

## **Pennbury Eco Town: A Review of the DCLG Report “Financial viability study of the eco-towns programme”, March 2009**

### **Introduction**

This report has been commissioned by Leicestershire County Council. It is based solely on a review of the March DCLG Report and has not been discussed with the scheme promoters or the report authors. Halcrow has seen the County Council's own financial appraisal (as it appeared in the draft committee report to Cabinet, dated April 7th) and fully endorses its contents.

The report is structured around the three questions posed in Section 1.5 of the Study, Consultation Arrangements.

### **Question 1: Do you consider that as a high level strategic assessment this study has identified the main issues affecting viability?**

The Study has highlighted many of the issues which will affect viability, but it does not sufficiently recognise the challenges involved in securing an annual return on investment in a long term scheme such as this, with very high upfront costs (see below). Moreover, the Study lacks detail and transparency. We have no confidence in the conclusions reached on viability because the Study does not provide:

- The details of the appraisal model used
- Enough information on the cost and value assumptions to allow checks to be made on the adequacy of the budgets allowed
- Sufficient details on the specific scheme and how it is proposed that it should be financed and run

### **Question 2: Are there major areas of cost of infrastructure provision and funding or other issues affecting financial viability which are not identified and could be considered at this stage?**

There are many areas of concern around costs which have not been included, assumptions which have been made about funding mechanisms and other issues affecting viability, which are summarised below:

#### **1. Forecast House Prices**

The key determinant of viability is the price which can be obtained for the new housing. The stated assumption in the Study is that there will be a recovery in house prices to peak levels by 2011 after which the rate of growth in house prices will be no higher than the rate of growth in construction costs. The Report's view is that the former assumption is optimistic and we would endorse this view. In mid 2008 the specialist residential research department at Savills produced a report entitled “UK Residential Development Land” in which they forecast “a return of buyer confidence in most mainstream housing markets with values likely to be restored to their 2007 peak in most of the regions before 2014. (We) anticipate a return of developer confidence to boost land values ahead of this date but it is unlikely that land values will return to their 2007 peak by then”. Conversely, the assumption that, after 2011, the rate of growth in house prices will be no higher than the rate of growth in construction costs is pessimistic. The Study refers to a 20 year increase in real house prices, prior to 2007, of 4% per annum (2.4.1 para. 4) and the Barker report pointed

to a long term trend for house prices to exceed general price inflation by 2.7%. The net effect of these various differences is that the DCLG assumptions are probably over-optimistic in the short term, but probably pessimistic in the long term. The overall effects on viability are unclear, but since forecast house prices are the most important variable in the economic analysis some sensitivity testing should be done around different assumptions.

## **2. Finance Strategy**

According to the Report the model used for the viability study is a "net present value calculation of the projected nominal pre-financing and tax cash flows discounted using a standard discount rate". Critically the model assumes that the schemes are funded using debt finance to meet 70% of the initial costs. The profits target is taken to be 20% of all the costs developer is assumed to incur. Whilst the use of a NPV model is considered more appropriate than the conventional residual land value appraisal used in the property industry the assumptions about debt financing seem dubious. Over the last 10 years, all major housebuilders have typically:

- (a) Used corporate rather than project specific debt and
- (b) Used a much lower level of gearing than 70%.

The volume housebuilders who might be expected to take on the 'lead developer' role in a scheme of this scale are likely to be very cautious of the risks that debt finance poses when the market turns downwards, as at present. In addition their main concern is to produce a high annual rate of return on the capital invested in their business and, by implication, in individual schemes.

## **3. Annual Return on Investment**

The main concern of investors in a long term scheme such as this is likely to be the need to obtain an adequate annual return on their capital required over the life of the project. Typically this is around 20% per annum at the level of individual projects and ignoring the cost of any corporate debt finance used. This need for an annual return on capital is a particular problem for eco-towns because of the extent of investment required before receipts can be generated. Not only is there a need for extensive site preparation and, in the case of Pennbury, access infrastructure; but also power generation plant which logically should be in place before the housing is occupied. The overall phasing strategy and the timing of costs and sales will be critical to viability and to investment decisions, but, unfortunately, the report provides no detail of this.

It is of course the case that the Co-op are not a typical housebuilder. Certainly the approach that they propose to adopt and their motivation is unclear from the information to hand. They say that they have a long-term interest but that normally is taken to mean an acceptance that returns will be deferred, not reduced. The key concept is that this return is a reward for taking a risk and current conditions demonstrate that the risks involved in this case are very real, especially where development has been financed using debt. It is possible that specialist developers such as Gallagher's use a different financial model and that in some cases joint ventures and other special purpose vehicles might be established which use some element of debt funding. However, the DCLG viability aims to use standard assumptions and our view is that the stated assumptions do not accord with market norms. The result is probably a more optimistic assessment than would otherwise have been the case.

#### **4. House Build Rate**

The report highlights that the model assumes that 542 market homes will be sold per annum. This is extremely ambitious. For comparison the project director for the scheme at Camborne near Cambridge was quoted in Planning Magazine (April 11th 2008) that "the maximum building rate for such settlements is around 350 homes per year". It could be argued that the Camborne scheme was better situated in relation to employment opportunities. It was also delivered at a time and in a place when there was a shortage of significant competition; which does not apply to Pennbury. This is important because the annual return on capital employed would be adversely impacted if completions run more slowly than anticipated, especially using the pessimistic assumptions about long term price and cost trends used in the Viability Study

#### **5. Commercial Space Provision**

The plans envisage a significant amount of retail and commercial floorspace. It is difficult to predict land values generated by the retail uses. Key units will be relatively valuable but much of the convenience provision is not likely to be. There is also the issue of limited demand for space and thus the possibility that substantial commercial development here could divert activity from more established locations which will probably be more sustainable in planning terms. Low and slow take up of commercial space on the site, like the housing build rate, would impact negatively on the return on capital employed.

#### **6. Lack of Transparency and Credibility of Cost Assumptions**

The Study makes a number of questionable assumptions about many of the costs involved, including infrastructure costs, section 106 costs, exceptional site costs, building costs, fees/marketing costs and open book accounting.

##### **6.1 Section 106**

Section 2.1. 5<sup>th</sup> paragraph states "neither the Department nor its advisers have taken a view on whether the s106 offer set out in the draft s106 HoTs is likely to be satisfactory in planning terms. Indeed, at this stage, prior to any planning application, the list of matters to be considered can only be identified at a high-level and it is likely to be subject to change at a future date". This is unsatisfactory and undermines any conclusions reached on overall viability.

It is not clear from the promoters offer whether the facilities they propose to provide are in addition to the stated S106 contribution or whether they expect that elements will be paid for through that contribution. But in several places references are made to the provision of 'land' for social infrastructure and community facilities. (i.e. not the facilities themselves and no statement is made as to whether a charge will be made for this land). The most expensive item of social infrastructure is invariably schools and it is noteworthy that the promoters offer is to "build and operate (these) through a partnership arrangement". The implication might be that the promoters envisage a PFI style arrangement whereby the Local Education Authority effectively rent the schools. From experience, this is not the LEA's preferred approach. LCC has estimated the costs or provision of the schools alone at £90 million, which is 90% of the low end of the total budgeted section 106 contribution. It is likely that Table 3.4.3.2 has seriously underestimated the likely costs of section 106 contributions when the costs of affordable housing, land contamination and on and off-site infrastructure provision are factored in.

## 6.2 Infrastructure Costs

Section 1.2.ii states that “Government and its Agencies have not endorsed the costs of new and unplanned infrastructure and its deliverability. For large schemes involving major new infrastructure substantial further work will be required and this is a significant consideration”

## 6.3 Exceptional Site Costs

Appendix 2 states “The Department’s advisers have also made an Assumption that there are no services on, or crossing any of the sites in a position which would inhibit development or make it unduly expensive and that there are no abnormal ground conditions, nor archaeological remains present, which might adversely affect the present or future occupation, development or value of each property”. In the case of Pennbury there are known, extensive archaeological remains and a likelihood of highly contaminated land from former airfield uses. A contingency sum should be built into the financial model to deal with both of these aspects, which could be very substantial and which could have repercussions for phasing and hence cash flow.

## 6.4 Building Costs

The build costs of £1,820 – 2,070 million (Table 3.4.3.2) seem low and insufficient to meet zero carbon standards. We analyse below the residential, commercial and retail components of the building programme for Pennbury.

### Residential

Table 3.4.3.2 makes it clear that this figure includes the costs of meeting CSH standards – to Level 4 although the Co-op state that Pennbury will be constructed to Level 6 for energy use. Building costs for residential units will vary depending on the housing type, density etc. If we assume 15,000 houses, at an average of 100 sq.m each this equates to an average residential building cost of £1,213 – 1,380 per sq.m. Comparison of this figure with the cost information in Table 1.1 of the DCLG Report “*Cost Analysis of the CfSH*”, July 2008, reveals that the Viability Study figures appear to make insufficient cost allowance for meeting zero carbon targets. Table 1.1 has baseline build-cost information on different house types. These range from £786 sq.m for detached houses to £1,342 for flats. The Co-op figure is at the upper end of this range but the figures quoted in Table 1.1 are before the costs of meeting CSH requirements are applied. The Pennbury proposals will be designed to meet Level 6 in energy terms, using an energy technology mix including wind energy. Table 2.4 of the DCLG report identifies the additional energy costs of meeting CSG Level 6, where wind energy can be utilised, of between £86 per sq.m. and £247 per sq.m. depending on the development scenario. A more appropriate range for residential build costs is therefore £872 - £1589 per sq.m.

### Commercial

Our cost analysis of the commercial elements of Pennbury is based on the following two assumptions:

1. Pennbury will provide just over 14,000 jobs, 46% of which will be in B-class sectors. The single biggest employment sector is projected to be Retail, Catering and Repairs (28%), followed by Finance and Business Services (20%);
2. In terms of employment (B-class) land requirements, Pennbury is assumed to need 11 ha of B1, 15 ha of B2 and 19 ha of B8.

There are no equivalent “official” figures for commercial development costs, but based on our previous experience we consider the following broad costs to be reasonable estimates (note none of these costs include any allowance for meeting low/zero carbon standards):

B2/B8 - £550 sq m which assumes 70% site coverage, a mix of building sizes and includes an allowance for external works but not fees

B1 - £1100 sq m including external works which assumes a mix of 2 & 3 storey development, 150% site coverage, no air conditioning, with low car parking provision

### Retail

Standard town centre & convenience units - £800 sq m (30 units, finished as shells for occupier fit out and averaging 200 sq m each)

Retail sheds - £600 sq m (5 units, average 1000 sq m each)

### Social and Community Costs

These are summarised below, based on information in the Leicestershire County Council Report to Cabinet, April 7<sup>th</sup>, 2009.

### Summary

On this basis the build costs are likely to be:

Build Costs Category	Cost per sq.m		total sq.m.	Total Cost (£ million)	
	low	high		low	high
Residential	872	1589	1500000	1,308.0	2,383.5
B2/B8	550	550	238000	130.9	130.9
B1	1100	1100	165000	181.5	181.5
Retail centre	800	800	6000	4.8	4.8
Retail shed	600	600	5000	3.0	3.0
Adult Social Care				2.0	2.0
Schools				90.0	90.0
Civic amenity site				1.0	1.0
Healthcare				2.3	3.6
Police				2.0	2.0
Fire & Rescue				2.4	2.4
Library				2.0	2.0
<b>Total</b>				<b>1,729.9</b>	<b>2,806.7</b>

Note Commercial costs include no allowance for low/zero carbon standards  
Social & Community facility costs source Leicestershire County Council, excluding revenue costs

The main origin of the significant variation between the low and high cost scenarios is the housing mix – i.e. the relative proportions of detached, semi-detached, terraced and apartment units. Further information on the proposed housing mix will enable these figures to be firmed up, but given the average high density of the Pennbury development, the build cost is likely to be at the high end of the range. On the basis of this analysis it appears highly likely that the Study has under-estimated the likely building costs. This is the largest cost item and any variances here would have a significant impact on overall viability.

### 6.5 Fees/Marketing costs

The entire budget for fees, sales, marketing, purchasing the land and finance including development profit is calculated at only around 13-15% of cost (and much less of value). This figure seems remarkably low, bearing in mind that most volume housebuilders seek to achieve a simple margin on cost that is higher than that and also, as previously stated, seek an annual return on their capital employed. However, in the absence of full workings in the viability study, it is impossible to know how this conclusion has been arrived at

### 6.6 Open Book Accounting

Section 2.1, last paragraph states “When promoters have refined their schemes to a point where they are ready to make a planning application, the relevant agencies will request the promoters to provide them with the required financial or technical information to assist in assessing proposals. LPAs may request this process to be carried out on an “open book” basis”. The recognition of the need for open book accounting is an important acknowledgement, but, as envisaged, this would be much too late in the process. The Study states that the conclusions drawn from the financial assessment may partly be based on “commercially confidential” information, which has been excluded from the report. An element of confidentiality is understandable, but the affected local authorities should be shown this information in confidence, and allowed to comment on it, particularly if it has influenced any decisions on overall viability. This should happen before any decisions in principle are taken on drawing up a shortlist of eco-town locations.

### 6.7 Transport Costs

The LCC Cabinet Report identifies the shortcomings of the on and off-site transport cost assumptions. We share these concerns; the Study lacks detail on which transport costs have been included and which have not. Our experience suggests that a total transport cost of between £140 million and £170 million is likely to be seriously inadequate for a development of this scale, and the County Council’s analysis supports this. This refers to the cost of a tram system in the order of £250-300 million. The Co-op are believed to favour a guided bus system and for information the 25km long Cambridge Guided bus has cost £116 million – and this is probably easier to construct than one for Leicester because the alignment follows an old rail track.

**Question 3: Are you aware of evidence which would lead you to different conclusions set out here? For example, where the assessment shows a negative financial outcome are there additional public policy reasons (e.g. regeneration or site restoration) which would justify an alternative approach?**

Any public policy reasons to justify public sector intervention or funding would have to comply with DCLG *Economics Paper 1: A Framework for Intervention (2007)*, known as the ‘Three Es’:

- Efficiency: intervention justified if expenditure corrects a market failure or if there are government failures
- Equity: intervention associated with correcting uneven distribution of outcomes (e.g. wealth), which may be regarded as unfair
- Environmental: intervention justified on the grounds of environmental objectives (e.g. carbon neutrality)

There are no efficiency, equity or environmental reasons which would justify public funding at Pennbury. It is noted that in the Definitions part of the Study (page 15) the definition of potentially viable schemes includes an allowance for “existing public sector funding sources (e.g. social housing grant)”. Given that this proposal is contrary to extant planning and regeneration policies and priorities it is important that the viability assessment is explicit about what assumptions have been made about the scale and type of public sector funding for Pennbury.

**Conclusion**

We have serious reservations that the Study has under-estimated the likely costs involved and has made a number of questionable assumptions about financing and market absorption, as set out above, although these cannot be properly tested because of a lack of transparency and detail in the Study methodology. Consequently we have no confidence in the conclusions reached on viability.