

Dacorum Borough Council Affordable Housing and Section 106 Viability Study

November 2009

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Three Dragons



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1 INTRODUCTION

Review of project aims

- 1.1 Dacorum, Watford and Three Rivers councils appointed Three Dragons to undertake a Development Economics Study (DES). The study was to provide the councils with appropriate information on which they can make informed decisions relating to the provision of affordable housing and the use and allocation of land within their respective Development Plan Documents (DPDs), to provide robust evidence to support the Local Development Frameworks (LDFs) at examination and to help formulate appropriate spatial planning policies.
- 1.2 This report relates to the specific circumstances of Dacorum Borough Council. The report analyses the impact of affordable housing and other planning obligations on scheme viability.

Need for Affordable Housing

- 1.3 The council is currently awaiting the results of its Strategic Housing Market Assessment to provide an up to date picture of the level of need for affordable housing in Dacorum. The last review of need was undertaken in 2004 and most recently reported in the Council's 2006 Housing Market Background Paper (<u>http://www.dacorum.gov.uk/default.aspx?page=1884#Housing Background</u>). The paper stated that, across the Borough as a whole, there was a net shortfall of 5,110 affordable properties to 2008. However, between 2001 and 2008, 459 affordable dwellings were delivered.
- 1.4 Our report is not intended to deal with the issue of affordable housing need in any detail and the forthcoming SHMA will provide the appropriate guidance to the council. However, given the level of need reported in 2006, it seems reasonable for us to assume that the council will continue to need to maximise delivery of affordable housing, consistent with financial viability considerations (and other mixed community objectives)

Policy context - national

- 1.5 This study focuses on the percentage of affordable housing sought on mixed tenure sites and the size of site from above which affordable housing is sought (the site size threshold). National planning policy, set out in PPS3 makes clear that local authorities, in setting policies for site size thresholds and the percentage of affordable housing sought, must consider development economics and should not promote policies which would make development unviable.
- 1.6 PPS3: Housing (November 2006) states that:

"In Local Development Documents, Local Planning Authorities should:

Set out the range of circumstances in which affordable housing will be required. The national indicative minimum site size threshold is 15 dwellings. However, Local Planning Authorities can set lower minimum thresholds, where viable and practicable, including in rural areas. This could include setting different proportions of affordable housing to be sought for a series of site-size thresholds over the plan area. Local Planning Authorities will need to undertake an informed assessment of the economic viability of any thresholds and proportions of affordable housing proposed, including their likely impact upon overall levels of housing delivery and creating mixed communities". (Para 29)

1.7 The companion guide to PPS3¹ provides a further indication of the approach which Government believes local planning authorities should take in planning for affordable housing. Paragraph 10 of the document states:

"Effective use of planning obligations to deliver affordable housing requires good negotiation skills, **ambitious but realistic affordable housing targets and thresholds** given site viability, funding 'cascade' agreements in case grant is not provided, and use of an agreement that secures standards." (our emphasis)

Policy context – East of England Region

- 1.8 Policy H2 of the East of England Plan (2008) deals with affordable housing. It requires local authorities to set appropriate, separate targets for social rented and intermediate housing. Targets should be based on the objectives of the RSS, local assessments of need and the Regional Housing Strategy. It also provides a regional monitoring target of 35% affordable housing from development granted permission after publication of the EEP. The policy justification indicates that as housing need varies across the region targets of more than 35% may be justified in some areas.
- **1.9** The East of England Plan, published in May 2008, indicated that 17,000 new dwellings should be provided between 2006 and 2031. This represented a minimum target and assumed strategic development at Hemel Hempstead, i.e. major review of the Green Belt and large urban extensions into the countryside.

Policy context – Dacorum

- 1.9 The Dacorum Borough Local Plan 1991 2011 (adopted April 2004), includes three saved policies for affordable housing.
- 1.10 Policy 20 seeks provision of 1,250 affordable housing units between 1 April 2001 and 31 March 2011. It requires affordable housing on:
 - sites of 1 hectare or more in area or capable of accommodating 25 dwellings in Hemel Hempstead or Berkhamsted;
 - sites of 0.5 hectares or more in area or capable of accommodating 15 dwellings in Tring or the large villages listed in Policy 3;

¹ DCLG, Delivering Affordable Housing, November 2006

- sites of 0.2 hectares or more in area or capable of accommodating 5 or more dwellings in or immediately adjacent to the small villages listed in Policies 6 and 8 and at Rucklers Lane and Little Gaddesden.
- 1.11 The Council has adopted a threshold of 15 dwellings to be applied in Hemel Hempstead, in line with the national indicative threshold set out in PPS3 as at 1st April 2007.
- 1.12 Saved Policy 20 of the Local Plan also states that the amount of affordable housing sought will be negotiated, but that this will be governed by:
 - expectation that a minimum of 20% of the units on redevelopment sites should be for affordable housing, with higher levels being appropriate on very large sites and on any green field sites;
 - indicative targets for sites listed in the schedule of housing proposal sites;
 - character of the site and its surroundings; size of the site; the need for the particular units of affordable housing; economics of providing affordable housing; proximity of local services and facilities and access to passenger transport; extent to which affordable housing would prejudice the realisation of other planning objectives that need to be given priority; and the viability of the development as a whole.
- 1.13 The target varies within the range 20-35%, with identified percentages for allocated sites.
- 1.14 The council published its Issues and Options Core Strategy in May 2006. The report set out the options that the number of affordable homes sought on the following types of site should be proportionally higher:
 - large:
 - greenfield;
 - with high accessibility (e.g. town centre locations)
- 1.15 The results of the consultation indicated that highly accessible locations were favoured for affordable homes, but a significant proportion of consultees supported all three options, or a combination of options 1 and 3 (large, highly accessible).
- 1.16 In 2006 changes to the East of England Plan recommended that Hemel Hempstead should be identified as a 'Key Centre for Development and Change' with 12,000 additional dwellings to be accommodated between 2001

and 2021. A supplementary Issues and Options Paper was published in November 2006 to explain the implications of these proposals. The Paper pointed to the need for large-scale greenfield growth at Hemel Hempstead, which included development in Dacorum and St. Albans districts.

Research undertaken

- 1.16 There were four main strands to the research undertaken to complete this study:
 - Discussions with a steering group of officers from the three commissioning authorities which informed the structure of the research approach;
 - Analysis of information held by the authority, including that which described the profile of land supply;
 - Use of the Three Dragons Toolkit to analyse scheme viability (and described in detail in subsequent chapters of this report);
 - A workshop held with developers, land owners, their agents and representatives from a selection of Registered Social Landlords active in the borough. A full note of the workshops is shown in Appendix 1.

Structure of the report

- 1.17 The remainder of the report uses the following structure:
 - Chapter 2 explains the methodology we have followed in, first, identifying sub markets and, second, undertaking the analysis of development economics. We explain that this is based on residual value principles;
 - Chapter 3 provides analysis of residual values generated across a range of different development scenarios (including alternative percentages and mixes of affordable housing) for a notional 1 hectare site.
 - Chapter 4 considers options for site size thresholds. It reviews national policy and the potential future land supply and the relative importance of small sites. The chapter considers practical issues about on-site provision of affordable housing on small sites and the circumstances in which collection of a financial contribution might be appropriate (and the principles by which such contributions should be assessed);
 - Chapter 5 identifies a number of case study sites (generally small sites which are currently in use), that represent examples of site types found in the authority. For each site type, there is an analysis of the residual value of the sites and compares this with their existing use value.

• Chapter 6 summarises the evidence collected through the research and provides a set of policy recommendations.

2 METHODOLOGY

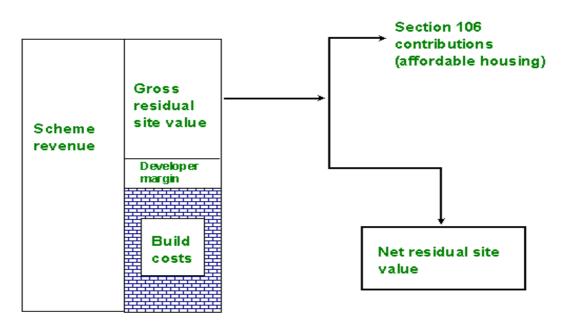
Introduction

2.1 In this chapter we explain the methodology we have followed in, first, identifying sub markets (which are based on areas with strong similarities in terms of house prices) and, second, undertaking the analysis of development economics. The chapter explains the concept of a residual value approach and the relationship between residual values and existing/alternative use values.

Viability – starting points

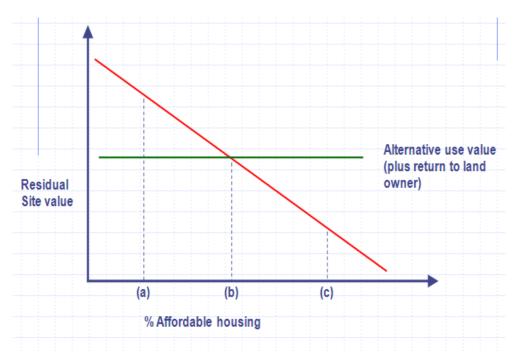
- 2.2 We use a residual development appraisal model to assess development viability. This mimics the approach of virtually all developers when purchasing land. This model assumes that the value of the site will be the difference between what the scheme generates and what it costs to develop. The model can take into account the impact on scheme residual value of affordable housing and other s106 contributions.
- 2.3 Figure 2.1 below shows diagrammatically the underlying principles of the approach. Scheme costs are deducted from scheme revenue to arrive at a gross residual value. Scheme costs assume a profit margin to the developer and the 'build costs' as shown in the diagram include such items as professional fees, finance costs, marketing fees and any overheads borne by the development company.
- 2.4 The gross residual value is the starting point for negotiations about the level and scope of s106 contribution. The contribution will normally be greatest in the form of affordable housing but other s106 items will also reduce the gross residual value of the site. Once the s106 contributions have been deducted, this leaves a net residual value.

Figure 2.1 Theory of the Section 106 Process



- 2.5 Calculating what is likely to be the value of a site given a specific planning permission, is only one factor in deciding what is viable.
- 2.6 A site is extremely unlikely to proceed where the costs of a proposed scheme exceed the revenue. But simply having a positive residual value will not guarantee that development happens. The existing use value of the site, or indeed a realistic alternative use value for a site (e.g. commercial) will also play a role in the mind of the land owner in bringing the site forward and thus is a factor in deciding whether a site is likely to be brought forward for housing.
- 2.7 Figure 2.2 shows how this operates in theory. Residual value falls as the proportion of affordable housing increases. At some point (here 'b'), alternative use value (or existing use value whichever is higher) will be equal to scheme value. If there is a reasonable return to the land owner at point 'b' (i.e 'b' reflects best possible current use value (alternative or existing) and there is a sufficient return, then the scheme will come forward. At point 'c', affordable housing will make the site unviable. At 'a' the scheme should be viable with affordable housing. The diagram does not assume grant. Grant should be used to 'lever out' sites from their existing or best alternative uses.

Figure 2.2 Affordable housing and alternative use value



2.8 The analysis we have undertaken uses a Three Dragons Viability model. The model is explained in more detail in Appendix 2, which includes a description of the key assumptions used.

3 HIGH LEVEL TESTING

Introduction

3.1 This chapter of the report considers viability for mixed tenure residential development for a number of different proportions and types of affordable housing. The analysis is based on a notional 1 hectare site and has been undertaken for the sub markets which have been identified for this study. The residual value shown will be the same whether the site is greenfield or on previously used land. The chapter explains this and explores the relationship between the residual value for the scenarios tested and existing/alternative use values.

Sub markets

- 3.2 Variation in house prices will have a significant impact on development economics and the impact of affordable housing on scheme viability.
- 3.3 We undertook a broad analysis of development across the housing market, using HM Land Registry data to identify sub markets in the borough. The sub markets are defined by reference to house prices and provide the basis for a set of indicative new build values as at January 2009. The purpose of this analysis is to help establish a broad starting point for target setting in the light of the general relationships between development revenues and development costs.

3.4 Table 3.1 below sets out the sub markets defined for Dacordin DC	3.4	Table 3.1 below sets out the sub markets defined for Dacorum BC.
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DACORUM		
MARKET AREA	PCS	Settlements/locations
Berkhamsted	HP4 1	Berkhamsted north
	HP4 2	Berkhamsted east & Potter End
	HP4 3	Berkhamsted south
	HP23 4	Tring west & hinterland
Tring	HP23 5	Tring north & hinterland
	HP23 6	Tring south and hinterland
Higher middle market		
Dacorum	AL3 7	Hinterland to Redbourn
	AL3 8	Markyate and Flamstead
	HP3 0	Bovingdon

Table 3.1 Sub Markets in Dacorum BC area

	HP1 1	Green End Road; Boxmoor
Hemel Hempstead (HH) South	HP3 8	Bennetts End; St Albans Road
	HP3 9	St Albans Hill; Lawn Lane
Hemel Hempstead (HH) West	HP1 2	Chaulden and Warners End
	HP1 3	Gadebridge; Galley Hill
	HP2 4	Central HH; East of Marlowes
North East Hemel Hempstead (HH)	HP2 5	Fletcher Way; Queensway
	HP2 6	Washington Avenue
	HP2 7	Buncefield

Source: Sub markets as agreed between Three Dragons and Dacorum BC

NB: Part of Kings Langley also falls within Dacorum, although it is within a sub market of 'The Langleys and Croxley Green' within Three Rivers (see also the Three Rivers Final Affordable Housing Viability Report).

3.5 The sub markets are defined by postcode sectors. This allows for an understanding of prices as reflected in specific settlements. We tested all scenarios for the six sub markets in the borough. These are: Berkhamsted, Tring, Higher Middle Market Dacorum, Hemel Hempstead South, Hemel Hempstead West, North East Hemel Hemstead.

Testing assumptions (notional one hectare site)

- 3.6 For the viability testing, we defined a number of development mix scenarios, using a range of assumptions agreed with the client local authorities. The scenarios were based on an analysis of typical development mixes and were endorsed at the stakeholder workshop.
- 3.7 The development mixes were as follows:
 - 20 dph: 100% 5 bed detached houses;
 - 30 dph: including 15% 3 bed town houses; 18% 3 bed semis; 35% 4 bed town houses; 32% 4 bed detached;
 - 35 dph: including 20% 3 bed town houses; 13% 3 bed semis; 40% 4 bed town houses; 27% 4 bed detached;

- 60 dph: including 15% 1 bed flats; 35% 2 bed flats; 20% 2 bed town houses; 30% 3 bed town houses;
- 85 dph: including 25% 1 bed flats; 45% 2 bed flats; 15% 2 bed houses; 15% 3 bed houses;
- 120 dph: including 50% 1 bed flats; 50% 2 bed flats.
- 3.8 We calculated residual site values for each of these (base mix) scenarios in line with a further set of tenure assumptions. These were 20%; 30%; 40% and 50% affordable housing. These were tested at 75% Social Rent and 25% New Build HomeBuy in each case. For the New Build HomeBuy, the share purchase was assumed to be 40%. All the assumptions were agreed with the authority.

Other s106 contributions

3.9 For the majority of the modelling we have undertaken (and unless shown otherwise) we have assumed that other planning obligations have a total cost of £5,000 per unit.

Results: residual values for a notional one hectare site

3.10 This section looks at a range of development mixes and densities. It shows the impacts of increasing the percentage of affordable housing on residual site values. In presenting the results, it should be noted that figures for intermediate amounts of affordable housing (e.g. 35% or 45%) can be interpolated from adjoining values e.g. for 30% and 40% in the case of 35% affordable housing. The full set of results are shown in Appendix 3.

Low density housing (20 dph)

3.11 Figure 3.1 shows lower density housing (20dph) and the residual values for each of the sub markets outlined in Section 3.

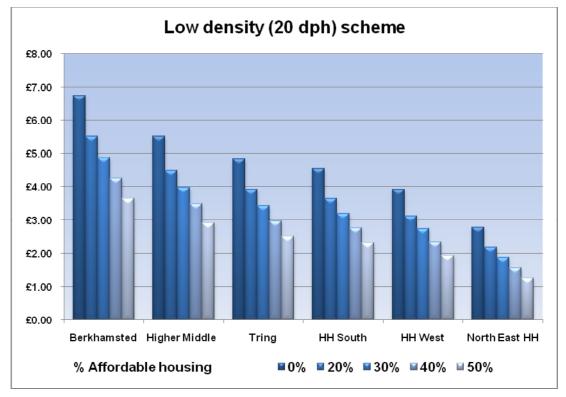
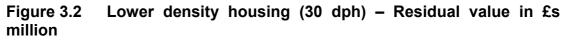


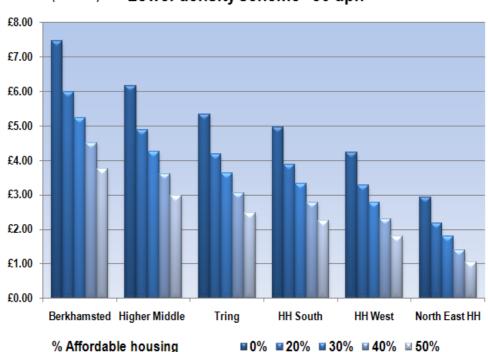
Figure 3.1 Low density housing (20 dph) – Residual value in £s million

- Figure 3.1 shows that for all the scenarios tested, there is a positive residual value, with £1.25m per hectare as the minimum residual value shown.;
- The chart also shows a very significant variance in residual values by sub market, reflecting the different house prices found in each of them. At, for example, 40% affordable housing, residual values range from £4.27m per hectare in Berkhamsted to £1.57m per hectare in the lowest value sub market of North East Hemel Hempstead;
- The range in values has potentially important implications for policy making. With the scenarios tested, a 50% affordable housing allocation generates a higher value in Berkhamsted than a nil affordable housing allocation in North East Hemel Hempstead.

Lower density housing (30 dph)

3.12 Figure 3.2 shows lower density housing (30 dph) and the residual values for each of the sub markets.



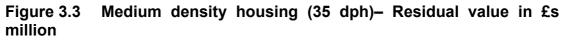


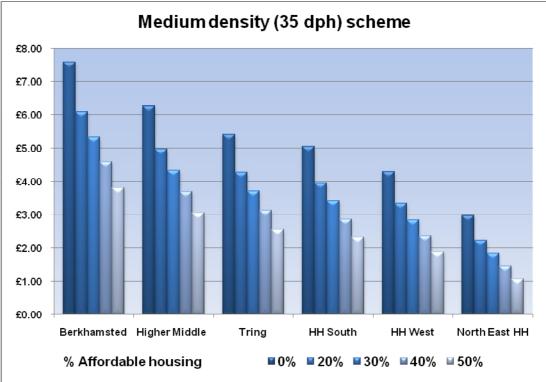
Residual (£ million) Lower density scheme - 30 dph

- Again, all the scenarios tested across all six sub markets, deliver a positive residual value in excess of £1 million.
- The impact of increased density has mainly been to increase residual values in the higher value sub markets, although in the lower value areas, the density increase tends to be offset by higher percentages of affordable housing. For this density scenario, residual values per hectare at 40 dph range from £4.5m in Berkhamsted to £1.41 in North East Hemel Hempstead.

35 dph scheme

3.13 Figure 3.3 shows residual values for a (35 dph) scheme and the residual values for each of the sub markets outlined earlier.

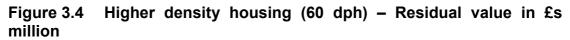


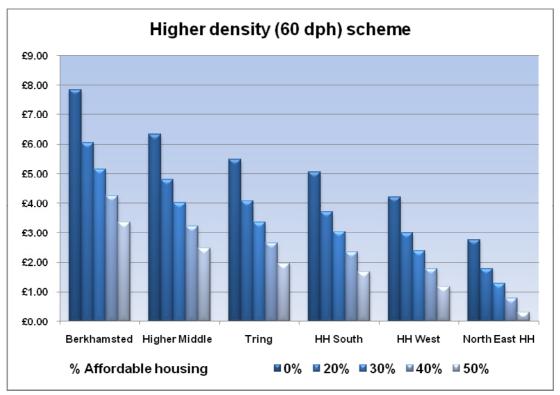


- The impact of an increase to 35 dph is to increase residuals values (above the 20 dph and 30 dph values) in all the sub markets except for North East Hemel Hempstead. The 35 dph scenario is significant. We think this will, across most instances, provide the best opportunity to develop affordable housing in most sub markets.
- At 35 dph for, say, 40% affordable housing, residual values vary from £4.6 m per hectare in Berkhamsted, to £2.86m per hectare in Hemel Hempstead South to £1.45m in North East Hemel Hempstead;.

Higher density (60 dph) scheme

3.14 Figure 3.4 shows a higher density scheme – at 60 dph, and the residual values for each of the sub markets.

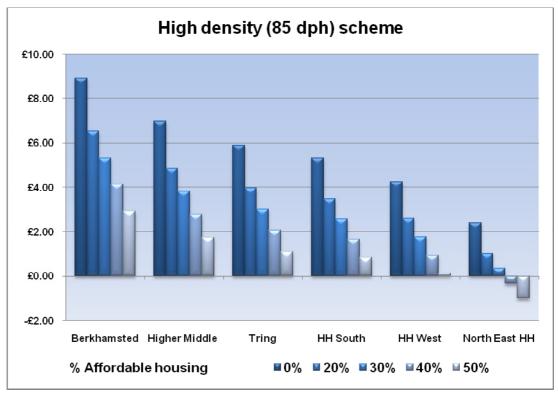




 At 60 dph, and with affordable housing, residual values are generally less than found at 35 dph. The reduction is proportionately greater in the lower value sub markets. For example, comparing the position at 60 dph with the 35dph scenario and considering the situation with 40% affordable housing, the residual value in North East Hemel Hempstead drops from £1.45m to £0.80m per hectare (i.e. a 80% reduction) while in Berkhamsted the reduction is from £4.60m to £4.27 (i.e. a fall of 8%).

High density (85 dph) scheme

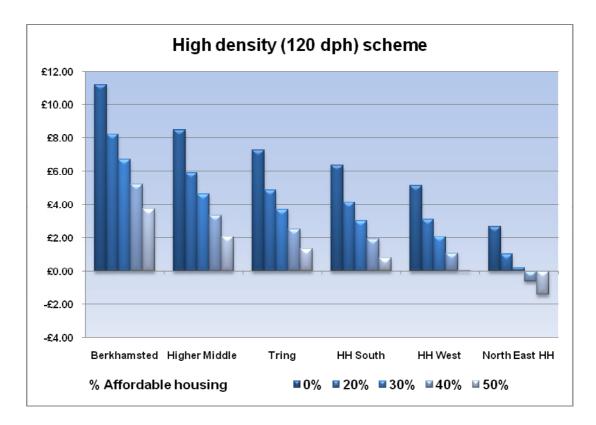
- 3.15 Figure 3.5 shows a higher density (85 dph) scheme. This graph is significant as it shows negative residual values in one sub market North East Hemel Hempstead at higher percentages of affordable housing.
- 3.16 Figure 3.5 Higher density housing (85 dph) Residual value in £s million



High density (120 dph) scheme

- 3.17 Figure 3.6 shows the highest density (120 dph) which was tested. As with the previous (85 dph) scenario, residual values are negative or here, negligible, above 30% affordable housing in the weakest sub market, although it should be noted that positive residual values are achieved elsewhere.
- 3.18 The 120 dph scenario tends to provide very high residuals in higher value sub markets at lower percentages of affordable housing. However, the affordable housing impacts tend to offset the density increases even in these higher value locations. For example, a 50% affordable target generates a residual of £3.73 million per hectare in Berkhamsted, but at 35 dph, the figure is £3.81 million at the same percentage.

Figure 3.6 High density housing (120 dph) – Residual value in £s million



Impacts of potential grant funding

- 3.19 The availability of public subsidy (in the form of grant) can have a significant impact on scheme viability. Grant given to the affordable housing providers enables them to pay more for affordable housing units, thus increasing overall scheme revenue and therefore the residual value of a mixed tenure scheme. There are two main sources of grant which may be available (from the Homes and Communities Agency and/or the local authority, for example using money collected from development in the form of a commuted sum, through a s106 agreement).
- 3.20 To illustrate the impact of grant on residual values we have used two examples of development mix scenarios. These examples, selected to show a lower and higher density option, show clearly how important grant can in strengthening residual values.
- 3.21 We have assumed grant of £50,000 per Social Rented unit and £15,000 per New Build HomeBuy unit.
- 3.22 We have tested the impact of grant on residual values for a 1 ha site at 35 dph (which we identified as likely to generate optimal residual values in weaker market areas of the density scenarios we tested). The results are shown in Table 3.2.

	Berkham	isted	Higher N	liddle	Tring		HH Sou	uth	HH West		North HH	East
	No Grant	Grant	No Grant	Grant	No Grant	Grant	No Grant	Grant	No Grant	Grant	No Grant	Grant
35 dph												
0% AH	£7.59	N/A	£6.26	N/A	£5.43	N/A	£5.05	N/A	£4.31	N/A	£2.98	N/A
20% AH	£6.09	£6.35	£4.98	£5.24	£4.28	£4.54	£3.95	£4.21	£3.34	£3.59	£2.22	£2.42
30% AH	£5.35	£5.73	£4.34	£4.73	£3.70	£4.09	£3.41	£3.80	£2.84	£3.23	£1.84	£2.17
40% AH	£4.60	£5.67	£3.69	£4.21	£3.12	£3.65	£2.86	£3.38	£2.36	£2.87	£1.45	£1.93
50% AH	£3.81	£4.50	£3.05	£3.70	£2.55	£3.55	£2.31	£2.96	£1.87	£2.52	£1.07	£1.87

Table 3.2Comparison of grant versus no grant residuals:
Residual Value (£s million per hectare)

- 3.23 Table 3.2 shows that the availability of grant will enhance site viability. This will be particularly important in the weaker sub market of Hemel Hempstead West and North East Hemel Hempstead.
- 3.24 The density scenario tested here generates relatively high residual values without grant in the stronger sub markets. The introduction of grant has a greater proportionate impact in the lower value sub market and we suggest that this is where the Council focus any such resources.

Impacts of increasing the proportion of Intermediate housing within the affordable element

3.25 In the previous section we considered the impact of grant on scheme viability. Where grant is not available to support schemes (or is not sufficient on its own), scheme viability can be (further) enhanced by increasing the percentage of intermediate affordable housing. We have tested all scenarios thus far assuming the relevant affordable element is split 75% Social Rent and 25% Shared Ownership. Here we test a 50%:50% split in the affordable element.

35 dph	Berkhamsted	Higher Middle	Tring	HH South	HH West	North East HH
0% AH	£7.59	£6.26	£5.43	£5.05	£4.31	£2.98
20% AH	£6.47	£5.30	£4.56	£4.22	£3.57	£2.40
30% AH	£5.91	£4.82	£4.13	£3.83	£3.21	£2.12
40% AH	£5.36	£4.35	£3.70	£3.41	£2.84	£1.83
50% AH	£4.80	£3.86	£3.28	£3.05	£2.48	£1.72

Table 3.3Site values (£ million per hectare) for a 35 dph scheme
assuming 50% Social Rent and 50% Shared Ownership)

3.26 Table 3.3 shows the residual values with a 50%:50% split in the affordable element. This demonstrates a considerable improvement over the 'no grant' residual values (compare with Table 3.2). In a middle market location, for example Hemel Hempstead South, a 'with grant' scenario (Table 3.2) produces a very similar result to the 50%:50% affordable option, across all the percetnages of affordable housing tested. One option therefore 'trades off' well with another.

3.27 In the higher value areas, a higher percentage of intermediate affordable housing will generate very high residual valuelt will be noted by comparing Tables 3.2 and 3.3. that in Berkhamsted for example, the 50%: 50% adffordable housing option generates higher residual values than the 'with grant option' (£4.8 million versis £4.5 million). In the weaker sub markets the opposite is the case with grant producing higher residuals.

Impact of an increased s106 requirement (£15,000 per unit)

3.28 In the earlier analysis, we have assumed a planning obligation package of £5,000 per dwelling. Table 3.4 shows residual values for a notional one hectare site at varying affordable housing percentages for a 35 dph scheme assuming a s106 contribution package of £15,000 per unit. We have tested this level of planning obligations to assess the possible economic impact of such an approach. This should not be taken to indicate that the Council might wish to adopt this level of planning obligations package.

35 dph	Berkhamsted	Higher Middle	Tring	HH South	HH West	North East HH
0% AH	£7.24	£5.91	£5.08	£4.70	£3.96	£2.63
20% AH	£5.74	£4.63	£3.93	£3.60	£2.99	£1.87
30% AH	£5.00	£3.99	£3.35	£3.06	£2.49	£1.49
40% AH	£4.25	£3.34	£2.77	£2.51	£2.01	£1.10
50% AH	£3.46	£2.70	£2.20	£1.96	£1.52	£0.72

Table 3.4Site values at Section 106 of £15,000 per unit Residual value
(£s million per hectare) 35dph scheme (No grant)

- 3.29 The introduction of a larger planning obligations package reduces residual values across all sub markets. We have illustrated this with the example of the 35 dph development but the pattern will be the same for all the development density scenarios. The impact of the planning obligations package is proportionately greater in the lower value areas.
- 3.30 It is possible that an enhanced planning gain package of circa £25,000 per unit will be needed in some instances. The impact of this will need further detailed assessment to establish the relationship between potentially enhanced development value and increased costs. All other things equal, this will reduce residual values by around 20% in a middle market location such as Tring at 40% affordable housing;
- 3.31 The impact in North East Hemel Hempstead however, at the same affordable housing target, will be to reduce residual values by around 50% a very substantial impact.

Benchmarking results

3.32 There is no specific guidance on the assessment of viability which is published by national government. In Section 2, we set out that we think viability should be judged against return to developer and return to land owner.

3.33 One approach is to take "current" land values for different development uses as a kind of 'going rate' and consider residual values achieved for the various scenarios tested against these. Tables 3.5 and 3.6 show land values regionally and for selected locations within the Eastern region.

Table 3.5 R	Residential land	values	regionally
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REGION	Small Sites	Bulk Land	Sites for flats or maisonettes
	£s per ha	£s per ha	£s per ha
North East	2,280,000	2,060,000	2,300,000
North West	2,710,000	2,500,000	2,560,000
Merseyside	1,250,000	1,270,000	1,590,000
Yorkshire and the Humber	2,390,000	2,050,000	2,310,000
East Midlands	1,990,000	1,860,000	1,770,000
West Midlands	2,360,000	2,120,000	2,180,000
Eastern	3,460,000	3,425,000	3,560,000
South East	3,560,000	3,300,000	3,380,000
South West	2,900,000	2,400,000	2,800,000
Wales	2,230,000	2,030,000	2,220,000
England & Wales (excluding London)	2,740,000	2,480,000	2,650,000
Inner London	11,050,000	8,500,000	9,900,000
Outer London	6,880,000	5,980,000	6,400,000
Scotland	1,990,000	2,130,000	3,950,000
Northern Ireland	2,825,000	2,130,000	2,790,000

Source: Valuation Office; Property Market Report, July 2008

3.34 The tables suggest (Eastern regional figure) a land value around £3.5 million per hectare was being achieved in the first part of 2008. Table 3.5, which looks at selected locations within the region, suggests a range of values between £2 million and £7 million per hectare for the same time. However, we note that as house prices have fallen since last summer, the values shown by the Valuation Office for July 2008 are likely to be significantly higher than current values. At the time of writing, there is no more up to date information publicly available.

EAST OF ENGLAND							
REGION	Small Sites (sites for less than five houses)	Bulk Land (sites in excess of two hectares)	Sites for flats or maisonettes				
	£s per hectare	£s per hectare	£s per hectare				
Cambridge	5,500,000	6,600,000	7,750,000				
South Cambridge	3,000,000	2,800,000	2,800,000				
Peterborough	1,980,000	1,850,000	2,100,000				
lpswich	2,930,000	2,650,000	2,200,000				
Norwich	3,400,000	3,200,000	2,800,000				
Luton*	2,200,000	2,000,000	2,400,000				
Stevenage	2,500,000	2,300,000	2,200,000				
St Albans	5,600,000	5,400,000	7,000,000				
Chelmsford	4,450,000	4,000,000	4,900,000				
Colchester	3,830,000	3,300,000	3,200,000				

Table 3.6East of England residential land values

Source: Valuation Office; Property Market Report, July 2008

- 3.35 In the context of viability, these land values need to be considered in the light of uplift from existing use value as well as from the viewpoint of hope value. The increase from existing use value for agricultural land will be from around £10,000 per hectare, to around £3 million per hectare. Whether the Council can successful argue that this uplift will routinely bring sites foward will depend on the planning process itself and the relationship between housing land supply and market demand.
- 3.36 Another benchmark which can be referred to is industrial land. Table 3.7 shows values of £2.5 million per hectare in Hemel Hempstead in the first part of 2008.

EASTERN			
	From £s per ha	To £s per ha	Typical £s per ha
Cambridge	650,000	1,400,000	900,000
Peterborough	600,000	750,000	650,000
lpswich	460,000	745,000	600,000
Norwich	425,000	615,000	525,000
Stevenage	700,000	2,300,000	1,500,000
Luton	700,000	850,000	800,000
Hemel Hempstead	1,750,000	2,750,000	2,500,000
Basildon	1,360,000	2,470,000	2,100,000
Colchester	425,000	800,000	650,000

Table 3.7East of England industrial land values

Source: Valuation Office; Property Market Report, July 2008

3.37 The 'benchmark' of employment land value can be important where land, currently in use as employment land, is being brought forward for residential development or where sites may be developed either for residential or employment use. In the weakest sub markets of the borough, where employment land value represents a realistic current/alternative use value, it may be difficult to bring forward residnetial schemes with relatively high proportions of affordable housing.

4 LAND SUPPLY, SMALL SITES AND USE OF COMMUTED SUMS

Introduction

4.1 This chapter reviews the policy context and options for identifying the size of sites above which affordable housing contributions would be sought, in the national policy context. The chapter provides an assessment of the profile of the future land supply and the likely relative importance of small sites. It then considers practical issues about on-site provision of affordable housing on small sites and the circumstances in which collection of a financial contribution might be appropriate (and the principles by which such contributions should be assessed).

Purpose of the Analysis

4.2 PPS3 Housing sets out national policy on thresholds and affordable housing and states:

"The national indicative minimum site size threshold is 15 dwellings. However, Local Planning Authorities can set lower minimum thresholds, where viable and practicable, including in rural areas. This could include setting different proportions of affordable housing to be sought for a series of site-size thresholds over the plan area." (Para 29)

- 4.3 By reducing site size thresholds and 'capturing' more sites from which affordable housing can be sought, an authority can potentially increase the amount of affordable housing delivered through the planning system.
- 4.4 In this section we examine the impact that varying site size thresholds would have on affordable housing supply. In order to do this we need to examine the likely future site supply profile.

Small sites analysis

4.5 We have analysed data on past permissions and from the SHLAA to consider how important sites of different sizes are likely to be to the future land supply. The tables below show the results of this exercise.

	3 Years per	missions		SHLAA	figures
	Average anr	nual 05-08			
No of dwellings in sites of:			No of dwellings in sit	es of:	
Under 5 dwellings	208	25.1%	Under 5 dwellings	78	0.3%
5 to 9 dws	43	5.2%	5 to 9 dws	234	1.0%
10 to 14 dws	60	7.2%	10 to 14 dws	276	1.2%
15 to 24 dws	55	6.7%	15 to 24 dws	437	1.9%
25 to 49 dws	60	7.3%	25 to 49 dws	1,075	4.7%
50 and over dws	402	48.5%	50 and over dws	20,994	90.9%
	829	100.0%		23,094	100.0%

Table 4.1:No of dwellings in different sizes of sites (annual average for last
3 years of permissions and most recent SHLAA figures)

- 4.6 The picture from the SHLAA and past permissions differs markedly but this is to be expected the SHLAA will tend to underestimate the likely supply from small sites in the future.
- 4.7 Looking at the permissions data, this indicates that around 37% of dwellings with planning permission have been on sites of less than 15 dwellings which, given the need for affordable housing in the borough, is a powerful argument for going for a threshold below 15 dwellings. However, it is the very small sites schemes of 1 to 4 dwellings from which a significant amount of new supply appears likely to come.
- 4.8 The SHLAA information indicates that a relatively small number of large sites will make a significant contribution to the future land supply. The SHLAA includes just 4 sites which are identified as capable of delivering over 13,000 dwellings. It is reasonable to conclude that such significant development schemes will take some years to be planned and developed. Whilst they are being brought forward, the land supply is likely to continue to rely to a large extent on smaller sites and with a significant contribution coming from sites of below 15 dwellings.
- 4.9 We have also considered differences in site supply between Hemel Hempstead and the rest of the borough. Table 4.2 below shows recent planning permissions for the two parts of the borough.

Table 4.2:Percentage of dwellings in different sizes of sites (annual average
for last 3 years of permissions) in Hemel Hempstead and Rest of
Borough

	Outside		
	Hemel	Hemel	All borough
Under 5 dwellings	41.8%	19.0%	25.1%
5 to 9 dws	4.2%	5.5%	5.2%
10 to 14 dws	9.1%	6.6%	7.2%
15 to 24 dws	12.1%	4.7%	6.7%
25 to 49 dws	10.1%	6.2%	7.3%
50 and over dws	22.7%	57.9%	48.5%
Total	100%	100%	100%

4.10 It is apparent that small sites have been playing a much more significant role in the site supply outside Hemel Hempstead. Whereas in Hemel, about 31% of dwellings granted permission were on sites of less than 15 dwellings (the national indicative minimum threshold), the equivalent figure in the rest of the borough was about 55%. Outside Hemel, it is the very small sites (1 to 4 dwellings) which have been making the most significant contribution with about 2 out of 5 of the total dwellings coming through on sites of this size.

Small sites and management of affordable housing

- 4.11 We discussed the suitability of small sites for affordable housing at the workshop with the development industry and which included representatives from Registered Social Landlords (RSLs). The workshops considered the situation where there could be as few as one or two units on each site.
- 4.12 The RSLs indicated their willingness in principle to take on small numbers of affordable units in mixed tenure development. There may be some schemes where RSLs might be less willing to manage with small numbers of affordable units but this would need to be reviewed on a scheme by scheme basis, as even single affordable units can be acceptable in certain circumstances

Use of commuted sums

4.13 As a general principle, we recognise that seeking on-site provision of affordable housing will be the first priority and that provision of affordable housing on an alternative site or by way of a financial payment in lieu (or commuted sum) should only be used in exceptional circumstances. This position is consistent with national guidance in Paragraph 29 of PPS3 which states:

"In seeking developer contributions, the presumption is that affordable housing will be provided on the application site so that it contributes towards creating a mix of housing. However, where it can be robustly justified, off-site provision or a financial contribution in lieu of on-site provision (of broadly equivalent value) may be accepted as long as the agreed approach contributes to the creation of mixed communities in the local authority area" Para 29.

- 4.14 Where commuted sums are sought as an alternative to direct on or off-site provision, PPS3 sets out the appropriate principle for assessing financial contributions that they should be of "broadly equivalent value" (see para set out 29 above). Our approach is that the commuted sum should be equivalent to the 'developer/landowner contribution' if the affordable housing was provided on site. One way of calculating this is to take the difference between the residual value of 100% market housing and the residual value of the scheme with the relevant percentage and mix of affordable housing.
- 4.15 If the 'equivalence' principle is adopted, then the decision of the local authority to take a commuted sum will be based on the acceptability or otherwise of onsite provision as a housing and spatial planning solution.
- 4.16 Any concerns about scheme viability (whatever size of site) should be reflected by providing grant or altering tenure mix, or by a 'reduced' affordable housing contribution whether provided on-site, off-site or as a financial contribution. Other planning obligations may also need to be reduced under some circumstances.
- 4.17 However, if affordable housing is sought from very small sites, in certain circumstances it becomes impractical to achieve on site provision e.g. seeking less than 33% on a scheme of 3 dwellings or less than 50% with a scheme of 2 dwellings. There will also be occasions where on-site provision can only deliver a partial contribution towards the proportion of affordable housing sought e.g. 40% affordable housing in a scheme of 3 dwellings would deliver one affordable unit on site (representing 33% of provision). In the latter case, it is possible to devise a formula which mixes on-site provision with a commuted sum to 'make up the balance'.

5 CASE STUDY VIABILITY ANALYSIS

Introduction

- 5.1 The analysis in Chapter 3 provides a good indication of the likely viability of sites in the borough. The residual values can be compared with existing use values to establish whether land owners are likely to make a return over and above existing use value, taking into account a developer margin.
- 5.2 The analysis in Chapter 3 <u>will apply for large as well as small sites (on a pro</u><u>rata basis)</u>. We do not have any evidence to suggest that the economics change significantly between large and small sites. This assumption was accepted at the development industry workshops as has been the case elsewhere where we have run similar workshops. It will be noted (Table 3.5) that small sites can achieve higher land values than larger ones, suggesting that the economics of developing smaller sites could actually be more favourable than developing larger ones.
- 5.3 In theory therefore there is no real need to review in detail viability issues for small sites. However, for the sake of further illustration, and recognising that there may be special circumstances which impact on the viability of some types of smaller sites, it was felt helpful to review the development economics of some illustrative case studies.

Case study sites

5.4 In this section we review a number of case study developments which are examples of small sites for residential development. They have been selected from the analysis of historic permissions described in chapter 4. The case studies are set out in Table 5.1 below.

Number o dwellings	f Type of development	Site Size (Ha)	Resulting density	
1	1 x 5 bed detached house	0.05	20	
2	1 x 4 bed detached house;	0.075	27	
	1 x 5 bed detached house			
4	2 x 4 bed detached house;	0.1	40	
	2 x 3 bed semis			
9	3 x 2 bed terraces;	0.15	60	
	4 x 3 bed semis;			
	2 x 4 bed detached houses			

Table 5.1Case study sites

- 5.5 For each case study, we have undertaken an analysis of residual values for three of our sub market areas (representing a lower value, mid value and high value sub market) and at levels of affordable housing from 0% to 50%. All the other assumptions used are the same as for the main analysis described in Chapter 3.
- 5.6 The values per hectare in the tables below are calculated by dividing the actual residual value by the site sizes in Table 5.1.

Case study A – Develop one detached house on a 0.05 ha site

5.7 The first scenario assumes the development of one detached house. The results, with the affordable housing impacts are shown in Table 5.2:

1 New 5 Bed Detached					
	0%	20%	30%	40%	50%
Berkhamsted	£475,000	£390,000	£349,000	£305,000	£264,000
	£9.50	£7.80	£6.98	£6.10	£5.28
HH South	£331,000	£269,000	£239,000	£207,000	£176,000
	£6.62	£5.38	£4.78	£4.14	£3.52
HH North East	£217,000	£173,000	£152,000	£129,000	£107,000
	£3.91	£3.46	£3.04	£2.58	£2.14

Table 5.2Develop one detached house

Table shows residual values in a selection of sub markets: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.8 Table 5.2 shows that the development of one new detached house will generate a very substantial residual value even with 40% or 50% affordable housing and across all sub markets. Where one dwelling of this type is built on, for instance, infill or backland sites, we would expect the uplift in site value will be very substantial. For sites taken from garden land, this will also be the case although a devaluation to the existing dwelling may also occur.
- 5.9 For schemes involving the demolition of an existing residential dwelling, the existing use value needs to be considered. Existing use values (which effectively will be the open market selling prices of a detached house in the three locations) will, we think, likely be from £735,000, to £575,000 to £450,000 (highest to lowest sub markets). On this evidence, demolishing an existing dwelling and building a single new 5 bed detached dwelling, which makes a contribution to affordable housing, looks unlikely to be viable.
- 5.10 However, in the example used above, it can be seen that the residual value generated at 100% market value is below the existing use value. This is not illogical. The data indicates that the circumstances in which a dwelling is brought forward for redevelopment will not be the 'average' situation for Dacorum (with average market values for existing properties and average residual values for the new scheme). The analysis implies that properties brought forward for redevelopment will be below average values and the new dwellings will be of a higher value than 'average' for new properties. This implies that there will be circumstances in which residential replacements can also contribute to affordable housing but each case will need to be analysed on its own merits.

Case study B – Develop two detached houses (one 4 bed and one five) on a 0.075 ha site.

5.11 The viability of developing two detached houses rather than one will depend on the site size and existing use value. There will be some instances where the relationship between existing use value and residual development value is favourable and some where this may not be the case. Table 5.3 shows residual values for the development of two detached houses.

1 New 5 Bed Detached 1 New 4 Bed Detached					
	0%	20%	30%	40%	50%
Berkhamsted	£900,000	£739,000	£658,000	£576,000	£494,000
	£12.00	£9.85	£8.77	£7.68	£6.58
HH South	£625,000	£507,000	£448,000	£388,000	£329,000
	£8.33	£6.76	£5.97	£5.17	£4.39
	0.400.000				
HH North East	£408,000	£325,000	£282,000	£240,000	£198,000
	£5.44	£4.33	£3.76	£3.20	£2.64

Table 5.3Develop two detached houses

Table shows residual values in a selection of sub markets: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million).

- 5.10 The same arguments apply to Case Study 1 and 2. For infill, backland and garden plots, we believe that a significant uplift in residual value will occur and that a contribution to affordable housing would not make development unviable. However, as previously discussed, schemes involving the demolition of an existing residential dwelling may prove more challenging.
- 5.11 Analysis of recent permissions indicates that there may be instances in the borough where an existing dwelling is converted to two dwellings. The viability of these schemes will depend on the cost of conversion and this can vary greatly between schemes although in many cases will be lower than the costs of new build. Our advice in these instances is that the Council should pursue a section 106 contribution but adopt a flexible approach to affordable housing.

Case study C – Develop four dwellings (Two detached and two semis) on a 0.1 ha site

5.12 A significant number of schemes in the borough involve the development of four dwellings. We have modelled a mid density scheme which is a mix of detached and semi detached dwellings. Increasing development density (as compared with case study A and B) increases the potential for achieving a higher residual value as Table 5.4 below shows.

4 New Build – Two 3 Bed Semis and two 4 Bed Detached					
	0%	20%	30%	40%	50%
Berkhamsted	£1,380,000	£1,130,000	£1,005,000	£878,000	£752,000
	£13.83	£11.31	£10.05	£8.78	£7.52
HH South	£964,000	£779,000	£686,000	£593,000	£500,000
	£9.64	£7.79	£6.86	£5.93	£5.00
HH North East	£620,000	£489,000	£424,000	£358,000	£293,000
	£6.20	£4.89	£4.24	£3.58	£2.93

Table 5.4Residual values for a development of four dwellings

Table shows residual values in a selection of sub markets: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million).

- 5.13 As previously noted, where this type of development takes place on back land, infill or garden land or other low value land, we anticipate significant land value uplift, sufficient for the Council to take a robust approach to seeking planning contributions (including affordable housing).
- 5.14 Developing four dwellings to replace a single house will be more viable than a smaller development assuming constant existing use values. Assuming these constant existing use values (Para 5.8 above), we think that the Council will be able to require an affordable housing contribution, although it will need to recognise that in practice each of these sites will need to be individually negotiated taking into account the size of the site and the extent to which residual development value 'covers' existing use value.

Case study D – Development of 9 dwellings on a 0.15 ha site

- 5.15 We look here at an example of a 9 dwelling development which we believe will not be untypical as a smaller site opportunity in the Borough. Table 5.5 shows the economics of developing a mix of nine new homes in the three locations. Residual values are high (ranging between £10.94m per hectare in Berkhamsted to £4.23 per hectare in North East Hemel Hempstead with 50% affordable. Where this type of development comes forward on back land, infill, garden or other land uses with a relatively low existing use value, the land value uplift from existing use will be substantial and a substantial affordable housing contribution should be achievable.
- 5.16 We believe that a similar approach should be applied in this case study to that in the previous. We think, looking at the planning data, that it will be unusual that this number of homes will be built where one large detached dwelling is knocked down. It is more likely to be the case that two dwellings will be demolished. Under these circumstances, the economic relationship will be marginally better than in Case Study C, but only marginally different.

9 New homes - 2 Terraces, 3 Semis, 4 Detached					
	0%	20%	30%	40%	50%
Berkhamsted	£3,000,300	£2,475,000	£2,197,000	£1,919,000	£1,641,000
	£20.20	£16.50	£14.65	£12.79	£10.94
HH South	£2,116,000	£1,706,000	£1.500,000	£1,296,000	£1,090,000
	£14.11	£11.37	£10.00	£8.63	£7.27
HH North East	£1,366,000	£1,074,000	£929,000	£783,000	£637,000
	£9.11	£7.16	£6.19	£5.22	£4.23

Table 5.5Develop nine new dwellings

Table shows residual values in a selection of sub markets: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare(in £s million).

Providing Gypsy and Traveller Sites

- 5.17 We were asked to review available evidence on standard sizes of gypsy and traveller sites and on the impact of an authorised gypsy and traveller site on the market values of neighbouring housing. During the course of 2008 we consulted the DCLG Gypsy and Traveller Unit and made a literature search of relevant publications.
- 5.18 DCLG's 'Preparing Regional Spatial Strategy Reviews on gypsies and travellers by Regional Planning Bodies' (March 2007), undertaken by the Centre of Urban Regional Studies, uses the East of England as a case study for the development of guidance on gypsy and traveller accommodation. It postulates an average site of 10-15 pitches, although it also states that many successful sites are both larger and smaller than this.
- 5.19 "Designing Gypsy and Traveller Sites" (DCLG May 2008) states that sites should ideally consist of up to 15 pitches (para 4.7) and comments that "there is no one size fits all measurement of a pitch as this depends on the size of individual families and their particular needs"..., In designing a new site account should be taken of the requirements of families on the waiting list and identified as a result of the Gypsy and Traveller Accommodation Needs Assessment" (para 7.9). Detailed guidance on site layouts and facilities required is provided in "Designing Gypsy and Traveller Sites", but it seems likely that each site will in practice be a one-off design to reflect the particular needs of the proposed residents.
- 5.20 We identified two relevant publications dealing with the UK experience of the impact of official gypsy and traveller sites on neighbours. "Neighbours views

of official sites for travelling people" Planning Exchange 1996 (based on a study of three official sites in Scotland) found that well managed official sites gave few problems to the neighbouring communities.

- 5.21 "Evidence on property values was inconclusive. While some continued to maintain that the value of their house was diminished by the presence of the site, unless the house had been placed on the market in the interim and unless there were some comparative properties in the area, this is a claim which it is difficult to establish with certainty. Others accepted that the trouble-free outcome of the development had meant that there was little apparent effect on house prices" (p9)
- 5.22 Providing Gypsy and Traveller sites" (JRF 2007) studied 6 local authorities who were seeking to identify and bring forward sites for gypsies and travelers. Five of the six local authorities already have authorized sites. Although resident concerns about the impact of new sites on house prices were raised the study does not report any evidence that existing sites had this effect. Effective site management was identified as critical to creating good places to live and improving the perception of the travelling community in the eyes of the settled community.
- 5.23 The Impact of Manufactured Housing on Adjacent Residential Property Values: a GIS approach based on Three North Carolina Counties" (Review of Urban and Development Studies March 2004) examined the effect of an adjacent trailerpark on residential properties at three locations in North Carolina. This study found that "the further away from a manufactured home the higher the site-built property value, other things being equal".
- 5.24 As a result of our review of literature we have concluded that a typical gypsy and traveller site will be of the order of 10-15 pitches, but site size and layout will vary depending on the requirements of likely residents. If a gypsy and traveller site is located within a residential development it will reduce the nett developable area of the site in much the same way as would any other alternative landuse required as part of the development. This will have an impact on the residual value for the site as a whole and should be modelled along with other site specific S106 requirements when carrying out site specific appraisal of individual developments.

Commentary on the results

- 5.25 This section on case studies is primarily illustrative, looking at the economics with particular reference to smaller sites and including consideration of achieved residual values for different sites and how they compare with existing use values.
- 5.26 Sites with a low number of dwellings (smaller sites) are no less viable than sites with a larger number. They can be shown to generate higher land values than larger sites. This means that where existing use value is relatively low, as we think will be the case for example, with back-land, infill or

garden land, the Council should pursue a robust approach to obtaining affordable housing and other s106 contributions.

- 5.27 Schemes which involve the redevelopment of one dwelling with either one or two new dwellings will be more difficult to deliver with an affordable housing contribution because of the high existing use value. There will however be some circumstances, particularly in higher value areas where an affordable housing contribution will be viable and hence we do not feel that there is case for a threshold which, for example cuts in at say two or three dwellings. There will, of course, be schemes with one or two dwellings which do not involve the demolition of an existing dwelling.
- 5.28 We think the threshold should be activated for all developments, accepting that it will be necessary for the council to take a more flexible approach where a scheme involves the demolition of one or more existing dwelling(s).
- 5.29 There is no evidence to suggest a quantifiable impact on house prices from close proximity to a well managed authorised gypsy and traveller site.

6 MAIN FINDINGS AND CONCLUSIONS

Key findings

- 6.1 We identified six sub market areas across Dacorum Borough. The sub markets are defined by prices by postcode sectors and are: Berkhamsted, Higher Middle Dacorum, Tring, Hemel Hempstead South, Hemel Hempsted West and North East Hemel.
- 6.2 There is very significant variation in market values between the six market areas. These differences in market values were reflected in differences in residual values (for the different scenarios tested). We found that residual value is dependent not only on location but also on the density adopted.
- 6.3 Higher density schemes of flats will, in higher priced areas, generally generate high residuals, but the opposite is the case in lower priced areas.
- 6.4 Residual values remain relatively high in most markets even at the higher percentages of affordable housing tested. We noted, for instance, that in the weakest sub market we modelled, North East Hemel Hempstead, at 35 dph and 50% affordable housing (without grant) a residual value per hectare of £1.07 was found and at 40% affordable housing, the equivalent figure was £1.45m. Significantly higher residual values were found in the higher value sub markets.
- 6.5 However, in the weaker sub markets (most notably North East Hemel Hempstead) residual values at even very modest levels of affordable housing fall (less than 20% target) are below the value of industrial land as a potential alternative use for the land. This benchmark does not of itself define what is and what is not viable, but gives an indication of the context in which potential s106 contributions (including affordable housing) might have to be considered.
- 6.6 The introduction of grant significantly improves residual values across the Borough. It matters most in the lower value areas. In higher value areas, grant is less effective in raising land values as a proportion of residual values without grant.
- 6.7 The analysis shows that increasing the proportion of intermediate affordable housing from 25% to 50% (of the total affordable element) will provide residual values broadly similar to those produced by schemes supported by grant. This applies in the mid markets of Dacorum. At the top ends of the market, increasing the percentage of Shared Ownership housing will be a more effective way of enhancing residual value relative to the grant option. In the lower value areas, the opposite will be the case. It should be noted that these conclusions hold in so far that Shared Ownership is the intermediate product (as its value is based on open market sales to some extent).
- 6.8 At the higher level of s106 contributions we tested, the impact on residual values is greatest in the weaker sub markets. However, even with a 50% affordable housing contribution, no grant available and a notional £15,000 planning obligation package per dwelling, in the weakest sub market, a positive residual value is still generated.

- 6.9 Viability is highly sensitive to the relationship between existing (or, where relevant, alternative) use value. A proportion of smaller sites being brought forward, involve the redevelopment of existing residential properties either as a one for one replacement or at a higher density of development. Whilst such schemes can deliver affordable housing in some circumstances and especially in the higher value markets, it must be acknowledged that residual values, with even relatively low levels of affordable housing, will not be sufficiently above current use values to encourage land owners to bring the land forward. The use of grant could help in achieving higher levels of affordable housing on such sites.
- 6.10 But there are other types of small residential sites (down to one and two dwellings) which do not involve the demolition of an existing dwelling(s) and which can be viable with relatively high levels of affordable housing. It will depend on the nature of the site and its location; for back land and garden land sites, there will be substantial uplift in value with affordable housing, even on very small sites.
- 6.11 Again, it is important to highlight that it is not the size of the site per se that causes difficulties with viability, but the nature of the existing or alternative use.
- 6.12 From a housing management perspective, we did not find any in- principle objections from housing associations to the on-site provision of affordable housing on small sites. There may be particular schemes where on-site provision is not the preferred option, but as a general rule, on-site provision of (very) small numbers of affordable homes is acceptable to housing associations.
- 6.13 The analysis of the supply of sites in the borough highlighted the importance of small sites. Across the borough, around 37% of dwellings with planning permission (2005 to 2008) were on sites of less than 15 dwellings. However, it is the very small sites schemes of 1 to 4 dwellings from which a significant amount (around a quarter) of new supply has been provided. Reliance on small sites is more marked outside Hemel Hempstead with about 55% of permissions on sites of less than 15 dwellings (compared with about 31% in Hemel). The pattern of supply implied by the SHLAA suggests that small sites will play a lesser role in the future but we anticipate that they will still have an important role to play for some time, especially outside Hemel.
- 6.14 Where a financial payment in lieu of on-site provision of affordable housing (or commuted sum) is to be sought, it should be of "broadly equivalent value". This approach is, on the evidence we have considered, a reasonable one to take in policy terms.
- 6.15 If this 'equivalence' principle is adopted, then the decision of the local authority to take a commuted sum will be based on the acceptability or otherwise of on-site provision as a housing and spatial planning solution, not in response to viability issues.

Conclusions and policy recommendations

- 6.16 There is no detailed government guidance setting out how targets should be assessed, based on an assessment of viability. In coming to our conclusions, we have reviewed the residual values generated for the different sub markets in the borough at the alternative levels of affordable housing tested and considered how these values compare with historic land values generally in the area.
- 6.17 From this review, we note the relative strength of the market across Dacorum, but also significant variations in residual values between different sub markets. This has led us to suggest three main options for setting affordable housing proportions for spatial planning policy purposes which would be a reasonable policy conclusion from the viability information presented. In coming to our conclusions we again note that viability is not the only consideration which the local authority will need to take into account in coming to a view on the policies it wishes to adopt and that it will need to consider the priority given to achieving affordable housing delivery to help address the very high level of need for affordable housing in the borough. The three options are:
 - A single percentage target across the whole borough and which is generally realistic in the lowest value sub markets (and therefore readily achievable in the higher values areas). Given the range of residual values we found, we consider that a target of 40% would be a reasonable starting point.
 - A split target which achieves 40% target across the Borough and which is more ambitious in the higher value areas for example, the authority could consider targets of between 35% and 50% for defined sub markets.
 - A target of 40% across the borough generally but with higher (or lower) targets set for specific allocated sites if site-specific analysis of viability indicated this was feasible.
- 6.18 Commenting on the second option, if this option is pursued, it will be important that there can be a clear distinction between the areas where the alternative targets apply.
- 6.19 On the other hand, a single percentage across the borough is simple and leaves no room for doubt about the authority's requirements.
- 6.20 If the third option is followed, the affordable housing policy would need to be carefully drafted so that the 40% proportion identified as the general target for the Borough is not interpreted as a maximum which the council cannot move upwards from where justified for individual allocated sites.

Viability on individual sites

6.21 Our analysis has indicated that there will be site-specific circumstances where achievement of the affordable housing proportions set out above may not be possible. This should not detract from the robustness of the overall targets but

the council will need to take into account specific site viability concerns when these are justified.

6.22 If there is any doubt about viability on a particular site, it will be the responsibility of the developer to make a case that applying the Council's affordable housing requirement for their scheme makes the scheme **not viable.** Where the council is satisfied this is the case, the council has a number of options open to it (including changing the mix of the affordable housing and supporting a bid for grant funding from the Homes and Communities Agency and/or using their own funds) before needing to consider whether a lower level of affordable housing is appropriate. In individual scheme negotiations, the council will also need to consider the balance between seeking affordable housing and its other planning obligation requirements.

Thresholds

- 6.23 There is a very high need for affordable housing in Dacorum and it is appropriate for the council to consider a lower thresholds than the indicative national minimum (15 dwellings) set out in PPS3. The supply of sites which has been coming through in recent years indicates that small sites make a major contribution to site supply and that a low threshold would capture a significant increase in affordable housing. Below 15 dwellings there is no particular threshold which appears more appropriate than another and a threshold of 0 is not unrealistic.
- 6.24 A second option which the council could consider is having different thresholds in Hemel Hempstead and the rest of the borough. In Hemel, given the likely future reliance on larger sites, a threshold of 15 dwellings could be appropriate. In the remainder of the borough, a zero threshold could be appropriate, given the importance of very small sites to the site supply.
- 6.25 However, this second option may need to be reviewed in the light of the assumed strategic development at Hemel Hempstead, i.e. major review of the Green Belt and large urban extensions into the countryside. If this growth goes ahead then the pressure to reduce the threshold lessens as more larger sites will be expected to bring affordable housing forward. However, if the numbers at Hemel Hempstead are reduced through the plan process, this would trigger a stronger case for a lower threshold.
- 6.26 However, it is apparent that the nature of the current land use plays a particular role in the development economics of very small sites. Some sites down to 1 dwelling will be equally capable of delivering affordable housing as much larger sites. But there will be a group of sites where the current use is as a dwelling(s) where this will not be the case and the authority will need to take a flexible view in seeking affordable housing from these sites. However, this particular viability issue should not, in our view, over-ride the general conclusion that a very low site size threshold would be appropriate.
- 6.27 Of course, at below 2 or 3 dwellings (depending on the target percentage adopted) on-site provision is not mathematically practical and an equivalent commuted sum will need to be sought. Given this situation and the need to

deal with a large number of sites, one option which the council could consider is adopting a 'two part' threshold. The actual threshold for seeking affordable housing contributions would be set at zero but up to, for example, schemes of 4 dwellings, a commuted sum would be sought, with an on-site contribution above this threshold.

Commuted sums

6.28 Where **commuted sums** are collected a possible approach to calculating the appropriate sum sought is to base this on the equivalent amount which would be contributed by the developer/landowner were the affordable housing provided on site. This is expressed as follows:

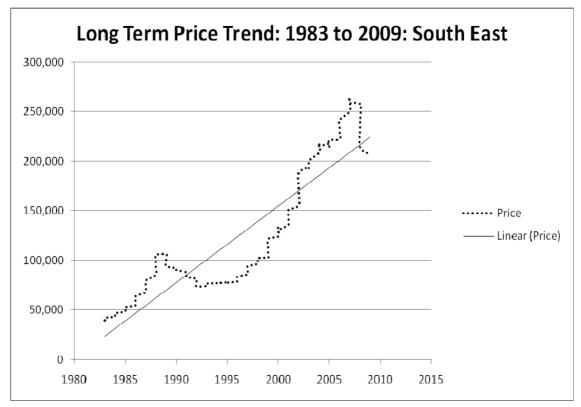
RV 100% M = Residual value with 100% market housing RV AH = Residual value with X% affordable housing (say 40%) Equivalent commuted sum = RV 100% MV minus RV AH

6.29 Where commuted sums are collected, the council will need to have in place a strategy to ensure the money is spent effectively and in a timely manner. Options for spending will be a matter for the council to consider but could include supporting schemes which would otherwise not be viable, increasing the amount of social rented housing in a scheme, increasing the proportion of family units in a scheme, seeking higher quality affordable housing (e.g. a higher level of the Code for Sustainable Homes).

The current housing market

- 6.30 At the time of preparing this report, the housing market has suffered a downturn as a result of the 'credit crunch'. Our analysis of housing market values is as recent as possible and relates to January 2009.
- 6.31 Figure 6.1 below shows the longer term house price trend, based on Halifax data for the South East since 1983 (no available data for East of England). This shows that we have looked at the housing market in a position where prices are below the long terms trend and have this made conservative conclusions on viability.
- 6.32 A rise in prices back to the long term trend may accommodate some or all of the additional costs envisaged by factors such as the code for Sustainable Homes and any additional Section 106 costs.

Figure 6.1 Long term trend in house prices



6.33 We think it likely however that developers will increasingly run an argument during 2009 and 2010 that the affordable housing and wider s106 policy is holding back sites. We believe that whilst the council should be flexible in its negotiations on specific sites, we do not think it should shift its position from the policy conclusions of this report since these will be more appropriate to the longer term trend in house prices which has been shown to be upwards. In other words, the policy position should be one which reflects the longer run and not simply the impacts of the credit crunch.

Appendix 1

Dacorum BC, Three Rivers DC and Watford BC Development Economics Study (DES) Workshops

10th March 2008 at Dacorum Borough Council, Hemel Hempstead

Attendees

Morning workshop:

Tina Barnard, WCHT Nathalie Bateman, Dacorum BC Philip Cringle, Affinity Sutton Glen Eaton, Metropolitan Housing Trust Andrea Gilmour, Hertfordshire Property, Herts CC Jed Griffiths, Griffiths Environmental Planning James Holmes, Brian Barber Associates Colin Howard, Hall Farm Jon Jennings, Pegasus Planning Group

Lin Cousins, Three Dragons Andrew Golland, Three Dragons

Afternoon workshop

Paul Newton, Dacorum BC Derek Bromley, Bidwells Jim Townsend, LSH Owen Roe, Abbotts Langley Parish Council Jean Conway Alexandra Stevens, Hertfordshire Property, Herts CC Simon Mitchell, Levvel Andy Royall, HPCHA Camelia Smith, Watford BC Richardo Rossetti, Savills Nathalie Bateman, Dacorum BC

Andrew Golland, Three Dragons Lin Cousins, Three Dragons

(Note: In this note, AH is used as shorthand for affordable housing.)

1 Key issues

There is a need for a robust evidence base to justify affordable housing requirements. Strategic Housing Market Assessments (SHMA) vary in quality and can provide contradictory evidence. It was noted that Watford, Three Rivers and Dacorum councils have commissioned a joint SHMA which is currently underway.

It was suggested that local authority requirements for AH are not consistent – over time or between one scheme and another. There is a need for greater consistency and clarity in the findings.

Lack of land and development opportunities for housing associations – either for 100% AH schemes or mixed tenure developments

There are still sites coming forward where option agreements were taken out 10/15 years ago. The land value has not adjusted to current requirements for AH. Local authorities need to understand this and be flexible in their approach to AH requirements.

From the housing association perspective - the need for AH is very strong across all property types but family sized housing is generally in shortest supply and has been squeezed out of the market. There may be occasions where it would be better for the local authority to accept a lower %age of AH in total if that means getting more family accommodation.

2 The Local Market and affordable housing targets

The area covered by Three Rivers, Watford and Dacorum councils broadly operates as one market place – but with some parts where values are higher than elsewhere. If there are variations in policy between the three authorities, this may have an impact on developer behaviour – so, for instance, if the requirement for AH is higher in one of the authorities than in the other two, sites in the latter may be taken up first.

It was recognised that differential AH targets can reflect different viability circumstances. One view was this seems a logical response to complex market situations. Another is that the targets should be consistent for the three authorities. On green field and brown field site circumstances, the view was these are not necessarily more (or less) viable; it depends on site specific circumstances and the negotiation of Section 106 should ultimately be subject to site specific economics.

There are indications of a shift away from development of apartments to larger family units after a long period when 1 and 2 bed apartments dominated the market. However, in Watford there are still a high number of one bed apartments coming forward. Family housing is in far higher need.

3 Delivery of Affordable Housing

The 3 local authorities seek affordable housing in terms of a %age of units delivered. It may be more appropriate to deal with this in terms of bedspaces etc. From the developer/land owner perspective, it would be useful for the 3 authorities to adopt consistent policies, although these should reflect local market circumstances.

There is no 'going rate' for AH which is being assumed in the market place.

Developers have provided AH requirements on basis free serviced land or completed units. However, the significant majority of sites where there is an AH contribution are now delivered by a developer building both the market and affordable elements 'complete'.

There is a general assumption that Housing Corporation grant in mixed tenure schemes Section 106 is only available if it shows proven "additionally" (e.g. more social rent than shared ownership, more family housing). Even then, there are strict 'rules' about the grant per unit/person which they will fund.

For scenario testing purposes 3 Dragons should assume that there will be no grant available and that housing associations do not make a contribution to scheme revenue from their own reserves. 3 Dragons should also test for the 'with grant' situation and assume £35k for social rent and £15k for Homebuy. This should apply to testing across all 3 authorities although it was noted that Watford BC's policy starts from a position of nil grant. It was noted that grant in the East of England is significantly less than 'just down the road' in London.

There was a general point made that transparency by local authorities in assumptions being made by the councils on availability of grant is needed. Financial cascades may have a role to play – e.g. councils set out what amount/type of AH they expect without grant and what amount/type if grant is made available. This could be incorporated in S106 agreements where uncertainty over grant remains at the stage of granting planning permission.

4 Small Sites and Site Size Thresholds

If site size thresholds were reduced, there is a perception that housing associations would not want provision of affordable housing to be made on-site because they do not want to manage very small 'groups' of new AH. The housing associations at both the morning and afternoon workshops rejected this as a general principle. They explained that, as a general rule, they do not have a problem with taking on very small numbers of AH within mixed tenure development.

There may be other objections to the provision of AH on-site in small schemes but these are not about stock management. What affects acceptability of securing onsite provision is consideration of service charge and dwelling access.

But it has to be remembered that the cost of negotiating a S106 agreement for 5 units is not much less then negotiating for 50! There was also a view expressed that RSLs bring a 'new level of bureaucracy' to the process and smaller developers and land owners may take time to adapt to it.

Mixed views on what the impact on traditional developers of small sites would be if they are required to deliver AH. Some think that developers would not want to continue (and would find the additional risk too great) but others saying that they would adjust to the new situation and carry on. Views also expressed that land owners of small sites would not want to proceed with development if AH introduced but uncertain whether this would be a 'short term shock' or a longer term response. Land owners have very different situations and will come to different conclusions about impact of AH requirements.

Small sites are not systematically more expensive to develop than large sites – depends on location and style etc.

There is a limited number of circumstances where it is seen to be better to take a commuted sum rather than provide AH on site. May be appropriate where value is high and money collected can be used to provide more units in a lower value location. But the counter argument is that housing associations need units and not cash to invest elsewhere when land supply is going to be a problem.

5 Other Planning Obligations

The list of planning obligations required in addition to AH is growing. Expectations for developers to pay for new provision are being expressed by a growing number of organisations e.g. PCT, education and highways authorities etc

3 Dragons to review County Council requirements from the toolkit on their website and to take into account other contributions being sought by the 3 borough councils.

6 Dwelling Mixes

3 Dragons need to model a number of dwelling mixes to represent 'typical' development scenarios across the 3 local authorities. The mixes are not intended to be anything more than reasonable examples of an average development type at a particular density. The densities and mixes agreed for testing (taking morning and afternoon sessions together) were:

Density	Development mix
20 dph	5 bed detached houses
30 dph and 35 dph	33% 3 bed houses; 66%
	4 bed houses
60 dph	50% 1 & 2 bed flats;
	50% 2 and 3 bed
	houses
85 dph	70% 1 and 2 bed flats;
	30% 2 and 3 bed
	houses
120 dph	50% 1 bed flats and
	50% 2 bed flats

7 Quality Standards

3 Dragons should assume Code 3 for market and affordable housing.

In comparison with current 'standards' this will mean the following additional costs:

AH £3-6k from 'Ecohomes very good' to Code 3

Market housing £5-10k from 'Ecohomes good' to Code 3

To move from Code 3 to Code 6 (the government target for 2016) was described as 'very difficult' and suggested that would cost £40,000 or more per dwelling.

Appendix 2 Three Dragons model: Method statement

The Toolkit provides the user with an assessment of the economics of residential development. It allows the user to test the economic implications of different types and amounts of planning obligation and, in particular, the amount and mix of affordable housing. It uses a residual development appraisal approach which is the industry accepted approach in valuation practice.

The Toolkit compares the potential revenue from a site with the potential costs of development before a payment for land is made. In estimating the potential revenue, the income from selling dwellings in the market and the income from producing specific forms of affordable housing are considered. The estimates involve (1) assumptions about how the development process and the subsidy system operate and (2) assumptions about the values for specific inputs such as house prices and building costs. These assumptions are made explicit in the guidance notes. If the user has reason to believe that reality in specific cases differs from the assumptions used, the user may either take account of this in interpreting the results or may use different assumptions.

The main output of the Toolkit is the residual value. In practice, as shown in the diagram below, there is a 'gross' residual value and a 'net' residual value. The gross residual value is that value that a scheme generates before Section 106 is required. Once Section 106 contributions have been taken into account, the scheme then has a net residual value, which is effectively the land owner's interest.

Key data assumptions

MARKET AREA	Detached		Semis		Town houses		Flats			Bungalows			
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	3 Bed	2 Bed	1 Bed	3 Bed	2 Bed
Berkhamsted													
	£815,000	£740,000	£600,000	£530,000	£460,000	£490,000	£445,000	£350,000	£370,000	£310,000	£215,000	£550,000	£450,00
Tring	£665.000	£605.000	£490.000	£435,000	£380,000	£400,000	£365,000	£285,000	£305.000	£255,000	£175.000	£455,000	£370.00
	,			,									
Higher middle market Dacorum	£720,000	£660,000	£535,000	£475,000	£405,000	£435,000	£395,000	£310,000	£330,000	£275,000	£185,000	£490,000	£400,00
Hemel Hempstead (HH) South	£640,000	£580,000	£470,000	£415,000	£365,000	£385,000	£350,000	£275,000	£290,000	£245,000	£165,000	£435,000	£355,00
Hemel Hempstead (HH) West	£590,000	£535,000	£430,000	£385,000	£335,000	£355,000	£320,000	£250,000	£270,000	£225,000	£155,000	£400,000	£325,00
North East Hemel Hempstead (HH)	£500,000	£455,000	£365,000	£325,000	£280,000	£300,000	£270,000	£210,000	£225,000	£190,000	£130,000	£340,000	£275,00

Market areas and prices:

The development mixes were as follows:

- 20 dph: 100% 5 bed detached houses;
- 30 dph: including 15% 3 bed town houses; 18% 3 bed semis; 35% 4 bed town houses; 32% 4 bed detached.
- 35 dph: including 20% 3 bed town houses; 13% 3 bed semis; 40% 4 bed town houses; 27% 4 bed detached.
- 60 dph: including 15% 1 bed flats; 35% 2 bed flats; 20% 2 bed town houses; 30% 3 bed town houses.
- 85 dph: including 25% 1 bed flats; 45% 2 bed flats; 15% 2 bed houses; 15% 3 bed houses.
- 120 dph: including 50% 1 bed flats and 50% 2 bed flats

Affordable housing targets:

20%; 30%; 35%; 40%; 50%.

Affordable housing split: 75% to 25% Social Rent to Shared Ownership

Development costs

Based on RICS BCIS database:

Costs as set out below:

	BUTTON FIRST	Clear Tables	
uild Costs per sq m	Other Development Cos	ts	
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alue for that fow will be used		Toolkit Us	
		Values Values	
Toolkit	Professional Fees % Internal Overheads	12.00%	of build costs of build costs (Market and Discount Market units)
Values	mornal or or node	7.00%	
Bungalows £1,049 Flats (6+ storeys) £1,545	Interest Rate (Market) Interest Rate (Affordable Housing)	7.00%	of build Costs (Market, Discount Market and Low Cost Sale units) of build costs (SR, HB, IR units)
		3.00%	
Flats (5 & less storeys) £1,115 £1,300	Marketing Fees		of market value (Market and Discount Market units)
Houses <= 75m2 £999 £1,050 Houses > 75m2 £901 £950	Developers Return Contractors Return	15.00%	of market value (Market and Discount Market units) of development costs (SR, HB, IR and LCS units)
Houses > 75m2 £901 £950			
	Land financing costs	£	 Please see the Guidance Notes for use of this value
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You may enter SCHEME totals for except costs. You can enter the name of the co- Sustainable Homes Standard Market Housing Affordable Housing None None Costs incurred for Sustainable Homes Levels None and N	st in the left hand cells and SCHE	ME value in t	he right hand cell. tal

No abnormals assumed

Typical unit sizes adopted (m²):

	Market	Affordable
1 Bed Flat		
2 Bed Flat	60	67
2 Bed Terrace	76	65
3 Bed Terrace	80	86
3 Bed Semi	90	86
3 Bed Detached	120	86
4 Bed Detached	150	101

Other Affordable Housing Factors:

Social rents

	Detached	d		Semis		Town h	ouses		Flats			Bungal	ows
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	3 Bed	2 Bed	1 Bed	3 Bed	2 Bed
Dacorum	£107	£105	£94	£102	£93	£101	£92	£80	£91	£80	£68	£92	£80
Three Rivers	£114	£112	£101	£109	£100	£108	£98	£86	£97	£86	£73	£98	£86
Watford	£110	£108	£97	£105	£96	£104	£95	£82	£94	£82	£70	£95	£82

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Gross to net factors (Affordable housing revenue)

9 - AFFORDABLE HOUSNG COSTS AND CAPITALISATION FACTORS									
ALWAYS DEPRESS THE CLEAR TABLE BUTTON FIRST									
You can enter your own values in the white cells below Where cells are left blank, the Toolkit value for that row will be used									
Social Rent		ToolKit Values	User Values						
	Management & Maintenance			per annum					
Costs per annum	Voids/bad debts	3.00%		of gross rent					
0.00	Repairs reserve	£ 500 6.00%		per annum of net rent					
Cap	italisation	0.00%		ornetrent					
New Build HomeBu	у	ToolKit Values							
Costs per annum	Rental Factor	2.75%		ofshare					
Сар	italisation	6.00%		of net rent					
Intermediate Rent		ToolKit Values							
	Management costs	6.00%		of gross rent					
	Maintenance Costs	£ 500		per dwelling					
Costs per annum	Voids/bad debts	5.00%		of gross rent					
	Repairs Reserve	1.00%		of gross rent					
Сар	italisation	6.00%		of net rent					
		Previou	s Page	Next Page					

20 dph scenario					
	0%	20%	30%	40%	50%
Berkhamsted	£6.74	£5.51	£4.89	£4.27	£3.65
Higher Middle	£5.51	£4.50	£3.98	£3.50	£2.93
Tring	£4.85	£3.92	£3.45	£2.98	£2.51
HH South	£4.55	£3.65	£3.21	£2.77	£2.32
HH West	£3.92	£3.13	£2.75	£2.35	£1.94
North East HH	£2.79	£2.18	£1.87	£1.57	£1.26
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30 dph scenario					
	0%	20%	30%	40%	50%
Berkhamsted	£7.46	£5.98	£5.24	£4.50	£3.75
Higher Middle	£6.16	£4.88	£4.25	£3.61	£2.97
Tring	£5.34	£4.19	£3.63	£3.05	£2.48
HH South	£4.96	£3.88	£3.33	£2.79	£2.25
HH West	£4.24	£3.27	£2.79	£2.30	£1.81
North East HH	£2.94	£2.17	£1.79	£1.41	£1.06
35 dph scenario					
	0%	20%	30%	40%	50%
Berkhamsted	£7.59	£6.09	£5.35	£4.60	£3.81
Higher Middle	£6.26	£4.98	£4.34	£3.69	£3.05
Tring	£5.43	£4.28	£3.70	£3.12	£2.55
HH South	£5.05	£3.95	£3.41	£2.86	£2.31
HH West	£4.31	£3.34	£2.84	£2.36	£1.87
North East HH	£2.98	£2.22	£1.84	£1.45	£1.07
	22.50	~~	21.04	21.40	21.07
60 dph scenario					
	0%	20%	30%	40%	50%
Berkhamsted	£7.84	£6.06	£5.16	£4.27	£3.38
Higher Middle	£6.35	£4.80	£4.02	£3.25	£2.48
Tring	£5.48	£4.08	£3.37	£2.66	£1.95
HH South	£5.06	£3.72	£3.05	£2.36	£1.69
HH West	£4.22	£3.00	£2.39	£1.79	£1.19
North East HH	£2.76	£1.79	£1.30	£0.80	£0.32
	~=./ 0	~1.10	~1.00	~0.00	~0.02
85 dph scenario					
	0%	20%	30%	40%	50%
Berkhamsted	£8.93	£6.53	£5.33	£4.13	£2.93
Higher Middle	£6.96	£4.87	£3.83	£2.78	£1.74
Tring	£5.90	£3.98	£3.02	£2.06	£1.10
HH South	£5.31	£3.48	£2.57	£1.67	£0.84
HH West	£4.26	£2.60	£1.77	£0.95	£0.04
North East HH	£4.20 £2.39	£2.00 £1.03	£1.77 £0.35	£0.93	-£1.01
	~~	£1.03	20.00	-20.00	-~1.01
120 dph scenario					
120 upit Scellario	0%	20%	30%	40%	50%
Berkhamsted	£11.24	£8.23	£6.73	£5.23	£3.73
Higher Middle	£8.48		£4.63		
ingiter middle	£0.40	£5.91	£4.0J	£3.35	£2.07

Appendix 3 Results – Residual values – no grant scenarios

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Tring	£7.25	£4.88	£3.69	£2.51	£1.32
HH South	£6.37	£4.14	£3.02	£1.91	£0.79
HH West	£5.14	£3.10	£2.08	£1.07	£0.05
North East HH	£2.67	£1.03	£0.21	-£0.61	-£1.43