

**Greater Norwich
Development Partnership
Joint Core Strategy Examination**

**Written Statement on behalf of
Landstock Estates Ltd and Landowners Group**

Matter 4:

**Infrastructure delivery (the JCS generally and policy
20 & the appendices 7 & 8 in particular)**

- A Is the JCS effective in what it conveys about the infrastructure necessary for its successful implementation and when and by which agencies this will be delivered? Does the Implementation Framework at Appendix 7 adequately identify the fundamentally essential infrastructure items without which its major component elements (eg the major growth locations) cannot progress? Are all 80 items in Appendix 7 equally 'critical', or would some be more appropriately styled 'desirable' or 'aspirational'? If so, which?**
- 1.1 The JCS in Appendix 7 lists the majority of the main infrastructure items required to meet the proposed growth targets. It does not, however, effectively convey the importance of the critical linkages or interdependencies between each of the infrastructure items listed. The implementation of a number of the items is critical to the release of others which will have a significant impact on the delivery of the plan. The interdependency of the various infrastructure items will impact on the potential funding mechanisms and delivery programmes that underpin the JCS.
- 1.2 Each item listed in Appendix 7 shows a potential timescale for delivery and funding source. It does not, however, clearly state who will be responsible for delivery, nor does it proportion the level of funding that would be required from the various parties identified. This is essential when considering the likelihood of a potential scheme being implemented and by what timescale. For example, if an infrastructure item requires a large proportion of public sector funds then it is unlikely that this will proceed in the short to medium term due to the public spending review currently being undertaken. It will be difficult to reprogramme these issues in a review of the LIPP as it is unlikely that funding will be available for both the delayed items and those programmed later in the plan.
- 1.3 There is a real possibility now that both the NDR and Postwick Hub will not receive the level of public funding required in order to enable implementation. This will significantly affect the ability of the North East Growth Triangle to deliver the projected level of growth. An alternative strategy (Plan B which provides a highway link between Wroxham Road and Postwick Junction, along with an improvement at Postwick can provide sufficient highway capacity to serve an additional development over and above the already committed proposals in the East Sector. It is proposed that the majority of Plan B costs would be funded by developer contributions.
- 1.4 Without confirmed deliverable growth, utility companies will not include schemes in their current AMP programme. EDF and AWS both have policies of not providing infrastructure for speculative development. Clearly, if there is potential doubt that a critical item of

infrastructure such as the NDR will not proceed, then utility companies are likely to reconsider their spending priorities within the AMP programmes. Reallocating spending to areas that can readily deliver growth over the next two AMP periods 2010 to 2015 and 2015 to 2020 is the logical alternative. Development in the A11 corridor is generally not dependent on public sector funding, therefore, certainty can be given to utility companies allowing them to confidently programme infrastructure delivery.

- 1.5 Not all of the 80 items identified in Appendix 7 are equally critical. A number of items are critical to the delivery of growth, as well as other infrastructure items. These include the NDR which, without the consideration of an alternative Plan B, would significantly effect the ability of the North East Sector to deliver the growth identified. Other items identified, such as the railway bridge widening at Wymondham, are not required at all if the development at Wymondham is located to the north of the town.
- 1.6 Table 1 sets out the impact of each item of infrastructure on the delivery of growth and other items of infrastructure. This shows the various interdependencies and identifies the critical elements of infrastructure to each growth sector and those which would be considered desirable or not essential to the absolute delivery of growth in these locations.
- 1.7 The current draft of the LIPP over simplifies the various priorities and does not differentiate between the critical items of infrastructure which would prevent growth in its entirety and those which would facilitate growth. The LIPP identifies all transport and utility schemes as priority 1, with the various elements phased over five year periods there is no recognition of the interdependencies and the fact that items such as the NDR are critical to the delivery of other items.
- 1.8 The Implementation Framework at Appendix 7 also does not adequately identify the fundamental essential infrastructure items without which its major component elements cannot progress. The Framework fails to identify the key linkages between each infrastructure element and how those linkages would efficiently either limit or prevent completing the delivery of growth in a certain area.
- 1.9 The following sections identify a number of key interdependencies and demonstrate how some growth areas, such as Wymondham and the A11 corridor, are more resilient to the risk of public sector funding cuts and subsequent delays in both private and public sector infrastructure investment, with the majority of the infrastructure required being either already in place or capable of being developer funded. They also identify areas which appear incorrect or require further clarification.

Transport Issues

- 1.10 As shown in Table 1 (**Appendix A**) the implementation of the NDR and Postwick Hub is critical to the delivery of a number of proposed transport improvements which affect the northern and eastern sectors of Norwich. The NATS IP (Report in Response to Inspector's Questions) states in paragraph 5.2:

"the NDR will provide relief to key radial routes and therefore additional capacity of the implementation of enhanced priority for buses, cyclists and pedestrians."

- 1.11 Without the NDR the implementation of the following appears not to be possible:

- i. BRT – Fakenham A1067
- ii. BRT – Yarmouth Road
- iii. BRT – Salhouse Road
- iv. BRT – Norwich Airport A140
- v. Some of the city centre public realm enhancements

- 1.12 The NDR and Postwick Hub provide little benefit to those residents and businesses located in the A11 corridor and the non-provision of these items will not effect growth in these locations.

- 1.13 Appendix 7 identifies £40m for a potential junction improvement at Thickthorn junction. This costing has been based on a preliminary scheme prepared by the highway authority which provided capacity for all peak hour scenarios resulting in the need for a complete rearrangement of the existing junction. Subsequent discussions with both NCC/DfT at the Thickthorn Developers Forum have confirmed that the development of a scheme of this scale and nature would result in an inappropriate level of infrastructure being provided to meet the demands of the proposed growth. The scheme would encourage the use of the private car over other modes and an alternative scheme which facilitated bus access/priority whilst maintaining the safe operation of the junction would be more in keeping with current government policy. Further details of proposed improvements to Thickthorn junction are outlined in **Appendix B**. The existing junction arrangement has spare capacity to serve additional development within the A11 corridor and future improvements will be required to this junction to incorporate both bus priority and other capacity measures.

- 1.14 One of the items identified in Appendix 7 of the JCS which can be considered as desirable/aspirational is the Transport Scheme identified for the widening of the existing rail

bridge at Wymondham at a cost of £7m. If the Wymondham allocation is located to the North East of the town then this requirement is not required.

- 1.15 Another transport scheme identified in Appendix 7 of the JCS which is at risk of not being implemented is the Long Stratton Bypass. Norfolk County Council have confirmed that they are no longer progressing with the promotion of this scheme. The provision of the bypass was critical for the release of the proposed development of growth at Long Stratton. With the removal of this key element of infrastructure it is anticipated that other infrastructure providers, such as utility companies, will now reallocate their investment focus, Long Stratton requiring both waste water and electricity upgrades.

Electricity

- 1.16 Scheme interdependencies apply to a range of other infrastructure items. For example, EDF have stated in their report titled "Report in Possible Network Reinforcement Requirements Resulting from the Proposed Norwich Growth Area" (which is contained in Appendix F – Utilities Statement of the Greater Norwich Infrastructure Needs and Funding Study) that in order for the New Primary Sub-Station at Norwich Airport North and the Primary Sub-Station at Sprowston and Rackheath to be developed, the Norwich North East Grid is required at a cost of £17m.
- 1.17 These growth areas are also critically dependent on other infrastructure items such as the NDR, therefore it is unlikely that EDF will put forward proposals to the next AMP for the provision of this infrastructure, if there is not a clear guaranteed timeline and funding for the NDR to proceed.
- 1.18 Both the Utilities Statement and EDF state that the proposed growth at Wymondham can proceed now. Improvements at the existing Wymondham primary sub-station are only required after 2026.

Waste Water

- 1.19 There are also issues in relation to the way the costings have been estimated/allocated to schemes in Appendix 7. For example, the waste water section identifies for Option 2 that three improvements are required at Wymondham totalling £36.7m, although the total level of investment required for the whole of the area for Option 2 is shown as only £23.2m. There is a clear discrepancy in the table in this area which needs to be clarified.

- 1.20 The Aecom report in Appendix F (Utilities Assessment) states in Table 6.6 for Option 2 that the cost of providing adequate capacity to meet the growth requirements of Wymondham are £1.5m.
- 1.21 The Water Cycle Study also states that the existing sewage treatment works at Wymondham has sufficient flow capacity to secure a further 4,600 dwellings without a new consent, providing additional headroom to allocate additional growth over and above the JCS figure of 2,200 to 4,500 dwellings or so.

Water Supply

- 1.22 AWS have stated that all of the proposed growth areas identified in the JCS can be supplied with water from the existing Heigham Works. The connecting supply network, however, is at capacity; therefore distribution mains are required to serve the proposed development areas. The costings identified in Appendix 7 total £313m for water supply improvements. These costs appear excessive especially when compared to the figures quoted in AWS – Final Business Plan Part A. In Table 9.1 Investment Required to Provide for Growth (**see Appendix C**) AWS have stated that their overall investment in the water supply network to service growth for the whole of the AWS region is only £281m for the period of 2010 to 2015. On the basis that this settlement is unlikely to change significantly for 2015 to 2020, the figure shown in Appendix 7 of £313m would equate to approximately 50% of Anglian Water’s overall investment in water supply schemes to accommodate growth in the whole of the operational area. The LIPP dated 30 September 2010, in its Infrastructure Framework, does not show any schemes in relation to the provision of water and only appears to consider waste water and sewerage.
- 1.23 Due to the scale of the costings identified in Appendix 7 to that enclosed in AWS’ Business Plan there appears to be an overestimation of the proposed investment required to deliver water to the various growth locations. These figures need further clarification.
- 1.24 From reviewing the Utilities Statement, it appears that the costings provided for each of the growth areas has been considered independently. The strategy is to utilise the surplus capacity of the two existing boreholes at Thorpe St Andrew and Colney which equates to approximately 21,000 dwellings before any other major improvements are considered. From reviewing the costings, it appears that the cost of infrastructure mains has been calculated from Heigham Works to each of the sites independent of each other, without any allowance for other developments which could be served within a similar area off the same main.

- 1.25 Clearly, when considering the provision of a new supply main to Wymondham, it would be practical and more cost efficient to ensure that one main was laid along the A11 corridor with sufficient capacity to serve Cringleford, Hethersett and the Wymondham growth locations. This would significantly reduce the costings identified in Appendix 7.
- 1.26 Anglian Water have confirmed that sufficient water can be supplied to Wymondham and the A11 corridor to ensure that infrastructure is provided in an efficient and timely manner, it is important that the proposed growth locations can proceed without risk of delay from issues such as public spending cuts.

B Do any infrastructure items represent 'showstoppers' which, if not completed by a certain date, would prevent implementation of particular key aspects of the JCS? Does the JCS appropriately identify them, and the consequences of their non-delivery?

- 1.27 The NDR and the Postwick Hub are major transport schemes which are critical items of infrastructure. The £26m allocated to the Postwick Hub is under review by central government as part of the October Spending Review. This has been confirmed by GO East in their letter dated 2nd August 2010 (EIP 75). In addition there is to be a Public Inquiry into the Postwick Hub if funding is approved within the October Spending Review.
- 1.28 The NDR will also be subject to the same review and with the coalition government seeking to make significant savings in all portfolios, it is unlikely that funding will become available in the short to medium term leading to delivery of the NDR. This will have a significant effect on the delivery of a number of the BRT schemes identified in the NATS IP. Without the delivery of the NDR, growth in the North East Sector will be significantly restricted. NATS IP, Report in Response to Inspector's Questions, states in paragraph 5.3 that approximately 3,000 dwellings can be developed in the North East Sector before the NDR is constructed, with the Postwick Hub being required after the first 1,400 dwellings. The report assumes that this 1,400 dwellings includes the 1,200 houses already committed at White House Farm. This is inconsistent with the information contained in the Statement of Focussed Changes included in paragraphs 45, 46, 47 and 26 published in July 2010 where it is stated that 3,200 dwellings in excess of the 1,200 White House Farm commitment can be constructed without the need of the NDR or improvements to the Postwick Hub.
- 1.29 Neither NCC nor the GNDP have considered any alternative development proposals without the NDR apart from 3,200 dwellings outlined in paragraph 1.28 above. This is mainly due to the fact that if a cheaper alternative was considered which still met the main demands generated by the growth then this could potentially affect the success of their bid for the

NDR. The JCS therefore is too inflexible and does not consider the implementations of non-delivery of critical items of infrastructure.

1.30 Without the certainty of the NDR and therefore subsequent significant growth in the North East Sector it is unlikely that utility companies, such as AWS and EDF, will build into their next AMP programmes significant infrastructure investment to serve this area. Again, the A11 corridor is an already established highway and services route and in which growth can be accommodated with certainty of delivery, allowing the utility companies to plan their investment programmes.

1.31 An alternative to the provision of the NDR/Postwick Hub is to limit growth in the North East Sector with the provision of Plan B and to reallocate the growth to the development areas within the A11 corridor such as Wymondham.

C Is there evidence of agreement by providers that there is a reasonable prospect of the required infrastructure being completed by the critical dates?

1.32 Investment in infrastructure provision is generally focused on five year bid cycles from each of the utility providers to the various regulatory bodies such as OFWAT/OFGEM. Both Anglian Water and EDF have just started AMP5 which runs between 2010 to 2015. Generally the utility companies will start to prepare for the next bid during 2013, reviewing demands and proposed schemes with the formal bids being submitted in 2014.

1.33 Therefore, if an infrastructure scheme is not included in the current plan, there is no guarantee that it will commence. The utility companies have a policy of not providing infrastructure to serve speculative development, therefore, before funds are allocated, a scheme must have an allocation or some form of planning status. It is therefore difficult during a process such as the JCS for any utility company to give a guarantee that infrastructure can be provided on time.

1.34 We are therefore left with considering the infrastructure requirement that may be required to relevant growth in certain areas and to identify growth areas which can be supplied relatively early with the critical items of infrastructure, such as electricity, water and sewage treatment. This then needs to be considered against any other potential risks which could prevent the development from coming forward.

1.35 The A11 corridor, in particular Wymondham, has the ability to serve additional housing growth with both sewage treatment capacity and electricity being readily available. The

provision of a new water supply main can also be efficiently provided serving proposed development allocated in Cringleford, Hethersett and Wymondham.

- 1.36 There is no clear evidence that each of the utility companies can commit to the delivery of the schemes outlined in Appendix 7 of the Plan nor can there be until each AMP bid process has been undertaken.
- 1.37 The evidence enclosed in the Utilities Statement and Water Cycle Study both shows that Wymondham is capable of delivering growth of 4,000+ dwellings in the period to 2026 and that there are minimal risks with respect to delivery when identifying growth in this location. Thus enabling any investment required to be carefully planned and phased in relation to the development.

[Understanding of the above matters A-C may be assisted by the Integrated Development Programme being drawn up by GNDP and by the critical path diagrams promised at the Exploratory Meeting to illustrate the degree of fit between the expected delivery times of the housing proposed at the various growth locations at p111 of the JCS and the reasonable prospect of phased completion of the critical infrastructure items, as agreed by providers.]

D Is the JCS flexible? Does it indicate any actions that may need to be triggered by contingencies, such as failure to achieve timely provision of necessary infrastructure?

- 1.38 The JCS does become flexible with amended Policy 9 and new Policy 9a as set out in Matter 01. Our evidence demonstrates that increased development at Wymondham can be accommodated at the Thickthorn grade separated junction where various development levels have been tested.

E Are policy 20 and p10 of the JCS clear and effective on the issue of implementation, including the role of GNDP as a delivery agency?

- 1.39 No comment.

Matter 04

Appendices

Appendix A:	Key Interdependencies	11
Appendix B:	Proposed Improvements To Thickthorn Junction	14
Appendix C:	AWS Investment Required to Provide for Growth	39