for Navigation is incorporated or as a minimum, not precluded for the future.
 - **Water Framework Directive** - Opportunities will be sought across all works arising from the above to collectively deliver in accordance with the Water Framework Directive and enhance the environment where possible.
- 5.3.5 Organisations will be able to bid for funding from sources other than FCRMGIA and coordinate development and risk management activities within the catchment.
- 5.3.6 Infrastructure requirements and delivery strategy relating to flood and drainage will be developed as the work of the South Forty Foot Steering Group develops in the four areas identified above. These will need to be incorporated into the live Infrastructure Delivery Plan. There are no identified strategic growth related flood and drainage infrastructure currently identified to prevent the planned growth to proceed (apart from site specific requirements that will be assessed at planning application stage).

6 EDUCATION INFRASTRUCTURE

6.1 Introduction

- 6.1.1 This section assesses the education infrastructure requirements, costs and funding for primary, secondary and sixth form education. This assessment has been informed by Lincolnshire County Council's education team.

6.2 Infrastructure capacity

- 6.2.1 Lincolnshire County Council (LCC) has confirmed that there are capacity issues across South East Lincolnshire however this varies. In the sub-regional centres of Boston and Spalding there is limited capacity for primary or secondary education. The past increases in population have affected the available capacity.
- 6.2.2 There are also capacity constraints in a majority of primary and secondary schools within the main and minor service centres in which development is being considered. It is understood that in a number of cases the ability to expand these schools is limited due to existing site constraints. Past expansions have absorbed the capacity to expand existing facilities at a number of schools due to historic requirements.

Critical path assessment

- 6.2.3 The education critical path assessment tables set out in Appendix C have been completed by LCC based on their current knowledge of existing capacity and where there is a need for additional infrastructure. It should be noted that as a service provider, LCC, is concerned with infrastructure planning to support consented schemes coming on stream as well as future planned growth, thus the critical path assessment has been completed based on their current knowledge of where infrastructure is likely to be required to meet past consented schemes and does not relate to just future planned growth.
- 6.2.4 This IDP has only assessed the infrastructure requirements stemming from planned growth, and so has amended the scale of infrastructure requirements

Land allocation for secondary schools

- 6.2.5 Land has been allocated for a secondary school to meet longer term planned growth to the west of Spalding. The Boston Transport Strategy identifies that secondary school provision on the western side of the urban area would have beneficial impacts on reducing traffic movements across and through the town. A site to meet secondary schooling needs, largely arising from Sou006 and Wes002 should be taken forward.
- 6.2.6 Other areas have been identified in the critical path assessment as requiring land or the release of playing fields to accommodate the expansion of school places.

6.3 Infrastructure requirement and cost assumptions

- 6.3.1 Consultation with the Education Team at LCC has informed the education infrastructure requirements assessment for this IDP. Appendix C provides detailed breakdown of the infrastructure requirements by location and type of school premises required stemming from this assessment, as well the critical path analysis to inform when infrastructure is likely to be required.

Table 6.1 Education infrastructure requirement assumptions

Assumption	Primary expansion	Primary new build	Secondary / Sixth form expansion	Secondary / Sixth form new build
Cost per pupil place	£13,755	£19,904	£14,102	£19,904
Yield (pupils per dwelling)	0.2		0.19	0.038 (sixth form)

Source: Costs informed by National School Delivery Benchmarking study Feb 2016, yields informed by Lincolnshire County Council Feb 2016

- 6.3.2 Table 6.1 set out the cost assumptions used to inform the education assessment. For consistency, the cost assumptions for both primary and secondary school are from the same data source based on a national cost benchmarking study undertaken by Hampshire County Council in conjunction with East Riding of Yorkshire Council and the Education Funding Agency in February 2016.
- 6.3.3 This study provides cost data for new primary, and extension of secondary schools, but does not provide a cost estimate for new secondary schools due to the limited nature of the sample size. For this reason we have adopted the same cost figure for new secondary as for new primary school, though it is likely that this cost will vary and could be higher due to the specialist nature of secondary schools.
- 6.3.4 Based on LCC guidance, the same cost assumption has been adopted for the sixth form requirements as the secondary school costs.
- 6.3.5 For this assessment current capacity has been informed by the LCC as shown in the critical path assessments in Appendix C.
- 6.3.6 LCC have developed a number of two form entry primary schools in the region in recent years and have indicated that these cost around £7.5m to build. Although a proportional application of this cost was considered, instead the pupil place cost figures have been used to inform the cost requirements for the unconsented plan growth in this study.
- 6.3.7 LCC have indicated that approximately 1.15% of primary age children and 2.5% of secondary age children are estimated to be of Special Education Needs (SEN). Whilst this is a small percentage, the cost for providing SEN

places is substantially higher than general costs¹². However, a cost estimate for SEN infrastructure has not been included in this IDP based on guidance from LCC as this will be difficult to seek developer contributions for.

- 6.3.8 Information was requested from LCC about the capacity and requirement for any Early Years provision. This information has not been made available to inform the IDP assessment.

6.4 Summary of education infrastructure costs and funding

- 6.4.1 The assessment of education infrastructure requirements is summarised in the table 6.2 below. This shows there is an overall requirement for approximately £75m worth of investment in education infrastructure to meet planned needs.

Table 6.2 Summary of education infrastructure cost phase, priority and local authority

Education est. infrastructure costs	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total cost
Boston BC	£19,529,869	£3,766,119	£6,094,956	£396,144	£29,787,088
Essential	£19,529,869	£3,766,119	£6,094,956	£396,144	£29,787,088
Primary school extension	£2,522,667	£3,766,119	£1,851,423	£396,144	£8,536,353
Primary school new building	£0	£0	£4,243,533	£0	£4,243,533
Secondary new school building	£13,932,800	£0	£0	£0	£13,932,800
Secondary school extension	£225,632	£0	£0	£0	£225,632
Six form new school building	£2,806,464	£0	£0	£0	£2,806,464
Six form school extension	£42,306	£0	£0	£0	£42,306
South Holland DC	£15,609,165	£18,860,698	£9,421,322	£2,547,712	£44,929,983
Essential	£15,609,165	£18,860,698	£9,421,322	£2,547,712	£44,929,983
Primary school extension	£2,759,253	£1,826,664	£110,040	£0	£4,695,957
Primary school new building	£4,896,384	£0	£7,802,368	£2,547,712	£15,246,464
Secondary new school building	£0	£12,937,600	£0	£0	£12,937,600
Secondary school extension	£6,627,940	£1,015,344	£1,508,914	£0	£7,643,284
Six form new school building	£0	£2,587,520	£0	£0	£2,587,520
Six form school extension	£1,325,588	£493,570	£0	£0	£1,819,158
Grand Total	£35,139,034	£22,626,817	£15,516,278	£2,943,856	£74,717,071

- 6.4.2 Further details by settlement are provided in table 6.3 overleaf. This shows where schools are to be extended or where a new school is likely to be required. The critical path analysis tables in Appendix C provide an assessment by LCC on whether there is capacity to expand an existing school or where further land is needed to support the delivery of the new schools.

¹² SEN space is estimated at £65,820 per pupil for a re-build / school extension in the National School Delivery Benchmarking study

Table 6.3 Estimated Basic Needs Funding for the South East Lincolnshire 2016 – 2019

Education infrastructure cost estimate by local authority and local area	Cost estimate
Boston overall	£16,739,264
Secondary new school building	£13,932,800
Six form new school building	£2,806,464
Spalding overall	£15,525,120
Secondary new school building	£12,937,600
Six form new school building	£2,587,520
Holbeach	£9,860,288
Primary school new building	£4,896,384
Secondary school extension	£4,131,886
Six form school extension	£832,018
Spalding (excluding SUE)	£7,802,368
Primary school new building	£7,802,368
Boston SUE -land to south of Chain Bridge Rd	£4,243,533
Primary school new building	£4,243,533
Boston (excluding SUEs)	£3,988,950
Primary school extension	£3,988,950
Donington	£3,801,169
Secondary school extension	£2,496,054
Primary school extension	£811,545
Six form school extension	£493,570
Boston SUE -land south of north Forty Foot bank	£2,872,044
Primary school extension	£2,872,044
Spalding SUE - Land linked to northern section of SWRR	£2,547,712
Primary school new building	£2,547,712
Deeping St Nicholas	£1,210,665
Secondary school extension	£1,015,344
Primary school extension	£195,321
Long Sutton	£1,121,442
Primary school extension	£825,300
Six form school extension	£296,142
Crowland	£1,036,483
Primary school extension	£839,055
Six form school extension	£197,428
Swineshead	£800,541
Primary school extension	£800,541
Sutterton	£660,240
Primary school extension	£660,240
Gosberton	£649,236
Primary school extension	£649,236
Surfleet	£412,650
Primary school extension	£412,650
Pinchbeck	£343,875
Primary school extension	£343,875
Weston	£316,365
Primary school extension	£316,365
Quadring	£302,610
Primary school extension	£302,610
Old Leake	£267,938
Secondary school extension	£225,632
Grand Total	£74,717,071

Funding education infrastructure

- 6.4.3 Table 6.4 below sets out the known Basic Need Funding for Lincolnshire and the estimate for South East Lincolnshire has been derived by apportioning the Lincolnshire total to the two S E Lincolnshire local plan authorities. This shows that an estimated £9m could be available to support the delivery of short term infrastructure in South East Lincolnshire to support the needs of the area.

Table 6.4 Estimated Basic Needs Funding for the South East Lincs 2016 - 2019

Year	Lincolnshire wide	S E Lincs estimate
2016-17	12,005,722	£3,430,206
2017-18	8,913,770	£2,546,791
2018-19	11,026,233	£3,150,352
Total estimate	£31,945,725	£9,127,350

Source: Lincolnshire County Council Education Dept 2016

- 6.4.4 The information in table 6.4 relates to short term funding as most service providers only deal in three to five yearly investment cycles. Longer term funding assumptions have been made as part of this IDP as this information is not available and most funders are unlikely to provide this. The funding has also not shown how much of the overall budget is actually committed to S E Lincolnshire, it is an assessment we have assumed, in consultation with LCC based on the overall allocation for Lincolnshire wide.
- 6.4.5 Longer term levels of capital available via Basic Needs funding from the Department for Education (DfE) are unclear but it is highly likely that this will be based on population growth and pupils on roll within school census data.
- 6.4.6 It is important to note that the housing growth in this assessment stems from forecast population growth, thus the housing growth identified in this study bears a direct relation to population increase.
- 6.4.7 The Basic Needs funding is also for population increases, but is usually available 'after the increase in pupil numbers' has been reported. Thus there is a time lag between when funding is needed to support housing growth and when it might be released to the service provider. There is also a requirement from the DfE to demonstrate that developer funding has been secured to fund education infrastructure.
- 6.4.8 For the purpose of this assessment it is assumed that 50% of the cost of education infrastructure will be funded by developer contributions and 50% will be from mainstream sources include Basic Needs or other sources.

Infrastructure investment plans to meet current requirements

- 6.4.9 It is clear for the Critical Path Assessments (see Appendix C) that considerable new investment in education infrastructure is likely to be required. It should be noted, that LCC are currently exploring various investment options to meet the current need for infrastructure stemming from past and recently consented planning applications and population changes within the area.
- 6.4.10 However, these investment plans are at a confidential stage, and have not been released to inform this IDP assessment. Therefore the IDP assessment has been based on profiling infrastructure requirements to meet growth at an early phase where there is already a shortage identified. LCC have stated that by the time the Local Plan is at Examination stage, they will be in a position to set out how their investment plans will deal with identified short term capacity constraints. This in turn is likely to affect the phasing of future infrastructure requirements and could considerably affect the overall infrastructure funding gap, phasing and delivery of the IDP.

Exploring new approaches to delivering education infrastructure

- 6.4.11 The way in which schools are designed, funded and managed is evolving and changing as a result of national policy, parental choice; economic factors such as restraints on funding; and changing the approach to school design and the possible re-use of existing redundant commercial and employment buildings as schools. These forces and influences may change how education infrastructure is planned for and provided in the future.

7 HEALTH INFRASTRUCTURE

7.1 Introduction

- 7.1.1 The delivery of health care is going through considerable change as part of the NHS Five Year Forward View¹³ which sets out the direction of the NHS. Part of the change is about greater delivery of health services taking place locally – breaking down barriers of how care is provided between family doctors and hospitals, between physical and mental health, between health and social care. The future will see more care delivered locally but with some specialist centres.
- 7.1.2 The NHS Forward View recognises that England is too diverse for a ‘one size fits all’ and this is particularly true for South East Lincolnshire which has its unique population and socio economic attributes. Health infrastructure response to delivery will need to respond to the national strategic changes.
- 7.1.3 This section assesses the primary and community health care infrastructure requirements to support the planned growth based on information known at this point in time but noting that there could be considerable changes ahead as local health delivery plans are developed and refined.

7.2 Consultation

- 7.2.1 This assessment has been informed by consultation with representative of the South Lincolnshire Clinical Commission Group (CCGs), guidance on health facilities cost and infrastructure assumptions from JTH Consultancy (working with the South Lincolnshire CCGs), and feasibility reports¹⁴ prepared for the South Holland and Boston locality areas to support the South Lincolnshire Clinical Commission Group (CCG) and East Lincs CCG.

7.3 Infrastructure provision and capacity

- 7.3.1 The South Lincolnshire CCG serves a registered population of approximately 162,000. The CCG is made up of two localities -South Holland and Boston. The South Holland locality has 8 GP practices including Beechfield, Gosberton, Littlebury, Moulton, Monro, Pennygate, Sutterton, and Long Sutton. The Boston locality has 9 GP practices including Greyfriars, Holbeach, Kirton, Liquorpond, Old Leake, Parkside, Stuart House, Swineshead and Westside. Details of list sizes and locations of these current practices can be found in the South Holland and Boston locality feasibility reports.

¹³www.England.nhs.uk

¹⁴ South Holland Locality and Boston Locality feasibility studies by Strategic Healthcare Planning on behalf of the South and East Lincolnshire CCG – June 2016. Please note the recommendations included in the feasibility reports have not been agreed or adopted by the CCGs and so are not included in this assessment.

- 7.3.2 In response to the 'Draft for Public Consultation of the Local Plan (Jan 2016)' the CCG's have commented that currently there is some capacity at the local GP surgery(surgeries) to accommodate additional patients in the short to medium term in Spalding and Boston.
- 7.3.3 There are some issues around capacity in Holbeach where there is a current grant funding application to address capacity issues, and one other practice in Spalding has also applied to expand. Similarly Westside surgery and Stuart House surgery in Boston locality have submitted project initiation documents to expand their current premises to cope with current and consented growth.
- 7.3.4 The critical issue for the service delivery County wide however, is an increasing shortage of GP's, nurses and other healthcare staff which could affect future service delivery should demand increase.

7.4 Infrastructure requirements to support planned growth

- 7.4.1 The South Lincolnshire CCG is developing a Primary Care Estates Strategy as part of the sub work stream of the Primary Care Strategy.¹⁵ The core delivery will be mainly through existing property assets but will require discussion regarding the optimal design for improved safety, quality and efficiency.
- 7.4.2 The focus for investment in health infrastructure will be about creating efficiency and working in a different way to maximising the use of facilities, sharing properties (particularly with social care and wider public sector), reducing running costs and rationalising property portfolios by focusing primary care onto fewer sites where there is potential for improved service delivery.
- 7.4.3 The future could see more health care delivered locally instead of at hospital, but also in specialist extended primary care centres, adopting a hubs and spokes type model to infrastructure. In the longer term the sub regional centres such as Spalding and Boston could perform the role of 'hubs' with potentially extended primary care facilities. Various options are currently being explored by the South Lincolnshire CCG as to what such a model might include and what it would cost, however work on this is at a very early stage and no decisions have been agreed.

Assumptions informing this assessment

- 7.4.4 The infrastructure assumptions informing this assessment have been informed by a review of a number of detailed cost appraisals provided by the South Lincolnshire CCG and their consultants. The following points should be noted:
- When the development plans progress towards the future health care delivery strategy, including site specific delivery, the health requirements

¹⁵ To be completed in 2016.

and where service delivery should take place then the information in the live IDP plan will need to be reviewed and updated;

- The generic assumptions adopted for this assessment will vary depending on costs and size of facility and the option to expand an existing or provide a new facility.
- There is a general move away from very small GP practices towards primary care and extended primary care centres (hubs and spokes model). The cost and size of facility will vary depending on the role of the facility being provided.
- It is assumed that the current capacity will be absorbed by the current consented growth and that future planned growth might require additional infrastructure (though efficiency measures, evening and weekend working may reduce future requirements).
- Population and age profiles will affect the type of infrastructure required – this will be developed at a more fine grained level as part of the delivery plans for the CCGs.

7.4.5 The assumptions set out in table 7.1 have informed this assessment

Table 7.1 Cost assumptions informing the IDP health assessment

Assumptions	General range	Assumed	Source
1 GP	1700 - 2000	1700 people	Based on Lincs CCG assumption
Population assumption	2.3	people per household	South East Lincs LA's
Extension of existing GP practice	50	50 sq.m	Based on review of CCG feasibility studies
New build space per GP practice	160 - 190	190 sq.m	Based on review of Lincs cost appraisals
Primary care centre cost	£3000 - £4000	£3,500 per sq.m	Based on review of Lincs cost appraisals
Extended primary care centre space	454 - 913+	n/a	Based on review of CCG feasibility studies
Extended primary care centre cost	£4000 - £5,000+	n/a	Based on review of CCG feasibility studies

Source: PBA 2016 (based on inputs from the South Lincs CCG and their consultants)

7.4.6 Table 7.2 shows the staff team ratio have been assumed as part of the South Lincs CCG feasibility studies to inform the space requirements for future extended primary care centres:

Table 7.2 practice team staff ratio

Practice team	% of practice team
GP	26.9
Practice nurse	12.5
Direct patient carer	7.5
Admin Staff	51.4
Other	1.7
Total staff team percentage	100.00

Source: Centre for Workforce Intelligence 2014

7.5 Summary of health infrastructure costs and funding

- 7.5.1 Based on the assumptions adopted for this IDP assessment, the general overall estimated health infrastructure (pending the detailed service delivery review by the South Lincs CCG) is summarised in the tables 7.3 and 7.4 below. This shows that an estimated 15 additional GPs are likely to be required to meet the (unconsented) plan period growth. The estimated cost to provide this level of additional service is approximately £11m.

Table 7.3 Summary of health infrastructure requirements and costs

Health summary	South Holland DC	Boston BC	S E Lincs totals
Plan period total GPs	9	6	15
Plan period total sq.m space	1681	1172	2853

Source: PBA 2016

- 7.5.2 Estimated costs assessment for health infrastructure for each local authority

Table 7.4 Summary of estimated health infrastructure costs by phase and priority

Health estimate infrastructure costs	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total cost
Boston BC	£992,376	£1,772,421	£1,058,954	£278,909	£4,870,676
Desirable	£992,376	£1,772,421	£1,058,954	£278,909	£4,870,676
GP facilities	£992,376	£1,772,421	£1,058,954	£278,909	£4,870,676
South Holland DC	£2,173,689	£2,108,911	£855,620	£745,856	£5,884,076
Desirable	£2,173,689	£2,108,911	£855,620	£745,856	£5,884,076
GP facilities	£2,173,689	£2,108,911	£855,620	£745,856	£5,884,076
Grand Total	£3,166,065	£3,881,331	£1,914,574	£1,024,765	£10,754,753

Source: PBA 2016

- 7.5.3 The space and infrastructure required for this could vary considerably depending on the type of services incorporated.
- 7.5.4 Note the review of South Lincs CCG health service delivery could result in the facilities provided in Boston and Spalding developed as extended care primary care centres. The cost of such facilities could be considerably higher than the estimates currently included in the IDP.
- 7.5.5 Given the wide variations and considerable consultations still to take place in arriving at an agreed health investment strategy, a pragmatic approach has been adopted in the scale of infrastructure requirements and cost estimates included in this IDP, though noting that this will need to be kept under review.

Funding health infrastructure

Estates and Technology Transformation Fund

- 7.5.6 The Estates and Technology Transformation Fund is a multi-year £1billion investment programme to help general practice make improvements, including in premises and technology. It is part of the NHS Five Year Forward View.

The fund is designed to accelerate investment in infrastructure to enable the improvement and expansion of joined-up out of hospital care for patients.

National sustainability and transformation package to support GP practices

- 7.5.7 There is currently a one off five-year national sustainability and transformation package to support GP practices, and includes additional funds from local clinical commissioning groups (CCGs). Part of this funding is to support upgrades to practice premises.

Developer funding and private sector finance

- 7.5.8 Based on the scope for some grant funding or external investment options, it has been assumed that at least 50% of the cost of health infrastructure required to support planned growth will be met by other sources of funding and 50% maybe sought from developer contributions, or other means.
- 7.5.9 The South Lincs CCG are currently consulting with various private health infrastructure investors to consider innovative ways of funding future health infrastructure on a build and rent back basis. Future delivery of health infrastructure is likely to be funded by means of third party investors who will look to provide the capital investment and look for a rental return on this. This could mean that 100% of the health infrastructure costs could be met by investors.

8 SPORT LEISURE AND GREEN INFRASTRUCTURE

8.1 Introduction

- 8.1.1 This section sets out the infrastructure requirements relating to village and community halls, leisure, play and sports facilities, and green infrastructure.
- 8.1.2 The findings for this section are based on research undertaken as part of the Sports Provision and Open Space Assessment (November 2012) prepared by Ploszajski Lynch Consulting (PLC).¹⁶ The PLC assessment covered a wide range of indoor and outdoor sports facilities, community space and open spaces ranging from formal garden to informal natural greenspace covering the South Holland and Boston Borough Council area.
- 8.1.3 In assessing the qualitative and quantitative information, the PLC study assessed future needs to 2031 for sport, leisure and green infrastructure and provides an action plan for delivery. It is noted that the PLC assessment is based on population projections and demographic assessment based on forecasts up to 2031. These requirements provide the basis for this assessment and will be updated over time as part of the live IDP.

8.2 Summary of sport, leisure and green infrastructure costs and funding

- 8.2.1 The PLC study does not provide a breakdown for each local authority hence the costs presented in table 8.1 below are at South East Lincs Plan wide level.

Table 8.1 Summary of estimate costs for sports, leisure and open space phase and priority

Sport, leisure, open space and GI estimate infrastructure costs	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total cost
Joint S E Lincs	£6,968,000	£6,968,000	£6,968,000	£6,968,000	£27,872,000
Desirable	£6,968,000	£6,968,000	£6,968,000	£6,968,000	£27,872,000
Allotments	£303,750	£303,750	£303,750	£303,750	£1,215,000
Cemeteries / church yard	£548,250	£548,250	£548,250	£548,250	£2,193,000
Children's play	£241,875	£241,875	£241,875	£241,875	£967,500
Green Infrastructure	£343,000	£343,000	£343,000	£343,000	£1,372,000
Parks and gardens	£178,750	£178,750	£178,750	£178,750	£715,000
Sport and leisure	£5,352,375	£5,352,375	£5,352,375	£5,352,375	£21,409,500
Grand Total	£6,968,000	£6,968,000	£6,968,000	£6,968,000	£27,872,000

Source: The Sports Provision and Open Space Assessment by PLC (November 2012)

- 8.2.2 The PLC assessment estimated the total cost for meeting the sport and leisure requirements at approximately £21.4m, and the total cost for the open space requirement at approximately £6.4m
- 8.2.3 This IDP treats the sports, leisure and open space costs as attributable to both the local authorities and is classed as 'desirable'. Further work will need to be

¹⁶ <http://www.southeastlincslocalplan.org/wordpress/natural-environment/>

undertaken at a local authority level to identify off site sports and leisure infrastructure priorities to inform future IDP reviews.

Management of public space

- 8.2.4 The general aim in terms of management of open spaces is to encourage developers to set up a management company to look after the ground maintenance of open spaces, although the options also exists to request the local authority to take on adoption based on a commuted sum. From a practical management view point, there is a preference to have fewer but larger public spaces instead of lots of small individual spaces.

Funding sources

- 8.2.5 Potential developer funding is expected to contribute to some sports, leisure and green infrastructure costs. However, this could be in various forms such as land transfers for allotments, and cemeteries or funding.
- 8.2.6 Some sports and greenspace infrastructure will be a requirement on site of development e.g. children's play area on developments supporting 150 people or more, or amenity greenspace for schemes supporting 200 people or more, or green infrastructure which might be incorporated as part of SUDs schemes. In these cases the cost of the requirement will be reflected in the value paid for the development land.
- 8.2.7 In respect of the non-developer funding, the main source of funding is from funding opportunities promoted by Sport England such as the following:
- Protecting Playing Fields Grant Fund - up to £100,000 grant for improving and preserving playing surfaces;
 - Inspired Facilities Fund - Round 9 Applications were due in January 2016;
 - Improvement Fund - Discretionary grants (this is not an open bid application process) for between £150,000 to £500,000 for 'locally needed sustainable' projects;
 - Strategic Facilities Fund - This is also a 'closed' fund - applications will be solicited by Sport England.
 - Potential Parish Council funding for burial spaces.

9 UTILITIES INFRASTRUCTURE

9.1 Introduction

9.1.1 Utilities infrastructure is prioritised as 'critical enabling infrastructure' because this type of infrastructure is generally required as a direct result of the proposed growth and would have to be implemented if the development is to go ahead (for instance sewerage infrastructure, drinking water, energy supply etc.).

9.1.1 This section has been informed by consultation with officers from the following organizations:

- Western Power Distribution – electricity infrastructure
- Anglian Water – potable water and sewage infrastructure
- National Grid – gas infrastructure.

9.2 How this study deals with utilities infrastructure

9.2.1 Utilities infrastructure assessment has been treated as follows:

- This assessment has investigated the extent to which utilities infrastructure may represent an obstacle to housing and jobs growth. It may be, for example, that utility provision is at capacity, and that further growth is impossible until further investment takes place. The study method has explicitly tried to pick up on any such issues and present the information using traffic lights tables to show how it might affect the planned phasing.
- The focus with the utilities infrastructure assessment is to understand if there are likely to be any technical or licensing problems in servicing the planned growth with utilities infrastructure in a timely manner aligned to the planned growth trajectory.
- The general principle involved is that strategic investment for utilities will be met by the utility companies as required at their own cost with capital raised through private debt or equity capital, in return for the income generated from sales to domestic and commercial customers.
- However, in some instances additional infrastructure may be required to create connections to existing plant. In these instances the cost of any additional infrastructure will be paid for by either the developer and or the utility provider depending on the individual specific circumstances. The whole plan viability assessment has included an allowance for plot externals and site opening cost to reflect this type of cost and so this cost input is not duplicated in the IDP. Though in reality the utilities connection

costs can vary considerably depending on the length and complexity of area to create a connection.

- Please note that the information provided here is a point in time assessment and capacity will be continuously changing (see caveats stipulated in section 3 of this report).

9.3 Interpreting the critical path analysis

9.3.1 The study findings for the utilities assessment have been set out in a critical path analysis tables using red, amber and green bars for each infrastructure category. This helps to provide a quick visual presentation of any infrastructure capacity issues for the planned growth assessed as part of this study. The traffic lights for the critical path analysis tables in this section can be interpreted as follows:

- **Red** - A red bar indicates that infrastructure is near capacity and will require some immediate infrastructure before growth can take place. It is important to note that in some instances, there may be planned solutions to address the capacity deficit in the imminent future and the red bar could soon change to green or amber once the solution is implemented. Development may be possible during this period, but may result in some services being 'stretched' until new capacity is created.
- **Amber** - An amber bar indicates that a capacity limit to growth has been identified or is expected, and there is a need to proceed with caution and plan for additional capacity.
- **Green** - A green bar indicates that there is sufficient capacity to deliver growth, or that improvement has been delivered to accommodate the growth.

9.4 Electricity infrastructure findings

9.4.1 The electricity infrastructure findings have been provided by Western Power Distribution during a meeting hosted by them in June 2016. The assessment provides an indication of the potential capacity available for new generation connections to 11kV (or 6.6kV) networks in all Western Power Distribution licence areas. It should be noted that this does not take account of upstream (higher voltage) constraints or reinforcement requirements. The capacity assessment has assumed an average household requires approximately 2kV of electricity. Note this could vary in areas where there is no gas or alternative energy source available.

9.4.2 The following findings are reported in respect of electricity capacity:

- Western Power Distribution (WPD) have recently carried out significant reinforcement works in **Spalding** resulting in additional capacity which is expected to support the short to medium term growth requirements. Major

reinforcements will be required to support the longer term post plan period of possible growth in this area, and early dialogue should be commenced and maintained to identify efficient ways of providing the infrastructure and aligning with other utility providers. .

- The Mount Bridge primary substation supplying part of Boston town centre and Boston North East is at capacity and there are no investment plans in the current Asset Management Plan to upgrade capacity here. Future demand may drive the need for reinforcement upgrades and dialogue should be maintained with WPD relating to how planned growth delivery and investment plans for WPD.
- The Donnington primary transformer is at capacity and any load requisition in this area is likely to trigger the need for reinforcements. This could affect growth at Donnington, Gosberton, Quadring, Wigtoft, Swineshead, Sutterton, and Bicker (an estimated 1,200 dwellings in the short to medium term could be affected by this). The implications of increasing any future load capacity will require a lead in timescales of at least 18 months (or more) to install transformers and the requested load may require cost apportionment to upgrade supply. A potential impediment to the delivery of growth, in common with many of the utilities infrastructure delivery, could result here and it relates to the way connections are paid for and costs apportioned. Simplistically, if there is a need to provide supply reinforcements, there is a risk that all the apportioned costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage).
- Up to 600 dwellings can currently be supported in the Holbeach before reinforcements are likely to be required. After this capacity is absorbed, new reinforcements are likely to require 13 km of 33 kV overhead line rebuild which could entail significant apportionment of cost and time delay. There may also be a need for a 33 - 11 kv transformer change at Holbeach. The delivery of this could require three or more years lead in time and early engagement and delivery plans should be developed with WDP to explore mechanisms to unblock any capacity issues.
- Most of the rural villages will have limited capacity due to their location; however due to the limited growth proposed in these areas no concerns have been expressed.

Phasing of infrastructure requirements

- 9.4.3 Tables 10.1a and 10.1b overleaf set out when upgrades in infrastructure are likely to be required to support the planned growth.

Table 10.1a Critical path analysis for electricity infrastructure – Boston Borough Council locations

Location	Commitments	Short term commitments and growth to 2021	Medium term to 2020/21	Longer term to 2036	Post Plan period
Bicker					
Bicker	33kv to 11 kv transformer at the primary substation in Donnington is full - recent connections have absorbed all available capacity.				
Boston SUE - Land to the south of Chain Bridge Rd					
Boston SUE - Land to the south of Chain Bridge Rd	No investment planned at the moment, but there is capacity on the primary transformer at Sleaford Road Boston at the moment. May require network alterations.				
Boston SUE -land north of north Forty Foot bank					
Boston SUE -land north of north Forty Foot bank	No investment planned at the moment, but there is capacity on the primary transformer at Sleaford Road Boston at the moment. May require network alterations.				
Boston (excluding SUEs)					
Boston (excluding SUEs)	Any major development to the north of Boston would require new / additional transformers as existing Mount Bridge primary station are running to capacity. The south and west of Boston currently have capacity at Sleaford Road and Marsh Lane primary stations.				
Butterwick					
Butterwick	Restricted by Mount Bridge primary station which is at capacity.				
Fishtoft					
Fishtoft	Restricted by Mount Bridge primary station which is at capacity.				
Kirton					
Kirton	Investment plans scheduled for second transformer at Kirton for a 33-11 kV primary.				
Old Leake					
Old Leake	May require minor network reinforcement				
Sutterton					
Sutterton	33kv to 11 kv transformer at the primary substation in Donnington is full - recent connections have absorbed all available capacity , scale of development development will need major upgrades in transformers - the				
Swineshead					
Swineshead	33kv to 11 kv transformer at the primary substation in Donnington is full - recent connections have absorbed all				
Wigtoft					
Wigtoft	33kv to 11 kv transformer at the primary substation in Donnington is full.				
Wrangle					
Wrangle	May require minor network reinforcement feeds off Wrangle primary substation				

Source: Based on input from Western Power Distribution June 2016

Table 10.1 b Critical path analysis for electricity infrastructure – South Holland District Council locations

Location	Commitments	Short term commitments and growth to 2021	Medium term to to 2020/	Longer term to 2036	Post Plan period
Cowbit					
Cowbit	Clay Lake at Spalding - may require overlay of 11kv cables if significant heating load required upstream.				
Crowland					
Crowland	Primary station in Crowland - dependent on build rate and load requirement may trigger 11 kv reinforcements at some point.				
Deeping St Nicholas					
Deeping St Nicholas	May trigger 11 kV reinforcements, primary station is in Crowland -will depend on load requirements				
Donington					
Donington	33kv to 11 kv transformer at the primary substation in Donnington is full.				
Fleet Hargate					
Fleet Hargate	Capacity will be determined by take up of the Holbeach 33kV to 11 kV primary				
Gedney Hill					
Gedney Hill	Capacity at Waploade Drove Primary substation to serve area				
Gosberton					
Gosberton	11 kV is fed from the 33kV -11kV Donnington Primary Substation which is at capacity (see Donnington).				
Holbeach					
Holbeach	1200 kVA capacity left at Holbeach Primary substation could serve 600 properties after which significant upgrades will be required impacting on cost and timing of delivery.				
Long Sutton					
Long Sutton	No major issues identified at present.				
Moulton					
Moulton	No major issues identified at present.				
Moulton Chapel					
Moulton Chapel	May require 11 kV reinforcement as there is no gas supply here.				
Pinchbeck					
Pinchbeck	No major issues identified at present.				
Quadring					
Quadring	Linked to capacity take up at Donnington and issues already identified at Donnington.				
Spalding					
Spalding	Recent upgrades will support short to medium term growth				
Spalding SUE					
Spalding SUE	Recent upgrades will support short to medium term growth				
Surfleet					
Surfleet	Dependent on growth at Gosberton and Quadring, may require 11 kV reinforcement				
Sutton Bridge					
Sutton Bridge	No major issues identified at present.				
Sutton St James					
Sutton St James	As no gas in the area, may require an 11 kV feeder reinforcement subject to requirement				
Tydd St Mary					
Tydd St Mary	No major issues identified at present.				
Weston					
Weston	May require 11 kV feeder reinforcements				
Whaplode					
Whaplode	There is capacity for approximately 600 units but inter-linked with take up at Holbeach				

Source: Based on input from Western Power Distribution June 2016

- 9.4.4 It is difficult to predict precisely when and what the specific infrastructure requirements to meet the needs of growth will be at this stage in the planning process, as much will depend on local capacity at the time of development. There is clearly a need for liaison and forward planning with Western Power Distribution. The construction of substations involves long term planning, the purchasing of equipment and the reservation of sites for the substations. It has been assumed that all way leaves and legal requirements for the substation sites and cabling works will be forthcoming. Any delay in this process could significantly affect construction works and cause delays.
- 9.4.5 Commercial developments can only realistically be assessed on a case-by-case basis due to the variance in demand with regard to the proposed employment use. However, it is important to note that the demand from the food processing type businesses can demand very high load capacities and so the snap shot of capacity can quickly change if a new employment users is established.

Investment plans

- 9.4.6 ED1 (or RIIO-ED1) is the price control mechanism which sets WPD's regulated revenues for the period 1 April 2015 – 31 March 2023.

9.5 Gas infrastructure findings

- 9.5.1 In terms of gas, National Grid have confirmed that, where there are existing gas connections in place, there are currently no major issues with gas provision, most new development can be managed and completed with the right timing, however the accumulative effects of a large number of loads may well overload the upstream systems and these reinforcements can cause delays in 'gas on dates'. It is envisaged that any reinforcements will be delivered in a timely manner, subject to specific engineering difficulties.
- 9.5.2 Reinforcements are likely to be required in Spalding and Holbeach to support the scale of planned growth in the medium to longer term. New development, including the proposed Sustainable Urban Extensions (SUE's) will need a connection to the gas main.
- 9.5.3 In addition there is currently no gas provision in the vicinity of the Deeping St Nicholas, Gedney Hill, Gosberton Clough / Risegate, Moulton Chapel, Old Leake, Sutton St James, Sutterton, Tydd St Mary and Wrangle. These areas are likely to be reliant on electricity supply or alternative energy sources for heating in these areas.

9.6 Potable water

- 9.6.1 Anglian Water is the Water and Sewerage Company (WASC) for South East Lincolnshire. Anglian Water has confirmed that there is sufficient potable (drinking) water resource to serve the proposed scale of housing development over the plan period however there may be a need to upgrade some of the

supply network, this would be considered at a site specific level by the site developer and Anglian Water.

- 9.6.2 As part of the assessment informing the 2010 Water Resource Management Plan, Anglian Water had forecast a significant deficit in water supply in the Lincolnshire Fens Water Resource Zone. Since then a number of significant investments in infrastructure have taken place to support the planned growth.
- 9.6.3 For instance, in 2014, Anglian Water invested £44m in the Hall Water Treatment Works, which serves the South East Lincolnshire area. This takes river water from the River Trent along a two kilometres pipeline to a newly constructed 20 acre reservoir which holds 300 million litres of water. Up to 20 million litres of water will be treated every day using innovative purification processes, before water is supplied to homes and businesses in Lincolnshire. This new water source will help support the region's planned growth and ensure there is sufficient water to meet the needs of Lincolnshire (including the planned growth in South East Lincolnshire).
- 9.6.4 Anglian Water has also invested £40m on a 60km pipeline to transfer water from Covenham to Boston. The capacity of this is 16 million litres per day, and is expected to meet growth related needs in South East Lincolnshire through to the mid 2030's, and probably beyond this date.

9.7 Sewage infrastructure

- 9.7.1 Anglian Water is the Water and Sewerage Company (WASC) for South East Lincolnshire. The sewerage infrastructure comprises of the following:
- Water Recycling Centres (WRC) which were formerly known as sewage treatment works.
 - Foul sewerage network relates to the network of pipes that connect between development and the WRC.
- 9.7.2 Anglian Water were consulted on the planned growth during June 2016. They have provided a RAG assessment (see Appendix B) setting out their assessment at this point in time. As such a RAG table is not repeated.

Overall assessment for sewerage infrastructure

- 9.7.3 Anglian Water's overall Red Amber Green (RAG) assessment (see Appendix B) of the ability to support the planned growth in terms of the sewage infrastructure identifies all sites, (apart from Gedney Hill), as 'amber'. This indicates that some infrastructure or treatment upgrades maybe required to service the proposed growth.
- 9.7.4 The proposed allocations of growth at Gedney Hill for some 110 dwellings are identified as red as there is no existing foul sewerage network in the area, so any development in this area is likely to require substantial investment in off-site foul sewerage network which would have to be funded by the developers

for these sites. It may be more practicable in engineering terms to treat the sewage from these sites 'on site' rather than pump foul flows into the existing foul sewerage network. However a new 'on site' sewage treatment facility would require environmental consent the Environment Agency in relation to the impact on the water environment.

9.7.5 Further dialogue is recommended with the promoters of the Gedney Hill sites to fully understand how sewage infrastructure will be provided to the developments before taking forward these sites.

9.7.6 Anglian Water have highlighted the following caveats to their assessment:

- The assessment undertaken by Anglian Water does not reflect the impact of cumulative growth.
- Should all available capacity be taken up at the WRC then upgrade to the works may be required that may involve seeking consent from the Environment Agency for an increase in discharge of final effluent.
- Available capacity in the foul sewerage network will be determined by detailed analysis. For developments of greater than 10 properties it is assumed that some enhancement to capacity maybe required.
- Anglian Water have stated that all developments should adhere to the surface water management hierarchy outlined in Part H of Building Regulations with disposal to a surface water sewer seen as a last resort. Under no circumstances will surface water be permitted to discharge to the public foul sewerage network and no new surface water flow will be permitted to discharge to the combined network.
- Where dwelling numbers are not stated, capacity assessment has been based on an assumption of 30 dph.
- In some instances, if the proposed development is sited close to existing WRCs, then there could be possible nuisance in relation to noise and odours (generated from the treatment of sewerage). See Appendix B for possible assets and locations that might be affected - development should be located a minimum of 15 metres from WRC pumping stations.
- All development will require a connection to the existing sewerage network, which may require upgrades as a result of the planned growth, there may also be a need for some upgrades to the WRC.

Anglian Water assessment of the WRC capacity to support planned growth

9.7.7 The following locations have been identified as 'red' (see Appendix B) in terms of the WRC infrastructure capacity, suggesting that some upgrades in capacity maybe required, depending on an assessment of the impact on the receiving watercourse:

- Kirton – affecting some 250 growth units,
- Moulton Chapel – affecting some 120 growth units,
- Surfleet – affecting some 150 growth units
- Land to south of Swineshead Road and north of Tytton Lane East both in Boston – affecting 335 growth units.
- Surfleet – 0.43 ha of employment land
- Kirton – 23 ha of employment land
- Wyberton – 0.43 ha of employment land
- Tulip – 7 ha of employment land

9.7.8 It is important to note that each proposed site has been assessed on an individual basis. The cumulative impact of all the proposed sites on the allocated treatment or network infrastructure is not indicated on the RAG assessment. It is possible therefore that the cumulative effect of the identified sites may also require enhancements to capacity.

9.7.9 Anglian Water has commented in response to the draft Local Plan consultation that most sites proposed in Boston would be served by the Boston WRC, which has adequate capacity to accommodate the planned growth which might potentially use it. Sites to the south of the town would be served by the Frampton Water Recycling Centre, which may require upgrades to its treatment capacity to accommodate any new sites. Sites to the east of the town would be served by the Fishtoft Water Recycling Centre which would require upgrades to its treatment capacity to accommodate larger sites. Enhancements to the capacity of the foul sewerage network may be required to accommodate the development of most sites.

9.7.10 In the case of growth proposed at Spalding, Anglian Water has commented that the Water Recycling Centre has capacity to serve all the proposed sites, except land to the north of the Vernatts Drain for some 4000+ dwellings, where an upgrade will be required.

9.7.11 Various options for increasing the capacity to the WRC may be pursued by Anglian Water including upgrades to the WRC, optimising the capacity of the existing site, or removing potential surface water that might be absorbing capacity to free up sewage treatment capacity. The investment for these upgrades would be met by Anglian Water and would be assessed as part of their Asset Management Plan preparations.

Anglian Water Asset Management Plan (6) 2015 – 2020

9.7.12 Anglian Water produces an Asset Management Plan (AMP). This document is the main mechanism where investment for future growth related infrastructure is identified. Work on preparing the AMP (7) 2021 - 2025, will commence in 2017.

Utilities forum as a mechanism for communication and enabling timely delivery

9.7.13 As part of the Infrastructure Delivery Plan, it will be important to maintain engagement with Anglian Water and inform the review of the AMP. This could be through establishing a utilities infrastructure provider forum, which would be a forum to exchange information on planned and scheduled development, and identifying any potential issues to the timely delivery of utilities infrastructure.

9.7.14 As part of preparing this document, Anglian Water use the Department for Communities and Local Government's most recent sub-national household projections. However, Anglian Water's Business Plan notes that Anglian Water consider these property projections to be overly optimistic, and so they have adjusted their assessment to reflect the impact on new connections of the current movement in the housing market, and also incorporated a gradual recovery in the market by 2024 -25. In the Business Plan, Anglian Water state that they have tested this approach with housing developers in the region, who agreed with the approach to forecasting adopted by Anglian Water. They note that if growth recovers more quickly, than they will invest on the basis of the next price review in 2020.

PART 3 INFRASTRUCTURE COSTS AND FUNDING

This section investigates how infrastructure might be funded. This includes how public and private sector funding will help to pay for supporting infrastructure.

The findings of the known costs and funding sources are brought together to understand the scale of the remaining funding gap, timeframes and options to manage this over the longer term.

10 INFRASTRUCTURE FUNDING

10.1 Introduction

10.1.1 The successful delivery of the infrastructure identified in this study is important in supporting the delivery of the planned growth. A number of developer and non developer funding streams are expected to fund the identified infrastructure. Known infrastructure funding and specific funding sources are listed in each of the previous infrastructure chapters and are not repeated here.

10.1.2 This section also includes a brief explanation of the role of viability in informing infrastructure delivery and sets out the different developer funding mechanisms options to inform decisions on whether to adopt a CIL or maintain a S106 developer funding mechanism.

10.2 Non developer funding

10.2.1 The main sources of non-developer funding that might currently support the delivery of infrastructure are:

- Mainstream funding – from the service provider using both local or central government funding such as Basic Needs education funding, Local Transport Plan funding and mainstream capital funding allocations by both Lincolnshire County Council and the local authorities.
- National Infrastructure Plan
- Devolution Deal
- Local Transport Fund
- Growth Deal and other government funding initiatives

The National Infrastructure Plan

10.2.2 This IDP assessment has not included the nationally important Boston Barrier flood defence project in assessing the funding gap, as the £107m scheme (which would exceed all the infrastructure cost categories identified in this plan) is identified in the National Infrastructure Plan for funding directly from Central Government.

The Greater Lincolnshire Combined Authority Devolution Deal

10.2.3 The combined Councils of Greater Lincolnshire consisting of ten local authorities¹⁷ from the Humber to the Wash have applied to government for

¹⁷ The ten local authorities are North Lincolnshire Council, South Kesteven DC, West Lindsey DC, South Holland DC, City of Lincoln Council, East Lindsey DC, Boston BC, North Kesteven DC, North-East Lincolnshire Council and Lincolnshire County Council.

devolved powers, which would provide the Greater Lincolnshire Combined Authority greater control over transport, housing, planning and other areas. If approved, Greater Lincolnshire could also receive control of a £450 million investment fund over 30 years to boost economic growth. The first year's funding of £15m could commence in 2016, with annual contributions over the next five years of £15m during 2016 – 2020 totalling £75m.

Greater Lincolnshire Strategic Infrastructure Delivery Programme

10.2.4 In preparing for this Devolution Deal funding, the ten local authorities are currently (August 2016) in the process of completing work on the preparation of Greater Lincolnshire Strategic Infrastructure Delivery Programme 2016. This includes some thirty six priority infrastructure projects which should accord with each of the ten local authorities local IDP. The criteria for selecting projects onto this sub regional IDP is that the project should be over £5m, should contribute to growth and jobs related outputs and should be deliverable and have project management strategies. The Spalding Western Relief Road is currently ranked second highest as a candidate for funding due to its cost relative to outputs (housing numbers and jobs). The Q2 scheme / Boston Distributor Road is lower down in the ranking.

Public sector funding assumptions

- 10.2.5 There is uncertainty over the scale of longer term public sector funding to support the delivery of planned infrastructure and funding streams are in a constant flux of change with greater devolution from central to sub regional delivery vehicles as outlined above.
- 10.2.6 Most service providers informing this assessment usually only know their investment and grant funding for three to five years ahead. Their funding plans do not reflect the longer term timeframes of the local plan or this IDP assessment. However, based on past experience, it is fair to assume that some form of mainstream or public sector funding is likely to contribute towards the longer term infrastructure costs.
- 10.2.7 As the cost estimates included in this study reflect the full plan period. Thus, where there is no known information about longer term public sector funding, (based on other national studies of a similar nature), this study assumes a public sector funding assumption of 50% towards the cost of the infrastructure. The exact percentage will of course vary depending on individual projects and site details at planning application stage, however for a strategic study the 50% assumption provides a pragmatic starting point.
- 10.2.8 The basis informing the increase in the planned growth for the South East Local plan stems from the detailed assessment of changes in future population forecasts included in the Objectively Assessed Needs, i.e. the reason for requiring additional homes in the longer term is to meet projected increases / changes in the population and household formations.

- 10.2.9 Education infrastructure providers currently receive various forms of national funding to meet the needs arising from increased population (as stated in the National Infrastructure Plan); however there is no certainty as to how much and whether this is sufficient to fund the cost of new schools as will be required in the case of South East Lincolnshire over the plan period. The consultees for education have stated that although national funding is allocated to meet population growth, the service providers need to demonstrate, to the DfE that developer contributions have also been secured to support the delivery of growth related infrastructure. For the longer term infrastructure assessment this study has assumed a 50% funding assumption from mainstream sources such as Basic Needs funding and other potential funding that may be announced periodically by the DfE.
- 10.2.10 In the case of health infrastructure, service delivery is going through considerable change, and greater use is likely to be made of existing underused capacity (e.g. evening and weekend opening times). In addition, innovative funding mechanisms are being sought linked to third party investors (who can benefit from a fairly non risky revenue return in return) for their capital outlay. Thus it is quite possible that the health related funding could be close to 100% in the future, however for now a cautious approach of assuming that 50% other funding sources is likely to be secured to fund the delivery of health infrastructure.
- 10.2.11 The funding of strategic transport schemes could come from various sources in the future, including the local Enterprise Partnerships and is expected to be linked to the delivery of housing and employment outputs. There is greater uncertainty over the scale of contributions that might be available, due to the competing needs sub regionally for this funding and also due to the significant scale of costs relating to some transport schemes, including the schemes highlighted in this Plan (for the BDR and SWRR). Where information is not currently available a general assumption of 50% of public sector funding has been assumed for the purpose of this study, except where there is known information about public funding such as the Holbeach transport schemes. However, due to the scale of the BDR bridge crossing and past transport assessment indicating a low priority in terms of cost benefit analysis by LCC, no public sector funding contribution has been included for this scheme at this point in time.
- 10.2.12 The assumptions included in this study will need to be refined over time as part of a live infrastructure planning toolkit. It should be noted that the assumptions made in this assessment should in no way prejudice any site specific assessments when assessing S106 contributions.

10.3 The Local Plan whole plan viability assessment

- 10.3.1 Viability considerations now form an important part of the NPPF, recognising that the developer's residual pot is finite, and that it may not be possible to expect the developer to fund all the infrastructure cost requirements. Some

trade-offs may be needed between other policy requirements such as affordable housing and infrastructure funding (either via CIL or s106).

10.3.2 Legislation introduced in the 2008 Planning Act, and brought into effect by the Community Infrastructure Levy Statutory Instruments (CIL) 2010 (and revisions) informs the mechanisms support developer funding. This is also incorporated in the National Planning Policy Framework which sets out some parameters and informs the options guiding developer funding.

10.3.3 The key messages in terms of infrastructure delivery from legislation and the Framework are as follows:

- The Local Plans must have regard to the infrastructure needed to support planned growth and have a clear plan and process in place of how this infrastructure is going to be delivered, including funding and management in a timely fashion to support planned growth. Indeed infrastructure planning is part of the soundness considerations of the local plan.
- In assessing the overall deliverability of the Local Plans, the Planning Authority must take account of the impact of the whole policy 'ask' on the viability of the planned growth. Therefore, local authorities need to consider the trade-offs between various policy requirements, especially affordable housing and the option of using developer funding to part fund infrastructure. This recognises that development viability is finite and important policy choices need to be made. This means adopting an iterative process to arriving at the affordable housing and infrastructure delivery policy mix which supports the Plan objectives.
- These policies should be kept flexible to allow for review and revision over time. Setting this approach out clearly in policy and linked to a 'live' Infrastructure Delivery Plan provides an important tool for adopting a proactive approach to managing the delivery of planned growth. It also recognises that viability assumptions change over shorter timeframes whilst the Local Plan is a longer term policy document.

10.4 Developer funding

10.4.1 The assessment towards developer funding is included in the South East Lincolnshire Viability Study¹⁸ which has been developed in parallel to this study.

10.4.2 The following categories are adopted to informing developer funding for infrastructure:

- **Site enabling infrastructure** is assumed to be funded fully by a developer: This infrastructure would be required of a developer to create a saleable product, such as site access, utilities infrastructure connections

1.1.1 ¹⁸ South East Lincolnshire Whole Plan Viability Study, Peter Brett Associates (2016)

and upgrades, drainage and flood mitigations, SUDs and informal open space. An allowance of £10,000 per dwelling has been included for the strategic sites in the Viability Study and it is assumed that site enabling infrastructure will be fully funded by the developer.

- **Strategic or cumulative infrastructure** funding using a Community Infrastructure Levy (CIL) Regulation 123 list, relates to projects of a strategic nature, and the infrastructure requirements arise due to the cumulative impact of development such as town centre congestion management measures and strategic transport corridors, libraries, sports centres, strategic flood defence measures, schools, parks, and strategic green infrastructure. These projects usually relate to infrastructure seen as important for the overall delivery of the plan. It is possible that such projects can be funded via S106 or CIL (but there cannot be duplication of funding or exceeding the pooling threshold for S106).
- **Site relevant infrastructure** funding using S106 infrastructure items are focused on addressing the specific mitigation required by a new development. S 106 projects must be a) directly related to the proposed development, b) reasonable in scale and kind and c) necessary to make the development acceptable in planning terms¹⁹, and pooling restrictions apply. In addition funding towards transport infrastructure can be via S278 contributions.

Developer funding mechanisms

- 10.4.3 The choice of developer funding mechanism in terms of introducing a CIL or maintaining the S106 mechanism is informed by the need to fund key strategic transport infrastructure road schemes, namely the Boston Distributor Road (BDR) and the Spalding Western Relief Road (SWRR), though other projects such as secondary schools, leisure facilities and health infrastructure could also be included in the CIL Regs 123 list. These road schemes should be viewed as part of the overall plan delivery strategy and not simply an infrastructure cost, as they provide the potential to unlock the delivery of planned growth which in turn supports the wider economy of the sub regional area. The road schemes will also bring a land value uplift and it is critical, which ever, funding mechanism is adopted (CIL or S106), that developers and landowners are aware that some of this value uplift will be required to pay for the longer term cost of providing this strategic infrastructure.
- 10.4.4 Our consultation with the LCC transport stakeholders indicates that a CIL is considered to have a number of advantages as it avoids the need for protracted negotiations with individual developers in assessing the site specific impact of a S106, and it provides some certainty of the scale of contributions that might be secured, thereby allowing LCC to use forecast CIL funding as a basis for bidding for other funding for this road scheme. It also provides the

¹⁹ These tests are now on a statutory basis under Regulation 122(2) of the CIL Regulations 2010 (continued in the CIL Regulations 2014). Although these Regulations are ostensibly about CIL, they apply to S106 in this instance.

developer certainty on the scale of contributions likely to be sought in informing their assessment of the amount to pay for the land. It is important to recognise however, that CIL is only likely to make a small contribution towards the overall infrastructure costs.

- 10.4.5 In the case of Boston Borough Council, a CIL is unlikely to provide much in the way of strategic infrastructure funding once allowances have made for CIL buffers to avoid charging the maximum. Also the nature of planned development and associated infrastructure means that the delivery of growth is fairly 'self sufficient' in terms of funding sections of the BDR road based on funding using site opening cost allowances. However the delivery of the secondary school is likely to be affected by the pooling restrictions on the use of S106 and there is a gap in the delivery of the bridge crossing linking the BDR.
- 10.4.6 In the case of South Holland District Council, given the nature of the remaining unconsented planned growth (in a number of land ownerships) along the route of the SWRR, the type of infrastructure required to support the delivery of the SWRR (requiring various bridge crossings not directly related to any development), and the need for LCC to take the lead in delivering this road, it is considered that a CIL would be more suited than S106 as the delivery funding mechanism. During our developer consultations, a major developer in the area expressed a preference for CIL as the preferred mechanism for funding the SWRR as it was viewed as a fairer way of ensuring all developers contribute equally towards the cost of the SWRR, which by its nature is of local and sub regional importance for the wider plan area.
- 10.4.7 In the case of South Holland, one of the main reasons in favour of a CIL developer funding mechanism is to support the delivery of the SWRR scheme and also possibly contribute towards the costs of funding wider leisure, sport and secondary school infrastructure. There is viability in development to charge some CIL and maintain a buffer.
- 10.4.8 The final decision on whether to adopt a CIL or not will be for each local authority to decide after weighing up the additional work, time delays and cost involved in introducing a CIL as opposed to maintaining the current approach of entering individual S106 negotiations.

10.5 Estimate of developer contributions

- 10.5.1 The current information stemming from the draft Viability Study suggests the following developer contributions maybe sought at a plan level from the various sites:
- Strategic sites are likely to contribute approximately £4,000 to £5,000 towards infrastructure costs such as education, sports, health, community facilities, in addition to site opening costs which includes items such as access and road infrastructure costs, open space / SUDs and utilities

connections. This currently assumes no CIL for the strategic sites and all contributions are met through S106 / S278 and site opening costs.

- Generic sites in South Holland DC are likely to contribute approximately £4,000 to £6,000 per dwelling towards infrastructure costs within CIL Regs compliant infrastructure contributions. Based on an estimate of £5,000 per unit contribution a high level indication of the developer contributions of approximately £33m towards relevant infrastructure costs.
- Generic sites in Boston BC are likely to contribute approximately £2,000 to £4,000 per dwelling towards infrastructure costs within CIL Regs compliant infrastructure contributions. Based on an estimate of £3,000 per unit contribution, a high level indication of the developer contributions of approximately £13m towards relevant infrastructure costs.

10.5.2 Note these figures are approximations only and will be refined in the Viability Study informing the whole plan viability assessment.

11 INFRASTRUCTURE COSTS AND FUNDING GAP

11.1 Introduction

11.1.1 This section sets out a summary of the estimated costs, and presents this information as cost estimates, by infrastructure priorities, by plan phasing and by local authority.

11.1.2 The known and assumed funding information is then introduced to start to identify the infrastructure funding gap and outlines how infrastructure delivery might be funded and prioritised to support the timely delivery of the South East Lincolnshire Local Plan. The final decision on developer funding mechanism and prioritisation will be made by the South East Lincolnshire Joint Strategic Planning Committee.

11.2 Infrastructure cost summary

11.2.1 Table 11.1 summarises the total estimated infrastructure costs by local authority and by priority. The overall cost is estimated at approximately £211m. Critical infrastructure, which is expected to be delivered as part of site opening costs by developers amounts to approximately £27m; this relates to critical highway infrastructure which is necessary to unlock the delivery of major development areas.

11.2.2 Approximately £105m is essential infrastructure which is necessary to accompany the delivery of the planned growth. This relates to education and highways infrastructure. An estimated £79m of the total costs relates to infrastructure costs such as Boston Distributor Road bridge crossing, open space, sports, leisure, and health facilities which are not necessary to support the immediate delivery of planned growth, but are in many ways important to local residents in terms of amenities and facilities.

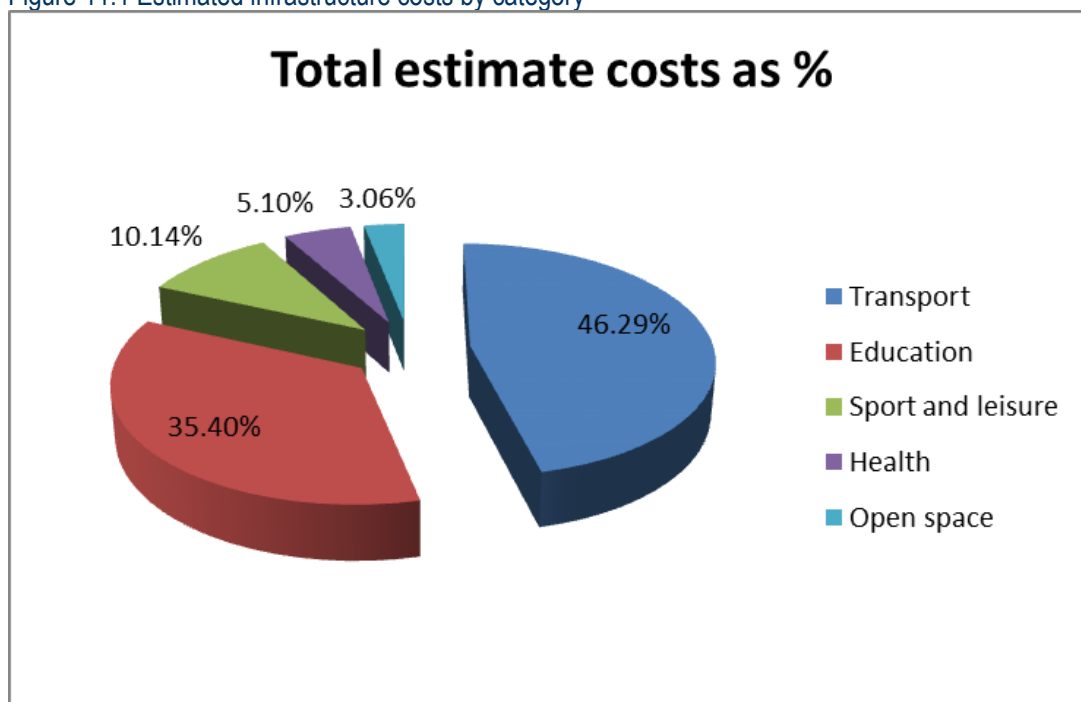
11.2.3 Note the information relating to sport, leisure and open space is based on the assessment undertaken by PLC for this area, the outputs of this study are presented as an area wide cost relating to the South East Lincolnshire area, and hence this information is presented as such in the IDP.

Table 11.1 Infrastructure costs by local authority and priority

Estimated infrastructure costs by local authority and priority	Boston BC	Joint S E Lincs	South Holland DC	Grand Total
Critical	£11,000,000		£16,000,000	£27,000,000
Boston Distributor Road Q2	£11,000,000			£11,000,000
Spalding Western Relief Road northern section			£6,000,000	£6,000,000
Spalding Western Relief Road southern section			£10,000,000	£10,000,000
Essential	£29,787,088		£75,624,983	£105,412,071
Holbeach - Boston Road roundabout			£295,000	£295,000
Holbeach - Peppermint Junction			£5,400,000	£5,400,000
Primary school extension	£8,536,353		£4,695,957	£13,232,310
Primary school new building	£4,243,533		£15,246,464	£19,489,997
Secondary new school building	£13,932,800		£12,937,600	£26,870,400
Secondary school extension	£225,632		£7,643,284	£7,868,916
Six form new school building	£2,806,464		£2,587,520	£5,393,984
Six form school extension	£42,306		£1,819,158	£1,861,464
Spalding Western Relief Road northern section			£15,000,000	£15,000,000
Spalding Western Relief Road southern section			£10,000,000	£10,000,000
Desirable	£44,870,676	£27,872,000	£5,884,076	£78,626,753
Allotments		£1,215,000		£1,215,000
Boston Distributor Road - South Forty Foot crossing	£40,000,000			£40,000,000
Cemeteries / church yard		£2,193,000		£2,193,000
Children's play		£967,500		£967,500
GP facilities	£4,870,676		£5,884,076	£10,754,753
Green Infrastructure		£1,372,000		£1,372,000
Parks and gardens		£715,000		£715,000
Spalding Western Relief Road central section			£0	£0
Sport and leisure		£21,409,500		£21,409,500
Grand Total	£85,657,764	£27,872,000	£97,509,059	£211,038,823

11.2.4 Figure 11.1 below illustrates the percentage breakdown for each infrastructure category. Unsurprisingly, the highest costs relate to transport at 46% of the total infrastructure costs, with education costs representing over 35% of the total estimated costs.

Figure 11.1 Estimated infrastructure costs by category



11.2.5 The top ten infrastructure cost items are summarised in table 11.2 below. The highest cost project identified in this table is for Boston Distributor Road and the provision of a crossing across the South Forty Foot Drain estimated at £40m. The northern and southern sections of the Spalding Western Relief Road together are estimated at £41m. Note the various primary and secondary school costs relate to a number of grouped projects.

Table 11.2 Top ten infrastructure cost items

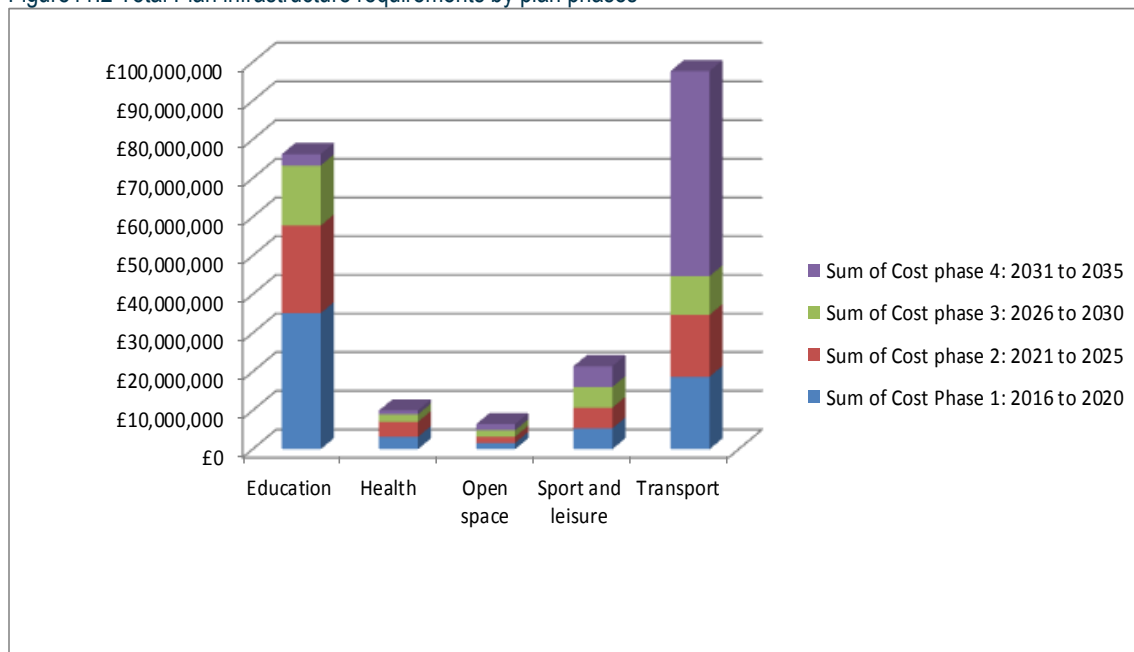
10 highest cost projects	Plan period (2016 - 2036) total cost estimate
Boston Distributor Road - South Forty Foot crossing	£40,000,000
Secondary new school building	£26,870,400
Sport and leisure	£21,409,500
Spalding Western Relief Road northern section	£21,000,000
Spalding Western Relief Road southern section	£20,000,000
Primary school new building	£19,489,997
Primary school extension	£13,232,310
Boston Distributor Road Q2	£11,000,000
GP facilities	£10,754,753
Secondary school extension	£7,868,916

11.2.6 Table 11.3 below summarises starts to break down the total cost information into five year plan phases for each local authority and this information is depicted as bar chart in figure 11.2 overleaf. The bar charts starts to show when highest amounts of costs come into effect, for instance phase 4 includes a considerably high transport cost, whilst phase 1 includes a much higher education infrastructure cost than the other phases, whilst phase 4 includes a very low education cost. This will help to inform how to manage cashflow and move projects between phases to reflect when they are absolutely required to match planned growth delivery.

Table 11.3 Total plan infrastructure costs by local authority and priority

Infrastructure by local authority and plan phases	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total estimate costs
Boston BC	£20,522,245	£8,538,540	£10,153,910	£45,675,053	£85,657,764
Education	£19,529,869	£3,766,119	£6,094,956	£396,144	£29,787,088
Health	£992,376	£1,772,421	£1,058,954	£278,909	£4,870,676
Transport	£0	£3,000,000	£3,000,000	£45,000,000	£51,000,000
South Holland DC	£36,477,854	£33,969,609	£17,276,942	£11,293,568	£97,509,059
Education	£15,609,165	£18,860,698	£9,421,322	£2,547,712	£44,929,983
Health	£2,173,689	£2,108,911	£855,620	£745,856	£5,884,076
Transport	£18,695,000	£13,000,000	£7,000,000	£8,000,000	£46,695,000
Joint S E Lincs	£6,968,000	£6,968,000	£6,968,000	£6,968,000	£27,872,000
Open space	£1,615,625	£1,615,625	£1,615,625	£1,615,625	£6,462,500
Sport and leisure	£5,352,375	£5,352,375	£5,352,375	£5,352,375	£21,409,500
Grand Total	£63,968,099	£49,476,148	£34,398,852	£63,936,621	£211,038,823

Figure 11.2 Total Plan infrastructure requirements by plan phases



11.3 The infrastructure funding gap

11.3.1 The assessment above has set out the total known costs estimated for the whole plan period to 2036. The next stage introduces known funding and assumptions relating to future main stream / public funding contributions to support the delivery of the planned growth. Where there is no known information about longer term public sector funding, a general assumption of 50% public sector funding contribution²⁰ towards the cost of the infrastructure from mainstream service providers has been assumed.

11.3.2 Table 11.4 overleaf takes account of the estimated and known mainstream funding and developer funding to arrive at the infrastructure funding gap. This show the estimated total plan period infrastructure costs of £211m. There is then a deduction of assumed and known mainstream and developer funding to arrive at the funding gap of £104m over the plan period.

²⁰ See section 10.2

Table 11.4 Estimated infrastructure funding gap

Estimated infrastructure cost and funding gap	Plan period (2016 - 2036) estimate total cost	Assumed public funding sources	Assumed developer funding	Funding gap
Critical	£27,000,000	£0	£27,000,000	£0
Boston Distributor Road	£11,000,000	£0	£11,000,000	£0
Spalding Western Relief Road northern section	£6,000,000	£0	£6,000,000	£0
Spalding Western Relief Road southern section	£10,000,000	£0	£10,000,000	£0
Essential	£105,412,071	£59,553,535	£1,000,000	£44,858,535
Holbeach - Boston Road roundabout	£295,000	£295,000	£0	£0
Holbeach - Peppermint Junction	£5,400,000	£4,400,000	£1,000,000	£0
Primary school extension	£13,232,310	£6,616,155	£0	£6,616,155
Primary school new building	£19,489,997	£9,744,998	£0	£9,744,998
Secondary new school building	£26,870,400	£13,435,200	£0	£13,435,200
Secondary school extension	£7,868,916	£3,934,458	£0	£3,934,458
Six form new school building	£5,393,984	£2,696,992	£0	£2,696,992
Six form school extension	£1,861,464	£930,732	£0	£930,732
Spalding Western Relief Road northern section	£15,000,000	£7,500,000	£0	£7,500,000
Spalding Western Relief Road southern section	£10,000,000	£10,000,000	£0	£0
Desirable	£78,626,753	£19,313,376	£0	£59,313,376
Allotments	£1,215,000	£607,500	£0	£607,500
Boston Distributor Road - South Forty Foot crossing	£40,000,000	£0	£0	£40,000,000
Cemeteries / church yard	£2,193,000	£1,096,500	£0	£1,096,500
Children's play	£967,500	£483,750	£0	£483,750
GP facilities	£10,754,753	£5,377,376	£0	£5,377,376
Green Infrastructure	£1,372,000	£686,000	£0	£686,000
Parks and gardens	£715,000	£357,500	£0	£357,500
Sport and leisure	£21,409,500	£10,704,750	£0	£10,704,750
Grand Total	£211,038,823	£78,866,912	£28,000,000	£104,171,912

11.3.3 Note the funding gap assessed in table 11.4 above does not take account of any developer contributions that may be sought. Based on the developer contributions outlined at paragraph 10.5.9, the planned development could possibly secure developer contributions of approximately £33m in South Holland DC and £13m in Boston Borough Council, combined to provide an estimated total of £46m. Thus reducing the total funding gap identified in table 11.4 to approximately £58m (£104m - £46m) over the 15 year period. This equates to a funding gap of approximately £4m per annum for all infrastructure (desirable, essential and critical)

11.4 Focusing on priority infrastructure projects

11.4.1 The total funding gap will needs to be managed by prioritising infrastructure requirements (both by theme and by timeframe), and looking for other sources of funding and efficiency savings to reduce the cost of infrastructure through means such as joint service delivery, or securing third party investment in non-risky income generating infrastructure.

Table 11.5 Funding gap for critical and essential infrastructure

Infrastructure and priority category	Plan period (2016 - 2036) total cost estimate	Assumed funding from various public sources	Assumed funding from developer site opening costs	Funding gap to inform future S106 / CIL and other funding bids
Boston Distributor Road Q2	£11,000,000	£0	£11,000,000	£0
Holbeach - Boston Road roundabout	£295,000	£295,000	£0	£0
Holbeach - Peppermint Junction	£5,400,000	£4,400,000	£1,000,000	£0
Primary school extension	£13,232,310	£6,616,155	£0	£6,616,155
Primary school new building	£19,489,997	£9,744,998	£0	£9,744,998
Secondary new school building	£26,870,400	£13,435,200	£0	£13,435,200
Secondary school extension	£7,868,916	£3,934,458	£0	£3,934,458
Six form new school building	£5,393,984	£2,696,992	£0	£2,696,992
Six form school extension	£1,861,464	£930,732	£0	£930,732
Spalding Western Relief Road northern section	£21,000,000	£7,500,000	£6,000,000	£7,500,000
Spalding Western Relief Road southern section	£20,000,000	£10,000,000	£10,000,000	£0
Grand Total	£132,412,071	£59,553,535	£28,000,000	£44,858,535

11.4.2 Table 11.5 above sets out the infrastructure funding gap by focusing on critical and essential infrastructure items only. This shows the total funding gap is approximately £45m for infrastructure in this category.

11.4.3 This is similar to the scale of developer contributions that might be sought in the plan area. However, note any developer contributions sought would need to comply with CIL Regulations.

11.5 Summary of infrastructure costs and funding by local authority

Table 11.6 Summary of costs funding and priorities for Boston Borough Council

Boston BC estimate infrastructure costs and funding by priority	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 to 2036) total cost	Assumed funding from public sources	Assumed funding from private sources	Estimate total funding gap
Critical	£0	£3,000,000	£3,000,000	£5,000,000	£11,000,000	£0	£11,000,000	£0
Boston Distributor Road Q2	£0	£3,000,000	£3,000,000	£5,000,000	£11,000,000	£0	£11,000,000	£0
Essential	£19,529,869	£3,766,119	£6,094,956	£396,144	£29,787,088	£14,893,544	£0	£14,893,544
Primary school extension	£2,522,667	£3,766,119	£1,851,423	£396,144	£8,536,353	£4,268,177	£0	£4,268,177
Primary school new building	£0	£0	£4,243,533	£0	£4,243,533	£2,121,766	£0	£2,121,766
Secondary new school building	£13,932,800	£0	£0	£0	£13,932,800	£6,966,400	£0	£6,966,400
Secondary school extension	£225,632	£0	£0	£0	£225,632	£112,816	£0	£112,816
Six form new school building	£2,806,464	£0	£0	£0	£2,806,464	£1,403,232	£0	£1,403,232
Six form school extension	£42,306	£0	£0	£0	£42,306	£21,153	£0	£21,153
Desirable	£992,376	£1,772,421	£1,058,954	£40,278,909	£44,870,676	£2,435,338	£0	£42,435,338
Boston Distributor Road - South Forty	£0	£0	£0	£40,000,000	£40,000,000	£0	£0	£40,000,000
GP facilities	£992,376	£1,772,421	£1,058,954	£278,909	£4,870,676	£2,435,338	£0	£2,435,338
Grand Total	£20,522,245	£8,538,540	£10,153,910	£45,675,053	£85,657,764	£17,328,882	£11,000,000	£57,328,882

11.5.1 Table 11.6 above shows that the infrastructure funding gap for Boston Borough Council's planned growth estimated at approximately £57m. The largest component of this cost relates to the BDR bridge crossing over the South Forty Foot drain of approximately £40m. If this cost is removed, the total estimated funding gap is reduced to approximately £17m.

11.5.2 Note this table excludes the jointly assessed sport and leisure infrastructure costs which amounts to approximately £14m and is classified as desirable.

11.5.3 The essential infrastructure category consists of education infrastructure only. The current education infrastructure phasing and requirements do not reflect any new planned investment that might take place. Once the LCC Education

investment plans are known, it may be possible to delay or reduce the delivery of some education infrastructure requirements to later parts of the planned growth. The costs during phase 4 are considerably lower if the desirable cost items are removed, therefore from a cash flow planning perspective it may be appropriate to look to move some costs towards phase 4.

- 11.5.4 The public sector funding is based on a long term assumption relating to unknown funding sources to cover approximately 50% of the infrastructure cost items from public sources. This is not confirmed funding, but is based on an assumption that some form of public funding to contribute towards the cost of essential infrastructure requirements is likely over the longer term.
- 11.5.5 The private sector funding assessment does not include any developer contribution that might be sought in the form of S106 or CIL contributions. Initial high level estimates suggest that £13m of developer contributions could be secured from the planned growth, depending on ensuring compliance with CIL Regulations.

Table 11.7 Summary of costs funding and priorities for South Holland District Council

South Holland estimate infrastructure costs and funding by priority	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 to 2036) total cost	Assumed funding from public sources	Assumed funding from private sources	Estimate total funding gap
Critical	£8,000,000	£8,000,000	£0	£0	£16,000,000	£0	£16,000,000	£0
Spalding Western Relief Road northern section	£3,000,000	£3,000,000	£0	£0	£6,000,000	£0	£6,000,000	£0
Spalding Western Relief Road southern section	£5,000,000	£5,000,000	£0	£0	£10,000,000	£0	£10,000,000	£0
Essential	£26,304,165	£23,860,698	£16,421,322	£10,547,712	£75,624,983	£44,659,992	£1,000,000	£29,964,992
Holbeach - Boston Road roundabout	£295,000	£0	£0	£0	£295,000	£295,000	£0	£0
Holbeach - Peppermint Junction	£5,400,000	£0	£0	£0	£5,400,000	£4,400,000	£1,000,000	£0
Primary school extension	£2,759,253	£1,826,664	£110,040	£0	£4,695,957	£2,347,979	£0	£2,347,979
Primary school new building	£4,896,384	£0	£7,802,368	£2,547,712	£15,246,464	£7,623,232	£0	£7,623,232
Secondary new school building	£0	£12,937,600	£0	£0	£12,937,600	£6,468,800	£0	£6,468,800
Secondary school extension	£6,627,940	£1,015,344	£1,508,914	£0	£7,643,284	£3,821,642	£0	£3,821,642
Six form new school building	£0	£2,587,520	£0	£0	£2,587,520	£1,293,760	£0	£1,293,760
Spalding Western Relief Road northern section	£0	£0	£7,000,000	£8,000,000	£15,000,000	£7,500,000	£0	£7,500,000
Spalding Western Relief Road southern section	£5,000,000	£5,000,000	£0	£0	£10,000,000	£10,000,000	£0	£0
Desirable	£2,173,689	£2,108,911	£855,620	£745,856	£5,884,076	£2,942,038	£0	£2,942,038
GP facilities	£2,173,689	£2,108,911	£855,620	£745,856	£5,884,076	£2,942,038	£0	£2,942,038
Grand Total	£36,477,854	£33,969,609	£17,276,942	£11,293,568	£97,509,059	£47,602,030	£17,000,000	£32,907,030

- 11.5.6 Table 11.7 above shows that the infrastructure funding gap for South Holland District Council's planned growth estimated at approximately £33m. Note this table excludes the jointly assessed sport and leisure infrastructure costs which amount to approximately £14m and are classified as desirable.
- 11.5.7 The essential infrastructure category is made up of education and transport infrastructure. The current education infrastructure phasing and requirements do not reflect any new planned investment that might take place. Once the LCC Education Team investment plans are known, it may be possible to delay or reduce the delivery of some education infrastructure requirements to later parts of the planned growth.
- 11.5.8 The funding has made a long term assumption relating to unknown funding sources to cover approximately 50% of the infrastructure cost items from public sources. This is not confirmed funding, but is based on an assumption that some form of public funding to contribute towards the cost of essential infrastructure requirements.

11.5.9 The private funding assessment does not include any developer contribution that might be sought in the form of S106 or CIL contributions. Initial high level cautious estimates suggest that £33m of developer contributions could be secured from the planned growth, depending on ensuring compliance with CIL Regulations. This would be sufficient to meet the essential infrastructure requirements, however, note it may not be entirely CIL compliant and maybe affected by pooling restrictions and relevance rules governing S106.

PART 4 CONCLUSIONS AND RECOMMENDATIONS

This section sets out the study conclusions and recommendations.

12 CONCLUSIONS AND RECOMMENDATIONS

12.1 Introduction

- 12.1.1 This study has undertaken an assessment of infrastructure to inform the deliverability considerations of the emerging South East Lincolnshire Local Plan. The approach has been framed by the requirements of the National Planning Policy Framework. The IDP has been prepared in parallel with a whole plan viability study of the plan wide growth.
- 12.1.2 The IDP considers the delivery and developability of the planned growth in Boston Borough Council and South Holland District Council areas. The approach has included input from the promoters of major strategic sites and interviews with key infrastructure service providers. The IDP reflects the delivery of growth in the plan period and also beyond the plan period to arrive at recommendations on the ability to support the infrastructure requirements.
- 12.1.3 Details of the various infrastructure costs and funding have been set out in the preceding chapters. The following tables provide a summary of infrastructure costs, funding and priorities for each local authority.

12.2 The Infrastructure Delivery Plan

- 12.2.1 The Infrastructure Delivery Plan assessment is seeking to assess infrastructure requirements, costs and funding that is constantly changing due to the following:
- The precise nature and timing of growth is not fixed, meaning that being precise about the required infrastructure is not appropriate
 - Public services, legislation and hence the infrastructure that service providers require is in a constant state of flux e.g. recent changes to health legislation or education legislation means there is greater scope for private sector providers.
 - Technology is likely to affect infrastructure requirements over the next few years in ways which may be difficult to predict.
 - Efficiency saving means service providers are looking to retrench and seek joint use of buildings e.g. community/PCT buildings/LA all of which alter infrastructure demand and future requirements.
 - Priority for what is essential or desirable infrastructure will change depending on funding and other considerations.
 - Most service providers do not plan beyond three to five years (if that) as generally funding is not guaranteed for longer term and so cannot by definition be expected to know their precise requirements in (say) ten or fifteen years' time.

12.2.2 This means that long term infrastructure assessments as a result of growth are difficult to predict and are necessarily subject to considerable change. For this reason, the assessment will need to be regularly reviewed.

12.2.3 *It is recommended*

12.2.4 This study should be treated as a sketch plan rather than a detailed route map to delivery. It is important to remember that in this study infrastructure requirements are only dealt with at a strategic level. As plans are developed, then specific development based infrastructure assessments will need to be carried out that will map out more accurately the actual infrastructure needs and costs based on greater detail and understanding of capacity at that point in time.

12.2.5 As more detail emerges, the IDP should be refined and updated on at least an annual basis. This document should be treated as a 'live toolkit' rather than a static study. It has the potential to add value beyond the Local Plan Examination and become an invaluable tool to support the delivery of growth.

12.3 A developable and deliverable plan

12.3.1 As shown in table 12.1 below, the Infrastructure Delivery Plan assessment has identified a plan period total infrastructure cost of £211m across South East Lincolnshire. After allowing for possible future public sector funding and other known funding, shows an estimated funding gap of over £104m during the plan period.

12.3.2 However this does not take account of possible developer contributions that might be sought as part of planning applications. A high level estimate based on the draft Viability Study findings suggests approximately £46m could be available from developer contributions towards the funding gap. Thus reducing the estimated funding gap from £104m to £58m. A funding gap over this longer term timeframe is to be expected. The NPPF recognises this by distinguishing between deliverable schemes for the first five years and developable schemes for the rest of the plan period.

12.3.3 Further reductions to this funding gap can be achieved by prioritising projects and focusing on those items most important to the delivery of the planned growth and categorised as either critical or essential projects.

Table 12.1 Total Infrastructure funding gap for South East Lincolnshire Plan area

South East Lincolnshire estimated infrastructure costs and funding by priority	Cost phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 to 2036) total cost	Assumed funding from public sources	Assumed funding from private sources	Estimate total funding gap
Critical	£8,000,000	£11,000,000	£3,000,000	£5,000,000	£27,000,000	£0	£27,000,000	£0
Boston Distributor Road Q2	£0	£3,000,000	£3,000,000	£5,000,000	£11,000,000	£0	£11,000,000	£0
Spalding Western Relief Road northern section	£3,000,000	£3,000,000	£0	£0	£6,000,000	£0	£6,000,000	£0
Spalding Western Relief Road southern section	£5,000,000	£5,000,000	£0	£0	£10,000,000	£0	£10,000,000	£0
Essential	£45,834,034	£27,626,817	£22,516,278	£10,943,856	£105,412,071	£59,553,535	£1,000,000	£44,858,535
Holbeach - Boston Road roundabout	£295,000	£0	£0	£0	£295,000	£295,000	£0	£0
Holbeach - Peppermint Junction	£5,400,000	£0	£0	£0	£5,400,000	£4,400,000	£1,000,000	£0
Primary school extension	£5,281,920	£5,592,783	£1,961,463	£396,144	£13,232,310	£6,616,155	£0	£6,616,155
Primary school new building	£4,896,384	£0	£12,045,901	£2,547,712	£19,489,997	£9,744,998	£0	£9,744,998
Secondary new school building	£13,932,800	£12,937,600	£0	£0	£26,870,400	£13,435,200	£0	£13,435,200
Secondary school extension	£6,853,572	£1,015,344	£1,508,914	£0	£7,868,916	£3,934,458	£0	£3,934,458
Six form new school building	£2,806,464	£2,587,520	£0	£0	£5,393,984	£2,696,992	£0	£2,696,992
Six form school extension	£1,367,894	£493,570	£0	£0	£1,861,464	£930,732	£0	£930,732
Spalding Western Relief Road northern section	£0	£0	£7,000,000	£8,000,000	£15,000,000	£7,500,000	£0	£7,500,000
Spalding Western Relief Road southern section	£5,000,000	£5,000,000	£0	£0	£10,000,000	£10,000,000	£0	£0
Desirable	£10,134,065	£10,849,331	£8,882,574	£47,992,765	£78,626,753	£19,313,376	£0	£59,313,376
Allotments	£303,750	£303,750	£303,750	£303,750	£1,215,000	£607,500	£0	£607,500
Boston Distributor Road - South Forty Foot crossing	£0	£0	£0	£40,000,000	£40,000,000	£0	£0	£40,000,000
Boston Distributor Road - post plan period growth	£0	£0	£0	£0	£0	£0	£0	£0
Cemeteries / church yard	£548,250	£548,250	£548,250	£548,250	£2,193,000	£1,096,500	£0	£1,096,500
Children's play	£241,875	£241,875	£241,875	£241,875	£967,500	£483,750	£0	£483,750
GP facilities	£3,166,065	£3,881,331	£1,914,574	£1,024,765	£10,754,753	£5,377,376	£0	£5,377,376
Green Infrastructure	£343,000	£343,000	£343,000	£343,000	£1,372,000	£686,000	£0	£686,000
Parks and gardens	£178,750	£178,750	£178,750	£178,750	£715,000	£357,500	£0	£357,500
Spalding Western Relief Road central section	£0	£0	£0	£0	£0	£0	£0	£0
Sport and leisure	£5,352,375	£5,352,375	£5,352,375	£5,352,375	£21,409,500	£10,704,750	£0	£10,704,750
Grand Total	£63,968,099	£49,476,148	£34,398,852	£63,936,621	£211,038,823	£78,866,912	£28,000,000	£104,171,912

12.3.4 To demonstrate a 'deliverable' five year housing supply and 'developable' longer term supply, it is necessary to have infrastructure in place to support short term growth, and a mechanism in place to demonstrate that the medium to longer term growth is developable.

12.3.5 Note this study has not assessed consented schemes that will make up part of the five year supply as these are assumed to be consented with appropriate accompanying infrastructure. The costs included in the IDP relate to the planned unconsented growth.

12.3.6 A major component of the first five years infrastructure costs identified in table 12.1 relates to education costs, amounting to approximately £35m (see Appendix C). A key component of this is the provision of a new secondary and sixth form school in Boston, a new primary school and a secondary / sixth form school extension in Holbeach and numerous school extensions currently linked to the planned growth in phase 1 and to reflect the lead in delivery times and current capacity issues (see critical path analysis tables for secondary education infrastructure in Appendix C).

12.3.7 The profiling of new school development during the first phase of the plan trajectory has been informed by the current capacity issues identified in the critical path analysis (see Appendix C) informed by the Education team at LCC. It should be noted that LCC are currently exploring various investments options to meet the current need for infrastructure stemming from past and recently consented planning applications and population changes within the area.

12.3.8 However, these investments options are currently being treated as confidential and have not been released to inform this IDP assessment. Therefore the IDP assessment has been based on profiling infrastructure requirements as part of the first phase to reflect current capacity issues identified. LCC have stated

that by the time the Local Plan is at Examination stage, they will be in a position to set out how their investment plans will deal with identified short term capacity constraints. This in turn is likely to affect the phasing of future infrastructure requirements and could considerably affect the overall infrastructure funding gap, phasing and delivery of the IDP.

- 12.3.9 Given the estimated shortfall in funding and variations in infrastructure requirements over time, there is a need to carefully manage the infrastructure cashflow to support the delivery of planned growth as it is built out.
- 12.3.10 Changes in the way developer contributions are sought were introduced in the 2008 Planning Act with the introduction of the Community Infrastructure Levy (CIL) to pay for 'strategic infrastructure'. The possible introduction of a Community Infrastructure Levy to secure contributions towards strategic infrastructure will be an important element of the Infrastructure Delivery Plan. If a CIL is not considered appropriate then careful consideration will be needed as to how to fund the delivery of strategic infrastructure that is not directly related to planned growth or exceeds the pooling restrictions for the use of S106.

Recommendations for supporting the delivery of the local plan

- 12.3.11 The success of showing that the Local Plan is deliverable will, to a significant degree, depend on the ability to deliver the infrastructure required to support the delivery of planned growth in the first five years. It is thus necessary to ensure that the funding is in place to fund infrastructure required in the short term. For the period beyond the first five years, it is important to show to the Examiner that although all infrastructure funding may not be in place, there will be processes in place to manage the funding gap. The South East Lincolnshire Joint Strategic Planning Committee (SELJSPC) should consider establishing an infrastructure delivery and prioritisation mechanism. There is a need for an 'Infrastructure Delivery Mechanism' or similar process to manage the funding gap and infrastructure delivery.
- 12.3.12 This will help the political process by clarifying decisions that need to be taken, when they need to be taken, and what the ramifications of choices are. The Infrastructure Delivery Mechanism would need to be practically orientated and could focus on the following:
- Focus on how problems are to be resolved, priorities determined, risks identified and plan ahead to support the delivery of the first five years of growth. Starting with the delivery of education infrastructure in the short term and revising the cost trajectory once investment plans are disclosed by LCC.
 - Establish a Member level decision making process to inform priorities for infrastructure investment, and also links to the existing corporate capital spending groups and emerging sub regional infrastructure delivery groups in order to consider how to align priorities for investment.

- Establish an internal Infrastructure Delivery Group consisting of service providers, especially those representing transport and education to help with critical path planning and identifying priorities for investment and capacity issues and explore alternative means of funding / delivering infrastructure. This could be at a local, sub regional or aligned with the Devolved Funding mechanism.
- Establish a Utilities Forum (see below) that meets for specific themed workshops to discuss growth priorities, and infrastructure requirements / issues.

12.4 Delivery of the safeguarded transport corridors

- 12.4.1 The delivery of the Spalding Western Relief Road (SWRR) and the Boston Distributor Road (BDD) schemes are an integral part of the 'solution' to the delivery of the overall plan objectives and should not be viewed simply as a high infrastructure cost items. These schemes are intended to help to unlock planned growth and improve the movement and functioning of the wider area.
- 12.4.2 The transport infrastructure makes up 48% of the total infrastructure costs identified in this IDP. The biggest proportion of this cost relate to the delivery of the Boston Distributor Road (estimated at £51m during the plan period) and the Spalding Western Relief Road (estimated at £47m during the plan period).
- 12.4.3 The planned growth is being channelled to help create a symbiotic relationship between the delivery of these road schemes, and the delivery of the planned growth. The delivery of these projects should be viewed as a public – private sector partnerships, they help to unlock growth and they will also bring wider longer term economic and traffic management benefits to the two sub regional centres.

Major transport projects management

- 12.4.4 Lincolnshire County Council has a monthly Capital Programme Steering Group which considers all major LCC Capital schemes and includes the delivery of the BDR and SWRR transport projects. The group looks to coordinate planning, infrastructure delivery and securing funding from various sources and engagement with private sector delivery partners. The projects are kept as 'live' and actions to move towards a delivery programme are progressing.
- 12.4.5 Those sections of the road scheme essential to unlocking planned growth are phased for early delivery. Delivery of the bridge crossing section of the BDR (not linked to a specific development) may take longer, and it is recognised by the Local Authorities that there could be some pinch points in the highway traffic movement, possibly resulting in additional congestion. However, safeguarding a corridor is an important step to protect the route delivery. It is accepted that some sections of the safeguarded transport routes are not likely to be delivered during this plan period.

Approaches to funding

- 12.4.6 Different approaches to developer funding are being explored for the two road schemes which reflect the nature of planned development in each sub regional centre.
- 12.4.7 In the case of the BDR, the initial delivery of sections of the safeguarded route is expected to be met by the developers of the Q1, Q2 and Wes 002 sites. The cost of the infrastructure is treated as part of the site opening cost assumptions. The BDR bridge crossing estimated at £40m does not form part of the LTP funding and is not part of any planned growth and it is currently not clear how or when this will be delivered. If a new crossing is not provided across the South Forty Foot Drain and adjacent railway, then the proposed development of BDR, combined with the associated housing developments, is expected to add to the congestion already experienced at the mini roundabout point where Boardsides meets the Sleaford Rd and the A52. Boston B C officers are aware of the challenges to the delivery of this section of the BDR, and have adopted a pragmatic approach. This section of the BDR is seen as 'desirable' to reduce congestion at the mini roundabout and also to alleviate the general town centre congestion. However, it will not impede the delivery of planned growth, and will be provided as and when funding can be secured.
- 12.4.8 The delivery of the entire Spalding WRR is likely to be managed and implemented by Lincolnshire County Council. The section of the road scheme associated with the consented Holland Park scheme will be part funded by a S106 / S278/ S38 agreement as private sector developer contributions (exact amount is yet to be finalised) and part funded by various public funding sources including bids to the Devolution Funding programme. Future sections of this transport corridor are likely to be funded and delivered as part of a possible future CIL charging schedule (which would ensure that all development in the area contributes towards the cost of this project and would allow LCC and South Holland DC as the charging authority responsible for the CIL Regs 123 list to forward fund the scheme and claw back from CIL revenue as it materialises).

Recommendations for the delivery of the transport corridors

- 12.4.9 The current cost estimates provided by LCC for the road schemes informing this IDP have been based on known constraints, known cost estimates and transport modelling assessments. As these schemes progress towards Local Plan Examination, concept plans should be developed and costings refined to reflect the known physical structures and other constraints and emerging funding sources.

- 12.4.10 The main risk to Lincolnshire County Council taking on the lead delivery role for the Spalding WRR is if development does not take place for any reason following considerable expenditure. Strong project management mechanisms are already in place, and further tools / legal agreements for safeguarding that development does follow capital investment will need to be investigated.
- 12.4.11 Dialogue should be held with the various private sector developers / site promoters / land owners to set out the current delivery strategy for the transport corridors and seek views on how partnership working can be strengthened to de-risk delivery of both the planned growth and the strategic road schemes.
- 12.4.12 Dialogue should be held with the various utilities infrastructure providers (possibly as part of the Utilities Forum recommended above) to develop thinking and an action plan on how to ensure efficient delivery of utilities infrastructure (noting some of the physical challenges of rail, river and drain crossings) and producing an aligned plan to ensure that key utilities infrastructure investment takes place alongside the delivery of sections of the road schemes to minimise costs and interruptions and increase efficiencies. The delivery of the road schemes is expected to be a very long term project (most likely beyond the plan period), however, the broad delivery framework should be jointly developed and agreed and captured in the various investment plans (AMP) for the utilities providers.
- 12.4.13 Dialogue should also take place with those responsible for the main physical features which the road schemes will need to cross, such as the railway lines, rivers and drains. This is likely to involve Network Rail, the Environment Agency, the Internal Drainage Boards, and others to ensure the delivery framework for the road schemes takes account of any matters that these stakeholders may identify and secure their 'buy in' at an early stage so that their maintenance and investment plans start to reflect the delivery of these road schemes.
- 12.4.14 The two road schemes already feature in the Greater Lincolnshire Strategic Infrastructure Delivery Plan currently being prepared (August 2016). This will be a key document that will shape and inform potential funding from the Devolutions Funding Programme. As such, it will be vital for the project management group overseeing the delivery of these road schemes to articulate a very strong economic and growth delivery case that responds to the criteria that will be used to assess how funding will be distributed sub-regionally. This is likely to require a detailed understanding of some of the important businesses that currently operate in Spalding and Boston and of future businesses and workforce to be attracted to the area.

12.5 Education and social infrastructure

- 12.5.1 The effect of increased numbers of school age children over recent years has meant that most of the pupil capacity in the education infrastructure has been absorbed. Recent increases in school roll numbers have been met by

expansion and by maximising the use of space within existing schools. However, the critical path assessment completed by LCC (see Appendix C) indicates that a number of school are now at or approaching capacity and will require significant investment if the number of school children continues to increase.

- 12.5.2 There are clearly issues in education infrastructure capacity to meet short term planned and consented scheme requirements. LCC has a statutory duty to ensure sufficient education capacity is made available to meet the needs of the area. It is understood that LCC Education Team are exploring various options to meet the current requirements for education places. These options have not been released to inform the IDP. Once these options are finalised they will inform the IDP cost trajectory and could move some of the requirements later into the plan period, as new capacity will be created in the short term.
- 12.5.3 Land has been identified in Spalding for the provision of additional education infrastructure, and the Holland Park consented urban extension also includes S106 funding to support the delivery of a primary school. There is currently no land allocation identified in Boston for the provision of a secondary school, though dialogue has commenced to explore the most suitable location for this.
- 12.5.4 With respect to other social infrastructure including health, sports, leisure, and open space the assessments currently reflect requirements for the joint plan area. Although collectively these represent a small percentage (approximately 18%) of the total infrastructure costs, these are often the sort of infrastructure items that local residents are most concerned about in relation to future proposals for growth, particularly the impact on already stretched facilities like GPs surgeries.
- 12.5.5 The focus for investment in health infrastructure will be about creating efficiency and working in a different way to maximise the use of facilities, sharing properties (particularly with social care and wider public sector), reducing running costs and rationalising property portfolios by focusing primary care onto fewer sites where there is potential for improved service delivery. Though it is noted that there are some planned expansions expected to come forward to meet short term needs which are expected to be funded via national funding programmes. The critical issue for the service delivery County wide however, is an increasing shortage of GP's, nurses and other healthcare staff which could affect future service delivery should demand increase.
- 12.5.6 The future could see more health care delivered locally in specialist extended primary care centres instead of at hospital, adopting a hubs and spokes type model to infrastructure. In the longer term the sub regional centres such as Spalding and Boston could perform the role of 'hubs' with potentially extended primary care facilities. Various options are currently being explored by the CCG's as to what such a model might include and what it would cost, however work on this is at a very early stage and no decisions have been agreed

Recommendations for the delivery of education and other social infrastructure

- 12.5.7 The need for education infrastructure is identified as a potential risk to supporting the short term delivery of the planned growth until the options being explored by LCC Education Team are released and provide clarity about how identified capacity issues will be met. Thus a priority for the South East Lincolnshire Local Plan delivery considerations will be to maintain continued engagement with the Education Team at LCC and seek assurance that there are clear deliverable investment plans for education infrastructure.
- 12.5.8 Close liaison should be maintained with the Clinical Commissioning Groups too to consider how future delivery of health infrastructure can act as a 'hub' for wider social infrastructure.
- 12.5.9 Further work will need to be undertaken at a local level to take the findings from the PLC Sports, Open space and Leisure facilities study to inform priorities for future off site sports and leisure infrastructure.

12.6 Utilities infrastructure

- 12.6.1 Based on the broad growth assessment to utilities, no technical or licensing barriers to growth have been identified that would prevent the delivery of the bulk of the planned growth. The service providers have indicated where possible capacity issues may arise associated with potential locations of growth based on information known at this point in time – these are outlined in the utilities section of this report.
- 12.6.2 If there is not the relevant capacity in the existing utilities infrastructure or if there is no utilities infrastructure in the vicinity of proposed development, then the cost and time required facilitating connections and/or upgrading the capacity can be substantial. If this cost has to be met by the developer, it can be a significant factor in determining whether a development is viable or introduce considerable delay. Some cost for utilities infrastructure has been factored into the Viability Study cost inputs to reflect an allowance for site enabling infrastructure costs and externals allowances for site connections and so is not duplicated in this study. However, the site specific cost of providing the utilities connections²¹ have not been assessed.
- 12.6.3 A potential impediment to the delivery of growth, in common with many of the utility networks, relates to the way connections are paid for. Simplistically, if there is a need to provide supply reinforcements, there is a risk that all the costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage).
- 12.6.4 Commercial developments can only realistically be assessed on a case-by-case basis due to the variance in demand with regard to the proposed

²¹ This is best done once the sites for development are known and a more accurate assessment can be made based on where connections are to be made.

employment use. However, it is important to note that the demand from the food processing type businesses can demand very high load capacities and so the snap shot of capacity can quickly change if a new employment user is established.

- 12.6.5 There are currently no identified strategic growth related flood and drainage infrastructure requirements identified. Infrastructure requirements and delivery relating to flood and drainage will be developed as the work of the South Forty Foot Steering Group develops and other schemes stemming from the Environment Agency. As and when these are developed, they will need to be incorporated into the live Infrastructure Delivery Plan.

12.7 Recommendations for the delivery of the utilities infrastructure

- 12.7.1 It is recommend that a Utility Forum should be established, meeting once a year (as considered appropriate) to exchange information on planned growth and impact on existing capacity and exploring approaches to helping unlock potential blockages to the delivery of planned growth (see below), and informing the utility company investment plans. The initial response from utilities providers to the possibility of establishing a Utilities Forum as part of the IDP consultation was very positive. The coordination of this type of strategic infrastructure enabling activity could be led by the local authorities or possibly at a sub-regional level by the Lincolnshire LEP or other similar strategic body with a responsibility for promoting the timely delivery of planned growth.
- 12.7.2 A watching brief should be kept on the review of asset management plans of the utilities providers in order to inform these when they are up for review. At present Severn Trent is operating on AMP 6 (1st April 2015 to 31st March 2020), Anglian Water are working on AMP 6 (1st April 2015 to 31st March 2020) and Western Power Distribution are working on a business plan RIIO – ED1(1st April 2015 to 31st March 2023).
- 12.7.3 An early priority for the Joint South East Lincolnshire Local Plan authorities, leading up to the Local Plan Examination, should be to explore how some of those locations identified as being close to capacity and / or network connections requiring further investment are to be actioned to ensure that any potential delays to the delivery of growth is minimised or to review whether some of these sites can be serviced by alternative options.
- 12.7.4 There are a number of developments in an area with known limitations to the utility connections (e.g. the Donnington transformer in the case of electricity supply). Before taking these sites forward further dialogue with Western Power Distribution is recommended to inform the plan trajectory and deliverability considerations in order to fully understand the implications in supporting the planned growth. The Utilities Forum could be tasked to look at how the cost and risk of connections to a number of development sites can be more equitably distributed between all the development sites. The local authority,

utility provider and developers could work collaboratively to secure the benefits of a single upgrade to feed the area as opposed to individual applications feeding each site independently.

12.7.5 Further dialogue is recommended with the promoters of the Gedney Hill sites to fully understand how sewage infrastructure will be provided to the developments before taking forward these sites.

12.7.6 Ensure liaison with the South Forty Foot Steering Group to capture any future flood and drainage infrastructure requirements that arise from the work of the group.

12.8 Infrastructure related to the delivery of employment sites

12.8.1 85ha of land is being allocated for main employment uses (within Use Classes B1, B2 and B8). Most of the sites allocated will require some form of site-specific transport infrastructure, utilities upgrades and site-specific flood-resilience measures. These will be met as part of the site-opening requirements by the site promoters.

Appendix A Consultees

The input provided by the following people in shaping this study is gratefully acknowledged:

- Gary Alexander, South Holland District Council
- Christopher Holliday, Boston Borough Council
- Phil Hughes and Brendan Gallagher, Lincolnshire County Council
- Richard Hardesty, Senior Project Leader (Major Schemes) Lincolnshire County Council
- Simon Challis, Katy Gosling, Matthew Clayton, Education team members, Lincolnshire County Council
- Dave Humberstone, 11KV Planner, Western Power Distribution
- Jason Taylors, 11KV Planner, Western Power Distribution
- Stewart Patience, Planning Liaison Manager, Anglian Water Services Limited
- Ross Blake, Network Strategy, UK Distribution, National Grid
- Annette Hewitson, Principal Planning Advisor, Environment Agency
- Justin Brown, Enterprise Commissioner, Lincolnshire County Council
- Gerry Dawson, Interim Manager (Devolution), Greater Lincs Devolution Programme Officer
- John Harness, JTH Consultancy Ltd – on behalf of the CCGs
- Andrew Rix, South Lincolnshire Clinical Commissioning Group, previously also for Lincolnshire East CCG
- Peter Udy, Boston Borough Council
- Matthew Fisher, Boston Borough Council
- Neal Rothwell, Head of Asset & Facilities Management, Lincolnshire Police
- Ian Canham Boardgate Homes
- David Newton and Neil Kempster, Chestnut Homes

Appendix B Anglian Water RAG assessment

The following table has been provided by Anglian Water as a point in time assessment of infrastructure capacity.

Appendix C Education assumptions

C.1 Critical path assessment of primary education infrastructure

Location	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Bicker	Zero places available at closest primary school (Donington) to 95% full at present. 5 additional classrooms required to extend school by just over 0.5FE to 2FE - school has sufficient land for extension																				
Boston SUE - Land to the south of Chain Bridge Rd	Currently above 95% full, taken as no capacity available. Total for Boston requires 3.5FE additional primary capacity as no space currently available. 3FE of this to be provided via a new school requiring 2.7ha of land. 0.5FE of this to be provided by extending existing primary school including 2 additional classrooms - school has sufficient land for this																				
Boston SUE - Land to the south of Chain Bridge Rd	Currently above 95% full, taken as no capacity available. Total for Boston requires 3.5FE additional primary capacity as no space currently available. 3FE of this to be provided via a new school requiring 2.7ha of land. 0.5FE of this to be provided by extending existing primary school including 2 additional classrooms - school has sufficient land for this																				
Boston SUE - Land north of north Forty Foot bank	Currently above 95% full, taken as no capacity available. Total for Boston requires 3.5FE additional primary capacity as no space currently available. 3FE of this to be provided via a new school requiring 2.7ha of land. 0.5FE of this to be provided by extending existing primary school including 2 additional classrooms - school has sufficient land for this																				
Boston SUE - Land north of north Forty Foot bank	Currently above 95% full, taken as no capacity available. Total for Boston requires 3.5FE additional primary capacity as no space currently available. 3FE of this to be provided via a new school requiring 2.7ha of land. 0.5FE of this to be provided by extending existing primary school including 2 additional classrooms - school has sufficient land for this																				
Boston (excluding SUEs)	Currently above 95% full, taken as no capacity available. Total for Boston requires 3.5FE additional primary capacity as no space currently available. 3FE of this to be provided via a new school requiring 2.7ha of land. 0.5FE of this to be provided by extending existing primary school including 2 additional classrooms - school has sufficient land for this																				
Butterwick	Sufficient capacity available for developments proposed																				
Fishtoft	Sufficient capacity available for developments proposed																				
Fishtoft	Sufficient capacity available for developments proposed																				
Kirton	Sufficient capacity available for developments proposed																				
Kirton	Sufficient capacity available for developments proposed																				
Old Leake	Sufficient capacity available for developments proposed																				
Sutterton	No capacity currently available. Extension to 1FE required for current demand and that from development proposed including 3 additional classrooms - school has sufficient land for this																				
Sutterton	No capacity currently available. Extension to 1FE required for current demand and that from development proposed including 3 additional classrooms - school has sufficient land for this																				
Swineshead	No capacity. 4 additional classrooms required to extend school by 0.5FE to 2FE - land shortage would require additional playing field land																				
Swineshead	No capacity currently available at closest primary (Sutterton). Extension to 1FE required for current demand and that from development proposed including 2 to 3 additional classrooms - school has sufficient land for this																				
Wigtoft	Sufficient capacity available for developments proposed																				
Wigtoft	Sufficient capacity available for developments proposed																				
Wrangle	Sufficient capacity available for developments proposed																				
Wrangle	Sufficient capacity available for developments proposed																				
Cowbit	Sufficient capacity available for developments proposed																				
Cowbit	Sufficient capacity available for developments proposed																				
Crowland	Capacity limited. 0.5FE required to extend the school to 2.5FE via 3 additional classrooms. Sufficient land available for extension.																				
Deeping St Nicholas	Some capacity currently available. One additional classroom may be required to extend school to 0.5FE in second phase of plan. School has enough land for this.																				
Deeping St Nicholas	Some capacity currently available. One additional classroom may be required to extend school to 0.5FE in second phase of plan. School has enough land for this.																				
Donington	Zero places available to 95% full at present. 5 additional classrooms required to extend school by just over 0.5FE to 2FE - school has sufficient land for extension																				
Donington	Zero places available to 95% full at present. 5 additional classrooms required to extend school by just over 0.5FE to 2FE - school has sufficient land for extension																				
Fleet Hargate	Sufficient capacity available for developments proposed																				
Fleet Hargate	Sufficient capacity available for developments proposed																				
Gosdony Hill	Sufficient capacity available for developments proposed																				
Gosdony Hill	Sufficient capacity available for developments proposed																				
Gosberton	Small amount of capacity available, extension to 1FE requiring 2 additional classrooms required																				
Gosberton	Small amount of capacity available, extension to 1FE requiring 2 additional classrooms required																				
Holbeach	New 1FE primary school and 0.5FE extensions of two existing primary school planned over life of proposed developments, including beyond plan period																				
Holbeach	New 1FE primary school and 0.5FE extensions of two existing primary school planned over life of proposed developments, including beyond plan period																				
Long Sutton	Zero available capacity at the present time. Requires 3 additional classrooms to extend by 0.5FE to 2.5FE. Severe land shortages on site would require additional playing field land in order to allow expansion																				
Long Sutton	Zero available capacity at the present time. Requires 3 additional classrooms to extend by 0.5FE to 2.5FE. Severe land shortages on site would require additional playing field land in order to allow expansion																				
Moulton	Sufficient capacity available for developments proposed																				
Moulton	Sufficient capacity available for developments proposed																				
Moulton Chapel	May need to increase to 0.5FE by end of plan period, however sufficient classrooms for this without further building work																				
Moulton Chapel	May need to increase to 0.5FE by end of plan period, however sufficient classrooms for this without further building work																				
Pinchbeck	Additional capacity is filtering through school to 2018, limited capacity available going forward although does not take into account natural growth after 2018/19																				
Pinchbeck	Additional capacity is filtering through school to 2018, limited capacity available going forward although does not take into account natural growth after 2018/19																				
Quadring	No available capacity. Extension to 1FE required over plan period including 4 additional classrooms																				
Quadring	No available capacity. Extension to 1FE required over plan period including 4 additional classrooms																				
Spalding	No capacity currently available in Spalding. New 3FE primary school required from development in Spalding on 2.7ha of land.																				
Spalding	No capacity currently available in Spalding. New 3FE primary school required from development in Spalding on 2.7ha of land.																				
Spalding SUE	No capacity currently available in Spalding. New 3FE primary school required from development in Spalding on 2.7ha of land.																				
Spalding SUE	No capacity currently available in Spalding. New 3FE primary school required from development in Spalding on 2.7ha of land.																				
Surfleet	Limited capacity available. One additional classroom required to extend school to PAN20 from PAN15. Land shortage would require additional playing field land.																				
Surfleet	Limited capacity available. One additional classroom required to extend school to PAN20 from PAN15. Land shortage would require additional playing field land.																				
Sutton Bridge	Sufficient capacity available for developments proposed																				
Sutton Bridge	Sufficient capacity available for developments proposed																				
Sutton St James	Sufficient capacity available for developments proposed																				
Sutton St James	Sufficient capacity available for developments proposed																				
Tydd St Mary	Sufficient capacity available for developments proposed																				
Tydd St Mary	Sufficient capacity available for developments proposed																				
Weston	Capacity currently available. Extension to 0.5FE required in phase 2 of plan period requiring one additional classroom - land shortage would require additional playing fields																				
Weston	Capacity currently available. Extension to 0.5FE required in phase 2 of plan period requiring one additional classroom - land shortage would require additional playing fields																				
Whaplode	Sufficient capacity available for developments proposed																				
Whaplode	Sufficient capacity available for developments proposed																				

Source: Lincolnshire County Council Education Team

C.2 Critical path assessment for secondary education infrastructure

Location	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Bicker																						
Bicker	No capacity currently available at closest secondary (Donington). Additional 200 places required for current demand and that from developments proposed - substantial land shortage would require additional land for education																					
Boston SUE																						
Boston SUE - Land to	No capacity currently available. Total for Boston requires 700 places to be provided via a new secondary school																					
Boston SUE - Land north	No capacity currently available. Total for Boston requires 700 places to be provided via a new secondary school																					
Boston SUE - Land north	No capacity currently available. Total for Boston requires 700 places to be provided via a new secondary school																					
Boston (excluding SUEs)	No capacity currently available. Total for Boston requires 700 places to be provided via a new secondary school																					
Butterwick																						
Butterwick	Closest secondary school in Boston. No capacity currently available. Total for Boston requires 700 places to be provided via a new secondary school																					
Fishtoft																						
Fishtoft	Closest secondary school in Boston. No capacity currently available. Total for Boston requires 700 places to be provided via a new secondary school																					
Kirton																						
Kirton	Sufficient capacity available for developments proposed																					
Old Leake																						
Old Leake	No capacity currently available. Additional 125 places required for current demand and that from developments proposed. Severe land shortage - additional land required																					
Sutterton																						
Sutterton	Sufficient capacity available for developments proposed																					
Swineshead																						
Swineshead	No capacity currently available at closest secondary (Donington). Additional 200 places required for current demand and that from developments proposed - substantial land shortage would require additional land for education																					
Wigtoft																						
Wigtoft	Sufficient capacity at closest secondary (Kirton) available for developments proposed																					
Wrangle																						
Wrangle	No capacity currently available at closest secondary (Old Leake). Additional 125 places required for current demand and that from developments proposed. Severe land shortage - additional land required																					
Cowbit																						
Cowbit	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New 700 place secondary school with sixth form required towards middle of plan period																					
Crowland																						
Crowland	Closest secondary Deepings which is at capacity - 75 additional places required for new development																					
Deeping St Nicholas																						
Deeping St Nicholas	Closest secondary Deepings which is at capacity - 75 additional places required for new development																					
Donington																						
Donington	No capacity currently available at closest secondary (Donington). Additional 200 places required for current demand and that from developments proposed - substantial land shortage would require additional land for education																					
Fleet Hargate																						
Fleet Hargate	Closest secondary University Academy Holbeach which currently has no available capacity. Additional 300 spaces required for developments proposed.																					
Gedney Hill																						
Gedney Hill	Closest secondary University Academy Holbeach which currently has no available capacity. Additional 300 spaces required for developments proposed.																					
Gosberton																						
Gosberton	No capacity currently available at closest secondary (Donington). Additional 200 places required for current demand and that from developments proposed - substantial land shortage would require additional land for education																					
Holbeach																						
Holbeach	Closest secondary University Academy Holbeach which currently has no available capacity. Additional 300 spaces required for developments proposed.																					
Long Sutton																						
Long Sutton	Limited capacity in first two years of plan, additional 1 to 2FE required over plan period - sufficient land for expansion																					
Moulton																						
Moulton	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Moulton Chapel																						
Moulton Chapel	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Pinchbeck																						
Pinchbeck	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Quadring																						
Quadring	No capacity currently available at closest secondary (Donington). Additional 200 places required for current demand and that from developments proposed - substantial land shortage would require additional land for education																					
Spalding																						
Spalding	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Spalding SUE																						
Spalding SUE	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Surfleet																						
Surfleet	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Sutton Bridge																						
Sutton Bridge	Limited capacity in first two years of plan, additional 1 to 2FE required over plan period - sufficient land for expansion																					
Sutton St James																						
Sutton St James	Limited capacity in first two years of plan, additional 1 to 2FE required over plan period - sufficient land for expansion																					
Sutton St James																						
Sutton St James	Limited capacity in first two years of plan, additional 1 to 2FE required over plan period - sufficient land for expansion																					
Tydd St Mary																						
Tydd St Mary	Limited capacity in first two years of plan, additional 1 to 2FE required over plan period - sufficient land for expansion																					
Weston																						
Weston	Capacity currently available at Spalding secondary schools which are closest to development. Likelihood that capacity will fill as children cannot attend schools at Holbeach/Bourne/Deepings. New secondary school required in second phase of plan.																					
Whaplode																						
Whaplode	Closest secondary University Academy Holbeach which currently has no available capacity. Additional 300 spaces required for developments proposed.																					

Source: Lincolnshire County Council Education Team

C.3 Education phasing and yield assumptions informing the IDP assessment

School assumptions for Boston BC - Primary new build and extension pupil yields and notes	Primary school extension yield	Primary school new build yield	Grand Total
Bicker	10		10
Assumed extension of existing school at nearest school in Donnington phased with planned growth based on extension cost of £13,755 per pupil place. Donnington has sufficient land to expand	10		10
Boston (excluding SUEs)	290		290
Assumed extension of existing school phased with planned growth based on extension cost of £13,755 per pupil place. Land required to meet this growth is assumed to be included in the SUEs to ensure efficiency	290		290
Boston SUE -land south of north Forty Foot bank	209		209
Assumed extension of existing school phased with planned growth based on extension cost of £13,755 per pupil place. LCC indicate that 0.9ha additional land required for 1 FE school	209		209
Boston SUE -land to south of Chain Bridge Rd		213	213
new build 1FE school (210 pupils) assumed to be required for phase 3 and further new capacity for 167 pupils will be required post plan based on new cost of £19,904 per pupil place. Will require additional land. LCC Education preference is for a 2FE school for all growth (consented and planned) and this would		213	213
Butterwick	12		12
Assumed existing capacity to meet growth needs based on feedback from LCC	12		12
Fishtoft	10		10
Assumed existing capacity to meet growth needs based on feedback from LCC	10		10
Kirton	40		40
Assumed existing capacity to meet growth needs based on feedback from LCC	40		40
Old Leake	6		6
Assumed existing capacity to meet growth needs based on feedback from LCC	6		6
Sutterton	48		48
Assumed extension of existing school phased with planned growth based on extension cost of £13,755 per pupil place. There is a need to provide an extension to 1FE for current demand and to meet planned	48		48
Swineshead	58		58
Assumed extension of existing school - note there is a land shortage at this school to meet the needs of planned growth and would require additional playing fields	58		58
Wigtoft	6		6
Demand will be met by extending school at Sutterton which has land and assumed to be an extension cost	6		6
Wrangle	10		10
Assumed existing capacity to meet growth needs based on feedback from LCC	10		10
Grand Total	699	213	912

C.4 Education phasing and yield assumptions informing the IDP assessment

School assumptions for South Holland DC - Primary new build and extension pupil yields and notes	Primary school extension yield	Primary school new build yield
Cowbit	11	
Assumed existing capacity to meet growth needs based on feedback from LCC	11	
Crowland	61	
Assumed extension of existing school at Crowland based on extension cost of £13,755 per pupil place.	61	
Deeping St Nicholas	14	
Assumed extension cost based on £13,755 per pupil place, school has sufficient land to expand	14	
Donington	59	
Extension will be needed to meet planned growth, assumed at £13,755 per pupil place, school has	59	
Fleet Hargate	27	
Assumed existing capacity to meet growth needs based on feedback from LCC	27	
Gedney Hill	22	
Assumed existing capacity to meet growth needs based on feedback from LCC	22	
Gosberton	47	
Cost for rest assumed at £13,755 per pupil place throughout the planned period.	47	
Holbeach		246
Linked to current planning applications pending S106 agreement, assumed need for school to accommodate at least 246 pupils to meet initial growth based on £19,904 per pupil and then an extension to this new		246
Long Sutton	61	
No capacity, severe land shortage, would require additional playing fields land to allow expansion of existing school from a 2 to a 2.5FE school. Extension assumed to be phased with planned growth at	61	
Moulton	13	
Assumed existing capacity to meet growth needs based on feedback from LCC	13	
Moulton Chapel	24	
May need to increase capacity by end of plan period, however sufficient classrooms for this without further building works - so for now assumed zero cost to meet planned growth but will need to be kept	24	
Pinchbeck	26	
School site is being investigated to see if additional growth can be accommodated - future growth may be via an extension or new provision - assumed extension of existing at £13,755 per pupil place phased on	26	
Quading	22	
Assumed extension of existing school phased with planned growth based on extension cost of £13,755 per	22	
Spalding		0
No capacity, will require new school and land, assumed cost at £19,904 per pupil place for new build.		0
Spalding (excluding SUE)		392
No capacity, provision will be linked to SUE and cost assumed at £19,904 per pupil place for new build.		392
Spalding overall	0	
n/a	0	
Spalding SUE - Land linked to northern section of SWRR		128
No capacity, provision will be linked to SUE and cost assumed at £19,904 per pupil place for new build.		128
Surfleet	30	
Extension will be needed to meet planned growth, assumed at £13,755 per pupil place, there is a shortage of land and will require additional playing field land.	30	
Sutton Bridge	33	
Assumed existing capacity to meet growth needs based on feedback from LCC	33	
Sutton St James	11	
Assumed existing capacity to meet growth needs based on feedback from LCC	11	
Tydd St Mary	8	
Assumed existing capacity to meet growth needs based on feedback from LCC	8	
Weston	59	
Assumed sufficient capacity for phase 1 cost for rest of planned growth assumed at £13,755 per pupil	59	
Whaplode	13	
Assumed existing capacity to meet growth needs based on feedback from LCC	13	
Grand Total	542	766

C.5 Education phasing and yield assumptions informing the IDP assessment

School assumptions for Boston BC - Secondary new build and extension pupil yields and notes	Secondary new school building	Secondary school extension	Grand Total
Bicker	9		9
New Boston secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	9		9
Boston (excluding SUEs)	276		276
New secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	276		276
Boston overall	0		0
New secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	0		0
Boston SUE -land south of north Forty Foot bank	198		198
New secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	198		198
Boston SUE -land to south of Chain Bridge Rd	203		203
New secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	203		203
Butterwick	12		12
New secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	12		12
Fishtoft	10		10
New secondary school will be needed in later part of phase 1 / phase 2 to serve Boston, Bicker, Butterwick, Fishtoft growth requirements. New build cost assumed at £19,904 per pupil place	10		10
Kirton		38	38
sufficient capacity in existing Kirton secondary and sixth form to meet planned growth requirements		38	38
Old Leake		6	6
Extension expected to meet the needs of Old Leake and Wrangle planned growth during phase 1 at Old Leake - assumed at @£14,102 per pupil place. Land shortage identified to meet this need.		6	6
Sutterton		46	46
sufficient capacity in existing Kirton secondary and sixth form to meet planned growth requirements		46	46
Swineshead		55	55
Secondary expansion at Donnington to serve Gosberton, Quadring, Swineshead and Donnington growth based on extension cost assumption of £14,102 per pupil place, there is no current capacity, total extension included in phase one of Donnington. LCC have identified a substantial land shortage to meet		55	55
Wigtoft		6	6
sufficient capacity in existing Kirton secondary and sixth form to meet planned growth requirements		6	6
Wrangle		10	10
Extension is expected to be required at Old Leake secondary school to meet needs of Wrangle -assumed at @£14,102 per pupil place, land shortage identified to meet this need.		10	10
Grand Total	707	160	866

C.6

School assumptions for South Holland DC - Secondary new build and extension pupil yields and notes	Secondary new school building	Secondary school extension
Cowbit	11	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	11	
Crowland		58
Deeping St Nicholas Secondary school serves Crowland - no current capacity, expansion will be required, school survey to be undertaken to inform what is required. All planned growth for Crowland and Deeping St Nicolas assumed to require an extension during phase 2 based on a cost assumption of £14, 102 per		58
Deeping St Nicholas		13
Deeping St Nicholas Secondary school serves Crowland - no current capacity, expansion will be required, school survey to be undertaken to inform what is required. All planned growth for Crowland and Deeping St Nicolas assumed to require an extension during phase 2 based on a cost assumption of £14, 102 per		13
Donnington		56
Secondary expansion at Donnington to serve Gosberton, Quadring, Swinshead and Donnington growth based on extension cost assumption of £14,102 per pupil place, there is no current capacity, total extension included in phase one of Donnington. LCC have identified a substantial land shortage to meet		56
Fleet Hargate		26
University Academy Holbeach has no current capacity, additional spaces required to meet proposed development needs for Holbeach, Fleet Hargate, Gedney Hill and Waplode. 280 pupil capacity included in phase 1 as expansion of Holbeach secondary based on a cost assumption of £14,102 per pupil. Post plan		26
Gedney Hill		21
University Academy Holbeach has no current capacity, additional spaces required to meet proposed development needs for Holbeach, Fleet Hargate, Gedney Hill and Waplode. 280 pupil capacity included in phase 1 as expansion of Holbeach secondary based on a cost assumption of £14,102 per pupil. Post plan		21
Gosberton		45
Secondary expansion at Donnington to serve Gosberton, Quadring, Swinshead and Donnington growth based on extension cost assumption of £14,102 per pupil place, there is no current capacity, total extension included in phase one of Donnington. LCC have identified a substantial land shortage to meet		45
Holbeach		234
University Academy Holbeach has no current capacity, additional spaces required to meet proposed development needs for Holbeach, Fleet Hargate, Gedney Hill and Waplode. 280 pupil capacity included in phase 1 as expansion of Holbeach secondary based on a cost assumption of £14,102 per pupil. Post plan		234
Long Sutton		58
Long Sutton secondary has limited capacity in first phase so assumed expansion will be required in phase 2 or 3 for 107 pupil places, cost assumed at £14,102 per pupil place for expansion.		58
Moulton	13	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	13	
Moulton Chapel	23	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	23	
Pinchbeck	25	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	25	
Quadring		21
Secondary expansion at Donnington to serve Gosberton, Quadring, Swinshead and Donnington growth based on extension cost assumption of £14,102 per pupil place, there is no current capacity, total extension included in phase one of Donnington. LCC have identified a substantial land shortage to meet		21
Spalding (excluding SUE)	372	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	372	
Spalding overall	0	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	0	
Spalding SUE - Land linked to northern section of SWRR	122	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	122	
Surfleet	29	
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place	29	
Sutton Bridge		32
Long Sutton secondary has limited capacity in first phase so assumed expansion will be required in phase 2 or 3 for 107 pupil places, cost assumed at £14,102 per pupil place for expansion.		32
Sutton St James		10
Long Sutton secondary has limited capacity in first phase so assumed expansion will be required in phase 2 or 3 for 107 pupil places, cost assumed at £14,102 per pupil place for expansion.		10
Tydd St Mary		7
Long Sutton secondary has limited capacity in first phase so assumed expansion will be required in phase 2 or 3 for 107 pupil places, cost assumed at £14,102 per pupil place for expansion.		7
Weston		56
Current capacity expected to be absorbed by consented growth. New Spalding secondary school likely to be required by end of second beginning of third phase of plan to serve Spalding, Moulton, Pinchbeck, Moulton Chapel, Sufleet, Weston and Cowbit Cost assumption of £19904 assumed per pupil place		56
Whaplode		13
University Academy Holbeach has no current capacity, additional spaces required to meet proposed development needs for Holbeach, Fleet Hargate, Gedney Hill and Waplode. 280 pupil capacity included in phase 1 as expansion of Holbeach secondary based on a cost assumption of £14,102 per pupil. Post plan		13
Grand Total	593	650

C.7 Education infrastructure requirements and costs by location

Boston BC Education infrastructure costs by settlement	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total cost
Primary school extension	£2,522,667	£3,766,119	£1,851,423	£396,144	£8,536,353
Bicker	£110,040	£24,759	£0	£0	£134,799
Boston (excluding SUEs)	£1,647,849	£2,021,985	£319,116	£0	£3,988,950
Boston overall	£0	£0	£0	£0	£0
Boston SUE -land south of north Forty Foot ba	£0	£1,100,400	£1,375,500	£396,144	£2,872,044
Butterwick	£0	£0	£0	£0	£0
Fishtoft	£0	£0	£0	£0	£0
Kirton	£0	£0	£0	£0	£0
Old Leake	£0	£0	£0	£0	£0
Sutterton	£159,558	£343,875	£156,807	£0	£660,240
Swineshead	£544,698	£255,843	£0	£0	£800,541
Wigtoft	£60,522	£19,257	£0	£0	£79,779
Wrangle	£0	£0	£0	£0	£0
Primary school new building	£0	£0	£4,243,533	£0	£4,243,533
Boston SUE -land to south of Chain Bridge Rd	£0	£0	£4,243,533	£0	£4,243,533
Secondary new school building	£13,932,800	£0	£0	£0	£13,932,800
Bicker	£0	£0	£0	£0	£0
Boston (excluding SUEs)	£0	£0	£0	£0	£0
Boston overall	£13,932,800	£0	£0	£0	£13,932,800
Boston SUE -land south of north Forty Foot ba	£0	£0	£0	£0	£0
Boston SUE -land to south of Chain Bridge Rd	£0	£0	£0	£0	£0
Butterwick	£0	£0	£0	£0	£0
Fishtoft	£0	£0	£0	£0	£0
Secondary school extension	£225,632	£0	£0	£0	£225,632
Kirton	£0	£0	£0	£0	£0
Old Leake	£225,632	£0	£0	£0	£225,632
Sutterton	£0	£0	£0	£0	£0
Swineshead	£0	£0	£0	£0	£0
Wigtoft	£0	£0	£0	£0	£0
Wrangle	£0	£0	£0	£0	£0
Six form new school building	£2,806,464	£0	£0	£0	£2,806,464
Bicker	£0	£0	£0	£0	£0
Boston (excluding SUEs)	£0	£0	£0	£0	£0
Boston overall	£2,806,464	£0	£0	£0	£2,806,464
Boston SUE -land south of north Forty Foot ba	£0	£0	£0	£0	£0
Boston SUE -land to south of Chain Bridge Rd	£0	£0	£0	£0	£0
Butterwick	£0	£0	£0	£0	£0
Fishtoft	£0	£0	£0	£0	£0
Six form school extension	£42,306	£0	£0	£0	£42,306
Kirton	£0	£0	£0	£0	£0
Old Leake	£42,306	£0	£0	£0	£42,306
Sutterton	£0	£0	£0	£0	£0
Swineshead	£0	£0	£0	£0	£0
Wigtoft	£0	£0	£0	£0	£0
Wrangle	£0	£0	£0	£0	£0
Grand Total	£19,529,869	£3,766,119	£6,094,956	£396,144	£29,787,088

C.8 Education infrastructure requirements and costs

South Holland DC Education infrastructure costs by settlement	Cost Phase 1: 2016 to 2020	Cost phase 2: 2021 to 2025	Cost phase 3: 2026 to 2030	Cost phase 4: 2031 to 2035	Plan period (2016 - 2036) total cost
Primary school extension	£2,759,253	£1,826,664	£110,040	£0	£4,695,957
Cowbit	£0	£0	£0	£0	£0
Crowland	£500,682	£324,618	£13,755	£0	£839,055
Deeping St Nicholas	£137,550	£57,771	£0	£0	£195,321
Donington	£583,212	£228,333	£0	£0	£811,545
Fleet Hargate	£0	£0	£0	£0	£0
Gedney Hill	£0	£0	£0	£0	£0
Gosberton	£464,919	£184,317	£0	£0	£649,236
Long Sutton	£302,610	£426,405	£96,285	£0	£825,300
Moulton	£0	£0	£0	£0	£0
Moulton Chapel	£0	£0	£0	£0	£0
Pinchbeck	£206,325	£137,550	£0	£0	£343,875
Quadring	£206,325	£96,285	£0	£0	£302,610
Spalding overall	£0	£0	£0	£0	£0
Surfleet	£357,630	£55,020	£0	£0	£412,650
Sutton Bridge	£0	£0	£0	£0	£0
Sutton St James	£0	£0	£0	£0	£0
Tydd St Mary	£0	£0	£0	£0	£0
Weston	£0	£316,365	£0	£0	£316,365
Whaplode	£0	£0	£0	£0	£0
Primary school new building	£4,896,384	£0	£7,802,368	£2,547,712	£15,246,464
Holbeach	£4,896,384	£0	£0	£0	£4,896,384
Spalding	£0	£0	£0	£0	£0
Spalding (excluding SUE)	£0	£0	£7,802,368	£0	£7,802,368
Spalding SUE - Land linked to north	£0	£0	£0	£2,547,712	£2,547,712
Secondary new school building	£0	£12,937,600	£0	£0	£12,937,600
Cowbit	£0	£0	£0	£0	£0
Moulton	£0	£0	£0	£0	£0
Moulton Chapel	£0	£0	£0	£0	£0
Pinchbeck	£0	£0	£0	£0	£0
Spalding (excluding SUE)	£0	£0	£0	£0	£0
Spalding overall	£0	£12,937,600	£0	£0	£12,937,600
Spalding SUE - Land linked to north	£0	£0	£0	£0	£0
Surfleet	£0	£0	£0	£0	£0
Secondary school extension	£6,627,940	£1,015,344	£1,508,914	£0	£7,643,284
Crowland	£0	£0	£0	£0	£0
Deeping St Nicholas	£0	£1,015,344	£0	£0	£1,015,344
Donington	£2,496,054	£0	£0	£0	£2,496,054
Fleet Hargate	£0	£0	£0	£0	£0
Gedney Hill	£0	£0	£0	£0	£0
Gosberton	£0	£0	£0	£0	£0
Holbeach	£4,131,886	£0	£0	£0	£4,131,886
Long Sutton	£0	£0	£1,508,914	£0	£0
Quadring	£0	£0	£0	£0	£0
Sutton Bridge	£0	£0	£0	£0	£0
Sutton St James	£0	£0	£0	£0	£0
Tydd St Mary	£0	£0	£0	£0	£0
Weston	£0	£0	£0	£0	£0
Whaplode	£0	£0	£0	£0	£0
Six form new school building	£0	£2,587,520	£0	£0	£2,587,520
Cowbit	£0	£0	£0	£0	£0
Moulton	£0	£0	£0	£0	£0
Moulton Chapel	£0	£0	£0	£0	£0
Pinchbeck	£0	£0	£0	£0	£0
Spalding (excluding SUE)	£0	£0	£0	£0	£0
Spalding overall	£0	£2,587,520	£0	£0	£2,587,520
Spalding SUE - Land linked to north	£0	£0	£0	£0	£0
Surfleet	£0	£0	£0	£0	£0
Weston	£0	£0	£0	£0	£0
Six form school extension	£1,325,588	£493,570	£0	£0	£1,819,158
Crowland	£0	£197,428	£0	£0	£197,428
Deeping St Nicholas	£0	£0	£0	£0	£0
Donington	£493,570	£0	£0	£0	£493,570
Fleet Hargate	£0	£0	£0	£0	£0
Gedney Hill	£0	£0	£0	£0	£0
Gosberton	£0	£0	£0	£0	£0
Holbeach	£832,018	£0	£0	£0	£832,018
Long Sutton	£0	£296,142	£0	£0	£296,142
Quadring	£0	£0	£0	£0	£0
Sutton Bridge	£0	£0	£0	£0	£0
Sutton St James	£0	£0	£0	£0	£0
Tydd St Mary	£0	£0	£0	£0	£0
Whaplode	£0	£0	£0	£0	£0
Grand Total	£15,609,165	£18,860,698	£9,421,322	£2,547,712	£44,929,983