

HEARING STATEMENT MATTER 6

Viability

Introductory comments

0.1 A letter from the Chairman of NEGC dated 16 November is attached at appendix 3. It suggests that the Inspector should restrict himself to considering <u>planning</u> viability in accordance with the Harman guidelines and that <u>delivery</u> viability can only be assessed by NEGC. We are advised that this is incorrect. There is no distinction between delivery and planning viability in the NPPF. Where, as in this case, viability is key to delivery of the Plan it must be fully examined.

0.2 We are also advised to ask whether the Councils can demonstrate that there is no conflict between their roles as planning authorities and as owners and directors of NEGC. This letter illustrates the confusion: it is on ECC letterhead (ECC being a Planning Authority for certain matters) but signed by Councillor John Spence as chairman of NEGC. The letter tries to use the legally distinct roles to side-line full examination of viability, yet the letterhead confuses them.

0.3 The Councils are promoting the GCs on the basis that land value uplift will be sufficient to fund the infrastructure requirements over 50 years plus. This concept is untested in planning, market and deliverability terms and the scale of the proposals is unprecedented. The garden communities are needed to deliver the OAN and there is no mechanism or alternative proposal to rebalance the Plan if they fail.

0.3 Viability is real – it isn't about following a set of rules. If viability is ignored now there is a good chance that NEGC will be unable to raise finance and long delays will result.

0.4 We are not saying that all new developments are unviable – far from it. We are just saying that CBBGC isn't viable: it is a standalone settlement located without consideration for local jobs or underused infrastructure¹ and there are scale diseconomies in funding the land assembly. Study of the key differentiators of location and DCF methodology is needed to choose the right location.

¹ See our August 2017 Consultation Response pages 62 and 74. See also Nicholas Falk's 2014 Wolfson prize winning essay on this subject.



Question 1: How were the broad locations for the proposed garden communities selected, and what evidence documents were produced to inform their selection?

- 1.1 We believe² that there is no proportionate evidence to justify the two key decisions in the plan
 - i) to concentrate on garden communities rather than balanced growth and
 - ii) the choice of the three locations.
- 1.2 The only evidence presented to justify these decisions is the Sustainability Appraisal (EB/014 Appendix 1). But this document fails to address differential cost and employment issues (the "economic dimension" required by para 7 of the NPPF) and many of the judgements made are subjective³.

Question 2: Have land-scape, agricultural land, flood-risk and heritage assessments been carried out to inform the locations of the proposed garden communities?

We have concerns about the significant loss of Grade 2 agricultural land at CBBGC.

Question 3: Is the Sustainability Appraisal of the Garden Community options [EB/014 Appendix 1] robust, particularly with regard to its threshold of 5,000 dwellings?

- 3.1 CAUSE believes that the sustainability appraisal is not fit for purpose. We do not support the 5,000 dwelling threshold. No convincing evidence of scale economies is presented and we believe that the key issue is connectivity, not size.
- 3.2 CAUSE's Metro Plan, proposed by Nicholas Falk⁴ and Alan Stones, shows how a series of well-connected smaller settlements can offer economic efficiencies. Primary healthcare and schooling can be provided in the small settlements, whilst secondary facilities are provided in Colchester or Clacton or an intermediate location. The rail line linking them together is the key.
- 3.3 The literature on Garden Settlements suggests that 5000 should be a maximum size not a minimum. Poundbury provides a good example of how a small Garden Settlement can succeed. It will only have c. 2000 dwellings by 2025, less than 1/10th the size of CBBGC. It is an urban extension to Dorchester, not a standalone settlement like CBBGC.
- 3.4 CAUSE believes that no serious attempt has been made to understand the planning benefit or

² See page 5 of our August 2017 consultation response for a detailed explanation

³ See our August 2017 Consultation Response Appendix 2.

⁴ Dr Nicholas Falk, BA (Oxon), MBA (Stanford), PhD (London), Hon FRIBA



economics of a string of smaller settlements based along an underused rail line. Our comments on the AECOM appraisal of our Metro Plan are shown as an appendix to our Matter 5 statement.

Question 4: Are the locations for the proposed garden communities and any associated green buffers adequately and accurately identified on the Policies Maps? Should they be more, or less, clearly defined?

- 4.1 There is no adequate definition of the location or layout of the garden communities in the submission Local Plan. The Proposals Map just shows "areas of search". We are left guessing at what is to be delivered and the supporting reports from AECOM, Hyas, Jacobs and DLA are inconsistent and confusing.
- 4.2 Plans for CBBGC by David Lock Associates, provided after the Local Plan was formally submitted for the latest consultation, propose a layout. But they are premature, misleading⁵ and ignore significant transport issues.
- 4.3 These DLA plans suggest an "Initial Stage of Development⁶". This is important because it is the only indication we have of how 2,500 dwellings will be delivered in the plan period to 2033. We hope that the Inspector will want to be satisfied (perhaps under Matter 5) whether it is wise to plan to build so many dwellings in the absence of any certainty on A12 / A120 realignments.
- 4.4 This Initial Stage is also unviable CAUSE estimates the infrastructure cost at more than £100,000 per dwelling even when all 2500 dwellings are built because it requires a new graded separated junction on the A12 and a new bridge over the GEML.
- 4.5 The DLA proposals provide no identity to the new community, and replicate the major severance problems already experienced at Marks Tey. They propose a town divided by a railway, with a grade separated junction in the centre⁷.
- 4.6 Much greater definition is required if the plan is to be sound. Both location and infrastructure need to be better defined.

Question 5: Have the infrastructure requirements of the proposed garden communities been adequately identified and costed?

⁵ The David Lock Associates plans are misleading because they understate the area needed for housing by 200 hectares and because they fail to portray the scale and complexity of transport infrastructure required.

⁶ NEGC Issues and Options Report page 91 Figure 5.2.

⁷ This will happen if the Concept Plan Initial stage proceeds before the A12 is realigned, something that would require a grade separated junction onto the existing road. It would be expensive to remove this in the completed settlement, so we assume it would be left in the centre of the town.



- <u>5. 1 a) Road improvements:</u> the A12 and A120 improvements are being well explored and costed⁸, but the costs related to the Garden Communities are confusing. CAUSE has spent many hours going through reports by AECOM, Hyas, Jacobs and DLA trying to find consistency, but we struggle to find any.
- 5.2 a)The County Council's A120 costings include a 44% contingency for known routes which have been carefully specified and considered. We regard the 5-15% contingency in the Hyas appraisal as inadequate for a project at this stage of planning. We have evidence that best practice and common sense would demand a contingency of at least 40% at this stage.
- <u>5.3 (b) Rapid public transit, bus and park-and-ride services</u>: we have not seen any agreed layout so costing is difficult. AECOM's "cost per dwelling" is inadequate to inform the choice of the "areas of search".
- 5.4 (b) The Jacobs report lists the interventions required to reduce car usage from 70% to 30%. The resulting cost per dwelling is more than double the Hyas number¹¹.
- 5.5 (b) The Hyas viability figures are based on the original AECOM feasibility study which multiplies up standard costs per dwelling rather than considering any particular transport network. The Jacobs report supports CAUSE's view that Hyas's total infrastructure cost £1.182bn is much too low.
- 5.6 (b) We believe that much more attention needs to be given to public transport costings of alternative locations <u>before</u> CBBGC can be included in a sound plan.
- 5.7 (c) water supply and waste water treatment; The AECOM figures are based on cost per dwelling rather than an assessment of the requirements for each location. For example CBBGC, which is far from any reservoir, is assumed to have the same water infrastructure cost per dwelling as East Colchester which is close to Ardleigh reservoir. This should be looked at in more detail before the location of new settlements is decided.
- 5.8 (d) primary healthcare; AECOM figures are based on a cost per dwelling.
- 5.9 (e) schools and early years' provision; AECOM figures are based on a cost per dwelling.
- <u>5.10 (f) leisure and sports facilities.</u> AECOM include £10m for country park landscaping in each GC which implies a scale economy for the bigger settlements. We find this surprising as smaller settlements will have better access to the countryside and less need for artificial landscaping.

⁸ We understand that Route A has been dropped and more costing work is being done before a decision is made on B,C,D or E.

⁹ Hyas only show a 5% contingency. The Councils have claimed that there is 24% but are unable to find where it is hidden. A maximum of 10% could be hidden in the figures between AECOM (which specifically exclude all contingencies) and the Hyas £1182m estimate.

¹⁰ See page 77 of our 2017 consultation response

¹¹ See CAUSE's matter 5 Hearing Statement



Question 6: Is there evidence that the infrastructure required will come forward within the necessary timescales?

6.1 The Councils have repeatedly assured the public that infrastructure will come forward before or alongside housing, but there is insufficient definition of the requirements in the Plan. Nor is there evidence that an infrastructure first policy is achievable:

- 6.1.2 Expectations that infrastructure can be funded from land value uplift are not well founded. See chapter 9 of CAUSE's August 2017 Consultation Response.
- 6.1.3 The track record of infrastructure delivery in North Essex is poor: Colchester is the fastest growing town in Eastern England but has fallen badly behind on infrastructure¹².
- 6.1.4 The Hyas appraisal suggests that no Mass Rapid Transit system or new station, both central to the DLA proposals, will be delivered until 2058.

Question 7: Should policies SP7, SP8, SP9 and SP10 make more specific requirements as regards the provision and timing of the infrastructure needed for the proposed garden communities?

7.1 Yes. This is essential if the Local Planning Authorities are to be in a position to control speculative applications by private developers, who are likely to submit planning applications to deliver development privately, should NEGC fail to deliver. More definition is required in the following areas:

- 7.1.1 The Plan should include a rough layout¹³ and outline specification for public transport infrastructure. Reference to "an urban public transit system using trains (including light rail), trams and guided bus" is inadequate.
- 7.1.2 We need to know the A12/A120 routings before CBBGC can have sufficient definition for inclusion in a sound plan.
- 7.1.3 The Plan needs to take into account the impact of a commuter settlement on the limited capacity of the GEML particularly between Shenfield and Stratford. CAUSE estimates the capital cost per extra commuter at £170,000 based on the cost of Crossrail 2¹⁴.
- 7.1.4 The plan needs to close the gap between the public promises made on infrastructure and the timings shown in the HYAS viability study. Hyas show no mass rapid transit system or new railway station, both central to the Concept Plan, until 2058

Question 8: The key viability issues raised by question 8 are attached at Matter 6 Appendix 1

This is justified because this is a complex subject on which we have expertise and which requires detailed analysis.

¹² See transport paper presented to Council in August 2017

¹³ The spider diagrams in the Jacobs report would suffice

¹⁴ See CAUSE's September 2016 Consultation Response Appendix 7 "External Rail Costs" Appendix 2



Question 9: Is there evidence to demonstrate that 30% affordable housing can be viably provided at each of the proposed garden communities? Is it appropriate for this figure to be set as a "minimum" requirement?

9.1 No. CBBGC is not viable and cannot therefore afford to honour affordable housing promises ¹⁵ any more than its infrastructure promises. Affordable housing particularly needs public transport connecting residents to jobs and CBBGC promises delivery only in 2058.

Question 10: Is there evidence to demonstrate that each of the proposed garden communities can support the range of facilities that are required by policies SP7, 8, 9 & 10?

10.1 No. A credible viability model is needed before such facilities can be promised.

Question 11: Is there evidence to show that each proposed Garden Community is capable of delivering 2,500 dwellings within the Section 1 Plan period?

11.1 No. 2,500 per settlement appears to be a political solution rather than sound in planning terms. The three settlements can only come forward at different times. Most parties agree with us¹⁶ that CBBGC cannot be started until both the A12 and A120 are realigned. We believe this makes inclusion in the plan premature.

Question 12: Have appropriate arrangements been made to apportion dwelling numbers at each proposed Garden Community between the respective housing requirements of the relevant local planning authorities?

12.1 This will be source of conflict and is likely to delay delivery. Our comments are on pages 3-4 of our Matter 1 hearing statement.

Question 13: How much employment land is to be allocated at each proposed Garden Community, and how many jobs is each expected to provide, both within and beyond the Section 1 Plan period? Should this information be included in the policies?

13. We question whether allocating large blocks of land for employment will itself create jobs for local residents. CBBGC will be at a <u>comparative disadvantage</u> in achieving this policy objective because house prices will be driven by London not the local economy. Our comments on employment are covered in our Matter 4 statement.

¹⁵ Hyas assume 30% affordable in calculating their residual of £177,600 per acre and show sensitivities around that figure. See page 33.

¹⁶ We support proportional growth at Marks Tey as is being considered by their neighbourhood plan group.



- 16) Should policies SP7, 8, 9 & 10 include:
- (a) a requirement for the optional national water use standard of 110 litres per person per day?
- (b) a requirement to minimise the impact of external lighting?
- (c) reference to specific standards for green infrastructure?
- (d) provision for bridleways?
- (e) specific reference to places of worship as part of their requirement for community facilities?
- 16.1 Yes. It is important to detail all the requirements for sustainability to protect against unsustainable private development in case NEGC fails in its endeavours.

Question 17: Is the proposal to prepare subsequent Development Plan Documents [DPDs], setting out the design, development and phasing principles for each Garden Community, justified?

- 17.1 We support genuine two-way consultation. But we regard the current DPD consultation as premature, a poor use of public funds, pre-determinative and unsatisfactory for the Planning Inspection process.
- 17.2 We believe that SP 9 and 10 should be dropped from the Plan. Rushing to include them in the current plan is commercially naive¹⁷ as well as premature.

Question 18: In guiding the development of the proposed garden communities, is there an appropriate division between the roles of the Section 1 Plan and the DPDs; or should the Section 1 Plan set out more detailed requirements than it does currently?

18.1 We respectfully suggest that the Section 1 plan is neither deliverable nor credible, and therefore not sound. It will be difficult to assess its soundness in isolation from Section 2 and the DPDs and if anything goes wrong it will result in unsustainable development.

Question 19: The key issues raised by the Inspector's questions about the current and future land ownership arrangements are covered in Matter 6 Appendix 2.

This is a complex matter requiring detailed analysis. Please see Appendix 2.

7

¹⁷ See our response to question 19 below



20 Are the proposed governance and delivery mechanisms for the garden communities, potentially involving Local Delivery Vehicles, appropriate?

20.1 The LDVs (owned by NEGC) are planning an expansion of public sector activity into speculative 18 land ownership and infrastructure provision. Their plans to date demonstrate that they don't have the money, skills or experience to deliver their promises. If they hope to raise private capital, as proposed by Lord Kerslake, they need a credible business plan; but our viability work shows that this is impossible without an unrealistic level of government subsidy.

20.2 We also believe that the LDV's governance structure is wrong. The interests of landowners on the board will be directly opposed to the provision of infrastructure first. Councillors on the board will be protecting their own patches and arguing about allocation of housing numbers. Local people whose lives will be affected are excluded completely: the emerging plans from DLA demonstrate a lack of understanding of the countryside and we feel that town based councillors are imposing a vision which we simply don't share.

20.3 Pages 7 and 8 of our August 2017 Consultation Response lay out why NEGC will be a negotiating forum rather than an effective quango.

 $^{^{18}}$ We use the word speculative because the commercial risks of buying land to sell as housebuilding plots are significant. The price of building plots is much more volatile and uncertain than the price of housing and investors will want a high return to justify the cyclical risk.



HEARING STATEMENT MATTER 6 Appendix 1

Appraisal

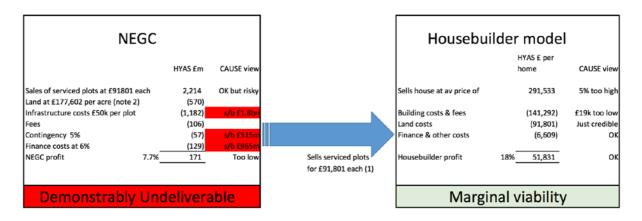
We have built on our critique of the Hyas appraisal in Appendix 9 of our August 2017 consultation response to correspond with the Inspector's question 8:

Question 8; Has the economic viability of each of the proposed garden communities been adequately demonstrated in the Hyas *North Essex Local Plans (Section 1) Viability Assessment* (April 2017) [the Hyas report, EB/013]?

8.0 No. There are three shortcomings to the Hyas study, each of which undermines viability on its own:

- It doesn't include the finance charges on landholding costs
- The infrastructure costs have been underestimated
- The 5-15% contingency is unrealistically low

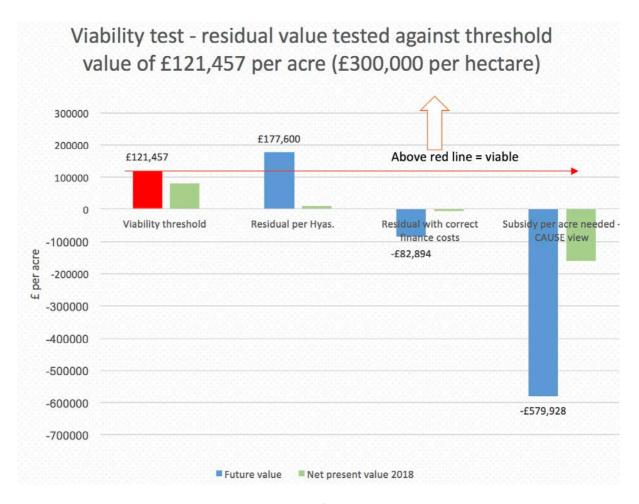
8.1 The diagram below illustrates the proposed split in the business. NEGC buys farm land and sells serviced building plots. Hyas have (correctly) focussed on the infrastructure delivery model. We understand that the Councils have talked to local developers but the discussions mainly focussed on the housebuilder model. We believe this part to be "just credible" in the current market¹. Our comments are focussed on the NEGC model.



¹ CAUSE's viability consultant has pointed out a number of inconsistencies between the Hyas report and the CBBGC appendix. Where there is a conflict we use the figures in the appendix because they lead to the £177,600 per acre residual value conclusion on page 33.



- 8.2 The underlying reasons for CBBGC's lack of viability are twofold:
 - 8.2.1 Scale diseconomies: CBBGC is so big that it will take many years to deliver. 1300
 hectares of land will need to be controlled from the beginning. The cost of funding the land
 acquisition programme would be lower for smaller settlements that could be completed
 more quickly.
 - 8.2.2 Stand-alone: The infrastructure costs for a stand-alone settlement are higher than alternatives such as a Poundbury style urban extension or the CAUSE Metro Plan. CBBGC will be too far from Colchester or Braintree to share infrastructure.



- 8.3.1 The chart above indicates a viability threshold of £121,457 per acre or £300,000 per gross hectare. If the residual value per acre is above that the project is viable, if below it isn't.
- 8.3.2 Our threshold figure comes from Pathfinder Development Consultants (Martin Aust). It is below the Benchmark Land value for large strategic sites of £440,000 per hectare recommended by Three Dragons and Troy planning in the evidence base. Hyas does not give a specific benchmark.



AECOM's feasibility study talks about an "indicative land acquisition price" of £100,000 per acre².

- 8.3.3 Hyas have calculated a residual value of £177,600 per acre³ which they claim indicates viability. But this is very clearly a FUTURE value⁴ – the amount in the bank account in 2065. It should not be compared to the PRESENT value of farm land.
- 8.3.4 This is another way of saying that Hyas has not made sufficient allowance for the funding cost of holding development land.
- 8.3.5 CAUSE can demonstrate that extra funding costs of £836m⁵ are required on the following assumptions:
 - * land price of £177,600 per acre, the value at which Hyas say the project is viable
 - * land acquired 2 years before it is needed, not on day 1, as suggested by AECOM. This implies that landowners will wait for some of their money until 2063.
 - * funding cost at 6%, the rate Hyas use.
- 8.3.6 If these costs are included the residual value falls to -£82,894 and the project is clearly not viable.
- 8.3.7 At this point the figures become huge and meaningless: CAUSE recommends a switch to Discounted Cash Flow methodology for such long-term projects. The green bars on the diagram represent the Net Present Value⁶ of the figures in 2018 money. We believe that this is a safer way to compare like with like.
- 8.3.8 CAUSE calculates that the cash subsidy required to make the project viable is £1.8bn or £579,928 per acre. These figures allow for extra building cost, contingency and inflation, as laid out in our August 2017 Consultation Response appendix 9.

Question 8a: In the Hyas report are appropriate assumptions made about the level and timing of infrastructure costs?

² Appendix 11 of our August 2017 Consultation Response explains why £100,000 per acre is unlikely to be attractive to landowners if deferred.

³ See page 33 of the Hyas report

⁴ We know that £177,600 is a future value because it corresponds to the £570m shown in the 2065 column in the appendix to the Hyas viability report. £570m / 1300 hectares / 2.47 = £177,600.

⁵ We are happy to share our spreadsheet. We take the Hyas pre-interest cash flows to 2065, deduct land cost and calculate interest on the resulting funding need. The compound interest bill comes to £965m compared to the Hyas figure of £129m. £836m = 965-129.

⁶ NPV translates future cash flows into "present values" by applying a discount factor. In this case the discount factor would be 6% per annum, the same as the funding cost assumed by Hyas.



8a.1 No. CAUSE believes that the £1.182bn infrastructure budget should be increased to £1.8bn and that key transport infrastructure must be delivered earlier e.g. 2030 rather than 2058. See CAUSE August 2017 Consultation Response Sections 8 and 10.

Question 8b: is the contingency allowance appropriate?

8b.1 Best engineering practice demands a contingency of 40%+ at this stage of project definition. See section 10 of ourAugust 2017 Consultation Response and Ringway Jacobs May 2017.

Question 8c: are appropriate assumptions made about the rate of output?

8c.1 No. See CAUSEAugust 2017 Consultation Response page 65 on deliverability. If the AECOM assumption of 240dpa is accepted it will take 100 years to deliver CBBGC. A report by Lichfields (http://lichfields.uk/media/1728/start-to-finish.pdf) which analysed large developments found an average build-out rate of 160dpa.

Question 8d: are appropriate assumptions made about the timing of land purchases?

8d.1 The absence of a land assembly strategy is a major flaw in the delivery plan. Without evidence that the land is under council control, there can be no guarantee that the project is deliverable. We consider inclusion of CBBGC in the Plan before the land is controlled to be **commercially naive**.

8d.2 The absence of a land assembly strategy has also led to a key error: land holding cost is ignored in the Hyas viability model as described above.

Question 8e: is it appropriate to allow for a Garden City premium?

8e.1 There is no reason to expect the premium of 5% assumed in the Hyas base case, especially if delivery is to be 350 rising to 500 per annum in 2035, more than twice the number recommended by AECOM. The DLA layout is ill considered and more likely to generate a discount than a premium.

Question 8f: is the viability threshold set at an appropriate level?

8f.1 The Hyas report is vague on the exact viability threshold.

8f.2 Martin Aust from Pathfinder Development Consultants suggests that the viability threshold should be £300,000 per hectare or £121,457 per acre. It is vital to note that he assumes that the land is paid for up front not later whenever a surplus is available.



Question 8g: should an allowance have been made for inflation?

8g.1 Viability is highly sensitive to inflation assumptions and ignoring it can lead to major funding problems.

8g.2 We believe that the assumptions used should be consistent with government policy⁷. It is not good enough to extrapolate past house prices into the future – we have a government determined to improve affordability for young families which should result in real terms price reductions over the long term.

8g.3 The appraisal should assume a general level of inflation of 2% in line with the Bank of England's Target. House prices should rise at slightly below inflation in line with government policy. Building costs should rise slightly faster than inflation due to reduced immigration (again government policy) and lower productivity gains in the building sector compared to the economy as a whole. We would regard these as "cautious and transparent assumptions" which are in line with the Harman guidelines page 27.

Question 8h: is an appropriate allowance made for finance costs?

8h.1 No. This is a fundamental error in the Hyas appraisal which points to a <u>major scale diseconomy</u> for large settlements.

8h.2 This goes to the root of the Plan and we believe that the Inspector may want to seek an independent project appraisal expert to assist him. The expert will need to understand land value uplift and both residual value <u>and</u> discounted cash flow appraisal techniques.

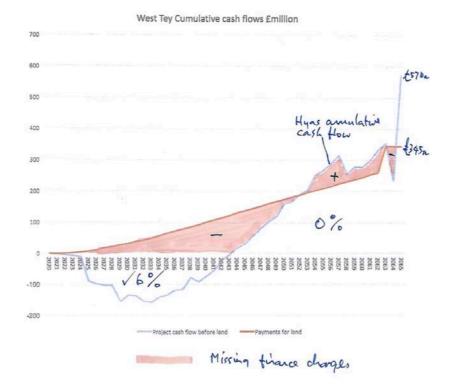
8h.3 The graph below illustrates the error⁸. Hyas implicitly assume that land is only paid for when a surplus arises. But landowners will have to hand over their land much earlier and will expect payment.

The blue line on the graph comes directly from the Hyas pre-interest cash flow. The red line uses the AECOM assumption that land is bought for £100,000 per acre and paid for 2 years before the building plots are sold. The funding costs on the deficits marked in red are enormous.

⁷ See pages 67-69 of our August 2017 Consultation Response.

⁸ For this graph and elsewhere in our August 2017 Consultation Response we assume that the land costs £107,500 per acre (£265,000 per hectare) including costs. Land is acquired two years before the serviced building plots are sold. The price has to be fixed on day one otherwise the upfront infrastructure investment will drive up values. Landowners will have to be rewarded for waiting this long so even this assumption may be too optimistic. They cannot, in our view, be bullied by CPO threats.





Question 8i: is the residual value methodology (GCLS model) appropriate? Should a discounted cash-flow methodology have been used instead?

- 8i.1 No, a residual value methodology is not appropriate. Yes, a DCF methodology should have been used instead⁹.
- 8i.2 Most project appraisal experts would agree that a DCF methodology is the best way to evaluate a 50-year project (see attachment 1 "Comments from the UK Head of a major US investment bank"). The Harman Guidance recommends a residual value approach, but this is directed towards establishing whether policy burdens are throttling the 5-15 year supply of building sites. It is used by the housebuilding industry for evaluating smaller projects over a much shorter period.
- 8i.3 We acknowledge that either approach <u>applied properly</u> will give the same conclusions. But we caution against trying to compare 50 year money to present day money this underlies the Hyas error and could lead to many more.

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⁹ Please see pages 72-73 of our August 2017 Consultation Response



HEARING STATEMENT MATTER 6 Appendix 2

Land Acquisition Strategy

We build on our comments in Appendix 11 of our August Consultation Response to correspond to the Inspector's questions:

Question 19: Will current and future land ownership arrangements facilitate the delivery of the proposed garden communities?

No. The absence of a land assembly strategy is a major flaw in the delivery plan. We consider first the landowners within the CBBGC area, then neighbouring landowners.

19.1 CBBGC landowners

19.2 NEGC needs to control 13sq kms of farmland <u>now</u> if it is to capture the land value uplift it is hoping for: but it has yet (so far as we know) to get agreement with any of the CBBGC landowners who have formed their own consortia¹ and wish to develop the land themselves.

19.3 NEGC is hiding behind commercial confidentiality and as a result its land acquisition strategy is opaque. This is unsatisfactory because it involves spending many millions of pounds of public money and the financial structures (like PFI) will be with us for decades. The appraisal work we have seen gives little confidence that this will be well done.

19.4 Land-owners will be aware that threats to compulsory purchase land at agricultural value are hollow as it will be difficult to prove a public interest in CPO for residential development from owners who want to do the same thing themselves. The councils appear to be placing their hopes on a change in the law to enable them to CPO land at agricultural value: we believe that the radical changes they need are an unlikely and a risky foundation for such a significant initiative.

19.5 Landowners will benefit from the efforts being made at public expense to prove that development on their land is sustainable when it was deemed unsustainable in 2008. If CBBGC is included in the Local Plan they will be in a stronger commercial position after the Inspection and the land value uplift available for infrastructure and social housing will be even smaller.

19.6 CAUSE believes that inclusion of CBBGC in the Local Plan will be a significant commercial disadvantage for NEGC. Once it is in the plan it will be even more difficult to negotiate favourable land deals.

¹ We are aware of two landowning consortia. Gateway 120 which includes most of the land needed to the North of the A12 and RF West which owns some of the land needed to the South.



Neighbouring landowners

19.7 If CBBGC is included there will be problems with neighbouring landowners who may well be successful in arguing that the Councils should not be favouring their own NEGC land over equally suitable private land. These considerations are advanced lucidly in the Counsel's opinion for Lightwood for Monks Wood at Pattiswick. We provided the Inspector with a copy of the opinion at Matter 1.

19.8 Colchester BC has recently lost planning appeals at both Tollgate and Stane Park. One of the issues there was its ownership of competing land to the North which it was thought to be favouring. It is at risk of making the same mistake again.

Essex County Council
Cabinet Office
PO Box 11
County Hall
Chelmsford
Essex CM1 1LX



Mr G Coode-Adams
Feeringbury Manor
Feering
Colchester
Essex
CO5 9RB

Our Ref: JS/RBJC/sjh

Your Ref:

Date: 16 November 2017

Dear Giles

Thank you for your letter expressing concern over the approach to planning, and the behaviour you have seen at planning inspections.

As you know, the way in which Local Authorities are required to develop future plans for their areas and the way in which they are tested by the Planning Inspectorate through a Local Plan EIP is defined by the NPPF. I understand your frustrations about this planning inspection process but need to offer you a reality check and some reassurance. On the reality check, the Planning Inspectorate is required to undertake planning viability assessments on development proposals in accordance with the Harmon guidance in line with the NPPF. From a North Essex Garden Communities Ltd or developer perspective, this is a planning inspection not about the delivery of Garden Communities, but about the future planning proposals (including housing) of a district / borough council.

And that brings me to the reassurance. This planning process has no implications for the agreement or otherwise to specific Garden Community delivery proposals. It reiterates that the councils involved have the ambition to come forward with viable plans for Garden Communities in their areas from a planning perspective; but that the delivery viability (as opposed to the planning viability) in the concept of Garden Community principles can only be assessed by North Essex Garden Communities Ltd and its shareholders acting in a delivery capacity through appropriate evidence gathering and governance.

Yours sincerely,

Cllr John Spence CBE DL Chairman North Essex Garden Communities Ltd

Cabinet Member for Health & Adult Social Care

Comments on the Hyas appraisal and CAUSE critique by the UK head of a major US Investment Bank

- 1. Methodology is both dangerous and wrong for this type of complex, long term, infrastructure heavy scheme ok for a local builder looking at a simple, stand alone land price analysis over 2 3 years using steady state house price, build cost, finance and economic assumptions to use a "per plot" residual value approach but completely useless (and reckless) for West Tey. You have to use a proper DCF WITH scenario analysis. The DCF also forces you to make sensible and responsible timing assumptions around the cash flows. Government infrastructure projects would also add cost/ benefit approach to it as well which would seek to put a cost on environmental and social impacts. No need to get into latter for these purposes though.
- 2. You CANNOT exclude land finance or financing commitment costs. You cannot start a scheme like this without having private or public sector funding commitments in place so that you know that it can be finished and this is not just financing facility and commitment costs it is also various hedging costs to ensure that economic and other cost assumptions are reasonably contained through the life of the project.
- 3 The DCF would not be done properly if it assumes that the infrastructure and land purchase costs are as back ended as they seem to be is Farmer X etc really expecting to wait that long for her dough and do the council really expect the infrastructure, transport and otherwise to be that back ended? I know that Priti Patel would have a strong view on that.
- 4. I would make more up front of the actual contingencies and the methodologies and assumptions used in actual and more advanced real projects like Crossrail and A120. Do you have any actual experience information around other very large residential developments around Colchester like 14,000 houses at Tollgate etc. Is there evidence from these?
- 5. I think the discount rate is both too low, even at 6 % and you would always look at a range in a project analysis of something this big, complex and long term and narrowing the range will force you to explicitly address all financing term commitments and hedging requirements. In other words it has to be viable across the range and if you want to remove the high discount rates at the top of the range you do so by making explicit assumptions around guarantees, finance commitment and hedging costs which would have that effect. You cannot responsibly commit to a scheme which is massively unviable at say 10% unless you have locked in the assumptions which drive the Weighted average cost of capital so it cannot be that high. What is the negative NPV at a range of discounts from 6 10% in 2% point steps and with contingency at 30%, 40% and 50%? The house price and build cost assumptions look sensible in CAUSE analysis (not theirs) and given long term of project, it is absolutely right to anchor them to long term reversion to mean around affordability and price / cost inflation.



North Essex Authorities Joint Strategic (Section 1) Plan

HEARING STATEMENT

4TH December 2017



FAO Mr. Roger Clews BA MSC DipEd DipTP MRTPI

Examination Office, Longcroft Cottage, Bentley Road, Clacton-on-Sea, CO16 9BX

4th December 2017

Dear Sir,

We are pleased to have the opportunity to prepare Hearing Statements for the North Essex Garden Communities section 1 Plan, which we submit as follows:

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CAUSE supports growth, and we have a positive vision for north Essex. We represent 8,500 people who signed a petition against West Tey (Colchester Braintree Borders Garden Community). Our committee includes urban design, engineering, financial, development and legal experience, and land owners.



Our wish is to see a positively prepared Local Plan, which provides a sustainable future for the people of north Essex. Our Hearing Statements seek to assist in the Examination.

We do not believe that the unprecedented strategy to build three, very large, stand-alone garden communities, is the best spatial strategy for north Essex. There is no evidence that Section 1 is deliverable and there is no 'Plan B'. Section 1 is a high-risk strategy, fraught with conflicts of interest, and has been prepared with indecent haste by people with insufficient expertise in delivering complex, long-term projects of this scale. Concerns raised by CAUSE at Issues & Options, Preferred Options and again at Draft Publication Plan have simply been ignored. If the Plan is recommended then we believe it could be open to challenge from land-owners and developers.

We agree with the councils that the locations chosen for SP9 and SP10, in particular, are not appropriate for significant development unless garden city principles can be delivered and we do not believe that SP1 can deliver garden city principles because viability has not been properly assessed and there is insufficient co-operation with statutory providers of infrastructure. Understanding the viability of the NEGC project is crucial, and goes to the very heart of the soundness or otherwise of the Plan.

The inter-relation between Sections 1 and 2, and the DPD's under consultation, is unclear, and the uncertainty may give rise to challenge from many angles.

In our opinion, there is only one course of action. Section 1 is not sound and must be abandoned, leaving the councils to focus on deliverable, positively prepared and effective Section 2s.

We are happy to explain our views further if it would help.

Yours Faithfully,

William Sunnucks MA (Cantab) ACA MBA

Rosie Pearson MA (Cantab)



HEARING STATEMENT 4TH DECEMBER 2017

Introductory Remarks

- 0.1 CAUSE submits this statement to assist the Inspector at the examination hearings scheduled for 16-25 January 2018.
- 0.2 We refer to West Tey and CBBGC interchangeably, as do our supporters, many of whom are displaying "say no to West Tey" outside their houses.
- 0.3 Our views are laid out in our 94 page consultation response to the Draft Publication Plan which the Inspector has clearly read and understood. This statement answers his questions and responds to further information made available since the Submission Draft. We respectfully request that we be given the opportunity to comment further when we have seen the responses provided by the Councils.
- 0.4 We recently met with Counsel (Martin Edwards from Cornerstone Chambers) who believes this to be a <u>high-risk</u> Plan which is likely to be open to challenge from a number of angles due to the unprecedented scale and structure of the proposals. Following this conversation, we invite the Inspector to consider adding three additional questions to Matter 1 or elsewhere:
 - 0.4.1 New question 11. Does the Plan provide adequate guarantees that planning permissions will only be granted in accordance with Garden Community principles? Will the Councils be obliged to refuse them if they fall short?
 - 0.4.3 New question 12. How will conflicts be managed? On what basis will the Councils be able to refuse permission for alternative sites if they can be shown to have favoured their own vehicle (NEGC & subsidiaries) with planning permissions and funding? This issue is raised by Christopher Boyle QC in an opinion for a competing development by Lightwood in Pattiswick: his opinion is at Attachment 1: http://www.cause4livingessex.com/about-cause/cause-papers-and-evidence/matter-1-zattachment-1-lightwoodmonkswoodopinion/
 - 0.4.4 Similar problems have been encountered on the outskirts of Colchester where there have been conflicts between retail/leisure development on council owned land and other land at



Tollgate.

0.4.5 New question 13. If NEGC fails to deliver on a timely basis what will prevent competing proposals for the existing site "tailgating" on the sustainability work done by the Councils? We are aware of two development consortia ready to do just that – RF West and Gateway 120. We fear that this attempt to deliver sustainable garden communities may instead unleash uncontrolled and unsustainable development.

0.5 If it would help the Inspector, CAUSE will obtain formal Counsel's Opinion on these matters: or alternatively arrange for Counsel to be available for the Matter 1 hearing.

MATTER 1

Matter 1: Legal and procedural requirements; Key Issues, Vision and Strategic Objectives (Chapter 1); Monitoring (paragraph 9.3 & Table 1)

Main issue: Have the relevant legal requirements been met in the preparation of the Section 1 Plan? Do any amendments need to be made to Chapter 1 of the Section 1 Plan in order to ensure its soundness?

Does Table 1 provide an effective monitoring framework for the Section 1 Plan?

Question 1:

Is there clear evidence that, in the preparation of the Section 1 Plan, the North Essex Authorities have engaged constructively, actively and on an ongoing basis with neighbouring authorities and prescribed bodies on strategic matters and issues with cross-boundary impacts in accordance with section 33A of the *Planning and Compulsory Purchase Act 2004*, as amended [the 2004 Act]?

1.1 Neighbouring Authorities

1.1.1The North Essex Councils have clearly made huge efforts to co-operate on the preparation of the plan. However what matters in practice is whether the co-operation will actually deliver three cross border communities simultaneously. It is one thing to agree a plan, but another to achieve delivery



with so much potential for disagreement.

- 1.1.2 This is a significant delivery risk for the plan, particularly for West Braintree which is partly in Uttlesford. The Inspector may want to ask the following questions which go to deliverability:
 - 1.1.2a Are the proposals to split housing numbers 50/50¹ wherever they are built legal? Is a claim that a house built in one borough is located in another unlawful or at best confusing? Will the allocation work for all purposes including New Homes Bonus, 5 supply and 15 year OAN?

There will be real problems to solve. Using East Colchester as an example: most of the housing will be in Tendring, but half of the housing numbers will be "allocated to" Colchester. Which specific houses? Will Tendring really hand over the New Homes Bonus to Colchester? Will Tendring transfer 5 year supply to Colchester? Will speculative developers use the confusion to challenge the 5 year supply?

- 1.1.2b How will the Councils ensure that the three settlements are designed according to sound planning principles rather than as a political carve up? Councils will want the houses on their side of the border and facilities that are expensive to run on the other side.
- 1.1.2c Will arguments about borders and allocations delay delivery? Would smaller settlements in one Borough be more deliverable?
- 1.1.3 We are not aware of evidence which indicates that the NEGC authorities are co-operating with other neighbouring authorities (e.g. Maldon, Babergh and Chelmsford) in an active, ongoing and constructive basis as required by the NPPF.

1.2 Infrastructure providers

1.2.1 CAUSE has even more significant concerns about the lack of joint planning with infrastructure providers which go to the heart of CAUSE's objections to the plan. Examples are:

¹ See Colchester June Agenda Pack para 1.104. "Delivery of 2,500 dwellings in the cross-border garden communities, no matter where they are physically built, within the Local Plan period to 2033 will be attributed as set out in section 2 of each of the individual Local Plans, or if more dwellings are built then 50:50 between the two districts concerned."



- 1.2.1a The failure to address the capacity constraints on the Great Eastern Mainline, particularly between Shenfield and Stratford. These make it unsustainable to build further commuter settlements along its route.
- 1.2.1b Presentation of plans by David Lock Associates for formal consultation which (after three years of discussion) have clearly had little input from the Rail or Highways Authorities. We explain this further under matter 5
- 1.2.1c Failure to co-ordinate planning with the Colchester General Hospital, as witnessed by a public argument between Mr. Nick Hulme the CEO and Colchester Borough Council this autumn in which he said that the hospital "may not cope" with the Garden Communities²
- 1.2.1d Inconsistency between the A12 route proposed in the DLA and ECC proposals, consulted upon within months of each other.
- 1.2.2 These are significant issues. Roads and public transport infrastructure are key "differentiators of location" and the big ticket items need to be laid out (including junctions) <u>before</u> decisions are made on the location of housing. The infrastructure first approach to the Cambridge / Oxford corridor project provides a precedent.
- 1.2.3 The unprecedented scale of the NEGC cross border settlements should warrant greater cooperation than normal because of the infrastructure impacts of the proposals. Issues which need to be addressed include, but are not limited to:
 - 1.2.3a <u>Healthcare</u>. Colchester and Ipswich hospitals have merged and therefore Babergh will feel the impact of Section 1's proposed growth.
 - 1.2.3b <u>Rail.</u> Chelmsford will feel the impact on the train service of locating CBBGC new town two stations further up the Great Eastern Mainline.
 - 1.2.3c <u>Joint proposals</u>. Uttlesford is at a different stage in the plan-making process yet with interest in the same site as Braintree at West of Braintree.

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² See http://www.gazette-news.co.uk/news/local/15508290.Boss_warns_hospital__may_not_cope__with_78_000_more_patients_if_divisiv e_new_towns_go_ahead/



Have the North Essex Authorities complied with the requirements of section 19(5) of the 2004 Act with regard to Sustainability Appraisal?

2.1 A sustainability appraisal has been prepared, but it is not fit for the purpose of locating such significant new settlements. In particular it fails to pay adequate attention to cost and employment issues, two of the key differentiators of location. We comment in detail on pages 18-29 of our consultation response.

Question 3

Have the North Essex Authorities complied with the requirements of the Conservation of Habitants and Species Regulations 2017 with regards to Habitats Regulations Assessment [HRA]?

No comment

Question 4

Does the Section 1 Plan incorporate all the measures necessary to avoid adverse impacts on any European site, as recommend in the Land Use Consultants HRA Report for North Essex Authorities Shared Strategic Part 1 for Local Plans, May 2017?

No comment.

Question 5

Have the North Essex Authorities complied with the requirements of section 19(3) of the 2004 Act with regard to conducting consultation in accordance with their statement of community involvement?

5.1 Community engagement is Principle No 7 of the NEGC Charter and is included in the NPPF. Engagement should be meaningful from inception to implementation. To us this means a sensible two-way collaborative process, in which all sides listen. But the preparation of this Local Plan, despite ticking regulatory boxes by running four consultations, has not come near to meaningful engagement. Nor does it meet the high aspirations of the Garden City Charter which is a core document for the plan.



- 5.2 The current consultation on the DPD's is the best example. It sets the context for detailed design of the new towns yet is being run despite requests to postpone it until after the Examination and Inspector's report. There is major uncertainty about key infrastructure and planning officers at public drop-in events are unable to answer important questions raised by the public. The concept map is misleading with 200 hectares shown as green space which would, in fact, have to be residential land. Council leaders make public promises which are not backed up by the evidence base.
- 5.3 The public is suffering from consultation fatigue. It feels that the plan is predetermined and that their views are ignored, "So what's the point?" Local residents, Councillors, parish Councils and local groups felt that the latest consultation (coming before an Inspector's report on the Plan and within weeks of the last one), was premature, but were ignored.
- 5.4 We feel that CAUSE in particular has been deliberately side-lined. This feeling started in 2015 when we heard from one Councillor that he had been discouraged from attending a conference at which we assembled well recognised speakers such as Nicholas Falk (Wolfson prize winner), George Kieffer (SELEP) and Bernard Jenkin MP. Wherever this advice came from other Councillors clearly saw attendance as "taking sides" rather than an opportunity to listen to other views.
- 5.5 The feeling was reinforced when our 2016 response was side-lined at the Local Plan Committee as a "substantive response to be discussed later". We later received a written response 2 hours before close of business before Christmas 2016 and we only got to meet officers to discuss it in early 2017. Most of our concerns still remain unaddressed and our detailed suggestions for improving the plan (attachment 1 to our 2016 and 2017 responses) have never been registered let alone discussed. The Metro Plan we launched at our conference has still not been properly understood. Our response to AECOM's 115-page evaluation of it is in Appendix 10, page 71 of CAUSE's Preferred Options submission sent in hard copy and available at http://www.cause4livingessex.com/wp-content/uploads/2016/09/15092016Part-1-North-Essex-Preferred-OptionsFINAL.pdf
- 5.6 Despite many requests, we have still never been able to meet with any Colchester Councillor who supports the Garden Communities.. The nearest we came to this was a meeting with Paul Smith, Colchester Leader in late 2015 at which he claimed to be open minded. We are left with the impression that a small number of Councillors is imposing its own urban vision on rural communities that they simply don't understand.
- 5.7 Over the last year CAUSE has also invited landowner groups to meet with us and find areas of common ground. Sadly these advances have been rebuffed. We believe that the failure of the parties



to talk to each other lies at the root of the long delays encountered by many schemes. Until there are "real conversations with real people" the system will grind to an expensive halt.

In summary consultation has not been proportionate because it has not been a two-way collaborative process. At each stage there have been significant concerns which have simply been ignored.

Questions 9 and 10

- 9) Do the Vision for North Essex and the Strategic Objectives provide an appropriate framework for the policies of the Section 1 Plan?
- 10) Should they include reference to: (a) the protection and enhancement of the natural environment? (b) the protection of the distinctive character of North Essex, heritage assets and the character of existing settlements? (c) creating healthier and active communities?
- 9.1 We support the suggestions in Question 10. We also request that the reference to "contemporary homes" be removed because it pre-judges the architecture and may not be consistent with preserving the local character.
- 9.2 The Plan fails to provide distinctive identities for the three garden communities as recommended by Lord Kerslake. It should be no surprise that West Tey is already seen as a commuter town. Even the official name 'Colchester Braintree Borders Garden Community' is uninspiring. The garden community branding is regarded as "greenwash" and there is widespread cynicism about Council promises on infrastructure. It will take many years of over-delivery to shake off these perception

Question 10

Should they include reference to:

- a)The protection and enhancement of the natural environment?
- b) The protection of the distinctive character of north Essex, heritage assets and the character of existing settlements?
- c) Creating healthier and active communities?



Yes. The distinctive character of rural north Essex is not protected by Section 1 and it is wrong to state (in sustainability appraisals) that garden communities will 'enhance' the natural environment, when the DPD consultation states that communities will be 'subsumed'.

Question 11

Does Table 1 set out an effective means of monitoring the implementation of the Section 1 Plan's policies



MATTER 2

Matter 2: Presumption in favour of sustainable development (policy SP1); Place-shaping principles (policy SP6)

Main issue: Are policies SP1 and SP6 positively prepared, justified, effective and consistent with national policy?

Introductory Remarks

- 0.1 We have concerns about SP6 is positively prepared. We wish to draw attention to a paragraph relating to SP6 which is fundamental to the soundness of the Plan. It tells us that the locations identified for garden communities are not acceptable for development unless garden city principles can be delivered:
- 0.2 "...In the absence of commitment and a policy framework that secures the principles of garden communities, development in the identified locations would not be acceptable. Other options for growth would have to be considered."
- 0.3 This is paragraph 1.98 in the agenda pack from Colchester's Local Plan Committee meeting of 12 June 2017, as an explanatory note for SP6. It is perhaps an administrative error that the paragraph has not been included in SP6. We respectfully suggest that this paragraph should be given serious consideration and we recommend that it should be included in the Plan.
- 0.4 We do not believe that the policy framework in Section 1 secures the principles of garden communities. Therefore, by definition, development in the identified locations is not acceptable.
- 0.5 Paragraph 1.98 demonstrates that there has been no strategic selection of sites to ensure that they are appropriate for significant development. The sites will only become suitable if the garden city principles can be delivered.
- 0.6 This is because NEGC used a call for sites to select locations where there are willing land owners and subsequently attempted to justify the choices by back-filling evidence. Arguably this might be a suitable means to identify small sites for Section 2, but not for strategic sites on the scale of the three garden communities which NEGC propose, where viability and sustainability are inextricably connected to location choice.
- 0.7 It is interesting to note that the National Infrastructure Commission is taking the opposite approach to decision-making in the Oxford-Cambridge Arc. First, infrastructure needs are identified, prioritised and funding commitments secured, and then suitable garden town sites are identified.



0.8 Using West Tey as an example, the issues associated with the location (and raised by Lord Kerslake in his peer review) render it impossible to apply garden city principles because the cost of doing so is simply too great. As we have demonstrated in our papers on viability and in Matter 6, it is clear that the infrastructure required to facilitate a successful new town at West Tey is too expensive.

0.9 In addition, because of the lack of employment prospects or strategy for employment, it becomes impossible to apply garden city principles which ensure that the new community is sustainable.

NEGC Charter garden city principles and why they will not be secured by the Policy Framework:

<u>0.10 Green infrastructure (1), Integrated & sustainable transport (2), Living Environment (4), Smart & Sustainable Living (5), Good design (6)</u>

Our analysis of the CBBGC viability appraisal shows that there will be insufficient funds to deliver a garden city to the principles 1,2,4, 5 and 6. We address this point in more depth in our Hearing Statement Matter 6. Viability is key to the deliverability of West Tey to garden city principles.

0.11 Employment Opportunity (3)

We set out our concerns about Employment opportunity in CBBGC in Matter 4. This is key to the sustainability, or otherwise, of the new town. Without sufficient employment, residents will have to commute, thus creating severe pressure on the local transport networks. This has not been taken into account in transport planning terms because the councils continue to insist that residents will work in the community, despite evidence to the contrary.

Community engagement (7), Active Local stewardship (8)

0.12 We believe that Community Engagement, principle 7, should be given greater emphasis in the Matters than in a traditional local authority local plan because of the garden city approach being undertaken, and the unprecedented scale of development proposed. On this principle, the NEGC councils fall far below the standards to be expected.

0.13 We have already highlighted concerns about community engagement in our previous consultation response, on page 87, and we respectfully remind the Inspector of paragraphs 155 and 158 of the NPPF. By way of a snapshot of local feeling, as represented in the local press, appendix 1 gives a sample letters page of the Essex County Standard, 24/11/17. (A Google search will reveal much more of the same, nearly every week for the past couple of years and an array of articles on the topic of north Essex garden communities.)

Strong corporate & public leadership (9), Innovative delivery structure (10)



0.14 Strong corporate leadership involves diversity of experience and relevant expertise on the board. This is not the case, with the NEGC board consisting of four council Leaders and a new Managing Director recruited much too late in the process to ensure that strategic and commercial decisions are sound. CAUSE has been calling for external and independent expertise on the NEGC board since it was first announced.

0.15 The leadership structure does not begin to approach the structure recommended in Lord Taylor's report on garden villages: "The Governance Board would likely comprise a Local Planning Authority representative and local community representatives... but also business members, and housing and planning experts from industry and academia."

0.16 Nor does it mirror the much more balanced Board of Ebbsfleet Garden City in which, of eight directors, only two are local authority representatives. The other six directors bring an excellent range of business, planning and engineering experience to the Board: http://ebbsfleetdc.org.uk/about-us/meet-the-board/.

0.17 Nor is the delivery structure innovative. It involves a small group of council leaders on the NEGC board, and Local Plan Committees in each LPA making the decisions in the traditional manner.

0.18 The DPD Concept Framework for CBBGC demonstrates that, despite nearly £3m of Government funding, there is insufficient expertise amongst decision-makers to deliver a 24,000-home new town. It is poor leadership which has led the councils into running a consultation, contrary to requests from residents and groups including CAUSE, SERCLE, CPREssex, Colne-Stour Association which is premature, a waste of tax-payers' money and will need to be re-run once there is more certainty. We also note that Strutt & Parker and Gladman, in their submissions stated that a DPD consultation should not take place until an Inspector's report was delivered.

Questions:

1) Is the wording of policy SP1 fully consistent with the wording of National Planning Policy Framework [NPPF] paragraph 14 and with the NPPF's section on Decision-taking?

SP1 needs to be strengthened to make it clear that applications cannot be approved without proper consideration of and funding for the related infrastructure. This codifies the repeated promises made by Councillors and is not inconsistent with para 14 of the NPPF.

2) Is it appropriate for the policy to require all development proposals to demonstrate that they contribute to the strategic and local vision and objectives?

Yes. This is what has been promised.

3) Is it necessary for the Section 1 Plan to include policy SP1?



The relationship between section 1 and section 2 is unclear. We fear that section 1, if adopted, will unleash unsustainable development unless the Councils protect themselves with a rigorous set of policies.

4) Is it reasonable for policy SP6 to require all development to meet the "highest" standards of urban and architectural design?

Yes. Garden city principles require this approach. A detailed understanding of viability is required. Development costs per square foot are higher in high quality developments such as Poundbury (£160 per square foot) than allocated in Aecom 2016 for West Tey (£100 per square foot).

- 5) Is the reference to the use of design codes for strategic scale developments likely to lead to overly homogenous environments?
- 6) Is there an effective relationship between policy SP6 and the design policies in each local planning authority's Section 2 Plan?

We seek to understand the relationship between Section 1 and Section 2. We believe that all developments should require high quality design, not just those in Section 1.

7) Are the principles set out in the bullet points to policy SP6 applicable to all development, irrespective of its nature and scale?

Residents of north Essex should be able to expect high quality developments in Section 2 and in Section 1. We question the relationship between Sections 1 and 2. Section 1 appears to favour new communities at the expense of existing communities. The focus on Section 1 by the local authorities risks a reduced focus on Section 2.

- 8) Should policy SP6 include reference to:
- (a) the protection and enhancement of biodiversity?
- (b) "places", rather than "communities and their environs" (in bullet point 1)?
- (c) provision for equestrians (in bullet point 9)?
- (d) water supply and waste water infrastructure, and sustainable drainage systems (in bullet point 10)?

Yes

9) Should the reasoned justification to policy SP6 include reference to SportEngland and Public Health England's Active Design Principles?



Matter 3

Meeting housing needs (Policy SP3)

Main issues: Does policy SP3 reflect an objective assessment of housing needs over the period 2013-2033? Should the housing requirement figures be reduced or increased? Does policy SP3 set out effective requirements for the maintenance of a five-year housing land supply? Should it allow for accommodating possible future need arising elsewhere?

Introductory Comment

- 0.1 CAUSE believes that the PPG is clear and simple in its intentions. Unnecessary complexity arises from the commercial pressures on the consultancy industry.
- 0.2 We understand DCLG's desire for standardisation, but believe that tightening existing guidance and publishing standard data would be more helpful than the radical change to a standard formula. The proposed formula has a number of significant problems. Most importantly, and of relevance at a local authority level, the formula will not address affordability as intended. CAUSE's response to the Government consultation, "Planning for the right homes in the right places", sets out our views: http://www.cause4livingessex.com/cause-response-to-government-housing-paper/
- 0.3 Locally, the most recent demographic forecasts (in this case DCLG 2014) are adequate as a base point for setting an OAN. These forecasts already contain generous allowances for inward migration, particularly in areas like Colchester which already suffers from a flywheel effect: the more you build, the higher inward migration, the higher your target. Forecasts already allow for the trend towards smaller households.
- 0.4 The PPG does not <u>require</u> upward adjustments it simply states that local planning authorities 'may' apply them where there is robust evidence to justify an uplift. The evidence base provides no evidence that the economic uplift applied for Colchester is justified, nor the market signals uplift applied for Braintree.
 - 0.4.1 There is no justification for an employment uplift. Tendring, Braintree and Colchester
 are all net exporters of labour, and Colchester has been unable to create sufficient jobs for
 its fast-growing adult population.



0.4.2 Nor is there evidence to support a market signals uplift, and Peter Brett has not
provided a robust argument for doing so in Braintree. They say that only one of several
measures of affordability is out of line, and we believe this particular measure to be
misleading – income should be measured for those who LIVE in the area rather than those
who WORK there, the difference being significant for commuter towns like Braintree.

0.5 Affordability depends on a range of factors, and on the definition of affordability used (rents to income? Local salary or commuter salary? % market price? Etc). We address these points in our response to Government's consultation on the paper "Planning for the right homes in the right places": http://www.cause4livingessex.com/wp-content/uploads/2017/11/CAUSE-comments-on-DCLG-housing-paper-9-Nov.pdf

0.6 We believe that the debate around setting an OAN has become overly complicated. It is supposed to be "policy off" and, as such the arguments made by Barton Willmore for Gladman and the Housebuilders Federation might be better applied in a discussion about the Local Plan target. Simply aiming for a high OAN on the hope that it will result in a drop in the affordability ratio is not sufficient and it would be better to discuss how affordability is addressed through policy.

0.7 We believe that the appropriate approach, as required by PPG would be to use the most recent demographic starting point for the OAN. *Then* our councils should look at how (or whether) policy in the local plan can deliver the supporting infrastructure, affordable homes and employment (policy on). If the supporting infrastructure can't be delivered, then the plan is unsustainable and a lower Local Plan target should be adopted. Our adviser Professor Alan Wenban-Smith argues that sustainability should be the over-riding consideration in a sound plan.

0.8 We hope that in this Matter the Inspector will go beyond the OAN to address whether the Local Plan targets adopted by the councils are realistic, and in addition, look at the constraints to delivering the TARGET. This is because it is the deliverability of the chosen housing targets which is more relevant to local people than the OAN is. Policy must ensure sufficient infrastructure, affordable homes and employment for the housing target selected. If there are constraints to delivery of any of these then the authorities are justified in reducing the target they set in the Plan.

Questions:

. 1) Does the Peter Brett Associates *Objectively Assessed Housing Need Study*, Nov 2016 update [the PBA Study, EB/018] appropriately define the housing market area? If it does not, what



are the consequences for the policy SP3 housing requirement figures?

- 1. We accept the HMA.
- 2) Are the proposed overall housing requirement in policy SP3 of 43,720 dwellings (2,186dpa), and the constituent requirement figures of 14,320 (716dpa) for Braintree, 18,400 (920dpa) for Colchester and 11,000 (550dpa) for Tendring, based on a sound analysis of the available and relevant evidence, and do they reflect the full, objectively-assessed need for housing over the period 2013- 2033? In particular:
- 2.1 CAUSE believes 2005dpa to be a reasonable figure (as per question 3a below).
- 2.2 The uplifts in the figure of 2186 dpa are unjustified, and the even higher figures proposed by vested interests are clearly unsustainable, probably undeliverable and also unlikely to reduce the affordability ratio.
- 2.3 CAUSE is not against housebuilding. It supports balanced growth with proper infrastructure. It opposes concentrating development in large new standalone settlements.
- (a) Is the PBA Study justified in using a baseline household growth figure of 445dpa for Tendring, rather than using the 625dpa figure from the 2014- based DCLG household projections?
- 2a.1 We understand that there are particular problems with UPCs in Tendring and support 550dpa including uplifts as a reasonable OAN.
- (b) Is the PBA Study justified in not making any adjustments to the household formation rates used in the 2012- and 2014-based DCLG household projections?
- 2b.1 Yes. We are confident that the DCLG household projections make adequate allowance for



household formation trends. We have not seen clear evidence from Barton Willmore or the HBF that they are wrong.

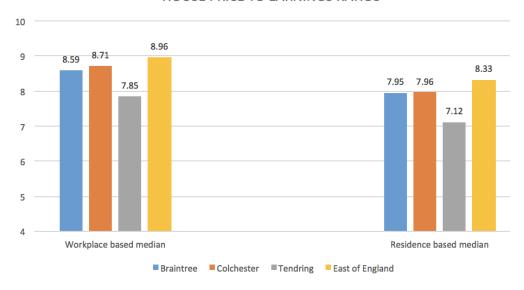
2b.2 We reject "pent up demand arguments" because OAN should assess <u>need</u> not <u>demand</u>. The CPRE argues that the two should be treated very differently and we agree.

- (c) Is the PBA Study justified in not making any adjustments to its household growth estimates to take account of out-migration from London?
- 2c.1Yes migration is already included in DCLG projections based on historic trends. Two-thirds of the population growth in North Essex is driven by in-migration and this is factored in to the forecasts because many of the incomers are from London.
- 2c.2 Any argument (such as the HBF's) that North Essex OANs should be increased further to accommodate London overspill need to demonstrate that the outward migration trend is accelerating, not merely maintaining the past high rate. Please note that London house prices are falling slightly post-Brexit and that further acceleration in outward migration is unlikely. In addition, Sadiq Khan's plan for London (29/11/17) sets out measures to deliver housing within Greater London.
- 2c.3 We understand the difficulties in meeting housing need in London. But we question whether building in the countryside just outside the green belt is a sustainable solution. London's population density remains one of the lowest for European capitals and much is already being done to increase it. Moving people out to North Essex will put yet more strain on the Great Eastern Main Line, and should be avoided because increasing commuter capacity is disproportionately expensive.
- (d) Is the PBA Study justified in applying a market signals uplift of 15% for Braintree and Tendring, and in making no market signals adjustment for Colchester?

2d.1 No. There is no compelling evidence that any market signals uplift is required in Braintree or Tendring. See our 2017 consultation response page 42. We have since studied the ONS residence and work-based house price/ earnings ratios, and note that none of the North Essex Boroughs is above the average for the East of England.



HOUSE PRICE TO EARNINGS RATIOS



2d.2 We believe that applying a higher target to increase affordability will not achieve the required result and this should be addressed through policy rather than through OAN.

2d.3 Barton Willmore has attempted to set a national context for affordability, and has suggested that by setting a higher target the affordability ratio measured as house price / income will be reduced. There are many reasons why this approach is flawed. There is no simple correlation between affordability and housing targets – either at the national level or the local level. House prices are not elastic in the way suggested by Barton Willmore, because developers will not build to a higher target (locally or nationally) if house prices begin to drop.

2d.4 High house prices nationally should be seen as a consequence of low interest rates rather than a supply shortage. The politicians are sensitive to the problems of young house-buyers: but this is a distribution problem not a shortage in total supply: landlords have done well and young house-buyers have been left behind. If interest rates rise it will (after some potential market turbulence) reverse.

2d.5 The private rental market is a better indicator of supply shortage, but (other than in London) rents have barely kept pace with inflation. Our views are laid out in our response to the Government consultation and are consistent with the writings of Ian Mulheirn on https://medium.com/@ian.mulheirn/part-1-is-there-really-a-housing-shortage-89fdc6bac4d2



- . (e) Are the PBA Study's findings on job-led housing need justified, having regard to the economic models on which they are based and the assumptions embedded in those models?
- 2e.1 No. There can be no justification for building houses for jobs rather than people except in a "goldrush town" which is a significant importer of labour. North Essex is a net exporter of labour and expected to remain so.
- 2e.2 The economic models provide widely varying results and as such cannot be relied upon. We agree with Barton Willmore that assumptions can be challenged. Falling back on demographic forecasts is therefore a justified conclusion because Tendring, Colchester and Braintree are net exporters of labour and Colchester's working age population is growing faster than jobs are created (http://www.cause4livingessex.com/wp-content/uploads/2017/07/CAUSE-2017-Part-1-Consultation-response.pdf)
- (f) Is the PBA Study justified in concluding that there is no reason to adjust the objectively-assessed housing need figures in order to meet affordable housing need?
- 2f Yes. OAN calculates total need whether for affordable or market housing. More affordable housing is needed in mixed communities and close to jobs. But this should not increase the OAN total.
- . 3) Should the Section 1 Plan make provision for higher or lower housing requirement figures, and if so, what is the justification for the alternative figures? In particular:
 - (a) Should the requirement figures reflect those proposed by CAUSE (2,005dpa overall, comprising 624dpa for Braintree, 831dpa for Colchester and 550dpa for Tendring)?
- (b) Should the requirement figures reflect those proposed by the Home Builders' Federation (2,540dpa overall, comprising 762dpa for Braintree, 1,002dpa for Colchester and 776dpa for Tendring)?
- 3.1 We believe 2005dpa to be the highest sustainable figure given the current infrastructure deficit.
- 3.2 Having read the Home Builders' Federation and Barton Willmore papers, we still believe that applying PPG would lead to the adoption of the latest DLCG (2014) demographic forecast without the need for uplifts.



- (c) Should the requirement figures be reviewed to reflect the criticisms made by Barton Willmore in their *Technical Review of* [each] *Council's Housing Need Evidence Base* (July 2017), commissioned by Gladman Developments Ltd?
- 3c. 1 No. We agree with the Barton Willmore paper that any departure from the demographic starting point should be explained and justified. However, we disagree that alternative migration trends should be taken into account, that market signals and economic uplifts should be applied, that affordability ratios should be addressed through a higher OAN, that London migration should be added to the OAN.
- 3c.2 We believe that we have addressed these points in our response to the Draft Publication Plan and in more detail in our recent response to the Government consultation paper: http://www.cause4livingessex.com/wp-content/uploads/2017/11/CAUSE-comments-on-DCLG-housing-paper-9-Nov.pdf
- . 4) Are the affordable housing need figures set out in the HDH Planning and Development Strategic Housing Market Assessment Update, December 2015 [EB/019], (212dpa for Braintree, 267dpa for Colchester and 151dpa for Tendring) based on a sound analysis of the available and relevant evidence? In particular:
 - (a) Is the estimate of 5,462 newly-forming households annually, at Stage 2 of the analysis, consistent with the findings of the PBA Study?
 - (b) Having regard to the definition of affordable housing in the NPPF Glossary, is there justification for excluding single adults under 35 from those considered to be in need of affordable housing (at the "Refining the model in a local context" stage of the analysis), if they can afford shared accommodation in the private rented sector or can afford the LHA shared room rate?
- 4.1 Yes. We support the NPPF definition of affordable housing which is consistent with supplying need rather than demand.
- 4.2 CAUSE accepts the need to build more social rented and shared ownership housing well connected to employment and existing communities. We believe that Government should concentrate on this sector rather than private housing where it spends 75% of its budget and is likely to get its fingers burnt.



- 4.3 We do not accept standalone garden communities as a solution because it will take many years to create either local jobs or the necessary public transport infrastructure. Land value uplift is insufficient to fund both social housing and the necessary infrastructure.
- 5) Should policy SP3 make it clear that the five-year supply of housing land must include an appropriate buffer in accordance with NPPF paragraph 47?
- 5.1 No. Delivery is now recovering strongly following a sharp downturn during the credit crunch years. There is no record of persistent under-delivery which would justify a 20% buffer.
- 5.2 The three large cross border garden communities will make it very difficult to apply SP3 in practice. Councils say they will "allocate" housing numbers 50/50 on each border wherever the houses are to be built. But even if this agreement sticks the artificial allocations could be subject to challenge by developers. They are tantamount to "false accounting".
- . 6) How will any undersupply of housing against the relevant requirement since 2013 be accounted for in the Section 1 Plan?
- 6. We question the whole relationship between Sections 1 and 2 Plans on this point. We cannot see how the two sections can be inspected or managed independently. It is important that the garden communities are not used as a metaphorical future 'dumping ground' for unmet need from Section 2.
- 7) Should policy SP3 include mechanisms for:
- . (a) review of the housing delivery strategy in the event of a failure to maintain the required level of housing supply?
- . (b) review of the housing requirement figures in order to provide for possible future unmet need from other local authority areas?
- 7.1 No. We have serious concerns that the plans for NEGC are undeliverable and that the suggestions in 7 will open the door to an alternative and unsustainable plan without proper consultation or Inspection.



- 7.2 We question the relationship between Section 1 & 2 Plans and ask how the two will interlink with regards to housing supply.
- 7.3 The Plan is already attempting to deal with cross-boundary issues with neighbouring LPAs.
- 7.4 We are unaware of the existence of the Memorandum of Understanding referred to in the June 2017 Agenda Pack for Colchester's Local plan meeting (Paragraph 1.104) to create a mechanism to attribute housing completions when the settlement straddles district boundaries. All three garden communities are cross-boundary. As set out in Matter 1, we seek to understand more about how this will work in practical terms and how the NPPF allows for this.



MATTER 4

Providing for employment (policy SP4)

Main issue: Is there adequate justification for the employment land requirements contained in policy SP4?

Introductory remarks

The unusual and unprecedented scale of development proposed in Section 1 must be recognised – three garden communities, the largest of which is a 23,660-home garden **city**. It is not sufficient for our local authorities to address the issue simply through a policy of allocating employment land.

Housing should be located close to local jobs. Firms locating at CBBGC will be at a competitive disadvantage in generating local jobs because it is near a commuter station and housing cost will be driven by those who work in London.

Should policy SP4 also set retail floorspace requirements?

See Q8 for our response.

Questions:

- 1) Does the evidence base provide adequate justification for the employment land requirements for each local authority area set out in policy SP4?
- 1.1 NO. The approach, for development on the scale proposed in Section 1, via three garden cities, is too reliant on providing employment *land* rather than creating a policy which aims for a step change in employment *generation*.
- 1.2 Policies for providing for employment on this scale (4,000 working age adults in each garden community in the Plan period, 39,700 working age adults in CBBGC at full size) must go beyond the allocation of employment land and must be proportionate to the scale of development under consideration. Policies need to be clear about how a **step change in employment growth can be achieved**.
- 1.3 For a settlement of the size of CBBGC to be sustainable it is imperative that the garden city principle of one job per household or close by on public transport, is properly defined and addressed in policy. The Cambridge Econometrics report states that a step change in Colchester's employment growth is required to achieve this goal. There is no policy definition of 'close' to a garden community but Cambridge Econometrics makes it clear that the inhabitants of CBBGC will have to



travel across Colchester Borough, Tendring District, Braintree District and beyond (including London and Chelmsford) for work.

1.4 Comments on employment land:

- 1.4.1 Neither SP4 nor the DPD give details of Employment land for the first phase of development of CBBGC. The concept map does not allocate employment land for initial phase.
- 1.4.2 Hyas proposes Employment land in CBBGC at its full scope of 23,660 dwellings as follows: 7ha Employment B1/offices; 33ha Employment B2 B8/Industrial; 46ha Retail. In the early DPD Concept Framework currently under consultation, however this differs: Employment land allocation is 60ha, plus 'additional floor space within town centre and neighbourhood centres'. It is therefore difficult to understand the allocations if analysis has led to different thinking since submission of the Plan. This reinforces our view that the DPD consultation is premature and should not have taken place until an Inspector's report was received.
- 1.4.3 The Employment Needs Land Assessment states that Colchester has "sufficient employment floorspace in quantitative terms to meet future needs to 2032 under all scenarios of future growth." Therefore, the policy issue need not be about how much land is set aside in the garden communities but what strategy is in place to ensure that sufficient jobs are created for north Essex and, in particular for the garden communities. CBBGC risk becoming commuter towns or dormitory settlements.
- 2) Are the employment land requirements consistent with the housing requirement figures and the methodology by which the latter were arrived at?
- 2.1 The Plan places too much reliance on economic modelling in preference to demographic forecasting promoted in the PPG. Moreover, it chooses the most optimistic of forecasts to justify a higher housing target. We query the reliability of the economic models because anomalies remain unexplained. (See page 46 of our OAN report for further details: http://www.cause4livingessex.com/wp-content/uploads/2017/07/CAUSE-2017-Part-1-Consultation-response.pdf)
- 3) Does the evidence base take sufficient account of employment generators in the area such as Stansted Airport and the University of Essex?
- 3.1 The Plan does not do this and does not meet the objective of SP3, to "achieve a better balance between the location of jobs and housing, which will reduce the need to travel and promote sustainable growth", nor of NPPF paragraphs 34 and 35.
- 3.2 However, an excellent Cambridge Econometrics report in the evidence base makes an assessment of the prospects for employment growth in north Essex and does refer to the growth



points of the University, the ports and Stansted. Unfortunately its findings have not been applied in the Plan.

- 3.3 Cambridge Econometrics points to the need for Colchester to become a centre of regional importance ('Aspiration 3') if the NEGC councils are to meet their stated goal of one job per household or nearby, yet it casts doubts on Colchester's ability to achieve this. The report says that Colchester must correct the imbalance between population growth and employment growth and that it is unlikely a step-change will be achieved because:
 - Despite the focus on creative industries, media & IT have declined;
 - A newly dualled A120 will not bring significant jobs (only 150 to CBBGC, for example);
 - There are few public sector projects (e.g regional hospital) on the horizon.
- 3.4 CAUSE believes that an employment strategy for the North Essex Garden Communities is required. It must take account of employment generators in the area and that, in accordance with the requirements of the NPPF, housing should be located to minimise travel. Our particular concern relates to the ability of CBBGC to generate sufficient employment, even if employment land is allocated (which it does not appear to have been in the initial phase, in the Plan period).
- 3.5 Colchester Council said, in a Hearing Statement in 2008 (here: http://www.colchester.gov.uk/CHttpHandler.ashx?id=3404&p=0), that it believed a lack of economic opportunities at Marks Tey would mean that residents would have to travel, encouraged by the proximity of the A12/A120. See Appendix 2 for full statement. We feel that this Appendix is an essential addition to this Matter because it sets out many concerns raised by Colchester Council about significant development in the vicinity of Marks Tey:
- 3.6 "The lack of an established local centre or local economic opportunities, other than what could be achieved within the development, means any residents would be likely to need to travel into Colchester town on a regular basis. The distance into the town centre would be approximately 8km from the larger proposed site, and approximately 6km from the smaller eastern most proposed site. The close proximity of the A12 trunk road would encourage use of the private car. Even if large investments in public transport could be provided, the creation of a development with high levels of need to travel is likely to be undesirable and unsustainable."
- 4) Is it appropriate for the employment land requirements to be expressed as a range?

No comment.

- 5) Does the proposed level of employment land provision ensure adequate flexibility to accommodate unanticipated needs and rapid economic change?
- 5.1 A related issue is that the Employment Needs Land Assessment points to congestion in north Essex as a factor hindering economic growth in north Essex. The inadequacies of the infrastructure policies to support the housing numbers in the Plan do suggest that even if there is flexibility in land



provision, employment growth may be held back. The multitude of *external* connectivity issues of the three garden communities have not been addressed in the Plan.

- 5.2 This is particularly relevant to CBBGC's because if, as set out in Cambridge Econometrics, the only way to achieve one job per household or nearby is to set a huge catchment area, (in fact the Housing Market Area), then SP4 must clearly reflect this commuting area and policies must plan accordingly for the very high level of commuting which will result from CBBGC.
- 6) Should policy SP4 specifically require the North Essex Authorities to allocate suitable sites to meet their employment land requirements?
- 6.1 Yes. The Plan cannot be found sound if employment land has not been allocated to support the first phase of each garden community within the Plan period.
- 6.2 By way of example, the CBBGC DPD concept map neglects to include employment land, whilst also locating the initial phase at a distance from public transport, urban centres and jobs. The combination of poor location and lack of allocated employment land mean that the first phase of the settlement will not be sustainable because it does not meet the requirement of the NPPF to locate development to reduce travel (para 9), to reduce congestion (para 29), to minimise pollution (para 110) and to focus development on locations which can be made sustainable (para 17).
- 6.3 We seek to understand the inter-relation between Sections 1 and 2 on this matter and, as raised in point 7 or your initial observations, how a conclusion can be reached in the absence of any conclusion about Section 2, which will be examined *after* Section 1.
- 7) Should policy SP4 be more specific about the types of employment that the North Essex Authorities seek to attract to North Essex?
- 7.1 Policy SP4 should be more specific about its strategy for employment growth in North Essex, how it will do this and what types of employment it might seek to attract. Our Appendix 1, below, addresses the weaknesses in the NEGC approach in more detail and responds to a report in an agenda pack for the Local Plan meeting in Colchester 30/8/2017. We feel that this Appendix is necessary because it addresses specific issues raised after the consultation period and which related to the Matter but not to the specific questions.
- 7.2 Policy SP4 contains no incentives, no plans for sector hubs, no plans for cluster hubs, no plans for linkages across the region. There are no policies to relate employment growth to transport. To date, the only report we have seen which discusses the local authorities' economic strategy, was not in the evidence base. This was a report to the NEGC board called NEGC Economic Strategy. The report mis-reads and mis-interprets the conclusions of the Cambridge Econometrics paper. Relying on jobs in construction of CBBGC is not a long-term strategy, working from home is not an economic strategy (and anyway, these people will also move around and infrastructure needs to be provided accordingly) and jobs related to the A120 will not materialise (150 in CBBGC!). There appears to be much reliance on ambition and potential and the aspiration that the garden communities will 'provide an opportunity to accelerate employment'. This is not backed up by the Cambridge



Econometrics analysis. There was agreement at the meeting to create a north Essex economic strategy by September 2017. We have not had access to this report, if it is available.

- 7.3 Ebbsfleet Garden City provides an interesting example: new job growth is focused around Ebbsfleet International station, with a medical school for Kent as the hub; there is an Enterprise Zone at one part of the site. Much is made of the excellent transport connections for businesses externally, something which north Essex lacks, and is not addressed in the Plan.
- 8) Should policy SP4 also set out strategic requirements for retail floorspace? If so, how should these be arrived at?
- 8.1 We have concerns about the inter-relation between retail offerings in CBBGC, Tollgate and Colchester Town Centre and Braintree Town Centre in the settlement hierarchy. The sustainability appraisal aims to avoid harm to Colchester Town Centre, whilst, in the same table (Table 2 Economy Reg 18 Sustainability Appraisal Stage A3) stating that, "The site is well located to Tollgate, which could become a preferable retail destination for new residents rather than Colchester Town Centre" (3.4 Table 2, Economy). Section 2, Policy SG6 also addresses with the Town Centre Uses and we are unclear about the inter-relation between Sections 1 and 2 on this point. The lack of clear identity for CBBGC reinforces our concerns it is unclear from different reports in the evidence base whether the intention is for the settlement to be self-contained or rely on Colchester for jobs and services.
- 8.2 This needs to be addressed in policy because of the implications on retail centres in the vicinity of CBBGC and congestion in these centres.
- 9) Should policy SP4 be more clearly focussed, with explanatory material relocated to the reasoned justification?
- 9.1 YES. We believe that SP4 should be focused on creating a clear, policy-driven vision for employment growth in north Essex and each of the garden communities.
- 9.2 In a recent conversation with the Head of Design at Ebbsfleet Garden City, it became clear that the thinking on employment goes far beyond allocating land. An employment strategy is required before CBBGC is included in a Local Plan. The success, identity, sustainability of all the garden communities depends on the employment proposition, and the allocation of employment land does not address this. Lord Kerslake pointed to the need for an identity for each community and, without this, CBBGC in particular is likely to become a magnet for commuters, given its location between two commuter stations (Marks Tey and Kelvedon).
- 9.3 We also believe that Employment policy in SP4 needs to recognise, and set clear policies to mitigate, **out-commuting** from north Essex. Colchester and Braintree are net exporters of labour (Peter Brett, ENLA). Out-commuting from a development on the scale proposed at West Tey, particularly given proximity to two mainline stations, is likely to be the same, or worse, and will have a significant impact on the local infrastructure. This has not been addressed in policy and the infrastructure policies are inadequate as a result.



9.4 In addition, the issue of 'comparative disadvantage' needs to be recognised and addressed in policy:

- CBBGC's house prices are likely to be set by London commuters (two thirds of north Essex's new homes are bought by people moving into the area).
- The result, from an employment policy perspective, is that in- and out-commuting are likely to be higher than in a non-commuter location.
- This is because a high proportion of those able to afford to buy into the new city will
 only be able to do so on a commuter-salary, and those working on employment land
 or in-service jobs in the new city are likely to commute in.
- The likely extent of this pattern of commuting has not been assessed and nor has it been addressed in policy. The DPD Sustainability Appraisal acknowledges that 25% of adults travel from London to Colchester each day yet there are no predictions for CBBGC.

9.5 We hope that the councils have supplied the Inspector not only CAUSE's submission to the Draft Publication Local Plan consultation response but also our response to the Preferred Options consultation in September 2016. In appendix 6 we set out comments on the employment offering at West Tey: http://www.cause4livingessex.com/wp-content/uploads/2016/09/15092016Part-1-North-Essex-Preferred-OptionsFINAL.pdf



MATTER 5

INFRASTRUCTURE AND CONNECTIVITY (POLICY SP5)

"Infrastructure has to be at the heart of any major development. And as Secretary of State I will make sure that it is" Sajid Javid in a speech on 16 November 2017

Main issue: Does policy SP5 accurately identify the strategic infrastructure needs of North Essex over the Section 1 Plan period? Does it contain effective mechanisms to secure the provision of strategic infrastructure as and when it is needed?

No. The Plan restricts its focus to the three garden communities instead of identifying the strategic infrastructure needs of north Essex. A better approach would be to take a strategic, 'infrastructure first' overview of the area to determine needs and to plan accordingly. Instead, three locations have been selected from a call for sites rather than strategically and attempts are being made to fit the connecting infrastructure to the settlements.

Question 1) Does the list in policy SP5 of strategic priorities for infrastructure provision or improvements accurately reflect strategic infrastructure needs in North Essex over the Section 1 Plan period?

1 No. CAUSE has serious concerns about SP5 and does not believe it identifies or meets the infrastructure needs of north Essex. In fact, it is likely that the inadequate transport planning for the scale of development proposed in the garden communities will create unacceptable pressure on north Essex's roads, rail and hospital.

1.1 It is clear that infrastructure planning has fallen far behind housing. Colchester's Council, in particular, admits³ that its present transport infrastructure is unsatisfactory⁴. The solution it presents is the garden communities project, which it hopes will generate land value uplift to provide

³ See Transport paper presented to Colchester's Local Plan committee 30th August 2017. "The use of the motor vehicle dominates travel movements....... The operation of the network has an impact on the economic growth of the Borough..... poor air quality..... vulnerable to incidents."

⁴ This is re-inforced by Transport for England who rank them 29th out of 30 towns studied for transport



infrastructure. This brings two problems. Firstly, there is a disconnect between planning for infrastructure in Section 2, to support growth across the districts as a whole (as opposed to just in the new towns). Secondly, land value capture does not deliver enough money to fund the infrastructure required to deliver sustainable and well-connected settlements.

- 1.2. We feel that the lack of rigorous transport planning is a fundamental flaw in the plan. Very little consideration has been given to existing infrastructure capacity or the severance problems caused by major roads and railways. The limited thought that has been given to connectivity outside the garden communities indicates that will be severe difficulties in delivering any form of mass rapid transit and that no attempt has been made to plan for green infrastructure between CBBGC and surrounding settlements.
- 1.3 SP5 contains general aspirations for "New and improved infrastructure" "Substantially improved connectivity" "Promoting sustainable travel patterns" and "applying modal hierarchy". But it doesn't tell us what roads and railways are needed. We need nodes and terminals and defined modal links on a map. It will then become clear how to connect housing to jobs as required by the NPPF.
- 1.4 It is particularly disappointing that the Garden Communities have been sold to the public around a "step change" in transport infrastructure (see the box below) when the Plan contains so little strategic understanding of the matter.
- 1.5 Examples of key infrastructure improvements missing from the list or priorities include:
 - Insufficient mention of the capacity constraints on the Great Eastern Main Line
 - No mention of the need to move Marks Tey station which is central to the plans on which the Councils are currently consulting.
 - A120 / A133 link road, essential for East Colchester.
 - Bus Rapid Transit system or any other form of Mass Rapid Transit as promised repeatedly by Councillors in connection with CBBGC
 - External cycle-ways
 - A railway station at the University of Essex

⁵ See Garden Communities Charter "The Garden Community approach provides a new opportunity to plan the new communities around a step change in integrated and sustainable transport systems for the North Essex area that put walking, cycling and public transit networks and connections at the heart of growth in the area, encouraging and incentivising more sustainable active travel patterns".



1.6 The plan needs to protect routes for these items and lay out specific infrastructure criteria for approving planning consents. It needs to set out answers to questions including what, where, how, when, what cost, who pays, what risk.

1.7. We note that Highways England has concerns as follows, "OBJECT Highways England (mr Mark Norman) I note that transport modelling work has been carried out for the town centre sites this is welcomed. However, there appears to have been no cumulative impact assessment carried out of the impact of development in the villages. I am particularly concerned the impact on junctions on the A12 to the North of Colchester and the A120 could be severe. Particularly as growth is likely to come forward toward the front of the local plan period as the garden villages are reliant upon major improvements to both the A120 and A12 to come forward."

The Jacobs report

1.8 The Jacobs report dated 23rd May 2017 is the nearest we have to an assessment of the strategic priorities. Its "spider" diagrams would be helpful if incorporated into the plan. But unfortunately, it clashes with the plan and serves to highlight the uncertainty, un-deliverability and over-ambition of the NEGC proposals. In particular:

- 1.8a It pre-assumes the decision to build three garden settlements at specific locations. No
 report has looked at how settlements can be located to use existing infrastructure more
 efficiently, or considered the extra rail costs of building a new commuter settlement on the
 GEML. We suspect that the consultants have been warned off raising this point and that
 public money has been wasted as a result.
- 1.8b It is inconsistent with the DLA consultation proposals for CBBGC which were published 6 months later.
- 1.8c It is unclear whether some of the options costed in the transport interventions can actually be delivered⁶ and the David Lock concept map creates even further uncertainty. Much on the list depends on the route and timing of the A12 and A120 and therefore it is impossible to determine whether CBBGC at full scale, let alone in the Plan period, is deliverable.
- 1.8d It is apparent that the aim of the Western Parkway is to accelerate the deliverability of
 an early phase of CBBGC. However, Lord Kerslake in his peer review stated that CBBGC was
 entirely dependent on a dualled A120 being in place and it seems premature to attempt to
 commence CBBGC before then. Having looked at the layout of the Western Parkway, we

⁶ For example MRT links into the town centres, the last two miles being the most difficult. The bridge over the railway and A12 junction at the centre of the settlement.



agree with Lord Kerslake.

Table 1

Questions arising from Jacobs report, 23 May 2017	CAUSE comment / further questions		
What transport infrastructure will be delivered in the plan period to 2033.	If the Jacobs category of "GC Essentials" is to be delivered in the Plan period, then the minimum transport infrastructure cost per dwelling will be £148m / 2500 dwellings = £59,200 per dwelling. Including other infrastructure, it will be an unviable £98,000 per dwelling. Which "essentials" will be delayed?		
	Hyas total is £1182m, of which £250m is transport. This £250m compares with Jacobs' total of between £658- £743m. We note that Jacobs incorporates an optimism bias contingency of		
Should the Hyas report (April 2017) be re-done with the Jacobs transport infrastructure figures?	between 44% and 66% as opposed to the 5% included in Hyas modelling. This issue has been raised numerous times with our councils by CAUSE and in our Appendix on Costs & Risks in our submission to the Draft Publication Plan. Jacobs says: "Typically for schemes in early stages of development, a figure of 44% optimism bias would be applied to highway schemes and 66% for bridges and rail links to reflect the uncertainty."		
Will Network Rail accept stations so close together as Marks Tey, CBBGC and Kelvedon?	Marks Tey and CBBGC stations will only be 2.5kms apart, with only a short distance between CBBGC and Kelvedon. This is too close for a main line where "Norwich in 90 trains" mix with stopping local trains. The time-tabling impacts have not been assessesd.		
Will CBBGC achieve the reduction to 30% private car use during the plan period?	We feel we are justified in assuming that all 27 interventions are needed to come close to achieving the 'ambitious' modal shift scenario.		

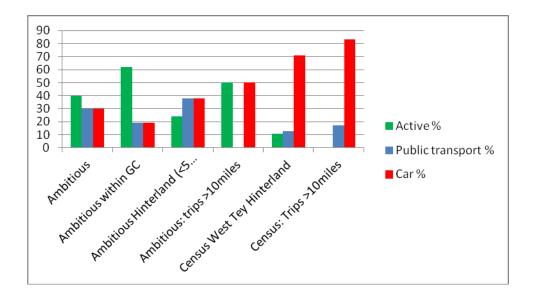
Modal Shift: Reducing car borne trips from 70% to 30%

1.9 The sustainable transport outcomes suggested for CBBGC are over-ambitious and without precedent for new communities⁷. The chart below summarises the Jacobs figures and illustrates the disparity between the census figures (70%+) and the ambition (30%).

Table 2

 $^{^7}$ This point is laid out in appendix 8 of our consultation response written in conjunction with Tim Pharoah of Living Transport





- 1.10 These mode split figures are essential for understanding the transport infrastructure provision which will be required to ensure that CBBGC is sustainable. For example, unless the 'ambitious' modal split is applied to the garden communities, development in Colchester's Local Plan causes congestion to increase. And, unless the 'ambitious' modal split is applied to modelling of a proposed express bus service, the service is not profitable.
- 1.11 While we agree that in the planning of a garden community there will be some scope to change the modal shift from the current Census figures WITHIN the settlement, it is clear that the majority of external trips will still have to be made by car. This is because the public transport options set out in Ringway Jacobs Garden Communities Movement and Access Report for CBBGC are no more than a wish list. Each option is fraught with uncertainty and difficulty. Many options are undeliverable due to existing road and rail constraints, some cannot be planned until route and timing of A12 and A120 is known and some are simply not affordable.
- 1.12 It is therefore essential to take great care using the figures in the Ambitious scenario and we believe that until mass rapid transit is proven, deliverable and in place, reliance should only be placed on the Census figures when planning for the likely number of car journeys to and from CBBGC.
- 1.13 We question the ability of the local and strategic roads to absorb the additional traffic from CBBGC in the Plan Period, let alone at full scale. AM and PM peak traffic as modelled by Ringway Jacobs shows huge variation, and none of the scenarios come close to the Department for Transport's 8-10 car trips per day per household, which would result in over 190,000 car movements



per day. Without a deliverable mass rapid transit solution, we believe that it is only right to plan for the impact of the upper range of car movements.

- 1.14 We include healthcare in the strategic priorities for north Essex infrastructure. It is of concern that this has not been given sufficient attention in the Plan. We draw your attention to the consultation response from the North East Essex Clinical Commissioning Group about the Draft Publication Plan:
- 1.15 "4.21 The West of Colchester Garden Community will add significantly to the number of patients within the catchment area. The location of existing facilities mean that it is unlikely that their expansion would address the needs over the plan period. Therefore, a new facility is likely to be required."
- 1.16 "4.22 The East of Colchester Garden Community will add significantly to the number of patients within the catchment area. The location of existing facilities mean that it is unlikely that their expansion would address the needs over the plan period. Therefore, a new facility is likely to be required."
- 2) Has each item on the list of strategic priorities been costed, and how will it be funded?

Costing:

- 2.1 There are three sources of cost data in the evidence base and these raise multiple questions:
 - AECOM feasibility study June 2016. We are critical of AECOM's "cost per dwelling" approach because it fails to consider transport networks or differentiate between locations. See Appendix 1.
 - Hyas viability study April 2017. This built on the AECOM work and uses an infrastructure total of £1.182bn which includes £250m for transport.
 - Jacobs Movement and Access Study 23 May 2017. This lists transport infrastructure interventions costing £658m to £1061m which raises a string of significant questions.
- 2.3 The Jacobs list of interventions required to achieve the ambitious modal shift targets more than double the cost included in the 23660 dwelling Hyas appraisal, and are more in line with the CAUSE estimates.



Table 3

Jacobs classification of 27 projects summarised by CAUSE				
	Min	Max		
	£m	£m		
GC Essentials	148	183		
Other before 2033	245	257		
After 2033 including station	265	303		
Total (£m)	658	743		
Number of dwellings (no)	25500	25500		
Transport infrstructure cost per dwelling £	£25,804	£29,137		
Hyas transport infrastructure cost per dwelling	£10,566	£10,566		

2.4 CAUSE believes that the Hyas infrastructure costs for CBBGC of £1.182 billion are seriously understated and that the 5% contingency is insufficient. Our engineers estimate that £1.8bn is required, plus a contingency of 40% or more. We believe that the Jacobs report supports this order of magnitude, although it is difficult to compare like with like.

Funding

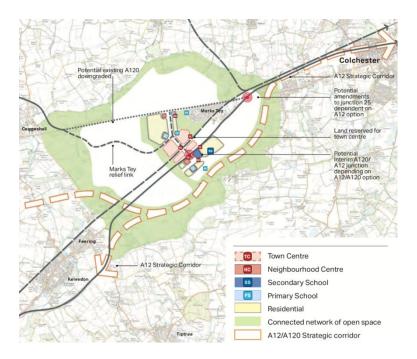
- 2.5 We believe the NEGC project in its present form to be un-fundable. The costings are uncertain, plot sale prices are highly cyclical and the land acquisition strategy unclear. Lord Kerslake recommends exploring options for private finance but that would seem unlikely without major government subsidy. Our views are supported by two senior financiers we have consulted and by our own viability consultant.
- 2.6 Government has been supportive in the funding of feasibility studies but there is nothing to suggest that the required investment in strategic infrastructure will materialise. Strategic focus is on the Oxford-Cambridge Arc, HS2 and Heathrow. There is little evidence to suggest that the north Essex local authorities have been able to follow Kerslake's recommendation of raising the profile of the NEGC project outside the garden communities team at DCLG. Infrastructure funding from Government is a far off dream.
- 3) Do the relevant infrastructure providers consider that each item on the list of strategic priorities (and any other necessary infrastructure) is deliverable during the Section 1 Plan period?
- 3.1 We list below the questions that we hope will be answered by experts at the Inspection. We refer to the DLA plans as the only indication we have of how, after three years, the Councils are



thinking.

• DLA initial plan: Are the DLA interim road layouts for CBBGC workable from a transport viewpoint? Will we need a new grade separated junction on to the A12? What sort of rail bridge do we need and has the 1.5m embankment been taken into account? Will this plan increase congestion on the Braintree roundabouts?

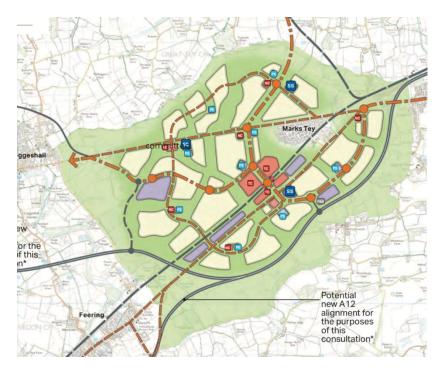
Table 4



DLA final plan: What changes are needed to make the road layout workable? Are there too
many junctions? Will it suffer from the same severance problems as the existing Marks Tey?
Will it work if routes D or E are adopted for the A120? How will the Mass Rapid Transit
system work? Will it be rail, tram or guided busway? How will the terminals work? How will
the town centres of Colchester and Braintree be accessed by public transport?

Table 5





- The cost of the new CBBGC station (c£140-£160m) is likely to push it into the long grass year after year, just as the situation with Beaulieu Park at Chelmsford.
- How will the Great Eastern Mainline cope with a new commuter town built on its route?
- 4) What constraints are there on the delivery of the strategic priorities (and any other necessary infrastructure), and how can they be overcome?
- 4.1 The issue of capacity on the GEML remains a serious concern. It has not been addressed at any stage of the plan-making process, despite CAUSE raising the issue at every consultation.
- 4.2 It is *the* major long-term constraint for CBBGC and although we agree that in theory it is sustainable to connect new settlements to the rail network, this is not the case if that part of the network is over-loaded. It would be better to plan housing near to jobs to reduce demand for long distance commuting to London.
- 4.3 Rail consultant, Jonathan Tyler, would like to attend the Examination on behalf of CAUSE. His views are laid out in Appendix 7 to our 2017 consultation response. In summary, the Anglia route study indicates a 75% increase in peak hour demand through to 2043. Council reassurances that they are in discussions with Network Rail are not adequate. Nor are references to the interventions in the Anglia Route Study as solutions because they are not costed, funded or scheduled, nor, even



in totality will they increase capacity sufficiently to meet demand. Improvements delivered through the Abellio franchise will offer limited short-term capacity increases but not solve the long-term issues.

Table 6

Discussions with Network Rail and Greater Anglia

7.A.5.6 Meetings were held in 2015 and 2016 with Network Rail, and both Network Rail and Greater Anglia attended North Essex Garden Communities Transport Working Group meetings in 2016 and 2017.

7.A.5.7 The Anglia Route Study prepared by Network Rail (March 2016) shows that while capacity varies along the Great Eastern Main Line, capacity to accommodate growth is limited and is particularly constrained in peak times from Chelmsford to London. Improvements are required along the Line to accommodate growth and provide a faster more competitive service across the region. The Study identifies a package of improvements necessary to respond to the need for increased capacity, which are seen as priorities to enable growth, improve services and journey reliability. A new franchise has been awarded to Greater Anglia for passenger services in the region. New services will be provided commencing 2018 and the entire fleet of trains will be replaced and in service by 2020 adding capacity.

- 5) Will policy SP5 ensure that the timing of infrastructure provision is aligned appropriately with the timing of proposed new development?
- 5.1 No. There is nothing in SP5 to give any such assurance. We request that:
 - SP1 be amended to include an "infrastructure first" commitment which will strengthen the Council's hand in negotiating with developers
 - SP5 be amended to restrict the development of the garden communities unless the promised "step change" in public transport provision is delivered
 - SP8, 9 and 10 be amended to include specific public transport measures without which housing will not be approved.
- 6) Are there effective mechanisms in place between the North Essex Authorities and the infrastructure providers, to co-ordinate the planning and provision of infrastructure?
- 6.1 No. It is clear that there are conversations, but no coherent plans. The Councils, whilst successfully co-operating with each other (so far), have failed in their duty to co-operate proportionately with infrastructure providers.



- 7) Should policy SP5 make specific reference to developer contributions and Community Infrastructure Levy as means of funding infrastructure?
- 7.1 Yes. The failure to collect CIL or proportionate S106 contributions lies behind the current infrastructure deficit and the increasingly desperate attempts to build large scale new towns.
- 8) Should facilities for leisure and sport, and for equestrians, be included in the list of strategic priorities?
- 8.1 Yes, but these can be planned in detail later. The countryside presently provides marvellous natural facilities and it will be sad to see them boxed into artificial sports centres and country parks.



MATTER 6

Viability

Introductory comments

0.1 A letter from the Chairman of NEGC dated 16 November is available here:

http://www.cause4livingessex.com/about-cause/cause-papers-and-evidence/matter-6-zappendix-3-negc-letter/. It suggests that the Inspector should restrict himself to considering planning viability in accordance with the Harman guidelines and that delivery viability can only be assessed by NEGC.
We are advised that this is incorrect. There is no distinction between delivery and planning viability in the NPPF. Where, as in this case, viability is key to delivery of the Plan it must be fully examined.

0.2 We are also advised to ask whether the Councils can demonstrate that there is no conflict between their roles as planning authorities and as owners and directors of NEGC. This letter illustrates the confusion: it is on ECC letterhead (ECC being a Planning Authority for certain matters) but signed by Councillor John Spence as chairman of NEGC. The letter tries to use the legally distinct roles to side-line full examination of viability, yet the letterhead confuses them.

0.3 The Councils are promoting the GCs on the basis that land value uplift will be sufficient to fund the infrastructure requirements over 50 years plus. This concept is untested in planning, market and deliverability terms and the scale of the proposals is unprecedented. The garden communities are needed to deliver the OAN and there is no mechanism or alternative proposal to rebalance the Plan if they fail.

0.3 Viability is real – it isn't about following a set of rules. If viability is ignored now there is a good chance that NEGC will be unable to raise finance and long delays will result.

0.4 We are not saying that all new developments are unviable – far from it. We are just saying that CBBGC isn't viable: it is a standalone settlement located without consideration for local jobs or underused infrastructure⁸ and there are scale diseconomies in funding the land assembly. Study of

⁸ See our August 2017 Consultation Response pages 62 and 74. See also Nicholas Falk's 2014 Wolfson prize



the key differentiators of location and DCF methodology is needed to choose the right location.

Question 1: How were the broad locations for the proposed garden communities selected, and what evidence documents were produced to inform their selection?

- 1.1 We believe that there is no proportionate evidence to justify the two key decisions in the plan
 - i) to concentrate on garden communities rather than balanced growth and
 - ii) the choice of the three locations.
- 1.2 The only evidence presented to justify these decisions is the Sustainability Appraisal (EB/014 Appendix 1). But this document fails to address differential cost and employment issues (the "economic dimension" required by para 7 of the NPPF) and many of the judgements made are subjective¹⁰.

Question 2: Have land-scape, agricultural land, flood-risk and heritage assessments been carried out to inform the locations of the proposed garden communities?

We have concerns about the significant loss of Grade 2 agricultural land at CBBGC.

Question 3: Is the Sustainability Appraisal of the Garden Community options [EB/014 Appendix 1] robust, particularly with regard to its threshold of 5,000 dwellings?

- 3.1 CAUSE believes that the sustainability appraisal is not fit for purpose. We do not support the 5,000 dwelling threshold. No convincing evidence of scale economies is presented and we believe that the key issue is connectivity, not size.
- 3.2 CAUSE's Metro Plan, proposed by Nicholas Falk¹¹ and Alan Stones, shows how a series of well-connected smaller settlements can offer economic efficiencies. Primary healthcare and schooling

winning essay on this subject.

⁹ See page 5 of our August 2017 consultation response for a detailed explanation

¹⁰ See our August 2017 Consultation Response Appendix 2.

¹¹ Dr Nicholas Falk, BA (Oxon), MBA (Stanford), PhD (London), Hon FRIBA



can be provided in the small settlements, whilst secondary facilities are provided in Colchester or Clacton or an intermediate location. The rail line linking them together is the key.

- 3.3 The literature on Garden Settlements suggests that 5000 should be a maximum size not a minimum. Poundbury provides a good example of how a small Garden Settlement can succeed. It will only have c. 2000 dwellings by 2025, less than 1/10th the size of CBBGC. It is an urban extension to Dorchester, not a standalone settlement like CBBGC.
- 3.4 CAUSE believes that no serious attempt has been made to understand the planning benefit or economics of a string of smaller settlements based along an underused rail line. Our comments on the AECOM appraisal of our Metro Plan are shown as an appendix to our Matter 5 statement.

Question 4: Are the locations for the proposed garden communities and any associated green buffers adequately and accurately identified on the Policies Maps? Should they be more, or less, clearly defined?

- 4.1 There is no adequate definition of the location or layout of the garden communities in the submission Local Plan. The Proposals Map just shows "areas of search". We are left guessing at what is to be delivered and the supporting reports from AECOM, Hyas, Jacobs and DLA are inconsistent and confusing.
- 4.2 Plans for CBBGC by David Lock Associates, provided after the Local Plan was formally submitted for the latest consultation, propose a layout. But they are premature, misleading¹² and ignore significant transport issues.
- 4.3 These DLA plans suggest an "Initial Stage of Development¹³". This is important because it is the only indication we have of how 2,500 dwellings will be delivered in the plan period to 2033. We hope that the Inspector will want to be satisfied (perhaps under Matter 5) whether it is wise to plan to build so many dwellings in the absence of any certainty on A12 / A120 realignments.
- 4.4 This Initial Stage is also unviable CAUSE estimates the infrastructure cost at more than £100,000 per dwelling even when all 2500 dwellings are built because it requires a new graded separated junction on the A12 and a new bridge over the GEML.
- 4.5 The DLA proposals provide no identity to the new community, and replicate the major severance

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¹² The David Lock Associates plans are misleading because they understate the area needed for housing by 200 hectares and because they fail to portray the scale and complexity of transport infrastructure required.

¹³ NEGC Issues and Options Report page 91 Figure 5.2.



problems already experienced at Marks Tey. They propose a town divided by a railway, with a grade separated junction in the centre¹⁴.

4.6 Much greater definition is required if the plan is to be sound. Both location and infrastructure need to be better defined.

Question 5: Have the infrastructure requirements of the proposed garden communities been adequately identified and costed?

- <u>5. 1 a) Road improvements:</u> the A12 and A120 improvements are being well explored and costed to the Carden Communities are confusing. CAUSE has spent many hours going through reports by AECOM, Hyas, Jacobs and DLA trying to find consistency, but we struggle to find any.
- 5.2 a)The County Council's A120 costings include a 44% contingency for known routes which have been carefully specified and considered. We regard the 5-15%¹⁶ contingency in the Hyas appraisal as inadequate for a project at this stage of planning. We have evidence¹⁷ that best practice and common sense would demand a contingency of at least 40% at this stage.
- <u>5.3 (b) Rapid public transit, bus and park-and-ride services</u>: we have not seen any agreed layout so costing is difficult. AECOM's "cost per dwelling" is inadequate to inform the choice of the "areas of search".
- 5.4 (b) The Jacobs report lists the interventions required to reduce car usage from 70% to 30%. The resulting cost per dwelling is more than double the Hyas number¹⁸.
- 5.5 (b) The Hyas viability figures are based on the original AECOM feasibility study which multiplies up standard costs per dwelling rather than considering any particular transport network. The Jacobs report supports CAUSE's view that Hyas's total infrastructure cost £1.182bn is much too low.

¹⁴ This will happen if the Concept Plan Initial stage proceeds before the A12 is realigned, something that would require a grade separated junction onto the existing road. It would be expensive to remove this in the completed settlement, so we assume it would be left in the centre of the town.

¹⁵ We understand that Route A has been dropped and more costing work is being done before a decision is made on B,C,D or E.

¹⁶ Hyas only show a 5% contingency. The Councils have claimed that there is 24% but are unable to find where it is hidden. A maximum of 10% could be hidden in the figures between AECOM (which specifically exclude all contingencies) and the Hyas £1182m estimate.

¹⁷ See page 77 of our 2017 consultation response

¹⁸ See CAUSE's matter 5 Hearing Statement



- 5.6 (b) We believe that much more attention needs to be given to public transport costings of alternative locations before CBBGC can be included in a sound plan.
- 5.7 (c) water supply and waste water treatment; The AECOM figures are based on cost per dwelling rather than an assessment of the requirements for each location. For example CBBGC, which is far from any reservoir, is assumed to have the same water infrastructure cost per dwelling as East Colchester which is close to Ardleigh reservoir. This should be looked at in more detail before the location of new settlements is decided.
- 5.8 (d) primary healthcare; AECOM figures are based on a cost per dwelling.
- 5.9 (e) schools and early years' provision; AECOM figures are based on a cost per dwelling.
- <u>5.10 (f) leisure and sports facilities.</u> AECOM include £10m for country park landscaping in each GC which implies a scale economy for the bigger settlements. We find this surprising as smaller settlements will have better access to the countryside and less need for artificial landscaping.

Question 6: Is there evidence that the infrastructure required will come forward within the necessary timescales?

- 6.1 The Councils have repeatedly assured the public that infrastructure will come forward before or alongside housing, but there is insufficient definition of the requirements in the Plan. Nor is there evidence that an infrastructure first policy is achievable:
 - 6.1.2 Expectations that infrastructure can be funded from land value uplift are not well founded. See chapter 9 of CAUSE's August 2017 Consultation Response.
 - 6.1.3 The track record of infrastructure delivery in North Essex is poor: Colchester is the fastest growing town in Eastern England but has fallen badly behind on infrastructure¹⁹.
 - 6.1.4 The Hyas appraisal suggests that no Mass Rapid Transit system or new station, both central to the DLA proposals, will be delivered until 2058.

Question 7: Should policies SP7, SP8, SP9 and SP10 make more specific requirements as regards the provision and timing of the infrastructure needed for the proposed garden communities?

7.1 Yes. This is essential if the Local Planning Authorities are to be in a position to control speculative applications by private developers, who are likely to submit planning applications to

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¹⁹ See transport paper presented to Council in August 2017



deliver development privately, should NEGC fail to deliver. More definition is required in the following areas:

- 7.1.1 The Plan should include a rough layout²⁰ and outline specification for public transport infrastructure. Reference to "an urban public transit system using trains (including light rail), trams and guided bus" is inadequate.
- 7.1.2 We need to know the A12/A120 routings before CBBGC can have sufficient definition for inclusion in a sound plan.
- 7.1.3 The Plan needs to take into account the impact of a commuter settlement on the limited capacity of the GEML particularly between Shenfield and Stratford. CAUSE estimates the capital cost per extra commuter at £170,000 based on the cost of Crossrail 2²¹.
- 7.1.4 The plan needs to close the gap between the public promises made on infrastructure
 and the timings shown in the HYAS viability study. Hyas show no mass rapid transit system
 or new railway station, both central to the Concept Plan, until 2058

Question 8: The key viability issues raised by question 8 are attached at Matter 6 Appendix 1

This is justified because this is a complex subject on which we have expertise and which requires detailed analysis.

Question 9: Is there evidence to demonstrate that 30% affordable housing can be viably provided at each of the proposed garden communities? Is it appropriate for this figure to be set as a "minimum" requirement?

9.1 No. CBBGC is not viable and cannot therefore afford to honour affordable housing promises²² any more than its infrastructure promises. Affordable housing particularly needs public transport connecting residents to jobs and CBBGC promises delivery only in 2058.

Question 10: Is there evidence to demonstrate that each of the proposed garden communities can support the range of facilities that are required by policies SP7, 8, 9 & 10?

10.1 No. A credible viability model is needed before such facilities can be promised.

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²⁰ The spider diagrams in the Jacobs report would suffice

 $^{^{21}}$ See CAUSE's September 2016 Consultation Response Appendix 7 "External Rail Costs" Appendix 2

²² Hyas assume 30% affordable in calculating their residual of £177,600 per acre and show sensitivities around that figure. See page 33.



Question 11: Is there evidence to show that each proposed Garden Community is capable of delivering 2,500 dwellings within the Section 1 Plan period?

11.1 No. 2,500 per settlement appears to be a political solution rather than sound in planning terms. The three settlements can only come forward at different times. Most parties agree with us²³ that CBBGC cannot be started until both the A12 and A120 are realigned. We believe this makes inclusion in the plan premature.

Question 12: Have appropriate arrangements been made to apportion dwelling numbers at each proposed Garden Community between the respective housing requirements of the relevant local planning authorities?

12.1 This will be source of conflict and is likely to delay delivery. Our comments are on pages 3-4 of our Matter 1 hearing statement.

Question 13: How much employment land is to be allocated at each proposed Garden Community, and how many jobs is each expected to provide, both within and beyond the Section 1 Plan period? Should this information be included in the policies?

13. We question whether allocating large blocks of land for employment will itself create jobs for local residents. CBBGC will be at a <u>comparative disadvantage</u> in achieving this policy objective because house prices will be driven by London not the local economy. Our comments on employment are covered in our Matter 4 statement.

- 16) Should policies SP7, 8, 9 & 10 include:
- (a) a requirement for the optional national water use standard of 110 litres per person per day?
- (b) a requirement to minimise the impact of external lighting?
- (c) reference to specific standards for green infrastructure?
- (d) provision for bridleways?
- (e) specific reference to places of worship as part of their requirement for community facilities?

²³ We support proportional growth at Marks Tey as is being considered by their neighbourhood plan group.



16.1 Yes. It is important to detail all the requirements for sustainability to protect against unsustainable private development in case NEGC fails in its endeavours.

Question 17: Is the proposal to prepare subsequent Development Plan Documents [DPDs], setting out the design, development and phasing principles for each Garden Community, justified?

17.1 We support genuine two-way consultation. But we regard the current DPD consultation as premature, a poor use of public funds, pre-determinative and unsatisfactory for the Planning Inspection process.

17.2 We believe that SP 9 and 10 should be dropped from the Plan. Rushing to include them in the current plan is commercially naive²⁴ as well as premature.

Question 18: In guiding the development of the proposed garden communities, is there an appropriate division between the roles of the Section 1 Plan and the DPDs; or should the Section 1 Plan set out more detailed requirements than it does currently?

18.1 We respectfully suggest that the Section 1 plan is neither deliverable nor credible, and therefore not sound. It will be difficult to assess its soundness in isolation from Section 2 and the DPDs and if anything goes wrong it will result in unsustainable development.

Question 19: The key issues raised by the Inspector's questions about the current and future land ownership arrangements are covered in Matter 6 Appendix 2.

This is a complex matter requiring detailed analysis. Please see Appendix 2.

20 Are the proposed governance and delivery mechanisms for the garden communities, potentially involving Local Delivery Vehicles, appropriate?

20.1 The LDVs (owned by NEGC) are planning an expansion of public sector activity into speculative²⁵ land ownership and infrastructure provision. Their plans to date demonstrate that they don't have

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²⁴ See our response to question 19 below

²⁵ We use the word speculative because the commercial risks of buying land to sell as housebuilding plots are significant. The price of building plots is much more volatile and uncertain than the price of housing and investors will want a high return to justify the cyclical risk.



the money, skills or experience to deliver their promises. If they hope to raise private capital, as proposed by Lord Kerslake, they need a credible business plan; but our viability work shows that this is impossible without an unrealistic level of government subsidy.

20.2 We also believe that the LDV's governance structure is wrong. The interests of landowners on the board will be directly opposed to the provision of infrastructure first. Councillors on the board will be protecting their own patches and arguing about allocation of housing numbers. Local people whose lives will be affected are excluded completely: the emerging plans from DLA demonstrate a lack of understanding of the countryside and we feel that town based councillors are imposing a vision which we simply don't share.

20.3 Pages 7 and 8 of our August 2017 Consultation Response lay out why NEGC will be a negotiating forum rather than an effective quango.



MATTER 7

The spatial strategy for North Essex (policy SP2)

Main issues: Does the spatial strategy set out in policy SP2 represent the most appropriate strategy, when considered against the reasonable alternatives?

Does policy SP2 adequately and appropriately define the role of each tier in the settlement hierarchy?

Questions:

- 1) Taking account of the Sustainability Appraisal and other relevant evidence, is the spatial strategy in policy SP2 justified as the most appropriate development strategy for North Essex, when considered against the reasonable alternatives?
- 1.1 NO. This is a high-risk strategy, fraught with complication, with no evidence of deliverability, prepared with indecent haste. There is no 'Plan B'. We are concerned that notional garden city principles are being used to justify inappropriately large-scale development in unsuitable locations. There are several more appropriate alternatives which offer greater sustainability and viability than very large, stand-alone settlements.
- 1.2 CAUSE is supportive of the need for development and we first engaged with the Local Plan in January 2015, in the Issues & Options consultation. We were clear then that the strategy for large, stand-alone garden communities was not the most appropriate one and that master-planned, compact urban extensions were a more suitable alternative. In Autumn 2015 we presented a transit-oriented development proposal, The Metro Plan. We have repeatedly called for prioritisation of brownfield land, and the evidence base demonstrates that brownfield has not been given full consideration in Sections 1 or 2. We included a vision for north Essex in our submission to the Draft Publication Plan. We have called repeatedly for homes to be located near to employment to reduce travel.
- 1.3 We are supportive of an infrastructure first approach, such as proposed by Dr Falk of URBED in his Wolfson prize-winning submission 2014, the CPRE's transit-oriented approach and SmartGrowth. We believe that Poundbury offers a model for successful development, as does Vauban in Germany. Eddington in Cambridge is based around excellent principles of master-planning, affordability and connections to its urban area. And Ebbsfleet Garden City, although slow off the ground, offers huge potential as a well-connected urban regeneration project. In all of these examples, it is connectivity which is crucial for sustainability, and this is a key



component which is missing in the NEGC project. We find ourselves agreeing with part of Sajid Javid's pre-budget speech on housebuilding in which he stated that sensible decisions are needed about what needs to be built and where.

- 1.4 Our comments on the Sustainability appraisal are in Appendix 02 of our consultation response of 6 August 2017.
- **1.5 Choice of location for garden communities.** Lord Taylor's report on Garden Villages reminds us that location is important. He notes that councils should not always take the shortcut of locating new settlements where there are landowner volunteers, but must instead look at maximising connectivity, minimising impacts on residents and minimising constraints and costs. Looking at each of his three criteria in turn, it is clear that there has been no spatial strategy to choose locations of garden communities.
 - Connectivity has not been maximised and there is still huge uncertainty surrounding external transport infrastructure at all three garden communities.
 - The spatial strategy chosen by our councils creates maximum impact on everybody, not just those whose villages and homes will be 'subsumed'. The character of beautiful, rural north Essex and its villages is at risk. The area will be changed forever yet the views of residents appear to count for nothing. A council leader has been heard to refer to the West Tey area as a 'blank canvas'. It is not. People live, work, go to school there. The financial risk is shared by all residents. An unnecessarily high OAN appears to justify the NEGC project.
 - Constraints and costs could not be higher, particularly at West Tey. The
 infrastructure requirements of this stand-alone settlement far from jobs, on
 an overcrowded road and rail network, with severance by three roads and
 two rail lines, could not be higher. (Lord Taylor's report:
 https://policyexchange.org.uk/wp-content/uploads/2016/09/garden-villages.pdf)
- 1.6 **Alternatives.** We believe that a more appropriate spatial strategy for north Essex would involve a number of more sustainable options:
 - 1.6.1 Smaller developments and master-planned urban extensions built to garden city principles. There is no justification for the scale of the three North Essex Garden Communities.
 - 1.6.1a The time it takes to plan and build large and complex new towns means that deliverability is an issue. We agree with Strutt &



Parker, in Gladman's submission, that build-out rates in large developments are slow and that smaller schemes are more justified, especially in Braintree District where, as of March 2017 there is a land supply of under five years (3.91 years).

- 1.6.1b The over-reliance on risky, long-term garden communities of the scale proposed does nothing to assure a five year supply, or to address affordability for those on a housing waiting list (around 4,000 in Colchester). Would it be better for the north Essex authorities to focus on these issues? Braintree, for example does not have a five year supply. Neither has it progressed work on an arm's length housing deliver company it first mooted in 2016, which would help to deliver affordable housing.
- 1.6.1c Lord Taylor argued that new villages, between 1,500 and 5,000 homes, are more acceptable to local residents, deliver more quickly, and offer greater viability. Smaller developments, contrary to council arguments, are able to provide infrastructure. For example, we note from Gladman's submission, that Essex County Council requires between 3,000 and 4,000 homes to support a secondary school.
- 1.6.1d A well-planned urban extension can better meet NPPF requirements of reducing travel than remote settlements. The NPPF also requires that viability be taken into account, and infrastructure costs for an urban extension are lower than those for a new settlement started from scratch. Viability for a stand-alone settlement becomes more challenging the greater the distance from an urban settlement.
- 1.6.1e We question why urban extensions such as North Colchester (Colchester) and Temple Border and Brook Green (Braintree) were not considered suitable options. All three are big enough to enable master-planned communities to come forward. Garden city principles should apply to all significant developments. The Sustainability Appraisal does not justify why these sites were not selected.
- 1.6.1f Transit-oriented growth. CAUSE's Metro Plan, which focuses growth in compact developments around public transport hubs using under-used infrastructure, has been rejected because of the arbitrary and unreasonable strategy for very large developments.
- **1.6.2 Brownfield first.** This option has not been fully explored. Greater efforts could be made to prioritised brownfield development before thousands of



hectares of high grade agricultural land are lost to low density garden communities. Colchester's brownfield register excludes village and rural (including on farmsteads) sites. Braintree has no brownfield register but the SHLAA appears to offer sites with the capacity for over 5,000 homes which would be suitable for consideration but have not been included in the Local Plan.

- 1.6.3 Transit-oriented development. Viability and sustainability can be increased, and car travel reduced, if under-used rail infrastructure is fully used. The Colchester-Clacton line offers the prospect of a mass rapid transit system for a mere fraction of the cost of starting from scratch to the west of Colchester where roads, and mainline rail, are congested. Development should be concentrated in compact, walkable developments surrounding stations and should offer low order services. High order services could be accessed via train in urban areas. This proposal meets Colchester & Tendring's policy objectives of reducing car travel.
- **1.6.4 Urban regeneration and intensification.** These should be given more attention, as in London's housing strategy 30/11/17. Philip Hammond's Budget 23/11/17 also noted the need for urban growth, particularly near public transport. High density urban housing can better support public transport than low density garden communities.
- 1.6.5 Proportionate growth of villages. Support for local services is important
 and proportionate development in villages can provide this support. Local
 agreement about how best to grow a village is essential, and Neighbourhood
 Plans are a good means of achieving agreement. Affordable rural housing for
 locals is much needed and tends to be more popular with the local population
 than market housing.
- 1.6.7 Marks Tey emerging Neighbourhood Plan Our understanding is that council proposals for CBBGC conflict with the ideas emerging from the Neighbourhood Plan group in Marks Tey, which has sought advice from planning consultants and carried out a residents' survey. It appears that residents of Marks Tey desire growth which supports the village, adjacent to the village, and provides betterment (reduced severance by bridges; cycle-ways, protection of views; better local shops etc). This is not reflected in the DPD Concept map, which removes development to an isolated green field site at a distance from the village, accessed by car, and which provides no improvement to the community of Marks Tey. We hope that the Neighbourhood Plan will be taken into account.

1.7 We have already noted inconsistency in decision-making with regards to spatial strategy in Appendix 02 (critique of Sustainability Appraisal) of our submission. Temple Border was rejected for



reasons which apply to West Tey. Monks Wood was, correctly rejected, yet West Tey has been included in the Plan while suffering many of the same locational disadvantages.

2) Why does the spatial strategy include provision, at the proposed garden communities, for substantial development beyond the Section 1 Plan period?

- 2.1 Firstly, the focus on the very long-term has resulted in a lack of focus on the needs of the area in the near term (5 years and the Plan period), for section 2 as well as 1. The garden communities are required to deliver 2,500 homes each to 2033, yet there is no plan for how this will be done. The Early Housing Option proposed in the DPD consultation for CBBGC is, with the lack of certainty about key infrastructure, both undeliverable and meaningless. It raises more questions than it answers: where, how, what, what cost?
- 2.2 We believe that it is important to set the NEGC proposals into a wider context. The map below shows that the garden communities proposed in the predominantly rural A120 corridor represent a wholescale urbanisation of the area. An urbanisation of this corridor represents a nearly unbroken continuation of the Oxford-Cambridge Arc, which starts just north of Stansted, with one of the five proposed garden towns at Great Chesterford.
- 2.3 If, and it is an if, the scale of development proposed for the A120 corridor is considered appropriate then our councils will need to co-operate not only with each other to produce Local Plans but also, in a co-ordinated manner to lobby Government for strategic infrastructure investment to support the 56,000 homes proposed (in garden communities *alone*) in this corridor.
- 2.4 It is quite apparent from the evidence base and from our discussions with the councils, that the three NEGC communities are considered as isolated settlements and that connections with the outside world (particulary in terms of Mass Rapid Transit, upgrades to the GEML, upgrades to A120 and A12) are only at germination. NEGC's plans are premature.
- 2.5 Only if the councils are able to return to the people of north Essex with commitment from Government and the National Infrastructure Commission to support the A120 corridor with a strategic, infrastructure first approach to the area, should these proposals be consulted on again. Until then, the unknowns are too great and the risk to the entire area and to council budgets of this project is too high. We believe that the only sensible option to create a sound Plan is to go back to the drawing board for the long term vision and to concentrate on individual Section 2 Plans for the Plan period.



Easton Park: Up to 10,000 homes 'West of Braintree' Garden Community/ Andrewsfield: Up to 13,000 homes 'West Tey' (Colchester Braintree Borders)Garden Community: Up to 24,000 homes 'East Colchester' Garden Community: Up to 9,000 homes



3) Does policy SP2 adequately and appropriately define the role of each tier in the settlement hierarchy?

- 3.1 NO. It is still not clear from the evidence base what the relationship between the garden communities and the urban areas will be nor how this can be assessed in a Plan in two Sections. Sustainability appraisals are confused about whether CBBGC in particular should be self-contained or rely on Colchester for jobs and services.
- 3.2 The relationship between Colchester and Braintree Town Centre, Tollgate and CBBGC town centre is not properly explained. The Sustainability Appraisal for the most recent sustainability appraisal (supporting the DPD Concept Framework) is still confused it talks of the need to protect Colchester Town centre but says that residents of CBBGC are likely to use Tollgate. This would result in further unsustainable growth in traffic to Tollgate and residents are already concerned about traffic congestion in this area.
- 3.3 It is not clear what the role and identity of each garden community is, nor its relationship with its neighbouring urban centres.
- 4) Is the detail in paragraphs 3.3 to 3.5 relevant to Section 1 of the Plan? If it is, should it be included in policy SP2?

No comment

- 5) Should paragraph 2 of the policy refer to the need to avoid the coalescence of settlements?
- 5.1 YES and not just with reference to the villages in the area of search which, according to the DPD consultation will be 'subsumed' by CBBGC. It is important to look at the entire NEGC area when answering this question. A quick glance at a map will show that there is a risk that the NEGC project represents a near continuous urbanisation of the A120 corridor from East Colchester through Marks



Tey to Coggeshall, (with a small break between Coggeshall and Braintree) and then from Braintree to Andrewsfield.

- 6) Does the reference to "Garden City principles" in the last paragraph of the policy identify the principles that are intended with sufficient clarity? What is the relationship between these principles and the North Essex Garden Communities Charter (June 2016)?
- 6. 1We agree that these are important questions. Without clarity, it will be impossible to ensure that policy can deliver garden city principles. As we have already noted in Matter 2, paragraph 1.98 of the agenda pack for Colchester's Local Plan meeting in June supporting Section 1, states that development in the identified locations would not be acceptable if the policy framework cannot secure the principles of garden communities. We do not believe that the policy in the submitted Plan offers clarity or any realistic prospect of garden city principles being delivered.



MATTER 8

The proposed new garden communities – specific matters (policies SP8, SP9 & SP10)

The Tendring / Colchester Borders proposed garden community (policy SP8) 21) What evidence is there to demonstrate that the Tendring / Colchester Borders proposed garden community is capable of delivering a total of 7,000 to 9,000 dwellings?

We question whether the first phase of 2,500 homes is deliverable with the promised infrastucture, let alone the full scope of 7,000-9,000 homes.

22) Should policy SP8 refer to the need for a dual-carriageway link between the A120 and A133?

Yes

23) Is it appropriate for policy SP8 to require provision of a country park along the Salary Brook valley incorporating Churn Wood?

Yes. Local people have campaigned for this for years.

24) Should Salary Brook also be designated as a Local Nature Reserve?

Yes. Local people value Salary Brook and it is essential to protect it.

The Colchester / Braintree Borders proposed garden community (policy SP9)

- 25) What evidence is there to demonstrate that the Colchester / Braintree Borders proposed garden community is capable of delivering a total of 15,000 to 24,000 dwellings?
- 25.1 We question whether there is evidence that the Colchester /Braintree Borders garden community could deliver 2,500 homes in the Plan period, let alone 15,000 to 24,000 in the long term. Lord Kerslake, in his Peer Review, made the following comment, "West Colchester/Marks Tey would be a large and complex project to deliver on its own, quite apart from the other two. It is absolutely dependent on upgrading the A120, and has complex land ownership. As a result it may take longer for the councils to deliver this development than the other two sites."
- 25.2 The Publication Plan shows only a broad area of search and, we do not believe that the current DPD Options consultation for CBBGC can be considered as evidence that the first phase (Early

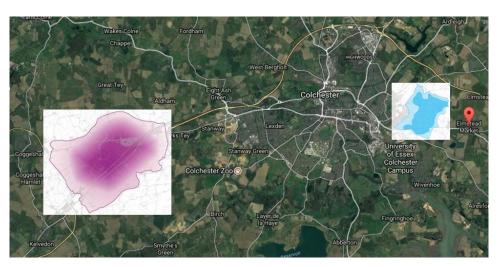


Housing Option) is deliverable because of the level of uncertainty surrounding key infrastructure. The concept map shows that:

- 25.2.1 The A120 route is not known, nor is funding guaranteed, nor is timing known;
- 25.2.1 The new A12 route is not known;
- 25.2.3 There appears to be no employment land on the Early Housing Option map;
- 25.2.4 There is no guarantee of a new station and it is therefore unwise to create a new settlement on the basis that one might materialise. Even if funding were available and Network Rail willing, a study for CAUSE in 2015 by Jonathan Tyler, for Passenger Transport Networks found that the Great Eastern Main Line's capacity issues make time-tabling for additional stations extremely challenging, if not impossible. Ringway Jacobs (May 2017) makes it clear that the new West Tey station would be in addition to Marks Tey station.
- 25.4.5 The 24,000-dwelling concept map is inaccurate. 200 hectares of green space shown would have to be residential to meet the stated 24,000 dwellings associated with the map. We have raised this with the councils, stating that we believe it is misleading to the public. We asked them to postpone the consultation until the map is rectified but the response was that the map is not meant to be representative. We disagree: Garden city principles are key to this proposal, and green space is an important principle, as is community engagement.
- 25.4.6 We have concerns that the Councils have not listened to Lord Kerslake's strongly worded advice that:
 - each garden community requires a name and a clear identity. Instead, they
 have asked local people not to call it West Tey and to refer to it as Colchester
 Braintree Borders Garden Community (CBBGC) hardly an identity;
 - o The NEGC delivery vehicle is risky.
 - "Major investment is required to deliver the new communities in full, including substantial improvements to parts of the A120 and A12. The councils need to be clear on the phasing of the delivery of each piece of infrastructure that will unlock aspects of sites for housing in each of three major new settlements. The project team should map these dependencies in order to develop a detailed understanding of what they need to deliver this development and in what order. This includes being very clear about who is responsible for funding or delivery of each element, in particular of infrastructure."



- 25.3. In addition, we seek to understand how the Examination will address issues relating to the DPD consultation and Concept Framework. We asked the councils to postpone this consultation until after an Inspector's Report was delivered. We believe that it is premature, particularly given infrastructure uncertainty.
- 26) Why were those figures increased from the earlier figures of 15,000 to 20,000 dwellings which appeared in the Preferred Options plans (June 2016)?
- 26.1 We note that at each stage of consultation, despite concerns raised by CAUSE and local people about location, infrastructure, viability etc, the dwelling number at West Tey has increased without explanation!
- 27) Will policy SP9 ensure that there are appropriate landscape buffers between the proposed garden community and nearby settlements?
- 27.1 We agree that it is important to ensure that there are appropriate buffers between West Tey and the villages within, or adjacent to the area of search.
- 27.2 We also believe that SP9, as part of the north Essex garden communities strategy, should have a broader remit: to ensure that the A120 corridor does not become urbanised from Elmstead Market (East Colchester Garden Community) to Coggeshall. The NEGC proposals could result in nearly 15 miles of uninterrupted urbanisation.
- 27.3 Colchester is growing rapidly to its west, at Tollgate, with the result that the urban area now stretches to Marks Tey without a break. West Tey will continue this sprawl, as far as Coggeshall. Protection of the rural nature of the area along the A120 corridor is essential and we not believe that this has been addressed in SP9 or the Sustainability Appraisals.





28) Should policy SP9 give clearer guidance about the intended relationship between Marks Tey and Little Tey and the proposed garden community?

28.1 Policy SP9 needs to give much clearer guidance about ALL of the communities which will be subsumed by or adjacent to West Tey. These include Marks Tey, Aldham, Little Tey, Great Tey, Coggeshall, Feering, Kelvedon, Easthorpe, Messing, Skye Green and Copford.

28.2 The Plan does not address the issues which concern these villages in their relationship with West Tey and clearer guidance is required. For example:

- it does not model traffic impact on the villages
- it does not plan for access to West Tey, A12, new A120 for through traffic (particularly from the north e.g Fordham & Earls Colne and West e.g Braintree, Stisted, Pattiswick, Halstead)
- it does not model for parking and access issues at Kelvedon and Marks Tey station
- it does not allow for cycle and foot access to West Tey from surrounding villages.
 (There is a perfunctory reference to this in Ringway Jacobs but with an inadequate costing of .>£1m)
- it does not protect individual rural dwellings
- it does not set clear buffers
- It does not protect views or favourite landscapes.

28.3 Policy should note that Marks Tey has an emerging Neighbourhood Plan and should give the Plan weight.

29) Should paragraph B3 of the policy include reference to starter homes, for consistency with policies SP8 and SP10?

The West of Braintree proposed garden community (policy SP10)

30) What evidence is there to demonstrate that the West of Braintree proposed garden community is capable of delivering a total of 7,000 to 10,000 dwellings?

We have little confidence that the early phase of 2,500 homes can be delivered, let alone the full scope.

31) Why were those figures reduced from the earlier figures of 10,000 to 13,000 dwellings which appeared in the Preferred Options plan (June 2016)?



- 32) Should the West of Braintree proposed garden community be extended to include adjacent land in the Uttlesford District Council area?
- 33) If so, what arrangements have been made for joint working between Braintree and Uttlesford District Councils to deliver the proposed garden community?
- 34) What are the implications of any requirement for prior mineral extraction on the timescale for development at the West of Braintree proposed garden community?
- 35) What are the implications of the West of Braintree proposed garden community for the future of Saling airfield (Andrewsfield)?
- 36) How have any impacts from flight paths to and from Stansted airport on the West of Braintree proposed garden community been considered?
- 37) Should policy SP10 refer to the need for an all-directions junction



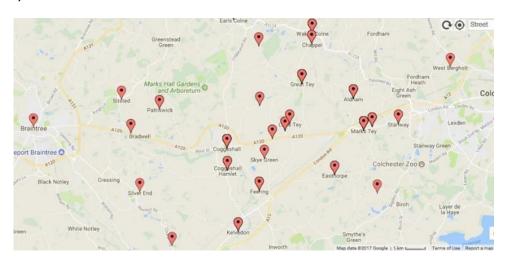
APPENDICES



APPENDIX TO MATTER 2: COMMUNITY ENGAGEMENT

AREA OF NORTH ESSEX WHERE 'SAY NO TO WEST TEY' SIGNS ARE DISPLAYED

The map shows broad locations of over 300 'Say No to West Tey' signs. This indicates that north Essex residents are not simply concerned about what they can see from their window, as suggested by one council leader. CAUSE knows, from correspondence, petition comments, letters to the paper and consultation responses, that members of the public are concerned about the infrastructure impact of West Tey/CBBGC and do not trust the local authorities to deliver a 24,000-home new town successfully.



RECENT LETTERS IN LOCAL PAPER

(WE CAN PROVIDE MANY SIMILAR THROUGHOUT THE PLAN PREPARATION PERIOD IF REQUIRED BUT THE SAMPLE BELOW IS REPRESENTATIVE)

ESSEX COUNTY STANDARD 24/11/17 LETTERS PAGE

CAUSE

Infrastructure First

New towns are personal crusade

GETTING this new town (West Tey) built has become a personal crusade for some members of the council, regardless of the merits or otherwise of doing so.

They feel they would lose face if it were not to go ahead, and this means so much to them that they are blinded to reason.

Unfortunately, Councillor Tim Young's attitude is matched by Braintree Council's leader, Graham Butland, who in Local Plan meetings, has resorted to calling any

member of the public with a Say No To West Tey sign a hypocrite.

It has become too personal for them and as they can no longer be objective and assess the project on its merits.

My personal view is they are not fit to make such decisions.

For the record, I am not a member of Cause but also support the work they are doing.

Tina Sivyer Coggeshall



all car crash politics?"

Transport, as an example. This not only involves these huge housing areas but the rural communities.

The roads around Mersea have become so congested particularly as its attractions are becoming so better known and will continue to do so.

do so.

This is not proper consultation. It is over the Christmas period, under stated and poorly publicised.

Much of the information difficult

to find on computer system that to find on computer system that many residents find impenetrable. The few local exhibitions being put on will be virtually over in the

next week

The most immediate issues facing residents are the ones that should be receiving their attention.

I fear the borough council is so arrogant and self-satisfied it will press ahead with this and have got the Government to believe this is what the people of Colchester want. I hope others share my concern at what is heine done in our name.

what is being done in our nam

John Akker Seaview Avenue, West Mersea Consultation was

not good enough

THE long swalted public consulta-tion by Coichester Council on gar-dem communities which will change Colchester for ever and provide a

huge increase in population, traffic and social change kicked off locally at the Loveloss Hall in Wivenhoe on Monday I don't know what the council was expecting, but it certainly was not what I was. For a start it covered

copering, but it certainly was not what I was. For a start it covered only the Colchester/Tendring border development, information about the much larger West Tey being almost entirely absent, although they are completely interdependent.

Neither I, nor the large number of people from all over Colchester, were expecting to find just two A2 maps on tables and a couple of copies of the inch and a half thick local planning policy, all of which were besteged by a crowd three or four thick desperate to get even a snatched view of them.

If there was more than one man fielding inquiries then they were certainly keeping a low profile. It was, not to put too fine a point on it, a complete shambles.

Consultation? Where were the comments and suggestions?

If there was a feedback sheet I

Consultation? Where were the people with clipboards taking down comments and suggestions?

If there was a feedback about I certainly didn't see one.

I tried to ask the functionary a few questions, but he really could not spare the time.

There were no documents to take away and study at leisure, nor was there a list of where the information could be downloaded from.

They will be on Cotchester market on Friday from Dann to 2pm.

Do go, fill up the High Street, show them that this is important to us, and don't be fiobled off.

I asked if they would be showing West Tey to the people if affected most and he was somewhat evasive. I asked if they would at least provide Ad size maps on boards so they could be seen, with the same reply. This simply is not good enough. This is important to us and our voice must be heard in a way that has some meaning and is respectful of our wishes and thoughts.

I demand a full meeting with the plans properly shown, interpreted and explained, with an opportunity for questions to be asked and properly answered.

Dorian Kelly

Gladstone Road, Colchester

CAUSE

Infrastructure First



ESSEX COUNTY STANDARD LETTERS PAGE 1/12/17

CAUSE

Infrastructure First

Scrap this ridiculous idea and start representing us

the to see a company about the try Where are the try Where are the try Where are the try Where the t



West Tey silence

provide a post proper a page of the proper and the



Attachment 2 to Matter 4

Agenda Pack for 30th August 2017

CAUSE comments

Colchester's Employment paper August 2017

Colchester Council was asked by some members of the Local Plan committee to provide further information on employment and transport. This is in the agenda pack for the meeting on 30th August 2017

The new employment report fails to provide any convincing evidence that West Tey will be anything more than an unsustainable dormitory for London. There is no new evidence, and the same incorrect conclusions have been drawn from the underlying SQW/Cambridge Econometrics report.

A sensible interpretation of this key report would support only one of the three garden communities – to the East of Colchester. There won't be enough local jobs to support the other two, and constraints on the inner reaches of the GEML will make them unsustainable for London commuting unless huge amounts are spent on rail improvements.

The employment evidence also undermines the OAN which relies on an abundance of job generation to justify an uplift from 831 to 920dpa. Colchester Borough is a net exporter of labour and will remain so throughout the plan period.

The whole plan is wildly over-ambitious, and level heads are needed to bring it back to reality.



Will there be enough jobs?

The key claim is that West Tey will generate 1.17 jobs per dwelling. We show below the full table from which this claim is extracted:

Table 6.1: Summary Table		
	By 2033	By 2050
West of North Essex – jobs created under transformational scenario (Scenario 3a) in excess of BAU baseline	5,400	8,300
NEGC 1:		
West of Braintree – jobs created (excl construction jobs)	2,913	7,752
NEGC jobs (excl construction jobs) as % of total increment	54%	94%
West of Braintree – jobs (excl construction jobs) per house	1.17	0.83
Central East of North Essex - jobs created under transformational scenario (Scenario 3b) in excess of BAU baseline	10,400	23,700
NEGC 2:	-	
Colchester Braintree Borders – jobs created (excl construction jobs)	2,914	8,799
NEGC jobs (excl construction jobs) as % of total increment	28%	37%
Colchester Braintree Borders – jobs (excl construction jobs) per house	1.17	0.95
NEGC 3:		
Tendring Colchester Borders – jobs created (excl construction jobs)	3,880	9,747
NEGC jobs (excl construction jobs) as % of total increment	37%	41%
Tendring Colchester Borders – jobs created (excl construction	1.55	1.28

The first thing to note is that the 1.17 jobs per new house at West Tey applies only up to 2033. By 2050 the cumulative figure has fallen to .95 which is below the NEGC target of 1 new job per dwelling. CAUSE believes that it is misleading to only quote the 2033 figure by which time only c.10% of West Tey will have been built.

The 2050 figure is a much more relevant statistic for deciding where new settlements should be located. On this basis both West Tey (.95 jobs per dwelling) and West of Braintree (.83 jobs per dwelling) fail to meet the Councils' threshold of 1 new job per dwelling.



Only the aspirational scenario 3b has been considered

The three scenarios in the Cambridge Econometrics report

- Scenario 1: 'Business as Usual' (the baseline trend-based forecast)
- Scenario 2: 'Business as Usual + A120 improvements' (a scenario taking into account the additional employment that may be generated as a result of the dualling of the A120 between Braintree and Colchester)
- Scenarios 3a and 3b: 'Potential Unlocked' (an aspirational scenario taking into account the potential for further, higher value employment growth)

Scenario 3a applies to Braintree, and the aspirational growth is driven by the expansion of Stanstead Airport which is easily accessible along a good road link.

Scenario 3b applies to Colchester and is dependent on three 'opportunities':

- Expansion of the University of Essex, including Knowledge Gateway
- Colchester's growth as a regional centre, including creative and media industries, retail and tourism
- Growth in the wider Central East of North Essex hinterland, including the new port Bathside Bay

The report's author shows little confidence in the second and third opportunities, and certainly provides no evidence of any local industry driving growth in the West Tey area.

"While we can be reasonably confident that the University will continue to expand in the medium term, there is greater uncertainty regarding the growth potential of some of the other sectors, not least given the contraction of employment in areas such as media-related activities in recent years."

Source: Cambridge Econometrics report page 51

Scenario 2 is clearly a more realistic view of the future than scenario 3. This includes continued growth at historic rates plus the benefits of a dualled A120. It excludes the "aspirational" growth – a step change in job generation - for which there is little supporting evidence.



Other optimistic assumptions

Scenario 3b uses two other assumptions which are clearly on the optimistic side.

- New jobs include a large number generated by home working. The level assumed (variously 17.5% and 25%) are unsupported by current experience in communities such as Gt Notley (c10%)
- The stated objective is to generate local jobs which are easily accessible from home by public transport. Cambridge Econometrics define "local" as anywhere in Braintree, Colchester or Tendring. This definition will only be relevant when a mass rapid transit system is operational, something not budgeted until 2058. Until then "local" jobs for West Tey realistically need to be located between Colchester and Braintree, because public transport is so poor: it currently takes longer to travel from Colchester to Braintree by public transport than it does to travel from either town to central London.

What sort of jobs?

The paper talks about the need to match jobs and housing and provides some evidence on the type of jobs to be generated.



Forecast Changes in Employment by Major Category, in thousands: 2017-203

Agriculture 0.604 0.447 Mining & quarrying 0.123 0.071 Manufacturing - food 0.986 0.760 Manufacturing - general 1.680 1.510 Manufacturing - demicals only 0.815 0.436 Manufacturing - metals 0.352 0.227 Manufacturing - transport 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Re	Employment by sector (000s)	2017	2033	
Manufacturing - food 0.986 0.760 Manufacturing - general 1.680 1.510 Manufacturing - chemicals only 0.815 0.436 Manufacturing - metals 0.352 0.227 Manufacturing - transport equipment 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883	Agriculture	0.604	0.447	
Manufacturing - general 1.680 1.510 Manufacturing - chemicals only 0.815 0.436 Manufacturing - metals 0.352 0.227 Manufacturing - transport equipment 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040	Mining & quarrying	0.123	0.071	
Manufacturing - chemicals only 0.815 0.436 Manufacturing - metals 0.352 0.227 Manufacturing - transport equipment 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547	Manufacturing - food	0.986	0.760	
Manufacturing - metals 0.352 0.227 Manufacturing - transport equipment 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 P	Manufacturing - general	1.680	1.510	
Manufacturing - transport equipment 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Ed	Manufacturing - chemicals only	0.815	0.436	
equipment 0.964 0.527 Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 1	Manufacturing - metals	0.352	0.227	
Manufacturing - electronics 0.356 0.193 Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care	Manufacturing - transport			
Utilities 0.543 0.475 Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment	equipment			
Waste & remediation 0.306 0.313 Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services	Manufacturing - electronics	0.356	0.193	
Construction 5.459 7.365 Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Utilities	0.543	0.475	
Wholesale 4.683 4.826 Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Waste & remediation	0.306	0.313	
Retail 10.713 11.642 Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Construction	5.459	7.365	
Land transport 2.993 2.951 Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Wholesale	4.683	4.826	
Water & air transport 0.015 0.016 Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Retail	10.713	11.642	
Accommodation & food services 6.103 8.021 Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Land transport	2.993	2.951	
Publishing & broadcasting 2.390 2.105 Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Water & air transport	0.015	0.016	
Telecoms 0.530 0.459 Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Accommodation & food services	6.103	8.021	
Computer related activity 1.117 1.294 Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Publishing & broadcasting	2.390	2.105	
Finance 2.156 1.871 Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Telecoms	0.530	0.459	
Real estate 1.917 2.690 Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Computer related activity	1.117	1.294	
Professional services 8.807 9.883 Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Finance	2.156	1.871	
Research & development 0.038 0.040 Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Real estate	1.917	2.690	
Business services 4.147 5.547 Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Professional services	8.807	9.883	
Employment activities 1.811 2.044 Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Research & development	0.038	0.040	
Public administration 5.714 6.218 Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Business services	4.147	5.547	
Education 10.852 10.797 Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Employment activities	1.811	2.044	
Health & care 16.105 19.268 Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Public administration	5.714	6.218	
Arts & entertainment 3.449 3.767 Other services 2.047 2.035	Education	10.852	10.797	
Other services 2.047 2.035	Health & care	16.105	19.268	
	Arts & entertainment	3.449	3.767	
Total 97.779 107.799	Other services	2.047	2.035	
	Total	97.779	107.799	

Source: Oxford Economics, EEFM

Unfortunately many of the jobs generated are in low wage sectors which are incompatible with the high house prices likely in West Tey. Employees will be outbid by higher paid commuters in both the rental and owner occupied markets and many will have to travel in from elsewhere. Development at West Tey will thus re-inforce an unsustainable London-centric pattern of growth.

The table below lists the segments likely to generate more than 1000 jobs by 2033 and suggests that many jobs in the construction, hospitality and care sectors will have wages that are too low to compete with commuting.



Colchester Borough				
	Extra jobs	Wages competitive with		
	by 2033*	commuting to London? **		
Construction	1906	No		
Accommodation & food services	1918	No		
Professional services	1076	Some		
Business services	1400	Some		
Health & Care	3163	No		
Other	560			
Total	10023			
* from Oxford Economics / EEFM o	⊥ lata summari	sed - see page 45 of agenda pac		
** CAUSE assessment				

Conclusion

Anyone reading the Cambridge Econometrics report (as opposed to the officers' paper) will be left in no doubt that the 3b forecasts are not a sound basis for planning. The Council should delay submission of the Plan to the Inspector until it has been re-formed with a lower OAN and housing located properly to match growth.



Appendix 1 to Matter 5

AECOM Evaluation of Alternatives – the CAUSE Metro Plan

Background to the Metro Plan

The Colchester-Clacton rail line offers a transit-oriented solution which would link much of Tendring and Colchester's proposed Local Plan development in a strategically co-ordinated way.

Tendring's Local Plan proposes growth at sites along the line (Weeley, Clacton, Frinton & Walton, Thorpe-Le-Soken and Great Bentley. Alresford is under pressure from speculative planning applications.) Colchester Tendring Borders Garden Community is within close reach of the line. A new station at the University would bring good connectivity for people accessing the CTBGC.

Tendring and Colchester's Local Plans both aim to reduce car dependency and ideas are being thrown around in Section 1 to provide expensive and impractical new mass rapid transit systems from scratch for the new garden communities.

We seek to understand why a £1bn, under-used, infrastructure asset, the Colchester-Clacton line, is being ignored as a strategic mass rapid transit option. It is already in place, and CAUSE's rail consultant, Jonathan Tyler reported in 2015 that the line has potential to offer a service every fifteen minutes.

AECOM's Evaluation of the Metro Plan

AECOM's evaluation is dated April 2017²⁶. This is nearly 18 months after CAUSE launched its Metro plan and 10 months after the Councils had published their preferred options. It may have been a

²⁶ AECOM's evaluation follows up an earlier rejection, which we critique on page 20 of our September 2016 response to the Preferred Options consultation (Available here and sent in hard



response to Lord Kerslake's critique published in January 2017. It appears to be backfilling evidence after the key decision has been made.

CAUSE put forward the proposal, following research, with the intention of demonstrating that there more sustainable alternatives to the large, stand-alone garden communities. We have no interest in the land and we are not promoters.

Why is the Metro Plan being rejected?

It is still difficult to pin down exactly why the Metro plan is being rejected, especially as many of the locations are already in the emerging plan. Is it because

- it doesn't generate enough houses?
- because scale economies makes small settlements less viable?
- Because it doesn't meet the objectives of the garden communities charter?
- Because the land didn't come forward in the call for sites and will therefore be too slow to deliver?

This report trawls through the possible reasons and evaluates the supporting evidence.

The number of houses:

The main reason for rejecting the Metro plan appears to be that it may not generate enough houses to support the Councils' ambitions. There are two points driving this – walkability and minimum size:

1. Walkability: AECOM point out that only 2277 dwellings can be created in the Metro settlements, much less than CAUSE's 8-9000 estimate, which they neglect to note includes a larger development at East Colchester. They have modelled the detailed layout and

copy: http://www.cause4livingessex.com/wp-content/uploads/2016/09/15092016Part-1-North-Essex-Preferred-OptionsFINAL.pdf).



obstacles for each settlement because an 800 metre diameter circle is too crude an approach.

We agree that our approach is crude. We have no objection to a more scientific approach being taken if it is applied with equal rigour in all cases.

Unfortunately this is not the case. AECOM must be consistent if we are to draw important conclusions from their analysis. We have no coherent plans for public transport in the garden settlements – David Lock Associates proposals incorporate no expert transport input at all. The turquoise line set on the station on the map below is 809metres long. It illustrates the inaccessibility of the station from the residential areas²⁷.

We feel strongly that AECOM should try to understand the economic principles behind the Metro Plan rather than diving into an inappropriate and unbalanced level of detail.

²⁷ In addition, in contrast from ideas emerging from the Marks Tey Neighbourhood Plan, virtually no walkable development is planned around the existing Marks Tey station as part of CBBGC.





2. Minimum size: The Metro plan has also been rejected because the settlements don't meet the 5,000 minimum threshold required by the Councils. No sound evidence has been presented to support this threshold, and the development of other smaller urban extensions in the area (including Gt. Notley) suggests that there is no reason why smaller settlements shouldn't be as viable and deliverable as large garden towns.

In fact, Lord Taylor, in his influential garden villages paper (https://policyexchange.org.uk/wp-content/uploads/2016/09/garden-villages.pdf), advocates settlements below 5,000 dwellings, "Whilst the size of a new community is suggested at up to 5,000 (not unlike the size originally envisaged as 'garden cities' by Ebenezer Howard) this is better understood today as a large village community than a town, let alone a city." He also says this, of smaller developments: "Around 1,500 homes allows a village built around a hub of primary school, sports hub, and local centre with household recycling facilities. It would hope to attract a café/small shops/a post office; with some live/work opportunities too, but it will clearly function in relation to nearby larger settlements for facilities like hospital healthcare, and main retail shopping. "



Does the Metro Plan achieve the objectives of the Garden Communities Charter?

The Councils have produced a Garden Communities charter, and we feel that our The Metro Plan meets its objectives rather well. Nothing in the AECOM report (which appraises our plan against the objectives) changes our views below:

Principle 1: Green infrastructure: smaller settlements along a railway line provide better access to genuine countryside than larger settlements which require artificial and expensive country parks.

Principle 2: Integrated and sustainable transport: the Metro Plan offers a high quality public transport option available immediately and at a fraction of the cost. The benefits of increasing the service from 2 to 4 trains per hour will be shared by Colchester and Clacton as well as the settlements along its route. A new halt at the university will reduce its car dependency and allow for high-density, mixed use development as is often successful around transit hubs.

Principle 3: Employment opportunity: the University and Knowledge Gateway constitute one of two credible employment growth nodes in the area (the other one being Stansted Airport). This view is supported by the economic reports in the evidence base. The Metro Plan will provide a link between Colchester and Clacton, two very different towns, and a credible source of employment opportunities in between.

Principle 4: Living environment: smaller communities can provide a superior living environment so long as it is easy to access the facilities available in larger towns by public transport.

Principle 5: Smart and Sustainable Living: there is no reason why small settlements should be any less smart or sustainable than large ones.



Principle 6: Good design: there is no reason why small settlements should be any less well designed than large ones. Indeed the need for such busy access roads which cause severance and pollution will be reduced.

Principle 7: Community Engagement: it is well known that it takes many years to build new communities and that it is easier to build on to existing ones. CAUSE has been criticised for failing to engage with the local communities or promote its ideas to landowners but we regard this as far beyond our role. We are merely pointing out that there are more economically sustainable and attractive alternatives to large garden towns.

Principle 8: Active Local Stewardship: smaller communities may be easier to manage than large ones.

What about cost?

We are highly critical of AECOM's approach to costing and believe that they have failed to address the economic benefits of the Metro plan. In particular

- 1. Insufficient attention has been given to the benefits of having a rail line already in place. AECOM assume that £1500 per dwelling is sufficient to support a sub-regional Public Transport solution e.g. BRT but there is no evidence to suggest how this might be achieved at that price. Based on experience at Cambridge and elsewhere we suspect that it is completely inadequate, especially as it appears that housing is being located with no real consideration for differential cost.
- 2. Inappropriate cost has been added loaded on to the Metro settlements. For example:



- The cost of providing open space is taken at £6072 per dwelling, compared to £3756 in the bigger settlements. CAUSE would expect the unit cost of open space to be lower in smaller settlements with countryside nearby
- Offsite utilities are set at £20,538 per dwelling compared to £2509 in the bigger settlements.
 Whilst we would expect some scale economies we feel that a multiple of 8x is excessive, and
 that little thought has been given to how efficiencies could be obtained. In addition, the
 advantage of the proposals are that these are not new, stand-alone communities but small
 village extensions which will benefit from some of the infrastructure, including utilities,
 already in place.
- Road costs are taken at £14991 per dwelling compared to £3573 for the bigger settlements.
 We would expect road cost to be reduced by a credible public transit system available
 immediately. We feel that the more balanced pattern of development we are proposing will
 cause less congestion than the large urban blocks. We feel that the costs allocated by
 AECOM are unjustified, and quote as an example the £9m loaded onto a potential 657
 dwellings at Gt Bentley.

							Thorpe-le-			
	East of Colche	North of Cold	West of Colch	West of Brain	TOTAL	Metro total	Soken	Weeley	Gt Bentley	Airesford
	Option 1	Option 1	Option 1	Option 1	Options 1					
Number of dwellings	6611	6606	16861	9665	39743	2278	405	480	657	736
Dwellings per hectare	30	30	30	30						
	£m	£m	£m	£m		£m	£m	£m	£m	£m
Education	49	50	126	72	298	9	1.52	1.8	2.463	2.76
Healthcare & Community	15	15	38	22	89	5	0.91	1.08	1.478	1.656
Open Space	28	28	56	37	149	14	2.46	2.914	3.989	4.469
Utilities - enabling works	111	111	282	162	666	38	6.78	8.04	11	12.328
Utilites - off site requirements	20	21	37	22	100	47	14.18	10.99	16.76	5.54
Bus	16	17	21	17	71	1	0.16	0.192	0.262	0.294
Road	32	20	35	55	142	34	9.40	7.5	9	8.25
Rail	0				0					
Cycle and other	12	14	31	21	79	5	0.94	1.508	1.058	1.126
Contribution to strategic public tra	10	10	25	14	60					
	0	0	0	0	0					
Total at 2016 prices excluding fees	293	286	652	422	1653	153	36.36	34.02	46.01	36.42
Infrastructure per dwelling										
Education	7480	7500	7500	7500	7497	3750	3750	3750	3749	3750
Healthcare & Community	2250	2250	2250	2250	2250	2250	2249	2250	2250	2250
Open Space	4263	4264	3343	3785	3756	6072	6072	6071	6072	6072
Utilities - enabling works	16750	16750	16748	16750	16749	16748	16749	16750	16743	16750
Utilites - off site requirements	3025	3209	2165	2276	2509	20838	35012	22896	25510	7527
Bus	2366	2589	1260	1745	1783	399	400	400	25510	399
Road	4840	3028	2076	5691	3573	14991	23210	15625	13699	11209
Rail										
Cycle and other	1803	2150	1846	2205	1977	2035	2331	3142	1610	1530
Contribution to strategic public tra	1500	1499	1500	1500	1500	0	0	0	0	0
Diff	20	10	2	0	6	0	0	0	0	0
Total at 2016 prices excluding fees	44298	43247	38690	43702	41599	67083	89774	70883	70030	49488



Scale Economies?

The AECOM numbers (summarised above) suggest that infrastructure costs per dwelling are £67,083 for Metro style settlements compared to £41,599 for the big garden communities. Do the garden communities really benefit from scale economies to the tune of £25,484 per dwelling? The table below shows the increase in cost per dwelling implied by the AECOM figures.

Metro plan compared to garden commu	unities Implied
	scale
	economies
Education	-3747
Healthcare & Community	0
Open Space	2315
Utilities - enabling works	-1
Utlilites - off site requirements	18330
Bus	-1383
Road	11418
Rail	0
Cycle and other	58
Contribution to strategic public transport solution	-1500
Diff	-6
Total at 2016 prices excluding fees	25484

We would expect there to be some scale economies for larger settlements - in provision of electricity and sewage services for example. But for a large standalone settlement we would expect overall costs to rise.

This view is supported by Nick Falk, who argues that infrastructure costs drop if utilising existing under-used infrastructure and Lord Taylor, who argues, "the scale of such requirements for a very large garden city is dramatically greater than for a new village or small market town. To put it



bluntly, creating a garden village is hugely easier to make viable and popular early on and will deliver houses sooner."

We look at each of the scale economies implied by AECOM:

Education: AECOM suggest that the smaller settlements save £3,747 per dwelling. This is possible if better use is made of existing secondary schools in Colchester and Clacton.

Open space: AECOM suggest that open space in smaller settlements costs £2,315 per dwelling more. This is extremely surprising as the smaller settlements will have much easier access to open countryside, and there should be less need for artificial and expensive country parks

<u>Off site utilities:</u> One might expect some scale economies, but £18,330 extra per dwelling is a large number and needs investigating. Gt Bentley for example is said to need expenditure of £16.76m for 657 dwellings. See below the breakdown of the expenditure: note that the justification is that a new primary substation <u>may</u> be required, and that upgrades to waste water collection capacity will be needed <u>if</u> the current capacity is insufficient.

Infrastructure	Demand Arising from Development Option	Cost per Unit (£)	Total Cost (£)	Phasing	Justification
Utilities - Off-Site Requirements					
Energy					
1 No. 11 kV ring circuit from primary substation to connect to distribution substations	-	-	£12,120,000	Initial Phase	Provide electrical power capacity for development
Waste Water					
Assumed 5km connection to existing waste water treatment works	-	-	£4,000,000	Initial Phase	Sewage network connection and flow to small existing treatment plants in early phases
Gas					
Extension to exsiting Medium Pressure distribution network	-	-	£140,000	Initial Phase	Gas supply to end users
Telecommunications					
Development of access chambers for BT Telecoms network, BT Openreach fibre optic network and private telecoms network throughout development	-	-	£500,000	Initial Phase	ICT and data networks to end users



Key Findings

Electricity

There are two primary substations within a 10 km radius of Great Bentley;
 Arlesford Primary and Chibson Heath Primary. As both of these have
 limited capacity for increased demand, a new primary substation may be required in closer proximity to Great Bentley.

Water supply

 Affinity Water forecast that the region will have a supply/demand surplus during their current 25 year planning period; 2015-2040.

Gas

- Intermediate and High pressure networks have adequate capacity.
- Medium and Low pressure networks will require reinforcement and extension to service new developments.

Waste Water

Great Bentley is within the Wastewater Treatment Works (WwTW) catchment for Thorrington. This is currently assessed as having sufficient volumetric capacity (headroom between the permitted dry weather flow and the demand. In addition, there is headroom within the process capacity, relating to the volume of water a WwTW is capable of treating to the required quality standards set by the discharge permit. Upgrades to the wastewater collection infrastructure between Great Bentley and the Thorrington WwTW will be needed if the current capacity is insufficient for the proposed additional demand. Similarly, upgrades to the infrastructure discharging the treated effluent from Thorrington WwTW may be required.

Telecommunications

 BT Openreach has made a commitment to supply high speed fibre optic broadband to all development over 30 dwellings at no cost to the developer.

Road transport costs

AECOM suggest that road adjustments will be £11,000 per dwelling more expensive for small settlements than the larger ones. They allocate total costs of £34m to 2277 dwellings. There may be some road costs associated with connections across the railway, but this total is higher than the total allocated to East of Colchester, where a new A133 link road is factored in to the cost, and seems disproportionately high.

Rail transport costs:

AECOM recognise that there need be no £1500 per dwelling charge for a regional BRT solution. This makes sense because the Colchester Clacton line should be sufficient.



However there should be an allowance for the cost of improving the service on the Colchester Clacton line to 4 trains per hour and building a halt at the University to connect the settlements to jobs growth. This demonstrates that no proper consideration has been to these key elements of the Metro plan.

Land acquisition

The Metro plan was first launched in November 2015. It was largely sidelined by the Councils until April 2017. It came too late to attract the interest of relevant landowners in the call to sites. However it is safe to say that landowners with land on the borders of villages will be open to ideas for more balanced development as they will see significant uplift.

It is also clear that the Councils have not understood CAUSE's analysis. Six of the settlements along the Colchester-Clacton line are already ear-marked for development in the Local Plan (Section 2). CAUSE's recommendation is to co-ordinate these proposals along the transport spine of the rail line and to ensure that developments are built according to garden village principles instead of creating bolt-on developments to villages which must be accessed by car.

CAUSE has been criticised for not talking to landowners to establish their interest. We believe this to be far beyond our brief, and not in the public interest. The Councils should be talking to landowners early before they get involved with promoters and developers who will each want a share of uplift. CAUSE would only complicate the picture.

In practice land assembly might be significantly easier for the Metro plan because:

- 1. the settlements are smaller and land holding periods may be shorter. Land holding finance costs have emerged as a <u>major diseconomy to scale</u> in our analysis of the Hyas report²⁸.
- 2. Building may move ahead faster at four separate locations and will have fewer constraints than one big new town.

 28 Based on Hyas figures the finance costs for West Tey should be £965m or £40,000 per dwelling compared to £6,000 for a 100 dwelling development. The increase is driven by the need to control the land up front.



3. compared to West Tey the land is relatively "virgin" to development proposals, and hope value will be lower. There may not be as many complex option arrangements to unravel.

Conclusion:

This AECOM report poses no serious challenge to the view that smaller rail linked settlements would be a more viable, sustainable and deliverable approach than large garden towns laid out without consideration for public transport constraints. They will meet the objectives of the Garden Settlements charter better.



MATTER 6 Appendix 1

Appraisal

We have built on our critique of the Hyas appraisal in Appendix 9 of our August 2017 consultation response to correspond with the Inspector's question 8:

Question 8; Has the economic viability of each of the proposed garden communities been adequately demonstrated in the Hyas *North Essex Local Plans (Section 1) Viability Assessment* (April 2017) [the Hyas report, EB/013]?

8.0 No. There are three shortcomings to the Hyas study, each of which undermines viability on its own:

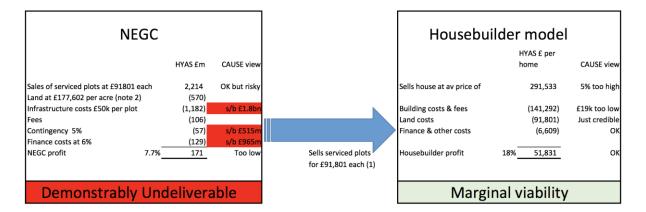
- It doesn't include the finance charges on landholding costs
- The infrastructure costs have been underestimated
- The 5-15% contingency is unrealistically low

8.1 The diagram below illustrates the proposed split in the business. NEGC buys farm land and sells serviced building plots. Hyas have (correctly) focussed on the infrastructure delivery model. We understand that the Councils have talked to local developers but the discussions mainly focussed on the housebuilder model. We believe this part to be "just credible" in the current market²⁹. Our comments are focussed on the NEGC model.

²⁹ CAUSE's viability consultant has pointed out a number of inconsistencies between the Hyas report and the

CAUSE's viability consultant has pointed out a number of inconsistencies between the Hyas report and the CBBGC appendix. Where there is a conflict we use the figures in the appendix because they lead to the £177,600 per acre residual value conclusion on page 33.

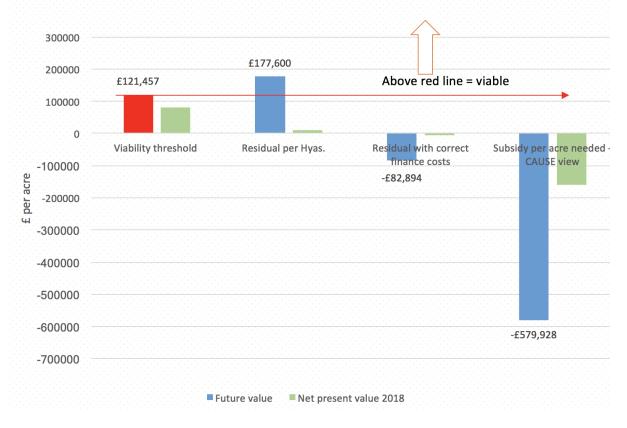




- 8.2 The underlying reasons for CBBGC's lack of viability are twofold:
 - 8.2.1 Scale diseconomies: CBBGC is so big that it will take many years to deliver. 1300
 hectares of land will need to be controlled from the beginning. The cost of funding the land
 acquisition programme would be lower for smaller settlements that could be completed
 more quickly.
 - 8.2.2 Stand-alone: The infrastructure costs for a stand-alone settlement are higher than alternatives such as a Poundbury style urban extension or the CAUSE Metro Plan. CBBGC will be too far from Colchester or Braintree to share infrastructure.



Viability test - residual value tested against threshold value of £121,457 per acre (£300,000 per hectare)



- 8.3.1 The chart above indicates a viability threshold of £121,457 per acre or £300,000 per gross hectare. If the residual value per acre is above that the project is viable, if below it isn't.
- 8.3.2 Our threshold figure comes from Pathfinder Development Consultants (Martin Aust). It is below the Benchmark Land value for large strategic sites of £440,000 per hectare recommended by Three Dragons and Troy planning in the evidence base. Hyas does not give a specific benchmark. AECOM's feasibility study talks about an "indicative land acquisition price" of £100,000 per acre³⁰.
- 8.3.3 Hyas have calculated a residual value of £177,600 per acre³¹ which they claim indicates viability. But this is very clearly a FUTURE value³² – the amount in the bank account in 2065. It should not be compared to the PRESENT value of farm land.

 $^{^{30}}$ Appendix 11 of our August 2017 Consultation Response explains why £100,000 per acre is unlikely to be attractive to landowners if deferred.

³¹ See page 33 of the Hyas report

³² We know that £177,600 is a future value because it corresponds to the £570m shown in the 2065 column in the appendix to the Hyas viability report. £570m / 1300 hectares / 2.47 = £177,600.



- 8.3.4 This is another way of saying that Hyas has not made sufficient allowance for the funding cost of holding development land.
- 8.3.5 CAUSE can demonstrate that extra funding costs of £836m³³ are required on the following assumptions:
 - * land price of £177,600 per acre, the value at which Hyas say the project is viable
 - * land acquired 2 years before it is needed, not on day 1, as suggested by AECOM. This implies that landowners will wait for some of their money until 2063.
 - * funding cost at 6%, the rate Hyas use.
- 8.3.6 If these costs are included the residual value falls to -£82,894 and the project is clearly not viable.
- 8.3.7 At this point the figures become huge and meaningless: CAUSE recommends a switch to Discounted Cash Flow methodology for such long-term projects. The green bars on the diagram represent the Net Present Value³⁴ of the figures in 2018 money. We believe that this is a safer way to compare like with like.
- 8.3.8 CAUSE calculates that the cash subsidy required to make the project viable is £1.8bn or £579,928 per acre. These figures allow for extra building cost, contingency and inflation, as laid out in our August 2017 Consultation Response appendix 9.

Question 8a: In the Hyas report are appropriate assumptions made about the level and timing of infrastructure costs?

8a.1 No. CAUSE believes that the £1.182bn infrastructure budget should be increased to £1.8bn and that key transport infrastructure must be delivered earlier e.g. 2030 rather than 2058. See CAUSE August 2017 Consultation Response Sections 8 and 10.

 $^{^{33}}$ We are happy to share our spreadsheet. We take the Hyas pre-interest cash flows to 2065, deduct land cost and calculate interest on the resulting funding need. The compound interest bill comes to £965m compared to the Hyas figure of £129m. £836m = 965-129.

³⁴ NPV translates future cash flows into "present values" by applying a discount factor. In this case the discount factor would be 6% per annum, the same as the funding cost assumed by Hyas.



Question 8b: is the contingency allowance appropriate?

8b.1 Best engineering practice demands a contingency of 40%+ at this stage of project definition. See section 10 of ourAugust 2017 Consultation Response and Ringway Jacobs May 2017.

Question 8c: are appropriate assumptions made about the rate of output?

8c.1 No. See CAUSEAugust 2017 Consultation Response page 65 on deliverability. If the AECOM assumption of 240dpa is accepted it will take 100 years to deliver CBBGC. A report by Lichfields (http://lichfields.uk/media/1728/start-to-finish.pdf) which analysed large developments found an average build-out rate of 160dpa.

Question 8d: are appropriate assumptions made about the timing of land purchases?

8d.1 The absence of a land assembly strategy is a major flaw in the delivery plan. Without evidence that the land is under council control, there can be no guarantee that the project is deliverable. We consider inclusion of CBBGC in the Plan before the land is controlled to be **commercially naive**.

8d.2 The absence of a land assembly strategy has also led to a key error: land holding cost is ignored in the Hyas viability model as described above.

Question 8e: is it appropriate to allow for a Garden City premium?

8e.1 There is no reason to expect the premium of 5% assumed in the Hyas base case, especially if delivery is to be 350 rising to 500 per annum in 2035, more than twice the number recommended by AECOM. The DLA layout is ill considered and more likely to generate a discount than a premium.

Question 8f: is the viability threshold set at an appropriate level?

8f.1 The Hyas report is vague on the exact viability threshold.

8f.2 Martin Aust from Pathfinder Development Consultants suggests that the viability threshold should be £300,000 per hectare or £121,457 per acre. It is vital to note that he assumes that the land is paid for up front not later whenever a surplus is available.

Question 8g: should an allowance have been made for inflation?



8g.1 Viability is highly sensitive to inflation assumptions and ignoring it can lead to major funding problems.

8g.2 We believe that the assumptions used should be consistent with government policy³⁵. It is not good enough to extrapolate past house prices into the future – we have a government determined to improve affordability for young families which should result in real terms price reductions over the long term.

8g.3 The appraisal should assume a general level of inflation of 2% in line with the Bank of England's Target. House prices should rise at slightly below inflation in line with government policy. Building costs should rise slightly faster than inflation due to reduced immigration (again government policy) and lower productivity gains in the building sector compared to the economy as a whole. We would regard these as "cautious and transparent assumptions" which are in line with the Harman guidelines page 27.

Question 8h: is an appropriate allowance made for finance costs?

8h.1 No. This is a fundamental error in the Hyas appraisal which points to a <u>major scale diseconomy</u> for large settlements.

8h.2 This goes to the root of the Plan and we believe that the Inspector may want to seek an independent project appraisal expert to assist him. The expert will need to understand land value uplift and both residual value <u>and</u> discounted cash flow appraisal techniques.

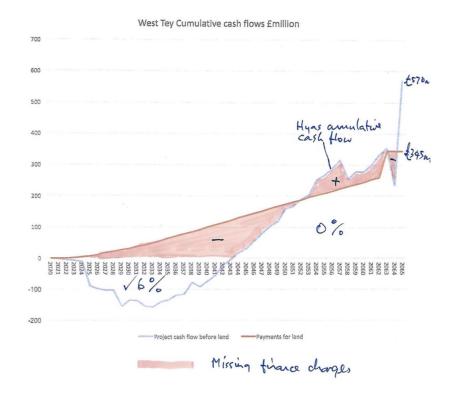
8h.3 The graph below illustrates the error³⁶. Hyas implicitly assume that land is only paid for when a surplus arises. But landowners will have to hand over their land much earlier and will expect payment.

The blue line on the graph comes directly from the Hyas pre-interest cash flow. The red line uses the AECOM assumption that land is bought for £100,000 per acre and paid for 2 years before the building plots are sold. The funding costs on the deficits marked in red are enormous.

³⁵ See pages 67-69 of our August 2017 Consultation Response.

³⁶ For this graph and elsewhere in our August 2017 Consultation Response we assume that the land costs £107,500 per acre (£265,000 per hectare) including costs. Land is acquired two years before the serviced building plots are sold. The price has to be fixed on day one otherwise the upfront infrastructure investment will drive up values. Landowners will have to be rewarded for waiting this long so even this assumption may be too optimistic. They cannot, in our view, be bullied by CPO threats.





Question 8i: is the residual value methodology (GCLS model) appropriate? Should a discounted cash-flow methodology have been used instead?

8i.1 No, a residual value methodology is not appropriate. Yes, a DCF methodology should have been used instead³⁷.

8i.2 Most project appraisal experts would agree that a DCF methodology is the best way to evaluate a 50-year project (see attachment 1 "Comments from the UK Head of a major US investment bank"). The Harman Guidance recommends a residual value approach, but this is directed towards establishing whether policy burdens are throttling the 5-15 year supply of building sites. It is used by the housebuilding industry for evaluating smaller projects over a much shorter period.

8i.3 We acknowledge that either approach <u>applied properly</u> will give the same conclusions. But we caution against trying to compare 50 year money to present day money – this underlies the Hyas error and could lead to many more.

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³⁷ Please see pages 72-73 of our August 2017 Consultation Response



MATTER 6 Appendix 2

Land Acquisition Strategy

We build on our comments in Appendix 11 of our August Consultation Response to correspond to the Inspector's questions:

Question 19: Will current and future land ownership arrangements facilitate the delivery of the proposed garden communities?

No. The absence of a land assembly strategy is a major flaw in the delivery plan. We consider first the landowners within the CBBGC area, then neighbouring landowners.

19.1 CBBGC landowners

19.2 NEGC needs to control 13sq kms of farmland <u>now</u> if it is to capture the land value uplift it is hoping for: but it has yet (so far as we know) to get agreement with any of the CBBGC landowners who have formed their own consortia³⁸ and wish to develop the land themselves.

19.3 NEGC is hiding behind commercial confidentiality and as a result its land acquisition strategy is opaque. This is unsatisfactory because it involves spending many millions of pounds of public money and the financial structures (like PFI) will be with us for decades. The appraisal work we have seen gives little confidence that this will be well done.

19.4 Land-owners will be aware that threats to compulsory purchase land at agricultural value are hollow as it will be difficult to prove a public interest in CPO for residential development from owners who want to do the same thing themselves. The councils appear to be placing their hopes on a change in the law to enable them to CPO land at agricultural value: we believe that the radical changes they need are an unlikely and a risky foundation for such a significant initiative.

19.5 Landowners will benefit from the efforts being made at public expense to prove that development on their land is sustainable when it was deemed unsustainable in 2008. If CBBGC is

³⁸ We are aware of two landowning consortia. Gateway 120 which includes most of the land needed to the North of the A12 and RF West which owns some of the land needed to the South.



included in the Local Plan they will be in a stronger commercial position after the Inspection and the land value uplift available for infrastructure and social housing will be even smaller.

19.6 CAUSE believes that inclusion of CBBGC in the Local Plan will be a significant commercial disadvantage for NEGC. Once it is in the plan it will be even more difficult to negotiate favourable land deals.

Neighbouring landowners

19.7 If CBBGC is included there will be problems with neighbouring landowners who may well be successful in arguing that the Councils should not be favouring their own NEGC land over equally suitable private land. These considerations are advanced lucidly in the Counsel's opinion for Lightwood for Monks Wood at Pattiswick. We provided the Inspector with a copy of the opinion at Matter 1.

19.8 Colchester BC has recently lost planning appeals at both Tollgate and Stane Park. One of the issues there was its ownership of competing land to the North which it was thought to be favouring. It is at risk of making the same mistake again.



HEARING STATEMENT MATTER 6 Appendix 2

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Attachment 4

Comments on the Hyas appraisal and CAUSE critique by the UK head of a major US Investment Bank

- 1. Methodology is both dangerous and wrong for this type of complex, long term, infrastructure heavy scheme ok for a local builder looking at a simple, stand alone land price analysis over 2 3 years using steady state house price, build cost, finance and economic assumptions to use a "per plot" residual value approach but completely useless (and reckless) for West Tey. You have to use a proper DCF WITH scenario analysis. The DCF also forces you to make sensible and responsible timing assumptions around the cash flows. Government infrastructure projects would also add cost/ benefit approach to it as well which would seek to put a cost on environmental and social impacts. No need to get into latter for these purposes though.
- 2. You CANNOT exclude land finance or financing commitment costs. You cannot start a scheme like this without having private or public sector funding commitments in place so that you know that it can be finished and this is not just financing facility and commitment costs it is also various hedging costs to ensure that economic and other cost assumptions are reasonably contained through the life of the project.
- 3 The DCF would not be done properly if it assumes that the infrastructure and land purchase costs are as back ended as they seem to be is Farmer X etc really expecting to wait that long for her dough and do the council really expect the infrastructure, transport and otherwise to be that back ended? I know that Priti Patel would have a strong view on that.
- 4. I would make more up front of the actual contingencies and the methodologies and assumptions used in actual and more advanced real projects like Crossrail and A120. Do you have any actual experience information around other very large residential developments around Colchester like 14,000 houses at Tollgate etc. Is there evidence from these?
- 5. I think the discount rate is both too low, even at 6 % and you would always look at a range in a project analysis of something this big, complex and long term and narrowing the range will force you to explicitly address all financing term commitments and hedging requirements. In other words it has to be viable across the range and if you want to remove the high discount rates at the top of the range you do so by making explicit assumptions around guarantees, finance commitment and hedging costs which would have that effect. You cannot responsibly commit to a scheme which is massively unviable at say 10% unless you have locked in the assumptions which drive the Weighted average cost of capital so it



cannot be that high. What is the negative NPV at a range of discounts from 6 - 10% in 2% point steps and with contingency at 30%, 40% and 50%? The house price and build cost assumptions look sensible in CAUSE analysis (not theirs) and given long term of project , it is absolutely right to anchor them to long term reversion to mean around affordability and price / cost inflation.

Figures for Graph - can be traced back through formulae

	Future	net present	
	value	value 2018	Year
Viability threshold per Pathfinder*	£121,457	80776	2025
Residual per Hyas.	£177,600	11483	2065
Residual with correct finance costs	-£82,894	-5360	2065
Subsidy per acre needed - CAUSE view	-£579,928	-159999	2065

^{*} Pathfinder are specialist s106 advisers. Their figure of £121,457 per acre is a more than the £100,000 suggested by AECOM. It is less than the £178,137 per acre (£440,000per hectare) in the Three Dragons / Troy report in the evidence base



Interest calculations
What will the interest charges be if land is bought at £177500 per acre, the residual value figure from the Hyas appendix?
The table assumes that land payements are delayed until 2 years before the plots are sold
If land is acquired in 2025 the finance charges escalate to £4.8billion - spreadsheet available if needed

Calculate correct finance charges at 6%	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Assuming land bought 2 years before it is sold		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Calculate Hyas finance cost error on the basis of £177600 per acre																			
Cost per acre	177600																		
Number of hectares	1300																		
Total land cost £m paid 2 yrs before sold	0 570.3	1.2	3.6	6.0	7.2	8.4	8.4	8.4	8.4	8.4	9.6	10.8	12.1	12.1	12.1	12.1	12.1	12.1	12.1
Cumulative land cost £m	570.3	1.2	4.8	10.8	18.1	26.5	34.9	43.4	51.8	60.3	69.9	80.7	92.8	104.8	116.9	129.0	141.0	153.1	165.1
Correct interest charge including land £m	-965		-0.5	-1.0	-6.0	-7.0	-7.8	-8.4	-12.1	-11.5	-12.4	-14.3	-15.3	-15.3	-16.1	-16.2	-17.3	-16.3	-18.6
Summary																			
Cumulative cash flow per Hyas before land	699.3	-7.1	-10.7	-87.4	-91.3	-88.6	-83.2	-126.9	-97.3	-91.6	-101.2	-93.1	-66.4	-51.3	-25.3	-15.5	29.8	20.5	46.4
Cumulative land cost £570m = £177600 per acre	-570.3	-1.2	-4.8	-10.8	-18.1	-26.5	-34.9	-43.4	-51.8	-60.3	-69.9	-80.7	-92.8	-104.8	-116.9	-129.0	-141.0	-153.1	-165.1
Cumulative interest 6%	-965.2	0	-0.5	-1.5	-7.4	-14.5	-22.2	-30.6	-42.7	-54.2	-66.6	-80.8	-96.1	-111.4	-127.5	-143.7	-161.0	-177.3	-195.9
Borrowing	_	-8.3	-16.0	-99.7	-116.8	-129.6	-140.4	-200.9	-191.8	-206.1	-237.7	-254.7	-255.3	-267.6	-269.7	-288.1	-272.2	-309.8	-314.6
Cumulative interest per Hyas	-129.0																		
Hyas finance cost error based on £177,600 per acre	-836.1																		

Iculate cost per acre	£m		Hectares	£ per acre
Per Hyas		570	1300	177504
Correct interest (965-129)		-836	1300	-260398
NFV		-266	1300	-82894

	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	140.0	0.0	0.0
	177.2	189.2	201.3	213.3	225.4	237.4	249.5	261.5	273.6	285.6	297.7	309.7	321.8	333.8	345.9	357.9	370.0	382.0	394.1	406.1	418.2	430.2	570.3	570.3	570.3
	-18.9	-19.4	-19.2	-19.8	-20.4	-21.5	-22.1	-22.6	-23.4	-24.5	-24.3	-26.0	-27.0	-28.5	-28.0	-29.4	-30.6	-31.6	-37.7	-39.4	-42.4	-44.5	-46.0	-55.8	-66.4
	67.9	103.6	124.3	145.7	160.2	184.8	210.7	232	248	288.2	296.9	318.2	331.5	381.3	397.5	418.9	444.9	387.3	408.1	408.9	429.6	460.5	482.5	362.5	699.3
	-177.2	-189.2	-201.3	-213.3	-225.4	-237.4	-249.5	-261.5	-273.6	-285.6	-297.7	-309.7	-321.8	-333.8	-345.9	-357.9	-370.0	-382.0	-394.1	-406.1	-418.2	-430.2	-570.3	-570.3	-570.3
	-214.8	-234.2	-253.4	-273.2	-293.7	-315.2	-337.3	-359.8	-383.2	-407.7	-432.0	-458.0	-484.9	-513.5	-541.4	-570.8	-601.4	-633.0	-670.6	-710.0	-752.5	-796.9	-842.9	-898.8	-965.2
_	-324.0	-319.8	-330.3	-340.8	-358.8	-367.8	-376.0	-389.3	-408.7	-405.1	-432.8	-449.5	-475.2	-466.0	-489.8	-509.8	-526.5	-627.7	-656.6	-707.3	-741.1	-766.7	-930.7	-1106.6	-836.1

Appraisal using DCF methodolgy - concludes that NPV is negative with land purchases 2 years before plot sales (as per AECOM)

Figures included in August consultation	£ per acre	NPV £m 6%	Total £m Cash flows	2021 6	2022 7	2023 8	2024 9	2025 10	2026 11	2027 12	2028 13	2029 14	2030 15	2031 16	2032 17	2033 18	2034 19	2035 20	2036 21	2037 22	2038 23	2039 24
Adjust Hyas methodology to normal NPV calc																						
Cash flow per Hyas (£177k per acre)	177592	11.4	570	-2	-3	-3	-4	-77	-9	-4	-1	-50	20	-3	-18	-2	17	6	17	2	38	-14
Add back interest charges	40185	45.3	129	0	0	0	0	1	6	6	7	7	10	9	9	10	10	9	9	8	7	5
Available for funding land purchases		56.7	699	-2	-2	-2	-4	-76	-4	3	5	-44	30	6	-10	8	27	15	26	10	45	-9
Land cost per AECOM - £100k per acre 2 years before plot	-207500	-61.8	-345	0	0	-0.7	-2.2	-3.6	-4.4	-5.1	-5.1	-5.1	-5.1	-5.1	-5.8	-6.6	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3
Deficit using normal DCF approach	110276	-5.1	354	-2	-2	-3	-6	-80	-8	-2	0	-49	25	1	-15	2	19	8	19	2	38	-17
Insert CAUSE Assumptions	£ per ocre																					
Cash flow per AECOM / HYAS	110276	-5.1	354	-2	-2	-3	-6	-80	-8	-2	0	-49	25	1	-15	2	19	8	19	2	38	-17
Garden city premium removed	-33821	-17.3	-109	0	0	0	0	0	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
3. Deliverability per C&W*	0	-37.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-4	-8	-13	-13	-13	-13
4. Infrastructure cost increase per CAUSE	-204973	-129.6	-658	0	0	0	-1	-35	-11	-7	-8	-32	-10	-10	-17	-9	-9	-9	-8	-15	-10	-23
5. Contribution to GEML	-60106	-80.5	-193	0	0	0	0	0	0	0	0	0	-193									
6. Contingency 40%	-229206	-144.9	-736	0	0	0	-1	-40	-12	-8	-9	-35	-11	-11	-19	-10	-10	-11	-9	-17	-11	-26
7. Infrastructure first in 2030	0	-37.9	0	0	0	0	0	0	0	0	0	0	-110	0	0	0	0	0	0	0	0	0
9a. Price inflation 1.125%	333158	125.5	1070	0	0	0	0	0	3	3	4	5	9	6	6	6	11	9	11	11	19	13
9b. Cost inflation 2.5%	-495269	-186.5	-1590	0	0	0	0	-16	-5	-4	-5	-21	-7	-8	-14	-8	-9	-10	-9	-19	-13	-32
Subsidy needed	-579928	-513.8	-1862	-7	-7	-9	-19	-331	-50	-25	-18	-231	-250	-24	-91	-17	37	-8	26	-47	84	-134

2040 25	2041 26	2042 27	2043 28	2044 29	2045 30	2046 31	2047 32	2048 33	2049 34	2050 35	2051 36	2052 37	2053 38	2054 39	2055 40	2056 41	2057 42	2058 43	2059 44	2060 45	2061 46	2062 47	2063 48	2064 49	2065 50
20	17 5	32 4	19 2	21 0	14	24 0	26 0	21 0	16 0	40 0	9	21 0	13 0	50 0	16 0	21 0	26 0	-57 0	21 0	1	21 0	31 0	22	-120 0	337 0
 26	21	36	21	21	14	24	26	21	16	40	9	21	13	50	16	21	26	-57	21	1	21	31	22	-120	337
-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-84.8	0.0	0.0
19	14	28	13	14	7	17	19	14	9	33	1	14	6	42	9	14	19	-65	14	-7	13	24	-63	-120	337
19	14	28	13	14	7	17	19	14	9	33	1	14	6	42	9	14	19	-65	14	-7	13	24	-63	-120	337
-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-27
-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	385
-8	-10	-10	-10	-10	-13	-19	-8	-10	-12	-8	-15	-10	-13	-8	-12	-10	-8	-51	-10	-19	-10	-10	-9	-72	-73
-9	-11	-11	-12	-11	-14	-21	-9	-11	-14	-9	-17	-11	-15	-8	-14	-11	-8	-57	-11	-21	-12	-11	-11	-81	-82
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	0	0	0	0	0	0	36
13	14	19	15	16	17	27	18	19	19	27	21	21	22	35	24	24	25	34	27	27	28	36	30	31	366
-11	-15	-16	-18	-17	-24	-37	-16	-21	-28	-18	-38	-25	-35	-21	-36	-29	-24	-166	-34	-66	-38	-36	-37	-294	-310
27	6	53	0	5	-28	-14	26	4	-24	76	-60	3	-38	110	-27	2	26	-375	-2	-113	-7	35	-231	-791	1304

Reconstruction of HYAS appraisal - Residual value is £177k per acre in 2065

econstruction of HYAS appraisal - Residua	l value is				,																	
as figures reconconstructed		Total	Y/e Marc 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Homes per annum	360	23660										50	150	250	300	350	350	350	350	350	400	450
Cumulative housing completions Cumulative commercial floorspace	Plots sqm	23660 364000										50 1000	200 15000	450 19000	750 23000	1100 27000	1450 56000	1800 60000	2150 64000	2500 68000	2900 72000	3350 76000
sidential plot sales Residential plot sales private		2004																				
Residential affordable		60																				
Residential shared ownship		108																				
Total plot sales revenue		2172	0.0									4.6	13.8	23.0	27.5	32.1	32.1	32.1	32.1	32.1	36.7	41.3
Interest on sales	6.0%	1955.4										0.28	1.10	2.48	4.13	6.06	7.99	9.91	11.84	13.77	15.97	18.45
Interest on base case Extra finance charges from delayed sales		1955.4 0.0																				
Employment		18	0.0										0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Retail / Leisure		186	0.0										10.2				25.5				15.3	
SDLT		-126	0.0									-0.2	-1.3	-1.2	-1.5	-1.7	-3.1	-1.7	-1.7	-1.7	-2.8	-2.2
Agent		-24	0.0									0.0	-0.2	-0.2	-0.3	-0.3	-0.6	-0.3	-0.3	-0.3	-0.5	-0.4
Legal Fees Total sales related fees		-12	0.0									0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2
al sales net of fees Inflation index	1.1%	2214	1.00	1.01	1.02	1.03	1.05	1.06	1.07	1.08	1.09	1.11	23 1.12	22 1.13	26 1.14	30 1.16	54 1.17	30 1.18	30 1.20	1.21	1.22	39 1.24
Inflated income Extra income		3284.2 1069.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	25.5	24.6	29.8	35.1	63.3	35.9	36.3	36.7	59.8	48.1
s costs		Total	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
eme Wide site enabling costs			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Based upon generic allowance per residential unit	20000	473.2	0.0								1.0	3.0	5.0	6.0	7.0	7.0	7.0	7.0	7.0	8.0	9.0	10.0
eme wide Community infrastrucute																						
Education facilities		212.9	0.0									3.6	3.6				3.6	3.6	20		3.6	3.6
Community &Helath facilities Open spaces, Leisure & Sports facilities/ ptiches		53.2 65.1	0.0									0.1	0.3	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.9	1.0
Environmental/suystainability/waste		11.8	0.0									0.1	0.4	0.7	0.8	1.0 0.2	1.0 0.2	1.0 0.2	1.0 0.2	1.0 0.2	1.1 0.2	1.2 0.2
eme wide other itemsised - on site		11.0	0.0									0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Country Park Not until	2020	5	0.0													5						
A3 - Active Modes link (Church Lane - Marks Tey station		0.4	0.0									0.4				,						
PT1a - Rapid Transit Lopp (Bus only Roads)	''',	42.5	0.0									0.4		5						5		
PT2 - Park & Ride		4.2	0.0														4.2					
PT3 - West Tey Railway station Not until	2043	50	0.0																			
PT4 - West Tey Transit Hub Not until		6	0.0																			
Travel plan measures (@£1500/7nit) Backende	ed 1500	36	0.0									0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Employment support (@£750/unit interesting	ng	18	0.0									0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
eme wide other itemised - off site																						
Utilities - Elec sub statnions, gas supply & telecomes		30	0.0									5			5							
Utilities - potable & waste water		12	0.0									5										
A2 & A4 - Active Modes Connections to Rural Hinterlan	id, cycles Link	1.5	0.0													0.5						
PR1 & PR2 - Mars Tey Station and Junction package & S	Stane St. redu	9	0.0										9									
R2 - A12 Southern Juntion with Garden Community		41.5	0.0										-			41.5						
Contribution to A120 (@£1500 per unit		36	0.0									36										
Contribtution to Rapid Transit sytem (@£1000 per unit		24	0.0																			
nagement & Long term governnance																						
Open space endownments		50	0.0									10						5				
All infrastrucutre Costs sub total		1182.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	63.8	19.0	13.1	14.4	56.8	17.6	18.4	29.8	15.8	15.7	17.0
Inflation index Cost including inflation	2.500%	2772.6	1.00 0.0	1.03 0.0	1.05 0.0	1.08 0.0	1.10 0.0	1.13 0.0	1.16 0.0	1.19 0.0	1.22	1.25 79.6	1.28 24.4	1.31 17.2	1.34 19.4	1.38 78.3	1.41 24.8	1.45 26.6	1.48 44.2	1.52 24.0	1.56 24.5	1.60 27.2
Extra cost		1590.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	15.9	5.3	4.1	5.0	21.5	7.3	8.2	14.4	8.2	8.8	10.2
fessional fees																						
Strategic planning costs 5 yrs at £7.1m per annum Professional fees	6%	35.5 70.9	0.0					2.4	2.4	2.4	2.4 0.1	2.4 3.8	2.4 1.1	2.4 0.8	2.4 0.9	2.4 3.4	2.4 1.1	2.4 1.1	2.4 1.8	2.4 0.9	2.4 0.9	2.4 1.0
riolessionalitees	0%	70.5	0.0								0.1	3.0	1.1	0.0	0.5	3.4	1.1	1.1	1.0	0.5	0.5	1.0
iter developer contractor profit on infrastructue costs (excluding man	iag 15%	169.8	0.0								0.2	8.1	2.9	2.0	2.2	8.5	2.6	2.0	4.5	2.4	2.4	2.6
tingencies 0.03254		56.6	0.0								0.1	2.7	1.0	0.7	0.7	2.8	0.9	0.7	1.5	0.8	0.8	0.9
Total all costs	•	1515.2	0.0	0.0	0.0	0.0	0.0	2.4	2.4	2.4	3.6	80.7	26.4	18.9	20.6	73.9	24.5	24.5	39.9	22.2	22.1	23.8
s summary and conclusion		Total	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
,			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		2214	0	0	0	0	0	0	0	0	0	4	23	22	26	30	54	30	30	30	49	39
	_	1515	0	0	0	0	0	2	2	2	4	81	26	19	21	74	24	25	40	22	22	24
Total costs		699	0	0	0	0	0	-2	-2	-2	-4	-76	-4	3	5	-44	30	6	-10	8	27	15
Fotal costs Balance per annum		0,5			0	0	0	-2	-5	-7	-11	-87	-91	-88	-82	-126	-96	-91	-100	-92	-65	-50
Total costs Balance per annum Balance cumulative	•	033	0	0		-																-51.3
Total costs Balance per annum Balance cumulative <i>Per Hyas</i>		033	0	U	Ü	_		-2.4	-4.7	-7.1	-10.7	-87.4	-91.3	-88.6	-83.2	-126.9	-97.3	-91.6	-101.2	-93.1	-66.4	
Total costs Balance per annum Balance cumulative Per Hyas 0.			0																			
Total costs Balance prannum Balance cumulative Per Hyas O. Total finance charges on carry over -119.	.0 6%	-119	0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.7	-5.3	-5.9	-6.1	-6.2	-9.2	-8.0	-8.2	-9.3	-9.4	-8.4
Total costs Balance per annum Balance cumulative Per Hyas O. Total finance charges on carry over -119. Total finance charges in year assuming midpo -10.	.0 6%			0.0	0.0	0.0	0.0	0.0	-0.1 0.0	-0.3 0.0	-0.5 0.0	-0.7 -0.1	-5.3 -0.4	-5.9 -0.5	-6.1 -0.5	-6.2 -0.5	-9.2 -0.8	-8.0 -0.7	-8.2 -0.7	-9.3 -0.8	-9.4 -0.8	-8.4 -0.7
Total finance charges on carry over -119. Total finance charges in year assuming midpo Cumulative finance charges -10.	.0 6% .0	-119	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.7	-5.3	-5.9	-6.1	-6.2	-9.2	-8.0	-8.2	-9.3	-9.4	-8.4
Total costs Balance per annum Balance cumulative Per Hyas O. Total finance charges on carry over Total finance charges in year assuming midpo Cumulative finance charges -129,	.0 6% .0	-119 -10.0	0.0	0.0	0.0	0.0 0.0 0.0	0.0	0.0	-0.1 0.0	-0.3 0.0	-0.5 0.0 -1.0	-0.7 -0.1 -1.7	-5.3 -0.4 -7.5	-5.9 -0.5 -13.9	-6.1 -0.5 -20.5	-6.2 -0.5 -27.2	-9.2 -0.8 -37.2	-8.0 -0.7 -45.9	-8.2 -0.7 -54.8	-9.3 -0.8 -64.8	-9.4 -0.8 -75.0	-8.4 -0.7 -84.1
Total costs Balance per annum Balance cumulative Per Hyas O Total finance charges on carry over 119. Total finance charges in year assuming midpo Cumulative finance charges	.0 6% .0	-119		0.0 0.0 0.0	0.0 0.0 0.0	0.0	0.0 0.0 0.0	0.0 0.0 0.0	-0.1 0.0 -0.2	-0.3 0.0 -0.5	-0.5 0.0	-0.7 -0.1	-5.3 -0.4	-5.9 -0.5	-6.1 -0.5	-6.2 -0.5	-9.2 -0.8	-8.0 -0.7	-8.2 -0.7	-9.3 -0.8	-9.4 -0.8	-8.4 -0.7

2037 22 500 4350 84000	2038 23 500 4850 128000	2039 24 500 5350 132000	2040 25 500 5850 136000	2041 26 500 6350 140000	2042 27 500 6850 159000	2043 28 500 7350 163000	2044 29 500 7850 167000	2045 30 500 8350 171000	2046 31 500 8850 200000	2047 32 500 9350 204000				2051 36 500 11350 220000				2055 40 500 13350 276000		2057 42 500 14350 284000	2058 43 500 14850 303000				2062 47 500 16850 329000		2064 49 500 17850 337000	2065 50 5810 23660 364000
45.9 23.96	45.9 26.71	45.9 29.47	45.9 32.22	45.9 34.98	45.9 37.73	45.9 40.48	45.9 43.24	45.9 45.99	45.9 48.75	45.9 51.50	45.9 54.25	45.9 57.01	45.9 59.76	45.9 62.52	45.9 65.27	45.9 68.02	45.9 70.78	45.9 73.53	45.9 76.29	45.9 79.04	45.9 81.79	45.9 84.55	45.9 87.30	45.9 90.06	45.9 92.81	45.9 95.56	45.9 98.32	533.4 130.32
0.4	0.4 25.5	0.4	0.4	0.4	0.4 15.3	0.4	0.4	0.4	0.4 25.5	0.4	0.4	0.4	0.4 15.3	0.4	0.4	0.4	0.4 25.5	0.4	0.4	0.4	0.4 15.3	0.4	0.4	0.4	0.4 10.3	0.4	0.4	1.8 2.0
-2.5 -0.5 -0.2	-3.8 -0.7 -0.4	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-3.3 -0.6 -0.3	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-3.8 -0.7 -0.4	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-3.3 -0.6 -0.3	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-3.8 -0.7 -0.4	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-3.3 -0.6 -0.3	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-3.0 -0.6 -0.3	-2.5 -0.5 -0.2	-2.5 -0.5 -0.2	-28.5 -5.4 -2.7
43 1.26 54.6	67 1.28 85.6	43 1.29 55.8	43 1.31 56.5	43 1.32 57.1	57 1.34 76.9	43 1.35 58.4	43 1.37 59.0	43 1.38 59.7	67 1.40 93.6	43 1.41 61.1	43 1.43 61.7	43 1.45 62.4	57 1.46 84.1	43 1.48 63.9	43 1.50 64.6	43 1.51 65.3	67 1.53 102.4	43 1.55 66.8	43 1.56 67.5	43 1.58 68.3	57 1.60 91.9	43 1.62 69.8	43 1.64 70.6	43 1.65 71.4	53 1.67 88.3	43 1.69 73.0	43 1.71 73.9	501 1.73 866.2
2037 22	2038 23	2039 24	2040 25	2041 26	2042 27	2043 28	2044 29	2045 30	2046 31	2047 32	2048 33	2049 34	2050 35	2051 36	2052 37	2053 38	2054 39	2055 40	2056 41	2057 42	2058 43	2059 44	2060 45	2061 46	2062 47	2063 48	2064 49	2065 50
10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	116.2	
3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	10 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	20 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	10 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	20 1.1 1.4 0.2	1.1 1.4 0.2	3.6 1.1 1.4 0.2	3.6 1.1 1.4 0.2	1.1 1.4 0.2	53.7 13.1 16.0 2.9
		5						5						5							50						5	12.5
0.5 0.5	0.5 0.5	6 0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.4	0.5 0.1	0.5	18.6							
5		7						0.5						5								0.5					5	5
5 27.3	17.3	41.7	13.7	17.3	17.3	5 18.7	17.3	22.8	33.7	13.7	17.3	5 22.3	13.7	27.3	17.3	23.6	13.6	5 22.2	17.2	13.6	91.2	17.7	33.6	5 18.6	17.2	16.9	129.4	10 131.7
1.68 45.9 18.6	1.72 29.8 12.5	1.76 73.6 31.9	1.81 24.8 11.1	1.85 32.1 14.8	1.90 32.9 15.6	1.95 36.5 17.8	2.00 34.6 17.3	2.05 46.7 23.9	2.10 70.8 37.0	2.15 29.5 15.8	2.20 38.2 20.9	2.26 50.5 28.1	2.32 31.8 18.1	2.37 64.9 37.5	2.43 42.2 24.8	2.49 58.9 35.3	2.56 34.8 21.2	2.62 58.2 36.0	2.69 46.3 29.0	2.75 37.5 23.9	2.82 257.4 166.1	2.89 51.3 33.5	2.96 99.7 66.1	3.04 56.6 38.0	3.11 53.7 36.4	3.19 54.1 37.1	3.27 423.4 294.0	3.35 441.8 310.0
1.6	1.0	2.5	0.8	1.0	1.0	1.1	1.0	1.4	2.0	0.8	1.0	1.3	0.8	1.6	1.0	1.4	0.8	1.3	1.0	0.8	5.5	1.1	2.0	1.1	1.0	1.0	7.8	7.9
3.4	2.6	6.3	2.1	2.6	2.6	2.1	2.6	3.4	5.1	2.1	2.6	2.6	2.1	4.1	2.6	3.5	2.0	2.6	2.6	2.0	13.7	2.7	5.0	2.0	2.6	2.5	19.4	18.3
1.1	0.9	2.1	0.7	0.9	0.9	0.7	0.9	1.1	1.7	0.7	0.9	0.9	0.7	1.4	0.9	1.2	0.7	0.9	0.9	0.7	4.6	0.9	1.7	0.7	0.9	0.8	6.5	6.1
33.4	21.8	52.6	17.3	21.8	21.8	22.6	21.8	28.8	42.5	17.3	21.8	27.1	17.3	34.4	21.8	29.8	17.2	27.0	21.7	17.2	115.0	22.3	42.4	22.5	21.7	21.3	163.1	164.0
2037	2038	2039	2040 25	2041	2042 27	28	2044	2045 30	31	32	33	34	35	36	37	38	2054 39	40	41	42	2058 43	44	2060 45	2061 46	2062 47	2063 48	2064 49	2065 50
43 33 10	67 22 45	43 53 -9	43 17 26	43 22 21	57 22 36	23 21	43 22 21	43 29 14	67 43 24	43 17 26	43 22 21	43 27 16	57 17 40	43 34 9	43 22 21	43 30 13	67 17 50	43 27 16	43 22 21	43 17 26	57 115 -57	43 22 21	43 42 1	43 22 21	53 22 31	21 22	43 163 -120	501 164 337
-14 -15.5	31 29.8	21	47 46.4	68 67.9	104 103.6	125	146 145.7	160 160.2	185 184.8	211 210.7	232	248 248	288 288.2	297 296.9	318 318.2	331 331.5	381 381.3	397 397.5	419 418.9	445 444.9	387 387.3	408 408.1	409 408.9	430 429.6	461 460.5	483 482.5	363	699.3
-7.0 -0.6 -100.5	-6.9 -0.6 -108.0	-4.6 -0.4 -113.0	-5.5 -0.5 -119.0	-4.3 -0.4 -123.6	-3.3 -0.3 -127.2	-1.4 -0.1 -128.8	-0.3 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0	0.0 0.0 -129.0
			-72											168		202		268		316		279		301		353		570