

# STATEMENT ON VIABILITY

## 1. Personal Details and Experience

My name is Edward Charlesworth. I live in Rayne and have been a resident of the area for 3 years. I have followed the Braintree Local Plan process with interest and present this Statement on Viability from a position of some expertise on behalf of the Parish Councils identified in the Overarching Planning Statement and SERCLE. Hence, references below to SERCLE mean me on behalf of the Parish Councils and SERCLE.

I am Managing Director, Head of Latin America Wholesale Credit at Bank of America Merrill Lynch. I have 21 years' experience in European and International lending markets, either as a transactor or as a risk manager. I was previously head of Corporate Credit Risk EMEA at Bank of America Merrill Lynch (a portfolio of more than \$80 billion), and have extensive experience of appraising, approving and managing large, highly structured and leveraged transactions for some of the world's leading companies and financial investors.

## 2. Preamble

The Viability Assessment produced by Hyas Associates Ltd in April 2017 to support the garden settlements proposed in the North Essex Local Plans ('the Hyas Report') in the Evidence Base does not demonstrate the economic viability of the project due to the lack of information provided and significant flaws in methodology.

The residual value methodology utilised by Hyas in the model is wholly inappropriate for such a long term project as it fails to take into account the substantial financing costs attached to projects such as this which operates with a cashflow deficit (income from land sales does not cover costs) for a number of years, and therefore has to borrow in order to invest.

Hyas does not demonstrate the financing requirement of the project or provide any sensitivity or stress test to help quantify the risks to the project. Instead, the purpose of the modelling is to determine a 'viable' land value, ignoring the facts that;

- i. landowners have a minimum expectation of land value; and
- ii. the project will need to borrow (either in the form of equity or debt) in order to buy that land.

SERCLE has used the GCLS model to recreate the Hyas viability study in order to more accurately demonstrate the cashflow of the project and to sensitise and stress test the numbers.

This analysis is intended to illustrate how sensitive a 40 year model is to a small number of variables. It should be noted, however, that it makes no comment as to the efficacy or otherwise of the assumptions relating to;

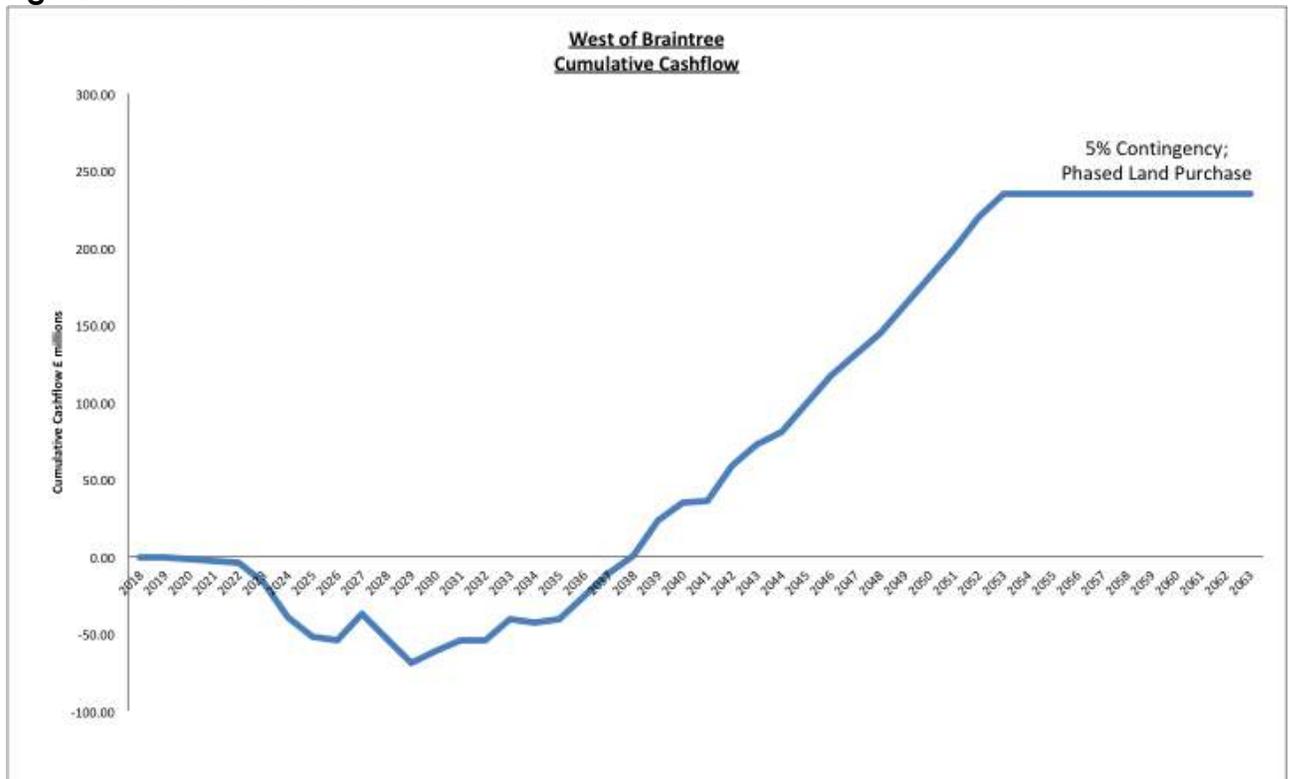
- i. build costs;
- ii. garden city premium;
- iii. application of inflation; or
- iv. the viability threshold.

### 3. Land Accumulation

The Hyas model does not model the purchase of land. It has been amended by SERCLE to include land accumulation costs on the basis laid out in the evidence base i.e. purchase of land 2 years ahead of disposal. Though it appears implausible that land owners would wait up to 40 years for land proceeds, SERCLE has no evidence that this has not been agreed with landowners as information about deals has not been released into the public domain.

Using the blended average £100,000 per acre land purchase cost referred to by AECOM in the Evidence Base, this creates a baseline cashflow profile as shown in **Figure 1** below:

**Figure 1: Baseline Cashflow**



This would suggest that, after financing costs at a 6% interest rate, the project generates a positive cashflow of £235 million at 2017 prices. This might suggest that there is significant headroom in the plan.

#### 4. Sensitivity Analysis

Some very simple stress testing of assumptions, however, demonstrates how much risk lies in those figures. This is explained below.

##### i. Infrastructure Costs/ Contingencies

**Table 1: Infrastructure Assumptions from Hyas Viability Model**

<b>On Site</b>	<b>Total</b>
Country Park Landscaping	£5.0 m
A4 Shalford Road/ Pods Lane Quietway	£0.3 m
PT5 Rapid Transit & Flagship Cycle Route	£5.0 m
PT7 Transit Hub	£6.0 m
Travel Plan measures (@£1,500/unit)	£13.0 m
Employment Support (@£1,000/unit)	£8.5 m
<b>Off Site</b>	<b>Total</b>
Utilities - Primary Substations, gas & telecoms	£13.0 m
Utilities - 5km trunk mains, discharge upgrade & 6km connection to WWTW	£9.0 m
Active Modes A1, A2, A3 & A4 (Cycleway improvements)	£6.7 m
PT4 - A131/A130 Bus Lane	£8.0 m
PT6 - Rapid Transit & Flagship Cycle route NW Braintree	£6.0 m
R2 & R3 - A120/ B1256 improvements (interim & final)	£15.0 m
R1 - A120/B1256 New Western Junction	£7.0 m
Contrib to strategic Public Transport Solutions (@£1,500 per unit)	£13.0 m
<b>Sub Total</b>	<b>£115.5 m</b>

Though difficult to prove as an outsider to the process without resources to conduct commercial due diligence, there are strong reasons to believe that the baseline level of infrastructure spend and the assumed 5% level of contingency on those costs are wholly inadequate. For example, the Viability Model only includes:

- £24 million for Utilities-related infrastructure, despite the need for significant investment in water, waste and electricity;
- £80 million for road, rail, bus and cycling infrastructure, which is intended to include multiple rapid transit routes due to the remote nature of the site. As an illustration of how ambitious / optimistic these costings are:
  - the Cambridge guided busway cost more than £150 million,
  - light rail projects, according to Government figures, have averaged £25 million per mile. West of Braintree to Braintree is at least 5 miles and to

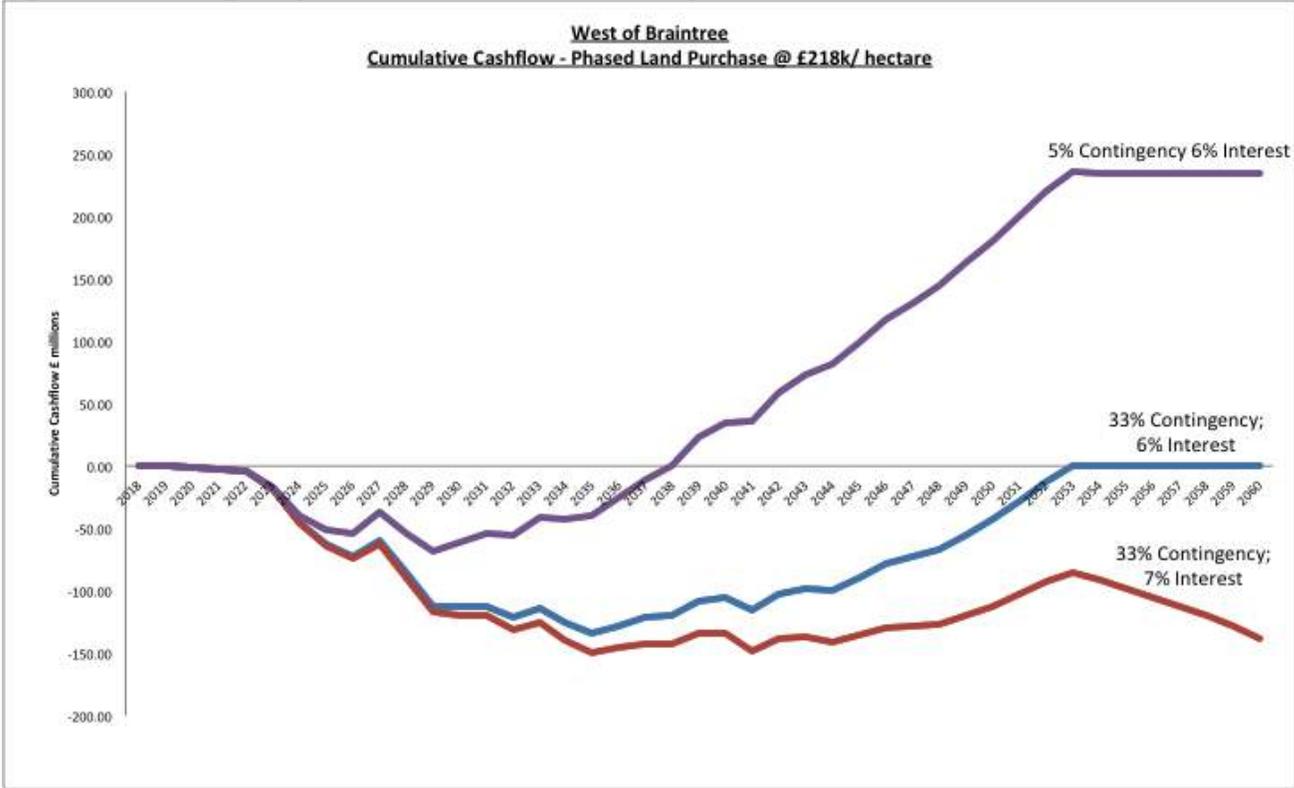
Stansted Airport around 10 miles. Hyas has budgeted £11m for rapid transit for West of Braintree. That effectively rules out light rail as an option.

As **Figure 2** below demonstrates, the cost of infrastructure is absolutely vital, as a 33% increase in those costs (either through an increase in the baseline cost or increased contingency) would take the project to a breakeven level – i.e. cash generated would be just sufficient to pay for the infrastructure and other costs, including land. Even with a 33% increase, total infrastructure investment (excluding land and enabling works) for a new, remote town would only be c. £150 million, i.e. similar to the costs of the Cambridge guided busway. It is implausible that total infrastructure costs would be so low when measured against that relevant, costed and similar yardstick.

**ii. Interest Rates**

Such a long term project is extremely sensitive to prevailing and future interest rates. Hyas has assumed a 6% cost of debt in its assumptions. Assuming the increased level of infrastructure spend and adding just 1% to the interest rate would take the project from breakeven to a £100 million deficit. The project stops generating cashflow before the debt is repaid and is therefore insolvent.

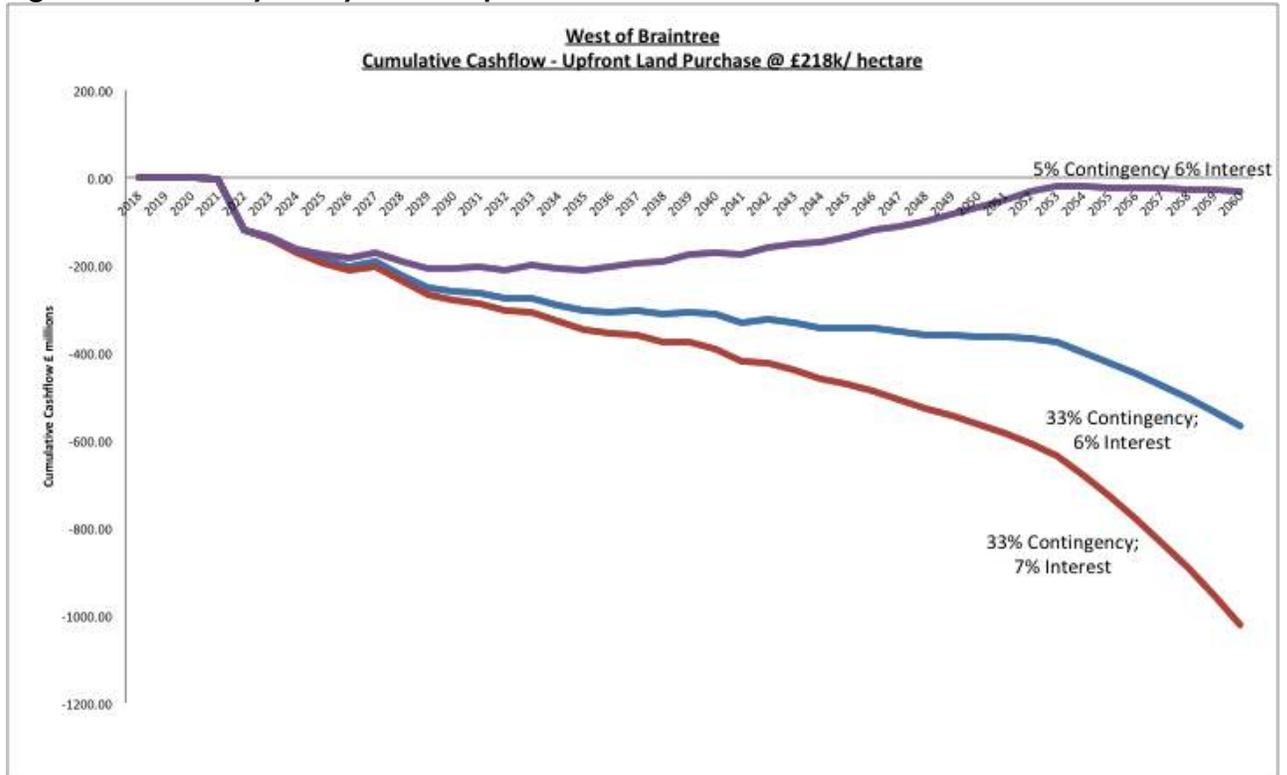
**Figure 2: Contingency and Interest Rate Sensitivity**



### iii. Land Accumulation Assumption

Though better from a cashflow perspective, a phased land purchase appears implausible. The phasing of the land purchase is vital in determining viability as the cost of the land will need to be financed, potentially for a large number of years, before it is sold on in parcels. To illustrate this, **Figure 3** demonstrates the cashflow of the project under the same scenarios as **Figure 2**, but with the land cost taken in year one.

**Figure 3: Sensitivity Analysis with Upfront Land Purchase**

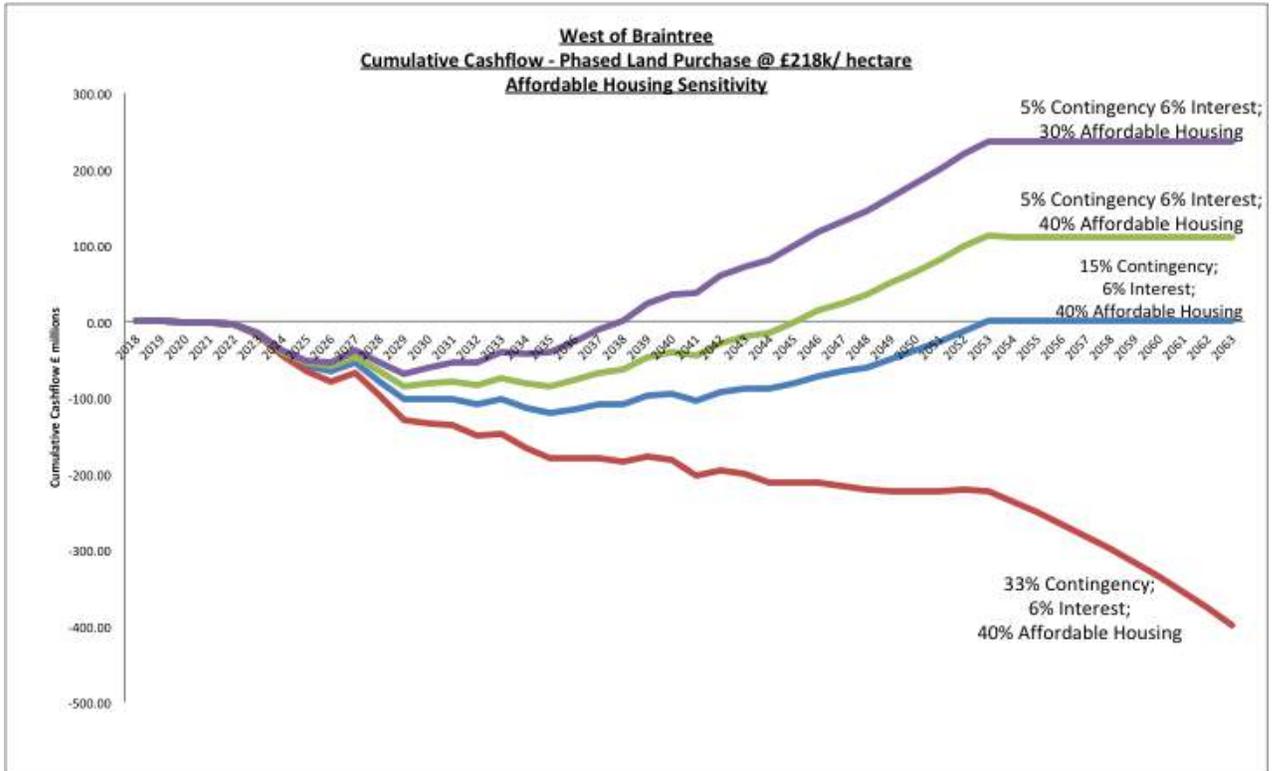


In this scenario, even the Baseline (5% infrastructure sensitivity, 6% interest rates) does not cover its costs over 40 years. In the arguably more realistic scenarios with 33% increase in infrastructure costs, the debt level spirals out of control as the income in each year is insufficient to cover project costs and interest on the accumulated debt.

## 5. Affordable Housing

This Statement on Viability has, for simplicity, largely focused on infrastructure and land costs as well as the sensitivity to interest rates. However, it is vital to note that Hyas makes clear at the start of its Report that the modelling in its appraisal illustrates a scenario in which affordable housing is provided at 30% of total housing stock. BDC policy requires 40% affordable housing. **Figure 4** demonstrates, under the phased land acquisition case what impact Affordable Housing has upon the cashflows of the project.

**Figure 4: Affordable Housing Sensitivity**



**Figure 4** demonstrates that breakeven on Infrastructure Costs with 40% Affordable Housing is only a 15% increase from Hyas' Base Case (versus 33% in the 30% Affordable Housing case). That renders the business case marginal by any sensible definition.

## 6. Conclusions

It is clear from the simple sensitivity analysis above that either insufficient stress testing has been undertaken by BDC and NEGC, or that the stress testing has been undertaken but the results not made public.

No commercial lender would consider lending to a proposition such as this, where relatively small changes to key assumptions render the project insolvent. Basic financial due diligence has not been undertaken, which puts taxpayers in peril and may lead to material unexpected public subsidy being required.