Braintree District Council Whole Plan Viability Assessment

Final Report

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CHAPTER 1 – INTRODUCTION

Overview and objectives

1.1 Andrew Golland Associates (AGA) have been appointed to carry out the Whole Plan Viability Assessment for Braintree District Council.

1.2 Whole Plan Viability Studies are required to cover a wide range of activities and tests. These include:

- High Level Testing – assessment of viability across a range of market circumstances, densities and Affordable Housing scenarios;
- Assessment of major strategic sites. This is a key element as capacity from these sites are highly significant to overall housing delivery;
- Assessment of other development uses – commercial including retail, offices and light industrial, retirement housing, hotels and HMOs (Houses in Multiple Occupation);
- Commentary on small site delivery and Affordable Housing.

Background for this study

1.3 The study takes place against a backdrop of significant political and economic change. The global economic situation is currently uncertain. We are now largely beyond the physical effects of Covid, although it has made a significant dent in the public finances as a consequence of the furlough scheme and the cost of mitigating health impacts.

1.4 There is now a wealth of evidence demonstrating the impact of Brexit on GDP (this varies between 4% and 8% of GDP) and the more direct effects are evident in the costs of imported materials and labour shortages at home. House prices in many locations have seen little to no growth and in some places (notably some London Boroughs), prices have fallen.

1.5 The market therefore finds itself in a situation where the viability 'gap' (between values and costs) is tight and not conducive to developing profitably. Nevertheless because of an historic shortfall in new development (which stretches beyond Brexit and Covid), prices are holding up to some extent. The incoming Labour Government of July (2024) set out an ambition to increase housing supply in particular via the release of green field land and 'grey' belt.

1.6 An updated NPPF has just been published (August 2026) although this study is based on NPPF 2024. Both documents bolster the expectation that viability assessment should be led by the plan making stage. It is anticipated that evidence bases underpinning plans should obviate or reduce the need for site specific assessments. Scheme specific negotiations should only be needed where certain circumstances are in place.

1.7 A new NPPG relating to viability is anticipated. The current guidance remains imperfect, particularly with respect to guidance on land value benchmarks.

Policy background

National Planning Policy

1.8 The National Planning Policy Framework (revised 12th December 2024) states:

57. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects.

Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification.

58. Planning obligations must only be sought where they meet all of the following tests:

a) necessary to make the development acceptable in planning terms;
b) directly related to the development;
and
c) fairly and reasonably related in scale and kind to the development.

59. Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable.

It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The weight to be given to a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force.

All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning practice guidance, including standardised inputs, and should be made publicly available.'

1.9 National Planning Policy Guidance on viability states:

'The role for viability assessment is primarily at the plan making stage. Viability assessment should not compromise sustainable development but should be used to ensure that policies are realistic, and that the total cumulative cost of all relevant policies will not undermine deliverability of the plan.

It is the responsibility of plan makers in collaboration with the local community, developers and other stakeholders, to create realistic, deliverable policies. Drafting of plan policies should be iterative and informed by engagement with developers, landowners, and infrastructure and affordable housing providers.

Policy requirements, particularly for affordable housing, should be set at a level that takes account of affordable housing and infrastructure needs and allows for the planned types of sites and development to be deliverable, without the need for further viability assessment at the decision making stage.

It is the responsibility of site promoters to engage in plan making, take into account any costs including their own profit expectations and risks, and ensure that proposals for development are policy compliant. Policy compliant means development which fully complies with up to date plan policies. A decision maker can give appropriate weight to emerging policies. The price paid for land is not a relevant justification for failing to accord with relevant policies in the plan. Landowners and site purchasers should consider this when agreeing land transactions.'

Local planning policy – Braintree DC

1.10 The adopted Local Plan (2022) states in relation to Affordable Housing:

Policy LPP 31

Affordable Housing

Affordable housing will be directly provided by the developer within housing schemes at the targets set out below.

A requirement of 30% of the total number of dwellings on sites located in the main towns of Braintree (including Great Notley, Bocking and High Garrett), Witham, Halstead, Sible Hedingham and development sites directly adjacent to these areas.

A requirement of 40% of the total dwellings sites in all other areas.

A threshold of 15 dwellings or 0.5ha will apply in the main towns of Braintree (including Great Notley, Bocking and High Garrett), Witham and Halstead.

A threshold of 10 dwellings or more or where a site area is 0.5 hectares or more will apply in all other areas of the District.

Where it is impractical to achieve on-site or off-site provision, a financial contribution in lieu of broadly equivalent value, may be accepted.

A mix of units to reflect the current local need will be required to be delivered on the site.

If the affordable housing targets set out in the policy cannot be met then the applicant must provide a viability appraisal which will be independently verified and the affordable housing contribution will be set at the maximum viable level.

And:

Policy LPP 32

Affordable Housing in Rural Areas

In rural areas, schemes to provide affordable housing will be permitted, providing that all the following criteria are met:

a. The development is adjacent to a development boundary with reasonable access to services and facilities

b. The site is located within an area designated as a rural area by the Secretary of State under the Housing Act 1996 (or any successor legislation)

c. A proven local need for affordable housing must exist to the satisfaction of the local planning authority, which cannot be met within the development boundary

d. Market housing should be provided at the minimum level to support viability and at no more than 30%

e. The development should be for less than 15 dwellings.

1.11 The Council's SPD on Affordable Housing (2006) states:

'Where the provision of affordable housing on site is not appropriate, and the developer cannot offer an alternative site, a commuted payment would be sought from the developer to enable the Council, in conjunction with a registered social landlord, to provide the affordable housing. The level of payment required will be based on the level of subsidy that would be required to permit a registered social landlord to purchase units on the open market. The assessment of the level of the payment will be based on properties in the same settlement as the proposed development and will reflect the tenure split and mix that the Council would have normally required on the development site. Any payments received this way, through Section 106 contributions, must be spent within Braintree District.'

1.12 The methodology has been used consistently since adoption of the Affordable Housing SPD, which followed from a process of consultation.

General approach

1.13 This study relates to Whole Plan Viability Assessment (WPVA).

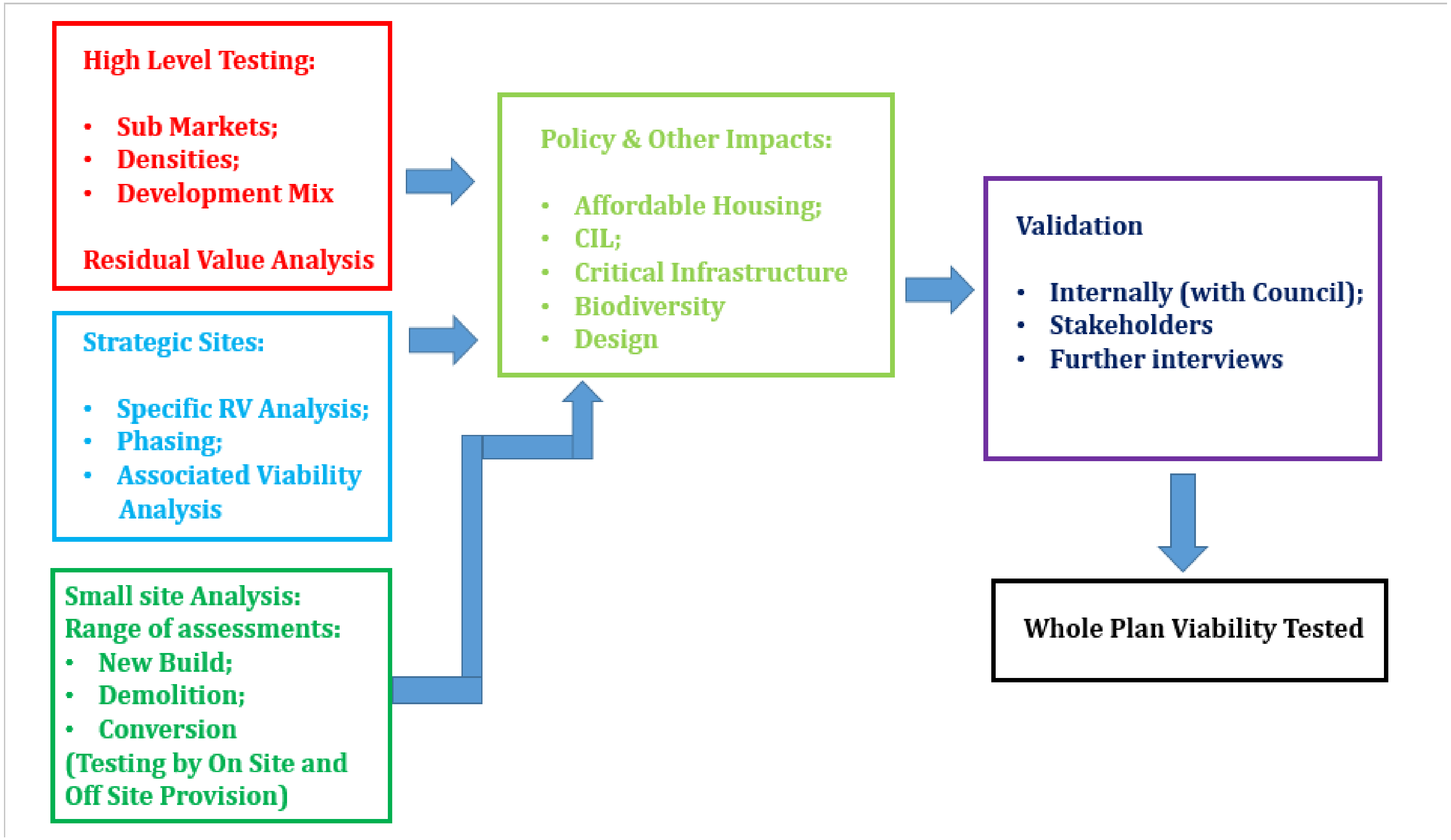
1.14 The Planning Inspectorate have set out the following principles for Whole Plan Testing - http://www.pas.gov.uk/documents/332612/6363137/Pages+from+

FINAL+PAS+Good+Plan+Making+-10.pdf/06519013-bb1d-4676-a005 6832ab6253f8) and have stated that:

'Evidence for viability can be gathered from a variety of sources including local agents, mystery shopping exercises, the internet, previous planning applications (it can be helpful to record this information over time), and Inspectors' reports on plans and CIL. However, if you are relying on more than one set of viability evidence (perhaps commissioned for different purposes CIL or affordable housing and or by different consultancies). This can result in inconsistencies in methodology and assumptions. It is important to understand and to be able to reconcile these differences, through discussion with the consultants, to enable them to use the evidence in relation to whole-plan viability'.

1.15 Set out below is the approach (Figure 1.1) adopted in this study, which involves High Level Testing (HLT), testing major and strategic sites and testing small sites.

Figure 1.1: Viability testing approach



Source: Dr A Golland, based on a range of projects for local authorities

Research undertaken for this study

1.16 There were five main strands to the research undertaken to complete this study:

- Discussions with a project group of officers from the Council to help inform the structure of the research approach;
- Analysis of information held by the authority, including that which described the types of sites coming forward;
- Consultation with local developers, housing associations and land owners via a Developer Forum and electronic survey work; The Discussion Paper is set out at Appendix 1 and a Summary of the Responses at Appendix 2;
- Liaison with TROY Planning on infrastructure costs to be inputted to the viability testing;
- Use of the Development Appraisal Toolkit to carry out High Level Testing and to analyse scheme specific viability;
- Reporting on the viability of the Plan and its various policy impacts.

CHAPTER 2 – APPROACH TO VIABILITY ASSESSMENT

Policy framework and Best Practice

2.1 The NPPF and NPPG affects both Plan Making and Viability Assessment (although in practice these are linked).

Plan Making

2.2 The key paragraphs here are 1 to 6:

2.3 Paragraph: 001 Reference ID: 10-001-20251216 is clear that all policy requirements and impacts shall be reflected in the assessment work and 'should be informed by evidence of infrastructure and affordable housing need, including the need for those who require Social Rent, and a proportionate assessment of viability that takes into account all relevant policies, and local and national standards, including the cost implications of the Community Infrastructure Levy (CIL) and section 106.'

2.4 Paragraph: 002 Reference ID: 10-002-20251216 stresses the importance of Planning leading the viability process – where site specific assessment lead back to the evidence base of the Plan. The paragraph places emphasis on consultation and the importance of local stakeholders engaging with the evidence generating process. Paragraph: 006 Reference ID: 10-006-20190509 expands on how this process shall be carried out.

2.5 Paragraghs 3 and 4 Paragraph: 003 Reference ID: 10-003-20180724 and Paragraph: 004 Reference ID: 10-004-20190509 support the role of a typology approach which is used to cover all eventualities of schemes and sites. This is typically in the form of sub market areas, a range of policy tests (significantly Affordable Housing targets – this is the Section 106 contribution that has the biggest viability effects) and by testing a range of densities. In conurbations and big cities this will usually be high density apartment through to smaller town housing schemes.

2.6 Paragraph: 005 Reference ID: 10-005-20180724 relates to the assessment of large and strategic sites. The guidance here is short but the emphasis is on making sure that such significant sources of supply are fully assessed in the report.

2.7 The approach taken in the Viability Assessment follows these principles.

Viability Assessment

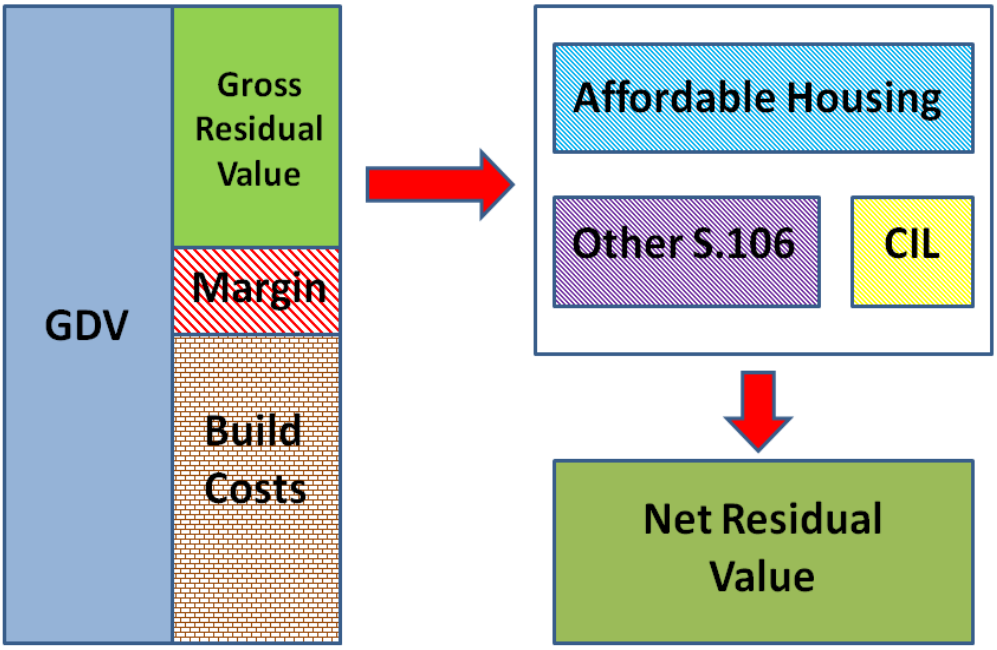
2.8 The NPPG as it now stands, follows very closely the GLA Toolkit Guidance Notes of which I am the author. The NPPG guidance owes credit in particular to John Wacher, now of the GLA, for his work at LB Islington which consolidated the approach.

2.9 The RICS, in their most recent guidance (2019) 'Assessing Viability in Planning under the National Planning under the National Planning Policy Framework 2019' unsurprisingly follows the NPPG, although the initial RICS guidance on viability and planning (published in 2012) failed altogether to recognise the importance of the concept of Land Value Benchmark, preferring instead to use purchase price (now specifically outlawed in the NPPG) as the basis by which Section 106 contributions should be assessed.

2.10 The Development Appraisal Model (DAT) is used in this assessment to establish development viability. This mimics the approach of virtually all developers when purchasing land. The model assumes that the value of the site will be the difference between what the scheme generates (scheme revenue) and what it costs to develop (build costs and developer margin). The model can take into account the impact on scheme residual value of affordable housing and other Section 106 contributions or CIL where this is being tested.

2.11 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.

Figure 2.1 Viability, CIL and Affordable Housing



Source: Dr A Golland, based on best practice and a range of projects for local authorities

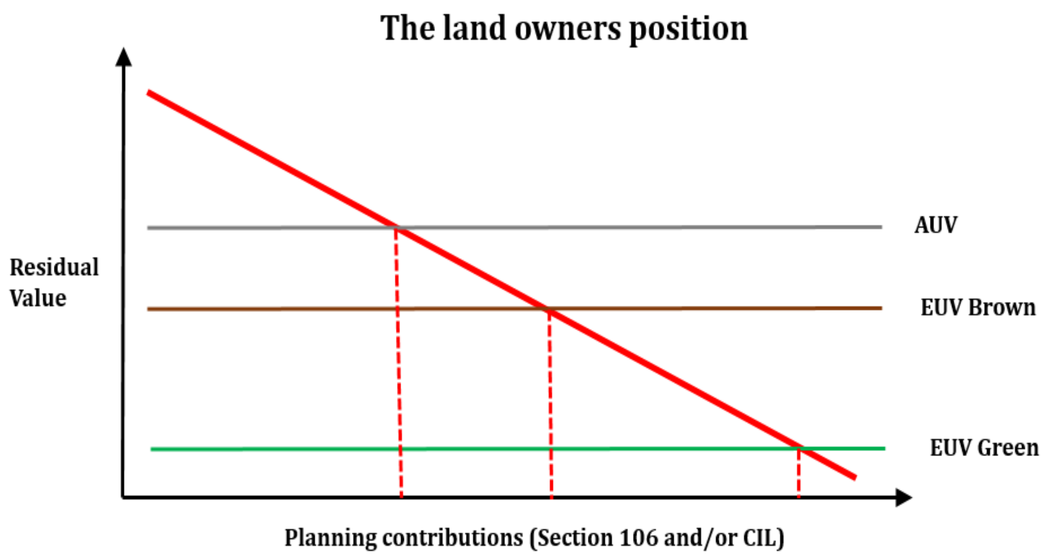
2.12 The gross residual value is the starting point for negotiations about the level and scope of Section 106 or CIL contribution. The contribution will normally be greatest in the form of affordable housing but other Section 106 items or CIL will also reduce the gross residual value of the site. Once the Section 106 contributions/CIL have been deducted, this leaves a net residual value.

2.13 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.

2.14 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 (EUV) of the site, or indeed a realistic alternative use value for a site 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 or any other use.

2.15 Figure 2.2 shows how this operates in theory. Residual value (RV) falls as planning contributions increase. The issue for the land owner will be the point at which RV is less than or equal to the land value benchmark.

Figure 2.2 Residual Value (RV) and the land owner's position



Source: Dr A Golland, based on best practice and a range of projects for local authorities.

2.16 Above this point there will be a land owner return. The extent of this returns depends on the existing use value of the site (EUV). Some sites will be green field and some brown field. Normally brown field sites will have a higher EUV than green field but this does not always follow; for example where brown field land is heavily contaminated.

2.17 In some instances, an Alternative Use Value (AUV) will be appropriate to use. The conditions where this is the case are discussed in the Harman Review (2012) which looks at how local authorities may take viability on board when making plans.

2.18 How affordable housing targets or CIL charges are set will be a function of a number of factors including the nature of land supply, residual value, comparable authority policies and the broader land supply situation. There is no specific 'equation' which specifies how a particular policy should be derived.

Approach and best practice

2.19 The approach set out above is robust for:

- Policy development;
- Scheme specific assessment;
- Updating viability (policy and schemes);
- Commuted sums;
- Disposal of public and private land (subject to Section 106 and/or CIL.

2.20 This approach, which has led national planning policy guidance has been followed in good practice and in all appeals.

2.21 The approach has never been rejected.

CHAPTER 3 KEY ASSUMPTIONS AND PROCESS FOR DATA GENERATION

3.1 This chapter sets out the key assumptions underpinning the viability study.

3.2 The assumptions are based on three main sources:

- The 2025 Viability Study (this related largely to Affordable Housing);
- Data sourced from the market, from industry standard information, and from best practice;
- Feedback from the June 2026 consultation with developers, large site promoters, housing associations and SME (Small and Medium Enterprise) builders;

3.3 To achieve the working assumptions two processes took place:

- A Developer Forum which took place on 8th June 2026;
- A Viability Assumptions Paper which was circulated to SME developers at the same time.

All contributors were invited to feed back.

3.4 The sources of information underpinning each of the key variables are set out hereafter:

Gross development value (GDV)

3.5 The gross development value of schemes depends on dwelling prices for residential development.

3.6 The report of 2025 analysed the Braintree housing market in terms of six sub markets. These are set out in Table 3.1 on the following page.

3.7 The sub markets were approved in the 2025 report and there were no objections in the 2026 consultation.

3.8 The indicative new build prices are based on four years data – from 2023 through to 2026 sourced from HM Land Registry. The base data is second hand property because this provides the optimal method of defining differences between sub markets.

3.9 The sub markets are groupings of postcode sectors into sub market descriptors. The prices adopted are averages of the postcode sectors.

3.10 The table presents absolute prices and values per square metre.

3.11 For the 2026 consultation, two main points were raised, one of which suggested that prices in the High Value Eastern Settlements were too high (and in particular in relation to new development at Kelvedon). Also that prices for the Witham sub market were too high.

3.12 In response, new build developments in those two sub markets were crossed checked, and a reduction in prices (at 8%) for the High Value Eastern Settlements made. For Witham, the price of new development held up to the prices set out in the Developer Forum and Viability Assumptions Paper.

Table 3.1 Sub markets in the Braintree District

Sub Markets	Main Settlements/Areas	Other Settlements/Areas	PCSs	Detached			Semis	Terraced		Flats	
				5 Bed	4 Bed	3 Bed	3 Bed	3 Bed	2 Bed	2 Bed	1 Bed
High Value Eastern Settlements	Kelvedon		CO5 9	£638,000	£579,000	£465,000	£397,000	£388,000	£338,000	£273,000	£182,000
	Coggeshall		CO6 1								
	The Colnes	Earls; White; Engaine	CO6 2								
	Hatfield Peverel	Terling	CM3 2								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,557	£4,825	£4,895	£4,901	£4,911	£4,971	£4,266	£4,044
Notleys & Rayne	Black Notley, Cressing & Stisted		CM77 8	£632,000	£574,000	£460,000	£392,000	£384,000	£335,000	£270,000	£181,000
	Great Notley		CM77 7								
	Rayne		CM77 6								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,514	£4,783	£4,842	£4,840	£4,861	£4,926	£4,219	£4,022
Northern Rural	North West Rural	The Yeldhams; Ridgewell	CO9 4	£627,000	£571,000	£456,000	£390,000	£382,000	£332,000	£269,000	£180,000
	North West Rural - Hamlets		CO10 8								
	Rural NW Braintree	Panfield	CM7 5								
	Rural West	Gt Bardfield; Wethersfield; Finchingfield	CM7 4								
	North West Rural	The Bumpsteads	CB9 7								
	North West Rural - Hamlets		CO10 7								
	Rural East -Hamlets		CO8 5								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,479	£4,758	£4,800	£4,815	£4,835	£4,882.35	£4,203	£4,000
Witham	South Witham	White Notley	CM8 1	£616,000	£560,000	£447,000	£384,000	£376,000	£326,000	£265,000	£177,000
	North Witham		CM8 2								
	Rivenhall & Silver End		CM8 3								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,400	£4,667	£4,705	£4,741	£4,759	£4,794	£4,140.63	£3,933
Braintree Town	NE Braintree Town		CM7 9	£577,000	£524,000	£419,000	£359,000	£352,000	£305,000	£247,000	£165,000
	S Braintree		CM7 1								
	SE Braintree Town		CM7 3								
	W Braintree Town		CM7 2								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,121	£4,367	£4,411	£4,432	£4,456	£4,485	£3,859	£3,667
Halstead & Sible Hedingham	Halstead North	NE Rural; the Belchamps	CO9 2	£572,000	£520,000	£416,000	£356,000	£350,000	£303,000	£244,000	£163,000
	Halstead South		CO9 1								
	Sible Hedingham		CO9 3								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,086	£4,333	£4,379	£4,395	£4,430	£4,456	£3,813	£3,622

Construction costs

3.13 Construction costs are based on the RICS (Royal Institution of Chartered Surveyors) BCIS (Building Cost Information Service). This is a standard approach. Lichfields, in their Fine Margins 'Viability assessments in planning and plan making' (2026) have surveyed a sample of current viability assessments for local plans state that '95% of the viability assessments that we reviewed used BCIS as a basis for calculating build costs (129 out of a total of 136 studies where source of the build cost basis was made explicit).'

3.14 The most up to date BCIS construction costs are set out in Table 3.2 below:

Table 3.2 Construction costs assumptions

BCIS - Rebased Braintree							
Building function	£/m² gross internal floor area						Sample
(Maximum age of projects)	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
810.1 Estate housing							
Generally (15)	£1,714	£842	£1,448	£1,637	£1,878	£5,858	1,272
Single storey (15)	£1,960	£1,134	£1,638	£1,881	£2,135	£5,858	197
2-storey (15)	£1,655	£842	£1,422	£1,602	£1,823	£3,519	1,007
3-storey (15)	£1,748	£1,056	£1,482	£1,677	£1,944	£3,483	63
4-storey or above (15)	£3,547	£1,736	£2,840	£3,170	£4,719	£5,270	5
816. Flats (apartments)							
Generally (15)	£2,050	£1,058	£1,680	£1,920	£2,337	£6,784	726
1-2 storey (15)	£1,969	£1,156	£1,630	£1,834	£2,255	£3,802	150
3-5 storey (15)	£2,014	£1,058	£1,670	£1,906	£2,282	£4,159	485
6 storey or above (15)	£2,376	£1,442	£1,939	£2,279	£2,652	£6,784	91
	Lower Quartile		Baseline				
	Houses	Flats	Houses	Flats			
Baseline	£1,422	£1,680	£1,602	£1,920			
External Works at 15%	£213	£252	£240	£288			
Contingency at 5%	£82	£97	£92	£110			
Gross to Nett (at 15%)	£0	£304	£0	£348			
Total	£1,717	£2,333	£1,934	£2,666			
Working Costs	£1,720	£2,350	£1,935	£2,700			

3.15 The two main sources are estate housing and flats. The study uses baseline figures as well as Lower Quartile figures. The baseline figures are used for the High Level Testing and the Lower Quartile for the strategic sites to reflect likely delivery through larger and volume house builders. The Lower Quartile point was raised in two responses from CBRE (29th June 2026).

3.16 The data reflects the standard (15 year) baseline and there was no objection to this from respondents other than a point made by CBRE that a five year base could be used. This is however using a much smaller sample than the baseline as is hence less reliable. In all events, the costs are much higher and if run through a residual appraisal lead to a situation where the residuals produced are out of kilter with land values.

3.17 All costs are enhanced by 15% for external works. This is an accepted industry standard for both plan making and scheme specific appraisal work.

3.18 Flats have been adjusted gross (BCIS basis) to nett at 85% efficiency (a fair and standard assumption).

3.19 A contingency of 5% has been allowed.

Other development costs

3.20 Other development costs are taken from the assumptions adopted originally in the Toolkit and set out in Table 3.3. This is a model which is widely used and has been independently audited on two occasions by Atis Real (now BNPP) and found to be robust.

Table 3.3 Other development costs assumed

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%	8.0%	of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hous	6.75%	8.0%	of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%	3.5%	of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)

3.21 The inputs assumed are therefore:

Professional Fees: 10% (adjusted from the default of 12% in line with feedback)

Finance: 8% (adjusted from the default of 8% in line with feedback)

Marketing: 3.5% (adjusted from the default of 3% in line with feedback)

Developer Return on Market Housing – 20% as per default

Return on Affordable Housing – 6% as per default.

Affordable Housing revenue

3.22 Three tenure splits within the Affordable Housing element have been tested:

- A 'Housing Needs' mix. This is based on the most recent Housing Needs Assessment for the Council and assumes a split of 75% Social Rent, 10% Affordable Rent and 15% Shared Ownership;
- A 3 way split – between the above tenures;
- A 2 way split – between Affordable Rent and Shared Ownership – 50%:50%

3.23 This is to reflect a range of potential policy choices based on needs as decided when sites come through the development process.

3.24 The revenue (blended across the tenures) for the 'Housing Needs' approach is £136,000 per unit. This figure is supported by feedback through the consultation.

3.25 The revenue (blended across the tenures) for the 'Housing Needs' approach is £180,000 per unit. The approach with Social Rent and Shared Ownership follows the 'Housing Needs' assumptions. The Affordable Rent is calculated at £223,000, a figure taken from a housing association offer for this tenure in scheme currently in planning.

3.26 The two way split revenue is calculated from Affordable Housing as per current RP offers and Shared Ownership at 65% of open market value (this assumption being supported by consultation feedback).

Development density and mix

3.27 A range of densities and development mixes are assessed in the High Level Testing. The testing framework is shown in Table 3.4.

Table 3.4 Development densities and mixes tested:

	Dwellings per Hectare					
	25	**35**	**45**	**55**	**65**	**75**
1 Bed Flats				10	15	25
2 Bed Flats			10	10	25	30
2 Bed Terraces		25	15	15	15	15
3 Bed Terraces	10	10	15	15	10	10
3 Bed Semis	15	15	15	15	10	10
3 Bed Detached	15	15	15	15	15	10
4 Bed Detached	35	20	20	10	10	
5 Bed Detached	25	15	10	10		
Percentage of Scheme	100	100	100	100	100	100

3.28 The assumptions follow the needs for housing (where in particular 3 beds are required) as well as a recognition that the mix is also a function of what developers find best to market.

3.29 This was the table circulated and there were no objections. One respondent implied that mix should follow developer templates where known. This will be picked up at scheme specific level.

Regulatory costs

3.30 There are regulatory costs which may be associated with new development going forward over the Plan period. These were set out in the Developer Forum and Viability Assumptions consultation presentations.

3.31 The assumed items and costs are set out in Table 3.5 below:

Table 3.5 Regulatory costs

Item	Per Dwelling	Source of assumption
Building Safety Levy	£2,500	CBRE Feedback
Future Homes	£5,600	CBRE Feedback
BNG	£5,000	CBRE Feedback
Garages	£7,500	Assume 50% Have External Garages
Accessibility	£3,500	£35,000 per Unit x 10% of 30 dph scheme
Electric Charging Points	£1,000	CBRE Feedback
Total per Dwelling	**£25,100**	

3.32 It is important to note that some of these items are not yet in force (example Future Homes which is not required until September 2027). The costs of BNG will vary by scheme and garage provision (an item flagged up under this heading) will also vary by scheme.

3.33 Growth in dwelling prices may eradicate the cost of some of these items. For example a 1% increase in the price of a semi-detached dwelling in a mid-market location such as Witham will negate the effect of Future Homes. A 6% increase in house prices will negate the entire effects of the above regulatory costs. House prices in the Braintree District have risen 9% over the past 5 years.

Land value benchmarks

3.34 The Revised NPPG is very clear that the land value benchmark should be based on existing use value (EUV). It states:

'To define land value for any viability assessment, a benchmark land value should be established on the basis of the existing use value (EUV) of the land, plus a premium for the landowner. The premium for the landowner should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The premium should provide a reasonable incentive, in comparison with other options available, for the landowner to sell land for development while allowing a sufficient contribution to fully comply with policy requirements. Landowners and site purchasers should consider policy requirements when agreeing land transactions. This approach is often called 'existing use value plus' (EUV+).'

The guidance goes on to state:

'Existing use value (EUV) is the first component of calculating benchmark land value. EUV is the value of the land in its existing use. Existing use value is not the price paid and should disregard hope value. Existing use values will vary depending on the type of site and development types. EUV can be established in collaboration between plan makers, developers and landowners by assessing the value of the specific site or type of site using published sources of information such as agricultural or industrial land values, or if appropriate capitalised rental levels at an appropriate yield (excluding any hope value for development).

Sources of data can include (but are not limited to): land registry records of transactions; real estate licensed software packages; real estate market reports; real estate research; estate agent websites; property auction results; valuation office agency data; public sector estate/property teams' locally held evidence.'

Wider Benchmarks

3.35 There are a number of land value benchmarks which can be drawn on, to help set the figure for any given local authority area. In this wider context, the DCLG's study on The Cumulative Impact of Policy Requirements (2011), although older now, suggests that a figure of £100,000 to £150,000 per acre (£247,000 to £370,500 per hectare) is a reasonable benchmark for green field land.

3.36 The feedback from the consultation on the Council's 2025 study suggested a range of multipliers for green field between 10 and 20 fold.

3.37 The Developer Forum and Viability Assumptions Papers (2026) set out a figure of £300,000 per hectare for green field land. This was based on multiple of agricultural value (at £17,142 per hectare); the multiple range being 10 to 25 (therefore at 17.5).

3.38 There were no objections to this other than from the CBRE submission which had expectations of a LVB of £400,000 per hectare.

3.39 Given the multiples are conventional set out within a range, the figure of £400,000 per hectare has been adopted.

3.40 Brown field land is conventionally assessed at 20% above existing use. It's very varied site by site. A brown field scenario has been tested at £1 million per hectare, with the rider that commercial uses will vary between sectors.

Section 106 requirements

3.41 This is again a difficult area to assess, not least because some items apply in some cases, whilst others apply in other schemes.

3.42 The list of requirements can be extensive – and will be likely to be longer for the large and strategic sites.

3.43 The figures in the table (3.6) below are indicative and taken from a large site currently being promoted through planning.

Table 3.6 Section 106 requirements

Item	Per Dwelling
Libraries	£110
Education:	
Early Years & Childcare	£2,917
Primary Education	£7,342
Secondary Education	£5,915
SEND	£1,198
Secondary School Transport	£1,189
NHS	£1,077
Sports Pitches	£1,439
Sports Facilities	£1,111
Community Building	£698
Essex Coast RAMS	£476
Public Transport	£3,636
Total	£27,109

3.44 For medium and smaller sites (less than 20 dwellings) there is no education requirement from Essex CC.

The testing reflects a 'with' and 'without' education requirements.

Commercial development

3.45 The Whole Plan Viability Assessment requires testing of a range of commercial property types.

3.46 The assumptions on capital values of completed units (per square metre) are set out in Table 3.7 below.

Table 3.7 Commercial property development values

Retail	Rents per Sq M	Yield	YP	Capital Value per Sq M
100 Sq M	£250	7%	14.29	£3,571
200 Sq M	£180	8%	12.50	£2,250
400 Sq M	£140	9%	12.50	£1,750

Offices	Rents per Sq M	Yield	YP	Capital Value per Sq M
100 Sq M	£250	7%	14.29	£3,571
200 Sq M	£170	8%	12.50	£2,125
400 Sq M	£100	9%	12.50	£1,250

Light Industrial	Rents per Sq M	Yield	YP	Capital Value per Sq M
100 Sq M	£120	5%	20.00	£2,400
200 Sq M	£100	6%	16.67	£1,667
400 Sq M	£80	7%	14.29	£1,143

3.47 The rents are taken from units currently being marketed (Rightmove scoping survey) and the yields are taken from latest Knight Frank Yields Guide.

3.48 The costs of development are based on the BCIS construction costs and calculated in a consistent manner with the residential. The working costs are set out in Table 3.8:

Table 3.8 Construction costs for commercial property development

Building function	£/m² gross internal floor area						Sample
(Maximum age of projects)	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
282. Factories							
Generally (20)	£1,362	£303	£739	£1,065	£1,571	£4,989	84
284. Warehouses/stores							
Generally (15)	£1,040	£454	£710	£913	£1,110	£3,392	49
320. Offices							
Generally (15)	£2,573	£1,202	£2,125	£2,547	£2,879	£4,478	27
341.1 Retail warehouses							
Generally (25)	£1,164	£597	£887	£1,026	£1,237	£3,365	44
342. Shopping centres (30)	£1,348	-	-	-	-	-	1
343. Department stores (55)	£1,822	£666	£1,428	£1,505	£2,136	£3,376	5
344. Hypermarkets, supermarkets							
Generally (35)	£1,951	£805	£1,361	£1,742	£2,632	£3,406	29
345. Shops							
Generally (30)	£1,979	£929	£1,080	£1,571	£2,376	£5,100	14
1-2 storey (30)	£2,007	£929	£1,061	£1,527	£2,475	£5,100	13
3-5 storey (30)	£1,614	-	-	-	-	-	1

	Light Industrial	Offices	Retail
Baseline	£1,065	£2,547	£1,474
External Works at 10%	£107	£382	£147
Braintree Location Factor at 1.03	£35	£88	£49
Contingency at 5%	£60	£151	£84
Total	£1,267	£3,168	£1,754
Working Costs	**£1,300**	**£3,200**	**£1,750**

3.49 Other development costs are consistent with residential testing.

Software

3.50 For all viability testing, the Toolkit has been used – this is a nationally accepted software model, which has been independently audited and found to be the optimal for the purposes of viability assessment.

3.51 This model has been proven robust in the development of local plans and for site specific assessments. The independent assessment (Atis: BNPP) results are shown below:

	Circle Developer	ProVal	PamWin	GVA EAT	Atisreal DCF	GLA Toolkit
Ease of use for lay person	Poor	Poor	Fair	Fair	Fair	Good
Accuracy of results	Good	Good	Good	Good	Good	Good
Ability to model a mix of resi units in addition to floor areas	Poor	Poor	Fair	Fair	Good	Good
Sensitivity analyses on affordable housing	Poor	Poor	Fair	Poor	Good	Good
Ability to calculate affordable housing revenue	Poor	Poor	Good	Poor	Fair	Good

Audit: Atis Real: BNPP

3.52 Its success lies in:

- Its accuracy. The model can be run, adopting its default, or pre-set data to generate results that emulate transactions in the land market. For example, the model can be run and its results shown to be very close to the land values reported in the Valuation Office's Property Market report. This shows that both the structure of the model and the data driving it are accurate and correct.

- Its validity: the model has been audited and shown to be robust by both the Home Builders Federation and major property valuation firms such as Atis Real (now BNP Paribas). The model is extensively accepted at appeal and Core Strategy examination.

- Its user friendliness. In their major review of viability models, Atis Real, the major surveying company rated the model the most user friendly of all those on the market (please see table above); local authority Planning and Housing officers can be trained to a high degree of competence within a day's training session.

- Its flexibility. The model is by far the most flexible model on the market in terms of understanding the impacts of Section 106 and CIL contributions on the residual value of schemes. It is perfectly set out to carry out both policy testing and site specific analysis. The model allows for schemes to be tested in the 'here and now', as well as over a period of time, where phasing and changes in house prices and development costs may change with time.

- Its compatibility. The model is an Excel spreadsheet which can be saved as a conventional spreadsheet. The model can be attached as a normal spreadsheet file which is helpful in keeping a 'trail' on development negotiations.

3.53 The Toolkit (which covers both residential and commercial development) can:

- Enable the Council to negotiate Section 106 matters with developers and land owners over the Plan period;
- Allow the Council to update any Viability Study internally as and when this is needed;
- Provide the Council with a tool for calculating commuted sums;
- Allow the Council to corporately come to agreements on land disposals and Section 106 matters.

CHAPTER 4 – VIABILITY ANALYSIS: HIGH LEVEL TESTING

Introduction

4.1 This chapter of the report considers viability for residential schemes including affordable housing. It provides an understanding of how residual value varies under different housing market circumstances, different policy impacts and different development densities and mixes.

4.2 The chapter is important in calculating residual values against which land value benchmarks are tested.

4.3 The analysis is based on a range of policy tests. Specifically, affordable housing targets of 0% through to 50%, including 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45% and 50%.

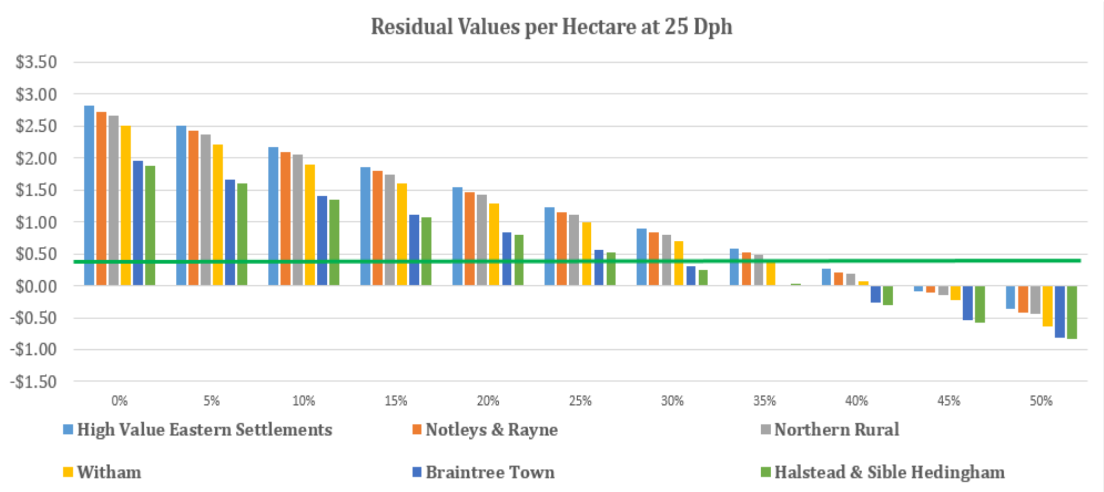
4.4 Residual values have been generated for a notional one hectare site that reflect a range of Affordable Housing percentages.

4.5 A full range of schemes are tested here. Densities of 25 dph, 30 dph, 35 dph, 40 dph, 45 dph and 50 dph have been tested for all (six) sub markets.

Residual values at 25 dph

4.6 Figure 4.1 shows residual values for all sub markets at a density of 25 dwellings per hectare. It shows residual values at a range of Affordable Housing targets from 0% through to 50%. The Affordable Housing revenue reflects a 'Housing Needs' split with 75% Social Rent. The Section 106 package is assumed to be £10,000 per unit for the High Level Testing.

Figure 4.1 Residual values (£ million per hectare) at 25 Dwellings per Hectare



Sub Markets											
25 DPH - Needs Driven AH	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
High Value Eastern Settlements	£2.82	£2.50	£2.18	£1.86	£1.54	£1.22	£0.90	£0.58	£0.26	-£0.08	-£0.37
Notleys & Rayne	£2.73	£2.42	£2.10	£1.79	£1.47	£1.16	£0.84	£0.53	£0.21	-£0.10	-£0.42
Northern Rural	£2.67	£2.36	£2.05	£1.74	£1.42	£1.11	£0.80	£0.49	£0.18	-£0.14	-£0.45
Witham	£2.51	£2.21	£1.90	£1.60	£1.29	£0.99	£0.69	£0.38	£0.08	-£0.23	-£0.63
Braintree Town	£1.95	£1.67	£1.40	£1.12	£0.84	£0.57	£0.30	£0.02	-£0.26	-£0.54	-£0.81
Halstead & Sible Hedingham	£1.88	£1.61	£1.34	£1.07	£0.79	£0.52	£0.25	£0.03	-£0.30	-£0.57	-£0.84

4.7 The figure shows residual values (£ million) on a per hectare basis, in graphical and tabular form.

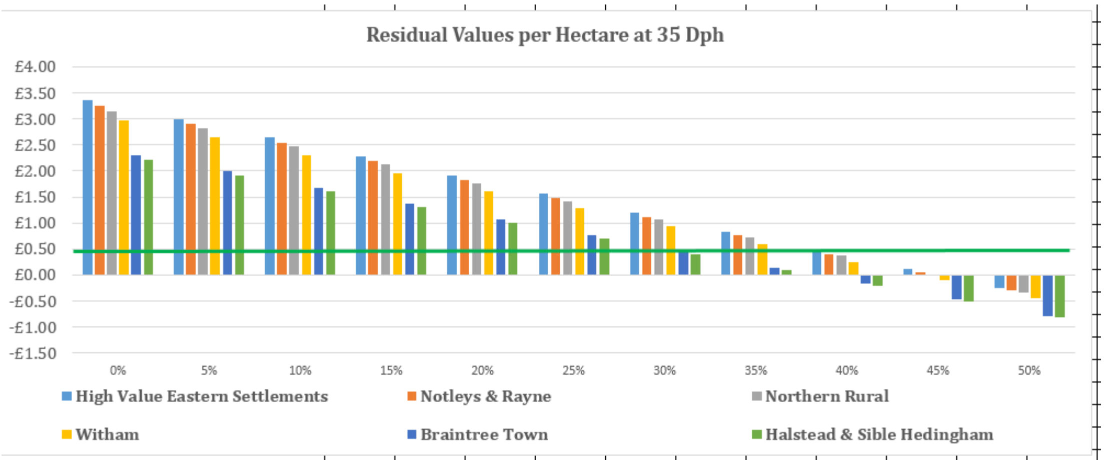
4.8 The figure shows in addition, the viable position in terms of the policy impacts for Affordable Housing. The green horizontal line in the graph is the £400,000 land value benchmark. The green cells in the table show the viable scenarios.

4.9 The 25 dph scenario suggests that a 35% Affordable Housing target will be deliverable in the higher value areas. The mid-market locations (Northern Rural and Witham) can deliver in the range, 30%-35% and the lower sub markets at 25%.

Residual values at 35 dph

4.10 The next highest density tested is 35 dph. This is a fair ‘marker’ for viability for the District as it reflects a good family housing mix. The full appraisal is set out in Appendix 3. Figure 4.2 shows residual values in tabular and graphical format:

Figure 4.2 Residual values (£ million per hectare) at 35 Dwellings per Hectare



Sub Markets											
35 DPH - Needs Driven AH	**0%**	**5%**	**10%**	**15%**	**20%**	**25%**	**30%**	**35%**	**40%**	**45%**	**50%**
High Value Eastern Settlements	£3.36	£3.00	£2.64	£2.28	£1.91	£1.56	£1.20	£0.84	£0.48	£0.12	-£0.24
Notleys & Rayne	£3.26	£2.90	£2.55	£2.19	£1.83	£1.48	£1.12	£0.77	£0.41	£0.06	-£0.30
Northern Rural	£3.78	£2.83	£2.48	£2.12	£1.77	£1.42	£1.07	£0.72	£0.37	£0.01	-£0.34
Witham	£2.98	£2.64	£2.30	£1.96	£1.62	£1.28	£0.93	£0.59	£0.25	-£0.10	-£0.44
Braintree Town	£2.30	£1.99	£1.68	£1.38	£1.07	£1.76	£0.45	£0.14	-£0.16	-£0.47	-£0.78
Halstead & Sible Hedingham	£2.22	£1.92	£1.61	£1.31	£1.01	£0.71	£0.40	£0.10	-£0.21	-£0.51	-£0.82

4.11 The figure shows the broad split in the market between the higher four value sub markets, and Braintree, Halstead and Sible Hedingham. This distinction is significant for the ability to deliver Affordable Housing.

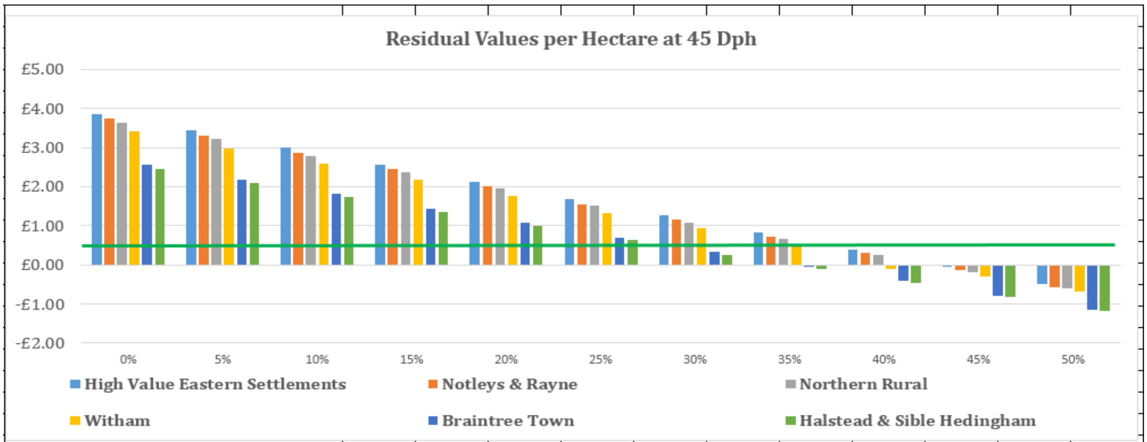
4.12 Residual values are generally higher than at 25 dph, reflecting a higher intensity of development.

4.13 Schemes should prove viable up to 40% Affordable Housing in the higher value sub markets; to 35% Affordable Housing in the mid value submarkets and to 30% Affordable Housing in the lower two value sub markets.

Residual values at 45 dph

4.14 The viability of housing has been tested at 45 dph. This is still predominantly family housing but with 40% of the scheme as terraces and flats. Figure 4.3 shows residual values in tabular and graphical format:

Figure 4.3 Residual values (£ million per hectare) at 45 Dwellings per Hectare



Sub Markets											
45 DPH - Needs Driven AH	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
High Value Eastern Settlements	£3.87	3.44	3.00	2.56	2.13	1.69	1.26	0.82	0.38	-0.06	-0.49
Notleys & Rayne	£3.74	3.31	2.87	2.45	2.02	1.56	1.16	0.73	0.30	-0.13	-0.56
Northern Rural	£3.65	3.22	2.79	2.37	1.95	1.52	1.09	0.67	0.25	-0.18	-0.61
Witham	£3.41	2.99	2.58	2.17	1.76	1.34	0.93	0.52	-0.10	-0.31	-0.68
Braintree Town	£2.56	2.19	1.82	1.44	1.07	0.70	0.33	-0.04	-0.41	-0.78	-1.15
Halstead & Sible Hedingham	£2.46	2.10	1.73	1.36	0.99	0.63	0.26	-0.10	-0.47	-0.83	-1.19

4.15 The figure is instructive as it indicates the direction of travel with respect to higher density schemes. Development in the higher and mid value sub markets is viable at 35% Affordable Housing, whereas at 35 dph viability was stronger, delivering 40% Affordable at the top end of the market.

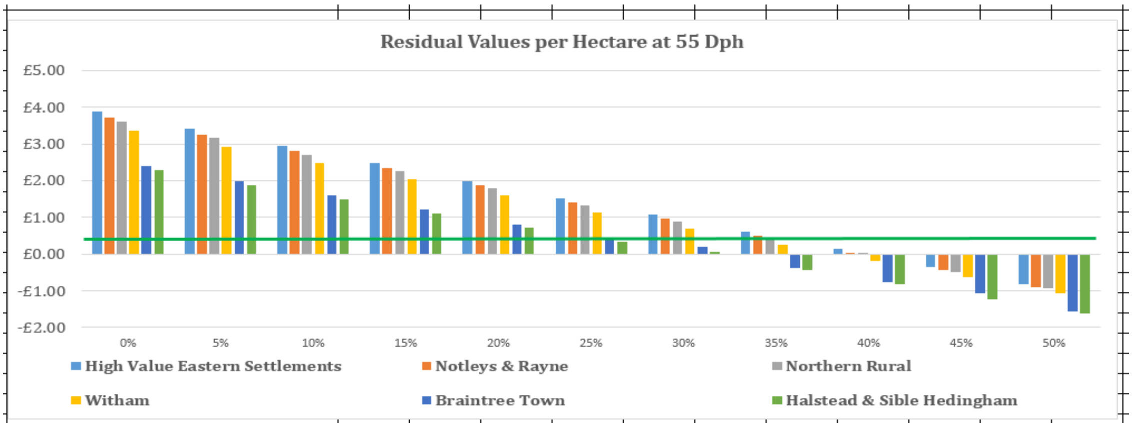
4.16 The reason for this relatively weaker viability is simply the relationship between values and costs, where residual values are relatively lower with smaller units. This can be appreciated from Table 3.1 which shows that values per square metre for smaller family housing (semis and smaller detached) generates higher prices per square metre than for e.g. flats. Flats have the added disadvantages of having common areas which are not 'saleable space).

Residual values at 55 dph

4.17 The High Level Testing analysed residual values at 55 dwellings per hectare. This is a mix with 50% of units as flats and terraces; therefore a less viable layout.

4.18 Figure 4.4 shows residual values in tabular and graphical format for the 55 dph scheme:

Figure 4.4 Residual values (£ million per hectare) at 55 Dwellings per Hectare



Sub Markets											
55 DPH - Needs Driven AH	**0%**	**5%**	**10%**	**15%**	**20%**	**25%**	**30%**	**35%**	**40%**	**45%**	**50%**
High Value Eastern Settlements	£3.88	£3.41	£2.94	£2.47	£2.00	£1.53	£1.07	£0.60	£0.13	-£0.34	-£0.81
Notleys & Rayne	£3.72	£3.26	£2.80	£2.34	£1.89	£1.42	£0.96	£0.49	£0.04	-£0.43	-£0.89
Northern Rural	£3.62	£3.16	£2.71	£2.25	£1.80	£1.34	£0.89	£0.43	£0.03	-£0.48	-£0.94
Witham	£3.35	£2.91	£2.47	£2.03	£1.59	£1.14	£0.70	£0.26	-£0.18	-£0.63	-£1.07
Braintree Town	£2.39	£1.99	£1.60	£1.21	£0.81	£0.42	£0.20	-£0.37	-£0.76	-£1.06	-£1.55
Halstead & Sible Hedingham	£2.28	£1.89	£1.50	£1.11	£0.72	£0.33	£0.05	-£0.44	-£0.83	-£1.22	-£1.61

4.19 The figure shows that whilst residual values hold up well to 35% Affordable Housing in the (three) higher and mid-market locations, they fall significantly in the lower two sub markets giving 25% Affordable Housing as viable.

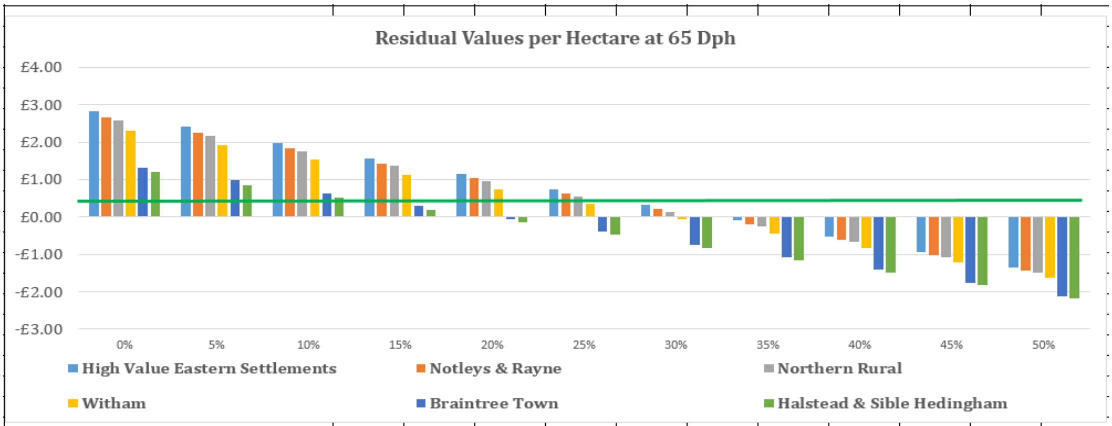
4.20 Beyond 40% Affordable Housing, residual value are negative for all sub markets.

Residual values at 65 dph

4.21 The 65 dph scheme assumes a mix of 40% flats and 25% terraces, therefore a high proportion of smaller units. The mix is reflected in residual values which are negative in all locations above 40% Affordable Housing.

4.22 Figure 4.5 shows residual values in tabular and graphical format for the 65 dph scheme:

Figure 4.5 Residual values (£ million per hectare) at 65 Dwellings per Hectare



Sub Markets											
65 DPH - Needs Driven AH	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
High Value Eastern Settlements	£2.83	£2.41	£1.99	£1.57	£1.16	£0.74	£0.32	-£0.10	-£0.52	-£0.94	-£1.35
Notleys & Rayne	£2.67	£2.26	£1.85	£1.44	£1.03	£0.62	£0.21	-£0.20	-£0.61	-£1.02	-£1.43
Northern Rural	£2.58	£2.18	£1.76	£1.36	£0.95	£0.55	£0.14	-£0.26	-£0.67	-£1.08	-£1.48
Witham	£2.31	£1.92	£1.53	£1.13	£0.74	£0.35	-£0.05	-£0.44	-£0.83	-£1.22	-£1.62
Braintree Town	£1.32	£0.98	£0.64	£0.29	-£0.05	-£0.39	-£0.74	-£1.08	-£1.42	-£1.77	-£2.11
Halstead & Sible Hedingham	£1.20	£0.86	£0.53	£0.19	-£0.15	-£0.48	-£0.82	-£1.16	-£1.49	-£1.83	-£2.17

4.23 The figure shows that viability is significantly weaker at this higher density. Whilst Affordable Housing is deliverable at 25% in the stronger (three) sub markets, only a 10% target appears viable in the weaker (two) sub markets.

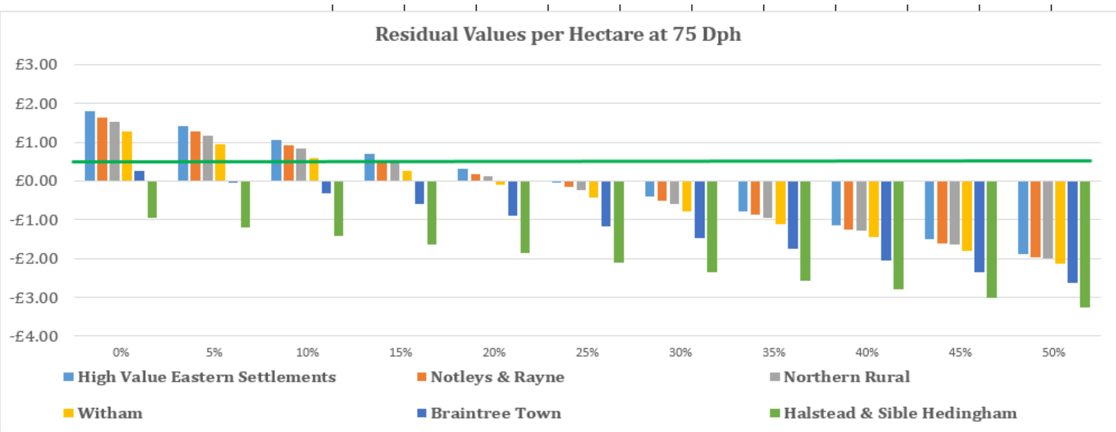
4.24 This does not prohibit the Council setting much more robust targets. But it does mean that with higher density schemes, greater flexibility will be likely to be needed in negotiation.

Residual values at 75 dph

4.25 75 dph is the highest density tested. This scheme is made up 70% from apartments and terraces. This has significant implications for viability.

4.26 Figure 4.6 shows residual values in tabular and graphical format for the 75 dph scheme:

Figure 4.6 Residual values (£ million per hectare) at 75 Dwellings per Hectare



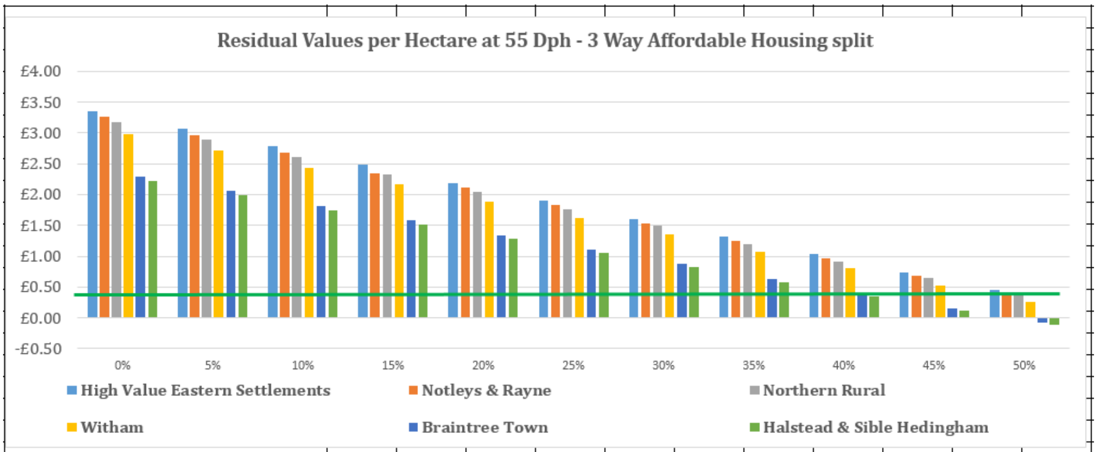
Sub Markets											
75 DPH - Needs Driven AH	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
High Value Eastern Settlements	£1.79	£1.42	£1.05	£0.69	£0.32	-£0.05	-£0.41	-£0.78	-£1.15	-£1.51	-£1.88
Notleys & Rayne	£1.63	£1.27	£0.91	£0.55	£0.19	-£0.16	-£0.52	-£0.86	-£1.24	-£1.60	-£1.96
Northern Rural	£1.53	£1.18	£0.83	£0.47	£0.12	-£0.24	-£0.59	-£0.94	-£1.29	-£1.65	-£2.00
Witham	£1.27	£0.94	£0.59	£0.25	-£0.09	-£0.43	-£0.77	-£1.11	-£1.45	-£1.79	-£2.14
Braintree Town	£0.27	-£0.02	-£0.31	-£0.60	-£0.89	-£1.18	-£1.47	-£1.76	-£2.06	-£2.35	-£2.64
Halstead & Sible Hedingham	-£0.96	-£1.19	-£1.42	-£1.65	-£1.87	-£2.11	-£2.34	-£2.56	-£2.79	-£3.02	-£3.25

4.27 The figure shows clearly that only a limited number of scenarios are viable. These are largely in the higher value sub markets at lower percentages of Affordable Housing.

Further tests – Affordable Housing

4.28 A number of further viability tests have been undertaken. The baseline assessments (Figures 4.1 to 4.6 above) assume a 'Housing Needs' driven Affordable element including 75% Social Rent. These are scenarios which drive viability down to levels below what might be achieved were the Affordable Housing element to be more evenly split. Figure 4.7 below shows residual values and viability for a scheme where the Affordable Housing element is split three ways equally between Social Rent, Affordable Rent and Shared Ownership:

Figure 4.7 Residual values (£ million per hectare) at 35 Dwellings per Hectare; three way Affordable Housing split:



Sub Markets											
35 DPH - 3 Way AH Split	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
High Value Eastern Settlements	£3.36	£3.07	£2.78	£2.49	£2.19	£1.91	£1.61	£1.32	£1.03	£0.74	£0.45
Notleys & Rayne	£3.26	£2.97	£2.68	£2.34	£2.11	£1.83	£1.54	£1.25	£0.97	£0.68	£0.40
Northern Rural	£3.18	£2.90	£2.61	£2.33	£2.05	£1.77	£1.49	£1.20	£0.92	£0.64	£0.36
Witham	£2.98	£2.71	£2.44	£2.17	£1.89	£1.62	£1.35	£1.08	£0.80	£0.53	£0.26
Braintree Town	£2.30	£2.06	£1.82	£1.58	£1.34	£1.11	£0.87	£0.63	£0.39	£0.15	-£0.08
Halstead & Sible Hedingham	£2.22	£1.99	£1.75	£1.52	£1.28	£1.05	£0.82	£0.58	£0.35	£0.11	-£0.12

4.29 Figure 4.7 shows that the increase in higher value Affordable Housing mean a shift to higher levels of viability. At the top of the market, it means Affordable Housing at 50% (rather than 40%) and in the lower value areas, it means an increase feasible from 30% Affordable to 35% Affordable.

4.30 At higher density the effect is generally similar as shown in Figure 4.8

Figure 4.8 Residual values (£ million per hectare) at 35 Dwellings per Hectare; three way Affordable Housing split compared with a Housing Needs approach

Sub Markets	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
65 DPH - Needs Driven AH											
High Value Eastern Settlements	£2.83	£2.41	£1.99	£1.57	£1.16	£0.74	£0.32	-£0.10	-£0.52	-£0.94	-£1.35
Notleys & Rayne	£2.67	£2.26	£1.85	£1.44	£1.03	£0.62	£0.21	-£0.20	-£0.61	-£1.02	-£1.43
Northern Rural	£2.58	£2.18	£1.76	£1.36	£0.95	£0.55	£0.14	-£0.26	-£0.67	-£1.08	-£1.48
Witham	£2.31	£1.92	£1.53	£1.13	£0.74	£0.35	-£0.05	-£0.44	-£0.83	-£1.22	-£1.62
Braintree Town	£1.32	£0.98	£0.64	£0.29	-£0.05	-£0.39	-£0.74	-£1.08	-£1.42	-£1.77	-£2.11
Halstead & Sible Hedingham	£1.20	£0.86	£0.53	£0.19	-£0.15	-£0.48	-£0.82	-£1.16	-£1.49	-£1.83	-£2.17
Sub Markets	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
65 DPH - 3 Way AH Split											
High Value Eastern Settlements	£2.83	£2.54	£2.25	£1.96	£1.67	£1.38	£1.09	£0.80	£0.51	£0.22	-£0.07
Notleys & Rayne	£2.67	£2.39	£2.11	£1.83	£1.55	£1.26	£0.98	£0.70	£0.42	£0.14	-£0.15
Northern Rural	£2.58	£2.29	£2.02	£1.74	£1.49	£1.19	£0.91	£0.64	£0.36	£0.08	-£0.19
Witham	£2.31	£2.05	£1.78	£1.52	£1.25	£0.99	£0.73	£0.46	£0.20	£0.06	-£0.33
Braintree Town	£1.32	£1.11	£0.89	£0.68	£0.46	£0.25	£0.04	-£0.18	-£0.39	-£0.61	-£0.82
Halstead & Sible Hedingham	£1.20	£0.99	£0.79	£0.58	£0.37	£0.16	-£0.05	-£0.26	-£0.46	-£0.67	-£0.88

4.31 This (Figure 4.8) shows that increasing from the Housing Needs assumption to a three way split shifts viability from 25% Affordable Housing to 40% in the higher value sub markets and from (broadly) 20% to 35% in the mid markets. Critically, at the lower end of the market, Affordable Housing can be delivered at an additional 10% (10% to 20%).

Further tests – at full Section 106 requirements

4.32 An increased level of Section 106 will impact on residual values. Figure 4.9 compares the residual values at 35 dph between a scheme at lower (£10,000 a unit) and higher (£27,000 a unit) Section 106 requirements.

Figure 4.9 Residual values (£ million per hectare) at 35 Dwellings per Hectare; three way Affordable Housing split; lower versus higher Section 106 requirements

Sub Markets	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
35 DPH - 3 Way AH Split - S106 at £10,000 per unit											
High Value Eastern Settlements	£3.36	£3.07	£2.78	£2.49	£2.19	£1.91	£1.61	£1.32	£1.03	£0.74	£0.45
Notleys & Rayne	£3.26	£2.97	£2.68	£2.34	£2.11	£1.83	£1.54	£1.25	£0.97	£0.68	£0.40
Northern Rural	£3.18	£2.90	£2.61	£2.33	£2.05	£1.77	£1.49	£1.20	£0.92	£0.64	£0.36
Witham	£2.98	£2.71	£2.44	£2.17	£1.89	£1.62	£1.35	£1.08	£0.80	£0.53	£0.26
Braintree Town	£2.30	£2.06	£1.82	£1.58	£1.34	£1.11	£0.87	£0.63	£0.39	£0.15	-£0.08
Halstead & Sible Hedingham	£2.22	£1.99	£1.75	£1.52	£1.28	£1.05	£0.82	£0.58	£0.35	£0.11	-£0.12

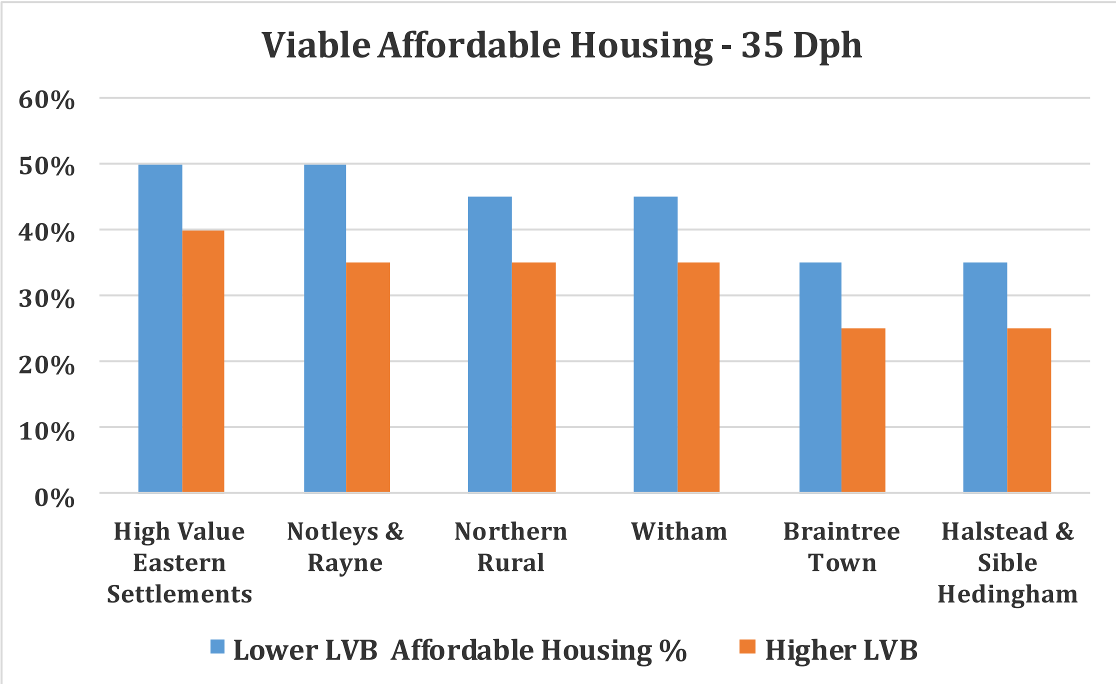
Sub Markets	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
35 DPH - 3 Way AH Split - S106 at £27,109 per unit											
High Value Eastern Settlements	£2.77	£2.47	£2.18	£1.89	£1.60	£1.31	£1.02	£0.72	£0.43	£0.14	-£0.15
Notleys & Rayne	£2.66	£2.37	£2.08	£1.80	£1.51	£1.23	£0.94	£0.65	£0.37	£0.08	-£0.20
Northern Rural	£2.58	£2.29	£2.01	£1.73	£1.45	£1.17	£0.89	£0.60	£0.32	£0.04	-£0.24
Witham	£2.38	£2.11	£1.84	£1.57	£1.29	£1.02	£0.75	£0.48	£0.20	-£0.07	-£0.34
Braintree Town	£1.70	£1.46	£1.22	£0.98	£0.75	£0.51	£0.27	£0.03	-£0.21	-£0.45	-£0.68
Halstead & Sible Hedingham	£1.62	£1.39	£1.15	£0.92	£0.69	£0.45	£0.22	-£0.02	-£0.25	-£0.49	-£0.72

4.33 The figure (4.9) indicates that Affordable Housing contributions can be achieved at 50% in the higher value sub markets and at 35% in the lower value sub markets at lower Section 106 levels, yet at 40% and 25% respectively at higher Section 106 levels.

Further tests – at a higher land value benchmark

4.34 The land value benchmark considered thus far is £400,000 per hectare. This is agreed through the consultation. The figure is a multiple of agricultural land. Brown field site benchmarks are calculated normally by reference to a value above existing use with a 'plus' factor of circa 20%. Further tests have been run with a benchmark at £1 million per hectare.

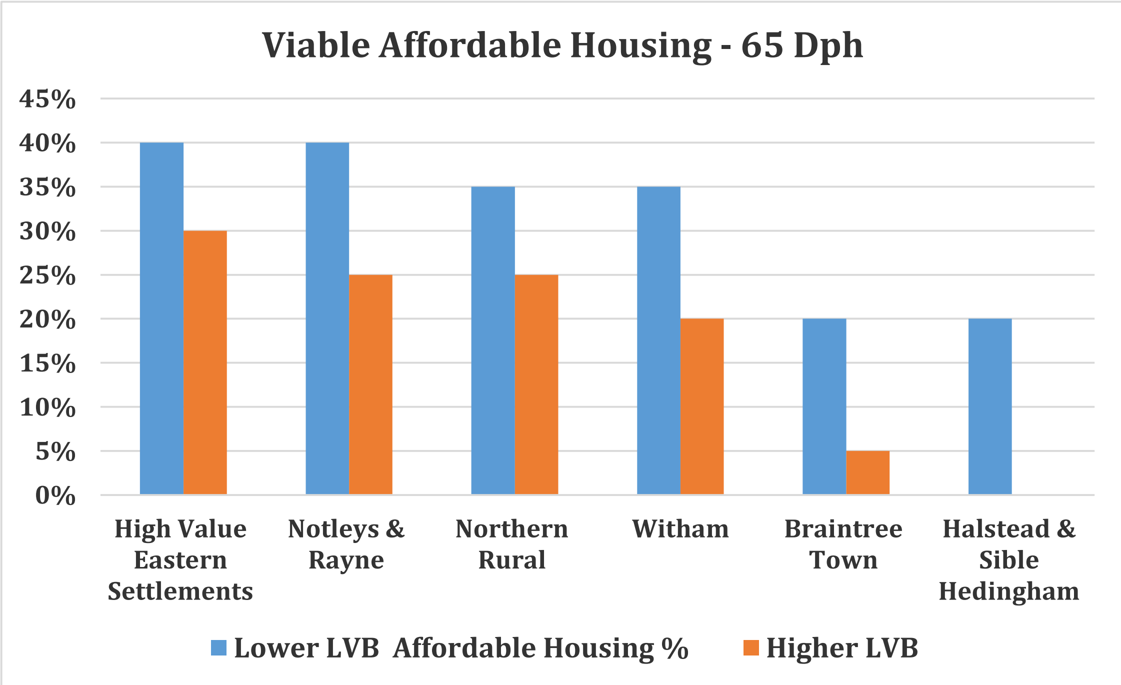
Figure 4.10 Viable Affordable Housing percentages at lower land value benchmark; three way Affordable Housing split; 35 dph



4.35 Figure 4.10 shows the impact of a higher land value benchmark on the viability of Affordable Housing at 35 dwellings per hectare. The impact is perhaps not as significant as may be expected, although having a higher benchmark could be very significant to Affordable Housing delivery on a large brown field site where delivery might be 10% lower than on an equivalent green field site.

4.36 The effect of a higher land value benchmark at higher density is however much more significant. Figure 4.11 shows the effect for a scheme at 65 dwellings per hectare.

Figure 4.11 Viable Affordable Housing percentages at lower land value benchmark; three way Affordable Housing split; 65 dph



4.37 Figure 4.11 shows that at higher density having a higher land value benchmark is critically significant in lower value locations, where only nominal (to nil) percentages may be viable. This reflects a coming together of relatively low residuals with relatively high land value benchmarks.

Conclusions on High Level Testing

4.38 This chapter has set out the High Level Testing process and results. It sits alongside the testing of the strategic sites (Chapter 5) in terms of policy formulation.

4.39 High Level Testing has a very important part to play in setting targets for Affordable Housing in particular and it provides a basis for forward planning for local authorities. Its role is to provide a robust starting point for site specific negotiations and to give local planning authorities a reference point for negotiating Section 106 contributions.

4.40 High level testing takes place against the backdrop of the current market. Prices have been static in the District since the beginning of 2025 and costs have been increasing. This situation won't necessarily prevail throughout the Plan period, yet it is difficult to forecast how the relationship between values and costs will change with time.

4.41 The extent of the testing needs careful management. The process is in principle inexhaustible in that any number of scenarios and tests can be carried out. The natural end point then would be an inexhaustible number of policies and policy positions. This would be impractical so only the main tests are carried out.

4.42 The viability assessment process remains unsophisticated. NPPG steers assessors to a dual process in analysing developer margin and land owner return. In many cases, it's not so straightforward and, importantly, different types of development provide different balances between the two main types of return. This is not recognised in national planning policy guidance.

4.43 Clearly the High Level Testing is indicative only. Within sub markets there will be hot and cold spots which the testing cannot practically highlight. The mixes selected here for each of the densities may co-incide with what developers are bringing forward and policy may change the needs equation. Construction costs are bespoke to individual developers and contractors and again the uniqueness of these numbers is smoothed over by using industry standard figures.

4.44 This all being said, the testing process brings forward a number of important findings.

4.45 Dwelling prices in the Braintree District are strong at the top end of the market, and robust at the bottom. This means that the quantum of Section 106 delivered (including Affordable Housing) is strong. At a density of 35 dwelling per hectare, Affordable Housing targets at 40% (three higher sub markets) and 30% in the lower three sub markets are viable. This reflects an Affordable Housing element substantially (75%) made up of Social Rent. The testing of schemes including a 50%:50% Affordable Rent and Shared Ownership split suggests that even at higher densities a higher percentage of Affordable Housing overall can be delivered.

4.46 The tenure of Affordable Housing is critical however at higher densities. Where the Affordable element includes a high percentage of Social Rented homes, the overall viable percentage above 55 dph begins to fall below 30% and collapses to around 15% (higher end) with schemes that are substantially flats.

4.47 Indeed, dwelling type has a big impact on viability. Braintree is not an apartment market, this means that the ability for developers to recoup costs through values is limited. Moreover flats have common parts which means building for areas which are not saleable – the nett to gross issue. The analysis suggests that the most efficient way of raising land value is through family housing in the mid-range, particularly three bed.

4.48 The testing assumed a fair Section 106 loading – the baseline tests assumed no education impact. Where this is factored in, it appears that the ability to deliver Affordable Housing viably reduces by around 10% in a 35 dph scheme. This is a trade-off which may be reality in some larger schemes (although it should noted, Chapter 5) that build costs are tested at a lower rate than has been the case there, so actually no trade may face the LPA.

4.49 Viability is defined not only by residual value but also by land value benchmarks. There is an argument to be followed which posits that benchmarks should be same across all sites. This is because in a transparent land market, land owners know what land 'goes for'. If this was completely the case, then the £400,000 per hectare adopted would apply to all sites. The reality is however that some sites have existing uses which are higher than that; typically sites with commercial and/or business use. Testing at a higher benchmark in principle reduces the ability of a local authority to deliver Section 106.

4.50 Given the specific economics of the Braintree market, it appears that a 10% reduction in Affordable Housing is likely between the two benchmarks (loosely green versus brown field) at a density of 35 dph. The effects are most significant however at higher density where in the lower value locations the confluence of low residual values and high existing use means that Section 106 delivery comes under intense pressure.

4.51 The results of the High Level Testing are robust and stand scrutiny with the government's own Land Values for Policy Testing work (https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2023) which suggests that for the District a range of residual values between £3.2 million and £3.7 million is appropriate for schemes between 25 and 40 dph. These figures are understood not to include the impact of Affordable Housing.

4.52 Compared with the figures in this chapter, it would appear that actually the assumptions made on costs and infrastructure loading are too cautious.

CHAPTER 5 – STRATEGIC SITE ANALYSIS

5.1 The Council has several key sites being promoted through the Plan. The key sites will comprise a major part of the Plan's housing supply and are therefore vital to overall delivery.

5.2 In terms of viability, large sites have the advantage of being able to be constructed at lower costs due to economies of scale; they are normally developed by volume house builders who have the expertise to keep costs competitive. For this reason, lower quartile build costs have been adopted in the viability testing.

5.3 On the other hand, large sites are disproportionately affected by infrastructure requirements. They attract 'big ticket' items like schools, major roads and recreation Section 106 obligations.

5.4 In many respects they are more challenging to assess because they are delivered over a long period of time and sometimes over more than one housing market cycle. This means phasing can be critical to the outturn viability. In the current market overage agreements for large sites is the appropriate way ahead in many cases.

5.5 The strategic sites assessed here are:

- Kings Dene – Land North, West and South West of the settlement of Kelvedon. This is development planned for 5,600 homes;
- Land East of Braintree. This land is planned for up to 2,660 dwellings;
- Land North of the A12 at Hatfield Peverel. This site should deliver 1,150 new homes;
- Land South and North East of Halstead. Development here will be in the region of 2,850 dwellings.

Development at Kings Dene, Kelvedon

5.6 The site (Map 1) comprises approximately 250 hectares, based on a dwelling density of 35 dph and a net to gross efficiency of circa 70%. The site is green field and in agricultural use.

Map 1 Site at Kings Dene

5.7 The site is located in the higher value Eastern Settlements sub market of the District and prices here are strong with, for example, a three bed semi-detached new build at close to £400,000 in value.

5.8 The infrastructure loading for this development is high. The main items are a new secondary school and improvements to the A12 junction nearby.

5.9 Table 5.1 on the following page sets out a summary of the main viability assumptions and the currently envisaged infrastructure requirements.

Table 5.1 Viability assumptions and infrastructure requirements – Kings Dene

KINGS DENE - NORTH, WEST AND SW OF KELVEDON				
Variable	Viability Assumption	Comments	Total Sum	Per Dwelling
Dwellings	5600	Circa		
Timings	2031 to 2043+	Prices currently static; costs rising at 3-4% per annum		
Land Area		5600/35 = 160 Ha Net x 1.5 = 240 Ha Gross		
Area/Sub Market	High Value Eastern Settlement	Prices as per High Level Testing		
Development Mix	Family Housing	35 Dph		
Affordable Housing	At a 3 way split - SR; AR; SO	Full range tested 0% to 50%		
Construction Costs	Lower Quartile BCIS	From Consultation Feedback		
Green Field Infrastructure Costs on Site	£1.2 million per Hectare	To cover Utilities; Services; Groundworks		
Land Value Benchmark		At £400,000 per hectare	£64,000,000	
Other Planning Costs				
Other (than AH) Section 106				
			Totals	Per Dwelling
Site Specific	Education	EYCC, Primary, and Secondary	£95,902,302	£17,125
	SEND Contribution	SEND cost	£9,858,912	£1,761
	Library Facility	Indicative cost £106,000 indicative 50sqm flexible / satellite library facility	£106,000	£19
	Health Care Facility	£5.72 million fallback - if onsite provision at nil cost to NHS not secured	£5,720,000	£1,021
	Gypsy & Traveller pitches	Pitches - 22	£2,200,000	£393
	Essex Police		£3,107,909	£555
	Essex Fire and Rescue		£1,960,000	£350
	Bus provision	Route to serve Kelvedon, new development and north to Coggeshall	£2,200,000	£393
	Kelvedon Station Improvements	Comprehensive station and interchange package including capacity, step-free access, passenger facilities, parking, bus interchange, cycle parking, pedestrian/cycle access and station quarter opportunities	£2,600,000	£464
	Kelvedon Mobility Hub	Transport shortlist LP IDP contribution to 2043	£585,000	£104
	New Grade-separated solution to Church Street level crossing	Provision of a road-over-rail bridge or other grade-separated solution to enable closure of Church Street Level Crossing.		
	A12 Access Junction	Transport shortlist LP IDP contribution to 2043	£23,500,000	£4,196
	Coggeshall Road and Oak Road link	Transport shortlist LP IDP contribution to 2043	£15,500,000	£2,768
	Employment & Skills Plans			£300
District Wide	Waste transfer capacity	£73.46 per dwelling		£73
	RCHW Contributions Improvement to existing provision	£150.59 per dwelling		£151
	Library infrastructure	£374.38 per dwelling		£374
	RAMS Tarriff	£476 per dwelling		£476
	PPOSS Sport Growth	£11,002,000/19,070 (Plan Supply)		£577
	Sport England Facilities	£22,923,000/19,070 (Plan supply)		£1,202
	Business and School Travel Planning	£18,000,000 / 19,070 focused IDP baseline		£944
	EEAST development wide ambulance contribution	£371 per dwelling		£371
	Defibrillator - new schemes	£5,000 per device confirmed by EEAST	£5,000	£1
				£33,619

5.10 This suggests an infrastructure loading of around £33,619 per unit including local and District-wide requirements. This is a very significant requirement.

Viability testing

5.11 The Results sheet (Figure 5.1) for the scheme assessment is shown below:

Figure 5.1 Results – Viability for Kings Dene

Results

Site Address	Kings Dene Strategic Site
Scheme Description	5,600 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results

View Results

Discounting Function

Floor Space Analysis

Costs Analysis

Child Occupancy & Bedrooms

RESIDUAL before land finance	**£71,495,000**
RESIDUAL after land finance	**£64,345,000**
Per hectare	£402,000
Per dwelling	£11,000
Per market dwelling	£17,000
Per habitable room	£3,000
Per bedspace	£4,000

SCHEME UNITS		per ha.
No. of Dwellings	5600	35
No. of Habitable rooms	19880	124
No. of Bedrooms	18200	114
Total floorspace (m2)	539,280	3371
% Wheelchair Units		

SCHEME REVENUE	**£2,081,898,000**
Contribution to revenue from:	
Market housing	£1,754,298,000
Affordable Housing	£327,600,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£327,600,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£7,150,000

AFFORDABLE UNITS	Low Cost	Equity Share	Shared	Intermediate	Affordable	Social Rent	Total
Units					1820		1820
Units %					33%		33%
Hab rooms					33%		33%
Bedrooms							
Persons					33%		33%
Floorspace					33%		33%

SCHEME COSTS	**£2,010,403,000**
Contribution to costs from:	
Market housing	£1,126,019,000
Affordable Housing	£363,558,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£363,558,000
- Social Rent	
Planning Obligations	£188,266,000
Community Infrastructure Levy	
Exceptional Development Costs	£332,560,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	**£**	**-**
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

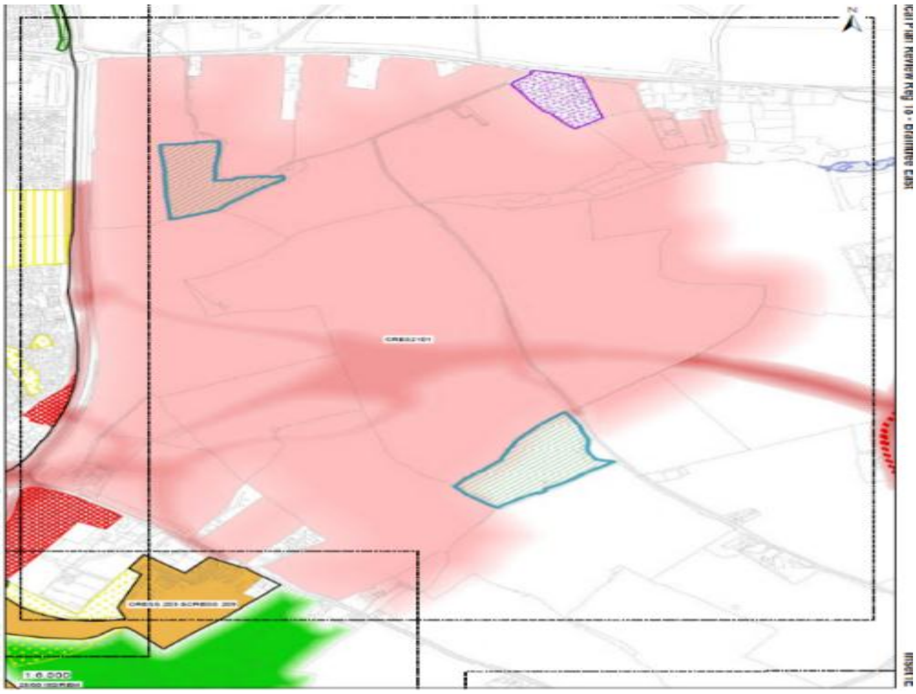
Alternative Site Values			**Against residual**
Existing Use Value	£	64,000,000	£345,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative us	£	-	

5.12 This shows a residual value of £64,345,000. This broadly balances with the land value benchmark at around 33% Affordable Housing, with this being valued at £180,000 per unit blended. The scheme generates £188,266,000 of planning obligations over and above Affordable Housing. The full appraisal is set out at Appendix 4.

Development at Land East of Braintree

5.13 The site (Map 2) comprises approximately 107 hectares, based on a dwelling density of 35 dph and a net to gross efficiency of circa 70%. The site is green field and in agricultural use.

Map 2 Site at Land East of Braintree



5.14 The site is located in the higher value Braintree sub market of the District and prices here are towards the lower end of the District with, for example, a three bed semi-detached new build at close to £360,000 in value.

5.15 As for Kings Dene, the infrastructure loading for this development is high. The main items are a new secondary school and improvements to the A120 junction at Galleys Corner.

5.16 Table 5.2 on the following page sets out a summary of the main viability assumptions and the currently envisaged infrastructure requirements.

Table 5.2 Viability assumptions and infrastructure requirements – East of Braintree

EAST OF BRAINTREE - LPR23				
Variable	Viability Assumption	Comments	Total Sum	Per Dwelling
Dwellings	2660	Circa		
Timings	2031 to 2041	Prices currently static; costs rising at 3-4% per annum		
Land Area		2660/35 = 76 Ha Net x 1.5 = 114 Ha Gross		
Area/Sub Market	Braintree	Prices as per High Level Testing		
Development Mix	Family Housing	35 Dph		
Affordable Housing	At a 3 way split - SR; AR; SO	Full range tested 0% to 50%		
Construction Costs	Lower Quartile BCIS	From Consultation Feedback		
Green Field Infrastructure Costs on Site	£1.2 million per Hectare	To cover Utilities; Services; Groundworks		
Land Value Benchmark		At £400,000 per hectare	£30,400,000	
Other Planning Costs				
Other (than AH) Section 106				
Site specific	Education	Education package: secondary, primary and EYCC provision- £55,054,374	£55,054,374	£20,697.13
	SEND Contribution	SEND	£4,724,062	£1,775.96
	Health Care Facility	£2.72 million - if onsite provision at nil cost to NHS not secured	£2,720,000	£1,022.56
	Gypsy and Traveller	10 pitches	£1,000,000	£375.94
	Employment & Skills Plans			£300
	Essex Police		£1,716,583	£645
	Essex Fire and Rescue		£931,000	£350
	Galleys Corner Roundabout	Transport shortlist LP IDP contribution to 2043	£7,800,000	2,932
	Marks Farm Roundabout	Transport shortlist LP IDP contribution to 2043	£5,400,000	2,030
	A120 Active Travel Bridge - link to LCWIP 3	Transport shortlist LP IDP contribution to 2043	£10,000,000	3,759
	5-year bus / BRT subsidy	Transport shortlist LP IDP contribution to 2043	£3,000,000	1,128
	E-bike hire scheme	Transport shortlist LP IDP contribution to 2043	£500,000	188
	Car club	Transport shortlist LP IDP contribution to 2043	£1,800,000	677
	Travel Plan Fund	Transport shortlist LP IDP contribution to 2043	£3,000,000	1,128
District Wide	Waste transfer capacity	£73.46 per dwelling		£73
	RCHW Contributions	£150.59 per dwelling		£151
	Library infrastructure	£374.38 per dwelling		£374
	RAMS Tarriff	£476 per dwelling		£476
	PPOSS Sport Growth	£11,002,000/19,070 (Plan Supply)		£577
	Sport England Facilities	£22,923,000/19,070 (Plan supply)		£1,202
	Business and School Travel Planning	£18,000,000 / 19,070 focused IDP baseline		£944
	EEAST development wide ambulance contribution	£371 per dwelling		£371
	Defibrillator - new schemes	£5,000 per device confirmed by EEAST	£5,000	£2
				£41,179

5.17 This suggests an infrastructure loading of around £41,179 per unit including local and District-wide requirements.

Viability testing

5.18 The Results sheet (Figure 5.2) for the scheme assessment is shown below:

Figure 5.2 Results – Viability for Land East of Braintree

------- Results -------

Site Address	East of Braintree
Scheme Description	2,660 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results | View Results | Discounting Function | Floor Space Analysis | Costs Analysis | Child Occupancy & Bedrooms

RESIDUAL before land finance	**£33,374,000**
RESIDUAL after land finance	**£30,037,000**
Per hectare	£395,000
Per dwelling	£11,000
Per market dwelling	£13,000
Per habitable room	£3,000
Per bedspace	£3,000

SCHEME UNITS		per ha.
No. of Dwellings	2660	35
No. of Habitable rooms	9443	124
No. of Bedrooms	8645	114
Total floorspace (m2)	256,158	3371
% Wheelchair Units		

SCHEME REVENUE	**£1,036,236,000**
Contribution to revenue from:	
Market housing	£976,386,000
Affordable Housing	£59,850,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£59,850,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£3,337,000

AFFORDABLE UNITS	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units					332.5		332.5
Units %					13%		13%
Hab rooms					13%		13%
Bedrooms							
Persons					13%		13%
Floorspace					13%		13%

SCHEME COSTS	**£1,002,862,000**
Contribution to costs from:	
Market housing	£668,941,000
Affordable Housing	£66,419,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£66,419,000
- Social Rent	
Planning Obligations	£109,536,000
Community Infrastructure Levy	
Exceptional Development Costs	£157,966,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	£	-
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values			**Against residual**
Existing Use Value	£	30,400,000	-£363,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative	£	-	

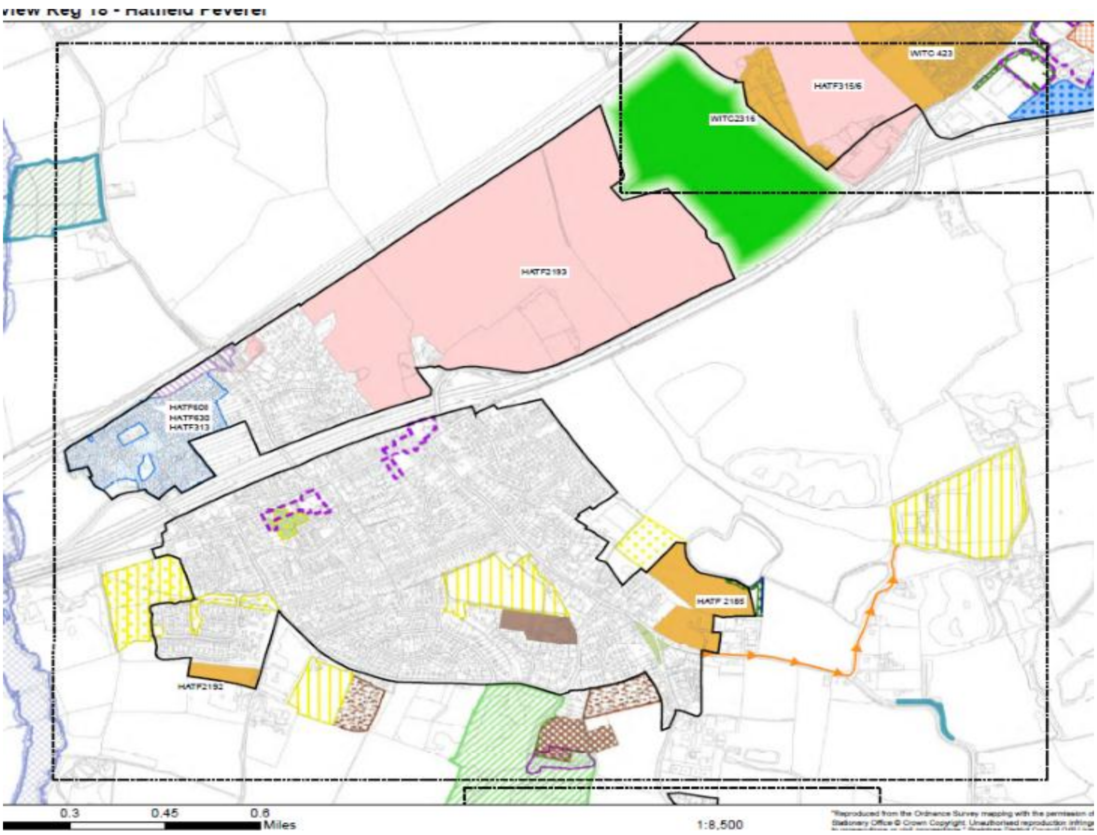
5.19 This shows a residual value of £30,037,000. This broadly balances with the land value benchmark at around 13% Affordable Housing, with this being valued at £180,000 per unit blended. The scheme generates £109,536,000 of planning obligations over and above Affordable Housing. The full appraisal is set out at Appendix 5.

5.20 This is a weak Affordable Housing outcome and the scheme demonstrates that in a lower value housing market area, a high infrastructure loading will ‘crowd out’ Affordable Housing.

Land North of the A12 at Hatfield Peverel

5.21 The site (Map 3) comprises approximately 49 hectares, based on a dwelling density of 35 dph and a net to gross efficiency of circa 70%. The site is green field and in agricultural use.

Map 3 Site at Land North of the A12 at Hatfield Peverel



5.22 The site is located in the High Value Eastern Settlements sub market of the District and prices here are at the top end of the market with, for example, a three bed semi-detached new build at close to £400,000 in value.

5.23 The infrastructure loading for this development is relatively low. There are no notable major items.

5.24 Table 5.3 on the following page sets out a summary of the main viability assumptions and the currently envisaged infrastructure requirements.

Table 5.3 Viability assumptions and infrastructure requirements – Land North of the A12 at Hatfield Peverel

LAND NORTH OF A12 HATFIELD PEVEREL - LPR 28				
Variable	Viability Assumption	Comments	Total Sum	Per Dwelling
Dwellings	1135	Circa		
Timings	2031 to 2041	Prices currently static; costs rising at 3-4% per annum		
Land Area	70% Developable Area	1135/35 = 32 Ha Net x 1.5 = 49 Ha Gross		
Area/Sub Market	Braintree	Prices as per High Level Testing		
Development Mix	Family Housing	35 Dph		
Affordable Housing	At a 3 way split - SR; AR; SO	Full range tested 0% to 50%		
Construction Costs	Lower Quartile BCIS	From Consultation Feedback		
Green Field Infrastructure Costs on Site	£1.2 million per Hectare	To cover Utilities; Services; Groundworks		
Land Value Benchmark		At £400,000 per hectare	£12,800,000	
Other Planning Costs				
Other (than AH) Section 106				
Site specific	Education	EYCC - £3.211 (Critical Troy IDP assessment)	£3,211,392	£2,792.51
	SEND Contribution	SEND	£1,951,243	£1,696.73
	Health Care Facility	£1.17 million	£1,174,150	£1,021.00
	Essex Police	£732,078 - Necessary Troy IDP assessment	£732,078	£636.59
	Cycle Countywide link to Hatfield Peverel Train Station	Transport shortlist LP IDP contribution to 2043	700,000	609
	Essex Fire and Rescue Service	£402,500 - Necessary Troy IDP assessment	£402,500	£350.00
	Gypsy & Traveller pitches	Pitches - 4	£400,000	£347.83
	Employment & Skills Plans			£300
District Wide	Waste transfer capacity	£73.46 per dwelling		£73
	RCHW Contributions	£150.59 per dwelling		£151
	Library infrastructure	£374.38 per dwelling		£374
	RAMS Tarriff	£476 per dwelling		£476
	PPOSS Sport Growth	£11,002,000/19,070 (Plan Supply)		£577
	Sport England Facilities	£22,923,000/19,070 (Plan supply)		£1,202
	Business and School Travel Planning	£18,000,000 / 19,070 focused IDP baseline		£944
	EEAST development wide ambulance contribution	£371 per dwelling		£371
	Defibrillator - new schemes	£5,000 per device confirmed by EEAST	£5,000	£4
				£11,926

5.25 The infrastructure loading for site specific and district wide loading is circa £12,000 per unit.

Viability testing

5.26 The Results sheet (Figure 5.3) for the scheme assessment is shown below:

Figure 5.3 Results – Viability for Land North of A12 Hatfield Peverel

------ Results ------

Site Address	Land North of A12 Hatfield Perverel
Scheme Description	1135 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results
View Results
Discounting Function
Floor Space Analysis
Costs Analysis
Child Occupancy & Bedrooms

RESIDUAL before land finance	**£13,547,000**
RESIDUAL after land finance	**£12,192,000**
Per hectare	£381,000
Per dwelling	£11,000
Per market dwelling	£20,000
Per habitable room	£3,000
Per bedspace	£3,000

SCHEME UNITS		per ha.
No. of Dwellings	1135	35
No. of Habitable rooms	4031	126
No. of Bedrooms	3689	115
Total floorspace (m2)	109,289	3415
% Wheelchair Units		

SCHEME REVENUE	£381,624,000
Contribution to revenue from:	
Market housing	£289,689,000
Affordable Housing	£91,935,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£91,935,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£1,355,000

AFFORDABLE UNITS

	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units					510.75		510.75
Units %					45%		45%
Hab rooms					45%		45%
Bedrooms							
Persons					45%		45%
Floorspace					45%		45%

SCHEME COSTS	£368,077,000
Contribution to costs from:	
Market housing	£185,939,000
Affordable Housing	£102,015,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£102,015,000
- Social Rent	
Planning Obligations	£13,536,000
Community Infrastructure Levy	
Exceptional Development Costs	£66,587,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	£	-
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values			Against residual
Existing Use Value	£	12,800,000	-£608,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative	£	-	

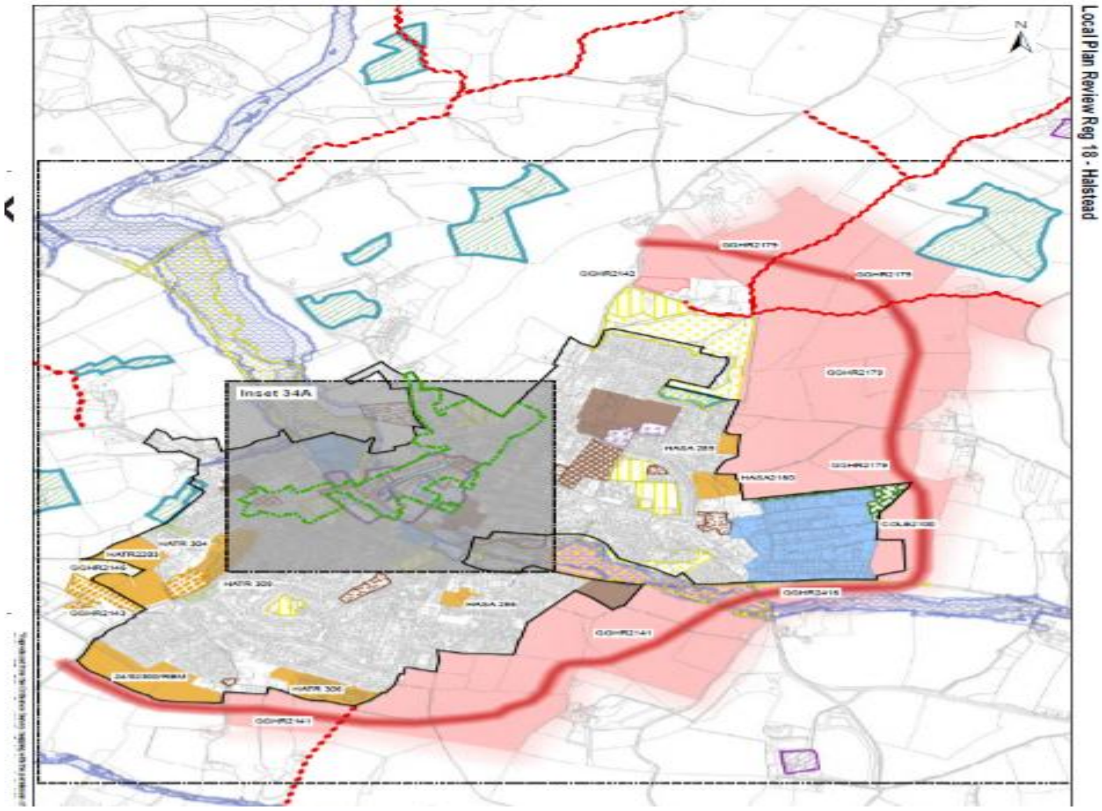
5.27 This shows a residual value of £12,192,000. This broadly balances with the land value benchmark at around 45% Affordable Housing, with this being valued at £180,000 per unit blended. The scheme generates £13,536,000 of planning obligations over and above Affordable Housing. The full appraisal is set out at Appendix 6.

5.28 This is a strong Affordable Housing outcome and the scheme demonstrates that with a modest infrastructure loading a high Affordable Housing target can be achieved.

Land South and North East of Halstead

5.29 The site (Map 4) is for 2,850 homes comprises approximately 122 hectares, based on a dwelling density of 35 dph and a net to gross efficiency of circa 70%. The site is green field and in agricultural use.

Map 4 Site at Land South and North East of Halstead



5.30 The site is located in the lower value Halstead and Sible Hedingham sub market of the District and prices here are at the top end of the market with, for example, a three bed semi-detached new build at close to £355,000 in value.

5.31 The infrastructure loading for this development is £20,354 per dwelling.

5.32 Table 5.4 on the following page sets out a summary of the main viability assumptions and the currently envisaged infrastructure requirements.

Table 5.4 Viability assumptions and infrastructure requirements – Land South and North East of Halstead

LAND SOUTH AND NORTH EAST OF HALSTEAD - LPR24				
Variable	Viability Assumption	Comments	Total Sum	Per Dwelling
Dwellings	2850	Circa		
Timings	2031 to 2041	Prices currently static; costs rising at 3-4% per annum		
Land Area	70% Developable Area	2850/35 = 81 Ha Net x 1.5 = 122 Ha Gross		
Area/Sub Market	Halstead & Sible Hedingham	Prices as per High Level Testing		
Development Mix	Family Housing	35 Dph		
Affordable Housing	At a 3 way split - SR; AR; SO	Full range tested 0% to 50%		
Construction Costs	Lower Quartile BCIS	From Consultation Feedback		
Green Field Infrastructure Costs on Site	£1.2 million per Hectare	To cover Utilities; Services; Groundworks		
Land Value Benchmark		At £400,000 per hectare	£32,400,000	
Other Planning Costs				
Other (than AH) Section 106				
Site specific	Health	fallback contribution estimated at c.£2.91m if not secured on site.	£2,910,000	£1,021.05
	Education	23,232,414	23,232,414	£8,151.72
	SEND	SEND contribution	£5,032,153	£1,765.67
	Halstead spine road	Transport shortlist shows £0 LP IDP contribution to 2043 and £39m beyond 2043	0	0
	A131 Corridor (including Halstead, High Garrett)	Transport shortlist LP IDP contribution to 2043	2,250,000	789
	Route 38 - increase frequency and access into development	Transport shortlist LP IDP contribution to 2043	250,000	88
	Halstead Town Network - new route	Transport shortlist LP IDP contribution to 2043	1,100,000	386
	Halstead Mobility Hubs	Transport shortlist LP IDP contribution to 2043	1,000,000	351
	Countywide Cycle Route - A1124 Greenstead Hall Road to Hospital	Transport shortlist LP IDP contribution to 2043	2,400,000	842
	Halstead Local Cycle Routes	Transport shortlist LP IDP contribution to 2043	3,180,000	1,116
	Essex Police		£1,818,841	£638.19
	Active Travel Connection to Hatfield Peverel Station	TBC		£0.00
	Essex Fire and Rescue Service	£402,500 - Necessary Troy IDP assessment	£997,500	£350.00
	Gypsy & Traveller pitches	Pitches - 11	£1,100,000	£385.96
	Employment & Skills Plans			£300
District Wide	Waste transfer capacity	£73.46 per dwelling		£73
	RCHW Contributions	£150.59 per dwelling		£151
	Library infrastructure	£374.38 per dwelling		£374
	RAMS Tarriff	£476 per dwelling		£476
	PPOSS Sport Growth	£11,002,000/19,070 (Plan Supply)		£577
	Sport England Facilities	£22,923,000/19,070 (Plan supply)		£1,202
	Business and School Travel Planning	£18,000,000 / 19,070 focused IDP baseline		£944
	EEAST development wide ambulance contribution	£371 per dwelling		£371
	Defibrillator - new schemes	£5,000 per device confirmed by EEAST	£5,000	£2
				£20,354.58

5.33 The infrastructure loading for site specific and district wide loading is circa £20,354 per dwelling per unit.

Viability testing

5.34 The Results sheet for the scheme assessment is shown below.

Figure 5.4 Results – Viability for Land North and South East of Halstead

Results

Save Results | View Results | Discounting Function | Floor Space Analysis | Costs Analysis | Child Occupancy & Bedrooms

Site Address	Land N and SE of Halstead
Scheme Description	2,850 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

RESIDUAL before land finance	**£36,366,000**
RESIDUAL after land finance	**£32,729,000**
Per hectare	£404,000
Per dwelling	£11,000
Per market dwelling	£15,000
Per habitable room	£3,000
Per bedspace	£4,000

SCHEME UNITS		per ha.
No. of Dwellings	2850	35
No. of Habitable rooms	10114	125
No. of Bedrooms	9263	114
Total floorspace (m2)	274,459	3388
% Wheelchair Units		

SCHEME REVENUE	**£1,018,199,000**
Contribution to revenue from:	
Market housing	£889,949,000
Affordable Housing	£128,250,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£128,250,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£3,637,000

AFFORDABLE UNITS	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units					712.5		712.5
Units %					25%		25%
Hab rooms					25%		25%
Bedrooms							
Persons					25%		25%
Floorspace					25%		25%

SCHEME COSTS	**£981,833,000**
Contribution to costs from:	
Market housing	£612,757,000
Affordable Housing	£142,329,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£142,329,000
- Social Rent	
Planning Obligations	£58,012,000
Community Infrastructure Levy	
Exceptional Development Costs	£168,735,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	£	-
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values			**Against residual**
Existing Use Value	£	32,400,000	£329,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative	£	-	

5.35 This shows a residual value of £32,729,000. This broadly balances with the land value benchmark at around 25% Affordable Housing, with this being valued at £180,000 per unit blended. The scheme generates £58,012,000 of planning obligations over and above Affordable Housing. The full appraisal is set out at Appendix 7.

Testing the strategic sites over the longer term of the Plan

5.36 The analysis which precedes relates to a snap shot of viability now.

5.37 There are two main variables which can changes with time. The first is the infrastructure loading. Clearly, where this is lower than anticipated on the tables above, then more Affordable Housing is deliverable. This is relatively easily accommodated via updates to the appraisals.

5.38 The other variable is the housing market and potential changes to prices and costs. Two main sensitivity tests have been carried out here:

- Assuming an historic annual increase in house prices over the last 15 years (5% according to HMLR data for Braintree along with an historic increase of 3% in build costs (BCIS data).

- Assuming an historic increase in house prices of 3% along with an increase of 3% in build costs (BCIS data); so where prices keep pace with costs.

5.39 Table 5.5 sets out the residual values for the strategic sites taking into account house prices and build cost inflation over the Plan period.

Table 5.5 Residual values for the strategic sites projected over the Plan period

RESIDUAL VALUES PER HECTARE		
Kings Dene at 50% Affordable Housing	House Prices	
	5%	3%
Build Costs at 3%	£1,772,658	£385,394
Hatfield Peverel at 50% Affordable Housing	House Prices	
	5%	3%
Build Costs at 3%	£1,949,816	£759,551
East of Braintree at 40% Affordable Housing	House Prices	
	5%	3%
Build Costs at 3%	£1,681,334	£178,000
Halstead at 40% Affordable Housing	House Prices	
	5%	3%
Build Costs at 3%	£3,221,000	£1,344,376

5.40 The results assume the same assumptions as for the High Level Testing but with projected value changes. The results reflect infrastructure costs evenly spread over the period of each scheme. Appendix 8 sets out an appraisal (for the East of Braintree site) as an example.

5.41 Assuming an historic performance of development variables (prices at 5% and costs at 3%) the schemes at Kings Dene and Hatfield Peverel are viable at 50% Affordable Housing and the schemes at East of Braintree and Halstead are viable at 40% Affordable Housing.

5.42 If house prices match build costs over the Plan period then Hatfield Peverel is viable at 50% Affordable Housing, Kings Dene is marginal at 50% Affordable Housing, East of Braintree produces a positive residual at 40% Affordable but this likely to fall below the benchmark and land at Halstead is viable at 40% Affordable Housing.

CHAPTER 6 – COMMERCIAL PROPERTY DEVELOPMENT

6.1 Whilst residential development is the main focus of the Whole Plan Viability Assessment, the study should test commercial property development for viability.

6.2 This chapter looks at the economics of development for retail, offices and light industrial uses, beginning with a summary overview of the market.

Summary of the commercial market

6.3 The retail property market in the District includes traditional high street shop uses in the main centres of Braintree and Witham, alongside shopping centres such as George Yard and out-of-town centres such as Braintree Village and Braintree Retail and Leisure Yard. Yields for mixed use retail schemes are currently around 7.5%, with rents for larger units around £140 per square foot.

6.4 The wider commercial property market in the Braintree District is strong and linked closely to the wider Essex and South East (particularly M25) commercial markets.

6.5 Essex is recognised as a national hub for import and export freight and logistics, a sector employing around 50,000 people. The Greater Essex Property Market Review (April 2026) states that the County:

'Has a strong track record for attracting Foreign Direct Investment (FDI) projects……………………With access to two of the UK's busiest freeports, Freeport East and Thames Gateway, direct links by car and train, and a coastal geographical advantage for offshore energy, Essex offers a competitive edge for national and international freight and logistics. It also has access to two international airports, London Stansted Airport'.

6.6 Braintree District has a number of significant commercial locations including Horizon 120 Business, Innovation and Logistics Park based to the south of Great Notley. This is a site of 65 acres developed following £24.3 million invested by Braintree District Council into the land and infrastructure, in partnership with commercial developer The Marshgate Group. In 2024, planning permission was granted for

Phase 2 of Horizon 120, for an additional 592,000 sq ft of industrial warehousing. The report states further that the County is a:

'Hub for innovation and production excellence…….Home to the UK's second-largest cluster of advanced manufacturing and engineering companies, it hosts 4,200 businesses. The region's advanced manufacturing capabilities have attracted some of the UK's leading manufacturers, including those in the aerospace and zero-emission vehicle industries. Notable companies such as Raytheon UK, Leonardo, and Teledyne e2v are leaders in the global defence and security market, providing products to the Ministry of Defence.'

6.7 Witham is a second key commercial location.

6.8 It is well placed for logistics companies, which occupy the town's industrial estates. Freebournes is the largest commercial area in Witham and consists of a mixture of warehouse/industrial and office blocks. Occupiers include Crittall Windows and Simarco. Planning permission has been granted for 160,000 sq ft of B2/B8 warehousing at Burghey Brook, Witham. Phase 1a is nearing completion.

6.9 Commercial Mortgage Brokers Research find that in the 'Witham-Braintree A12 Spine', yields for industrial/warehousing are in the range 5.5% to 7.5%

6.10 The demand for offices remains robust. As in many districts the market is split between bespoke units either as wholly office buildings or supporting industrial/warehousing, and, on the other hand, smaller offices within town centres and supporting retail and high street uses.

6.11 Glenny's Office 'Databook' reports stable rents for offices at around £15 per square foot with 'Grade A space coming forward over the next 15 months at Panattoni Park. The firm states further that 'owner occupier capital values [have] stabilised across all locations in Q1 2026, bringing to an end the downward shift seen over the past few years.'

6.12 Commercial Mortgage Brokers Research find that 'Across the rest of the market, prime and well-let secondary offices across Essex 'trade broadly in the 6.5% to 8% yield range'.

Retail property development viability

6.13 The assumptions on rental values and yields are set out in Table 3.7 above. The assumed costs are set out in Table 3.8 above. There was no feedback on these assumptions. To reflect the fact that new commercial development in the district is likely to be delivered in larger sites, I have adopted the BCIS Lower quartile costs.

6.14 Table 6.1 below sets out residual values for the range of retail units – 100, 200 and 400 square metres.

Table 6.1 Retail development viability

Retail Units	Value per Sq M	Value per Sq M	Value per Sq M
	100 Sq M Unit	200 Sq M Unit	400 Sq M Unit
GDV	£3,571	£2,250	£1,750
Construction Costs	£1,385	£1,385	£1,385
Fees at 10%	£139	£139	£139
Finance at 8%	£122	£122	£122
Return at 15%	£536	£338	£263
Total Development Costs	£2,181	£1,983	£1,908
Residual Value	£1,390	£267	-£158
At 30% of 1 hectare - 3,000 Sq M	£4,169,910	£801,360	-£473,640
Land Value Benchmark - £400,000	£400,000	£400,000	£400,000
Surplus per Sq M	£3,769,910	£401,360	-£873,640

6.15 The table shows that retail, if developed in smaller units within larger schemes is likely to generate strong residual values in excess of the land value benchmark generally adopted for the study.

6.16 Smaller units look very viable with a surplus of approaching £4 million per hectare being generated over and above the land value benchmark (equivalent of £400,000 per hectare).

6.17 Larger units (400 square metres) produce a negative residual following local rent, yields and BCIS costs.

6.18 The lesson to be drawn here is not that this form of development is unviable, but that retail space, in order to be viable, needs to focus on smaller units where the rental is highest, and best covers the costs incurred.

Light industrial property development viability

6.19 The assumptions on rental values and yields for industrial are set out in Table 3.7 above. The assumed costs are set out in Table 3.8 above. These was no feedback on these assumptions. As for retail, I have adopted BCIS Lower Quartile costs.

6.20 Table 6.2 below sets out residual values for the range of industrial units – 100, 200 and 400 square metres.

Table 6.2 Industrial development viability

Light Industrial	Value per Sq M	Value per Sq M	Value per Sq M
	100 Sq M Unit	200 Sq M Unit	400 Sq M Unit
GDV	£2,400	£1,667	£1,300
Construction Costs	£879	£879	£879
Fees at 10%	£88	£88	£88
Finance at 8%	£77	£77	£77
Return at 15%	£360	£250	£195
Total Development Costs	£1,404	£1,294	£1,239
Residual Value	£996	£373	£61
At 40% of 1 hectare - 4,000 Sq M	£3,982,992	£1,490,792	£242,992
Land Value Benchmark - £400,000	£400,000	£400,000	£400,000
Surplus per Sq M	£3,582,992	£1,090,792	-£157,008

6.21 The table shows an optimistic picture for industrial property development.

6.22 For smaller units the residual value exceeds the benchmark by some £.5 million per hectare. For a larger unit the appraisal shows a small deficit, although with a margin of 10% (rather than 15%) the scheme will be in surplus (by around £100,000).

6.23 This form of development has few viability challenges on the basis of the evidence.

Office development viability

6.24 The assumptions on rental values and yields for industrial are set out in Table 3.7 above. The assumed costs are set out in Table 3.8 above, where, as for the retail and industrial analysis, I have adopted the BCIS lower quartile costs. I have amended all office yields to 7% in the light of the market information preceding, and increased the rental on the larger unit to £150 per square metre.

6.25 Table 6.3 below sets out residual values for the range of industrial units – 100, 200 and 400 square metres.

Table 6.3 Industrial development viability

Offices	Value per Sq M	Value per Sq M	Value per Sq M
	100 Sq M Unit	200 Sq M Unit	400 Sq M Unit
GDV	£3,571	£2,429	£2,143
Construction Costs	£2,643	£2,643	£2,643
Fees at 10%	£264	£264	£264
Finance at 8%	£233	£233	£233
Return at 15%	£536	£364	£321
Total Development Costs	£3,676	£3,504	£3,461
Residual Value	-£105	-£1,075	-£1,318
At 30% of 1 hectare - 4,000 Sq M	-£313,602	-£3,225,702	-£3,955,002
Land Value Benchmark - £400,000	£400,000	£400,000	£400,000
Surplus per Sq M	-£713,602	-£3,625,702	-£4,355,002

6.26 This analysis suggests a problem as negative residuals are evidence, and, in the case of larger units the residuals are very negative.

6.27 In large measure, the numbers appear more pessimistic than what the market is reporting. There are a number of explanations for this. Perhaps the most important is that with a significant proportion of commercial development, units are not built speculatively, but to contract for a bespoke client.

6.28 It will also be the case that often here costs are considered much longer term and funded through a commercial mortgage. Longer term financing allows the client to pay more for units and to spread the costs more evenly.

6.29 Where units are built to order, the developer margin will not be a commercial one, but a contractor; and this is included within the BCIS baseline costs, again allowing the property to be developed at much lower cost.

6.30 Re-running the office analysis again, removing the margin for a non speculative scheme, generates a surplus approaching £1 million for the scheme of 100 square metres.

CHAPTER 7 OTHER DEVELOPMENT SECTORS

7.1 The Whole Plan Viability Assessment requires an analysis of the viability of additional sectors. This chapter looks at the viability of Retirement Housing, Hotels and HMOs (Houses in Multiple Occupation).

Retirement Housing

7.2 Retirement Housing is key in delivering a wide housing supply offer locally. Retirement Housing here is Market Housing for those usually older than 55 (this is the way it is often marketed).

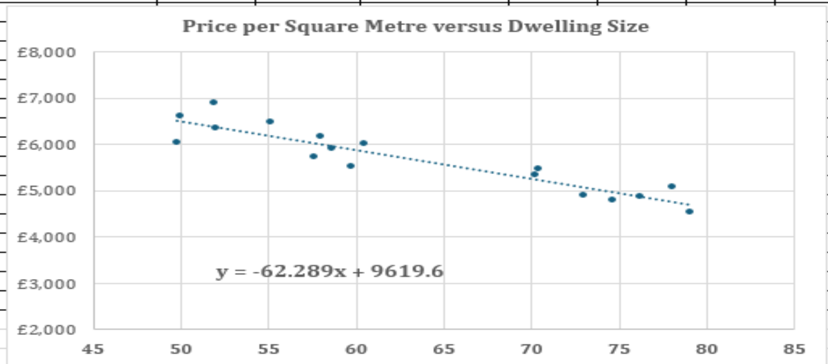
7.3 The economic advantage of this type of housing is that it normally has a sizeable premium (typically 20% to 40%) over and above apartments in the general market. This advantage is however offset by the areas required for common space and circulation.

7.4 A residual development appraisal has been carried out utilising local scheme comparable data and BCIS industry standard costs. The comparable retirement apartments are shown on the following page in Figure 7.1.

Figure 7.1 Retirement apartment values

Development	Area	Developer	Newbuild	Type	Service Charge	GR	Beds	Sq M	Price (£)	Price per Sq M	New Build Premium Plus 10%
Mill Green Lodge	Witham	Churchill	Yes	Flat	£2,641		1	50	£329,500	£6,592.61	£6,593
Lawrence Place	Maldon	McCathy & Stone	No	Flat	£3,865	425	1	52	£325,000	£6,258.29	£6,884
Mill Green Lodge	Witham	Churchill	Yes	Flat			1	50	£299,950	£6,023.77	£6,024
Arthur Ashby Court	Broomfield	Anchor	Yes	Flat			1	60	£362,500	£5,993.93	£5,994
Miami House	Chelmsford	McCathy & Stone	No	Flat	£9,554	435	1	55	£325,000	£5,889.54	£6,478
Lawrence Place	Maldon	McCathy & Stone	No	Flat	£3,958	425	1	52	£300,000	£5,766.57	£6,343
Miami House	Chelmsford	McCathy & Stone	No	Flat	£9,554	435	1	58	£325,000	£5,606.39	£6,167
Princes Road	Chelmsford	McCathy & Stone	No	Flat	£9,180	435	1	59	£315,000	£5,373.60	£5,911
Princes Road	Chelmsford	McCathy & Stone	Yes	Flat	£11,989	£510	2	70	£375,000	£5,339.42	£5,339
Lawrence Place	Maldon	McCathy & Stone	No	Flat	£3,958	425	1	58	£300,000	£5,208.51	£5,729
Stane House	Dunmow	McCathy & Stone	Yes	Flat	£5,812		2	78	£395,000	£5,061.77	£5,062
Miami House	Chelmsford	McCathy & Stone	No	Flat	£9,554	435	1	60	£299,950	£5,021.37	£5,524
Ryland Drive	Witham	Churchill	No	Flat			2	70	£350,000	£4,970.31	£5,467
Stane House	Dunmow	McCathy & Stone	Yes	Flat			2	76	£369,995	£4,856.98	£4,857
Miami House	Chelmsford	McCathy & Stone	No	Flat	£12,509	510	2	73	£325,000	£4,450.87	£4,896
Miami House	Chelmsford	McCathy & Stone	No	Flat	£12,509	510	2	75	£325,000	£4,351.23	£4,786
Dunmow Road	Great Easton	TBC	No	Flat			2	79	£325,000	£4,110.91	£4,522

Sq M	New Build Premium Plus 10%
50	£6,593
52	£6,884
50	£6,024
60	£5,994
55	£6,478
52	£6,343
58	£6,167
59	£5,911
70	£5,339
58	£5,729
78	£5,062
60	£5,524
70	£5,467
76	£4,857
73	£4,896
75	£4,786
79	£4,522



Sq M	Equation	Sq M	Equation	Sale Price	Price
50	-62.2890	-3114.45	9619.6	£6,505	**£325,258**
68	-62.2890	-4235.652	9619.6	£5,384	**£366,108**

7.5 The comparables have been applied to a one hectare scheme of, one and two bed retirement apartments. These are evenly split within a scheme of 60 units.

7.6 The indicative new build prices are determined by plotting the relationship between price per square metre and dwelling size, as shown in the Figure (7.1).

7.7 The results of a scheme including 30% Affordable Housing are shown in the appraisal in Figure 7.2 on the following page.

Figure 7.2 Development appraisal of a 60 unit Retirement scheme

Development site:	Retirement Housing	Market	70%			
Local Authority:	Braintree	Affordable	30%			
SALES REVENUE						
Unit	New Build Private	No.	Sq M	Total Sq M	Revenue per Unit	TOTAL REVENUE
1	1 Bed	21	50	1050	£325,258	6,830,418
2	2 Bed	21	68	1428	£366,108	7,688,268
		42		2,478		14,518,686
Unit	New Build Affordable	No.	Sq M	Total Sq M	Revenue per Unit	TOTAL REVENUE
1	1 Bed	9	50	450	£180,000	1,620,000
2	2 Bed	9	68	612	£180,000	1,620,000
		18		1,062		3,240,000
		60			Total GDV	17,758,686
BUILD COST						
		No	Sq M	Base Build Rate		TOTAL CONSTRUCTION
Base Build	Construction (incl Externals)	60	3,540	£2,400		£8,496,000
	Circulation	20%	708	£2,400		£1,699,200
		60			Total Construction	£10,195,200
Fees at 10% Build						£1,019,520
Marketing Fees	3% of Private Rev					£435,561
Finance at 8% Build & Fees						£897,178
Return						
Market at 20% GDV						£2,903,737
Affordable at 6%						£194,400
Section 106 at £10,000 per unit						£600,000
Total Development Costs						£16,245,595
Residual Value						£1,513,090.62
Land Value Benchmark						£400,000
Surplus						£1,113,091

7.8 The appraisal shows the total GDV achieved by a mixed tenure scheme including Affordable Housing. Construction costs are taken at a higher rate than mainstream housing and an allowance for external works and contingency is included.

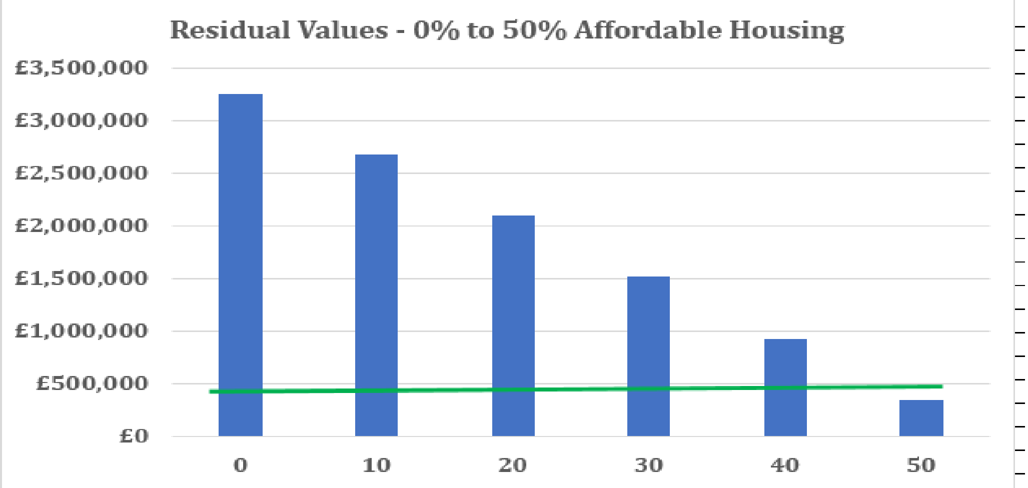
7.9 Total GDV is £17.76 million and total development costs are £16.24 million. The land value benchmark is £400,000 per hectare which gives a surplus of £1.11 million. There is an allowance of £10,000 per unit for Section 106 over and above Affordable Housing.

7.10 On this basis, an Affordable Housing contribution at 30% is viable.

7.11 The appraisal has been run in addition at a range of Affordable Housing targets. Figure 7.3 sets out the residual values

Figure 7.3 Residual values for Retirement Housing

	Affordable Housing Percentages					
	0	10	20	30	40	50
Residual Value	£3,258,657	£2,675,801	£2,094,946	£1,513,090	£931,235	£349,379



7.12 This suggests that Affordable Housing will be viable up to, and in some cases beyond, 40%.

7.13 In practice, Affordable Housing with this type of scheme (Retirement Housing) will be delivered via a commuted sum.

7.14 Table 7.1 sets out indicative commuted sums at a range of Affordable Housing percentages. These are calculated as the difference between a scheme with no Affordable Housing contribution and the residual value at the relevant Affordable Housing target.

Table 7.1 Indicative Affordable Housing commuted sums

	Affordable Housing Percentages					
	0	10	20	30	40	50
Residual Value	£3,258,657	£2,675,801	£2,094,946	£1,513,090	£931,235	£349,379
Commuted Sum		£582,856	£1,163,711	£1,745,567	£2,327,422	£2,909,278

7.15 In conclusion, this type of development is viable to deliver significant percentages of Affordable Housing. As with other forms of development, viability will depend on existing use and in some instances the site will be brown field. This will normally limit the viable percentage deliverable.

Hotel sector

7.16 It is understood that currently hotels do not make a contribution towards Affordable Housing although may make contributions towards other community benefits.

7.17 Hotels vary in terms of scale within the District. Research has been carried out however to establish the viability of their development. Whereas for Retirement Housing and residential more generally, viability can be assessed via a residual appraisal, hotels are typically assesed via the Profits Method. Figure 7.4 identifies a range of hotels along with their rent per room per night:

Figure 7.4 Hotel comparables – rents per room per night

Hotel	Address	Link	Room Type	£ / 1 night	Number of Rooms
White Hart Hotel	Bocking End, Braintree	White Hart Hotel by Greene King Inns - Guest Reservations	Double	£90	33
Holiday Inn Express	Panners Roundabout, Braintree	Hotels Near Stansted: Holiday Inn Express Braintree	Double	£114	84
Ross House	Windermere Drive, Great Notley	Ross House Great Notley, Braintree, Essex, Great Notley (updated prices 2026)	Double	£92	
Bull Hotel	Bridge Street, Halstead	Bull Hotel by Greene King Inns, Halstead (updated prices 2026)	Double	£59	16
Essex Golf & Country Club	Earls Colne Coggeshall	The Essex | Golf, Health, Racquets, Hotel & Country Club	Double	£95	39
Rivenhall Garden Hotel	Rivenhall Hotel, Rivenhall	Your Perfect Escape in the Heart of Essex	Double	£60	53
White Hart Hotel	Market End, Coggeshall	White Hart Hotel by Greene King Inns, Coggeshall (updated prices 2026)	Double	£81	20
Travelodge Stansted	Chelmsford Road, Great Dunmow	Travelodge | Stansted Great Dunmow hotel - Stansted Great Dunmow hotels	Double	£94	92
The Saracens Head Hotel	High Street, Great Dunmow	Hotel In Great Dunmow | The Saracens Head Hotel	Double	£111	30
Premier Inn	Cressing Road, Braintree	Search results | Premier Inn	Double	£118	78
Channels Lodge	Belsteads Farm Lane, Chelmsford	Channels Hotel has 29 rooms in total Archives - Channels Hotel	Double	£125	32

7.18 The comparables suggest a rent of circa £95 per night.

7.19 Table 7.2 below describes the economics of the example hotel development.

Table 7.2 Viability of hotel development

Rooms per hectare	150
Income per room per day	£95
Income per room per annum	£34,675
Income per annum - 150 rooms	£5,201,250
Occupancy at 85%	£4,421,063
Labour - Staff/Management at 30% Turnover	£1,326,319
Expenses - Property, Utilities & Food at 25% Turnover	£1,300,313
Marketing at 10% Turnover	£520,125
Total Expenses	£3,146,756
Gross Profit	£1,274,306
Construction Costs	
Room Size - 15 Sq M	15
Rooms	150
Nett Area	2250
Gross to Nett at 30%	2925
Build Costs	
Per Square Metre	£2,500
Externals at 15%	£375
Contingency at 5%	£144
Fees, Marketing & Margin @ 1.4 Costs	£1,208
Total	£4,226.25
Total Construction Costs	£12,361,781
Mortgage finance at 5% at 70% Loan - Repayment	700000
Depreciation at 3% Contract Sum	£370,853
Profit Before Tax	£203,453
Tax at 25%	£50,863
Net Profit	£152,590
Income	£152,590
Yield	6%
YP	16.67
Capital Value	£2,543,160

7.20 Turnover on a nett basis, taking occupancy into account is £4.4 million. With industry standard assumptions - https://www.knightfrank.co.uk/research/sectors/hotels - the gross income is circa £1.3 million.

7.21 Adopting BCIS indicative costs for the development, funded over 25 years, and taking depreciation into account, gives a profit before tax. Taking a net profit at a going rate yield of 6% gives a capital value of c £2.5 million.

7.22 This is well in excess of the land value benchmark and it concludes that the sector could provide Affordable Housing contributions if required.

Houses in Multiple Occupation (HMOs)

7.23 An increasingly important development sector is Houses in Multiple Occupation (HMOs).

7.24 The valuation of an HMO is via the investment method. This takes the net rental incomes multiplied by an appropriate yield.

7.25 Comparable room rental are shown in Table 7.3 on the following page.

Table 7.3 Rooms for rent – Braintree area

Address	Link	Room Type	£/Month	£/Year	Number of Rooms
Braintree CM7	'Double Room with Air Con' Room to Rent from SpareRoom	Double	800	£9,600	1
Braintree CM7	'Spacious En-suite Studio Universal Credit Accepted' Room to Rent from SpareRoom	Double	795	£9,540	1
Braintree CM7	'Queen size room to rent in a clean house' Room to Rent from SpareRoom	Double	825	£9,900	1
Braintree CM77	'1 Large Double En-Suite (Ev Charging)' Room to Rent from SpareRoom	Double	650	£7,800	1
Braintree CM7	'Last room available ' Room to Rent from SpareRoom	Double	625	£7,500	1
Braintree CM7	'Spacious room - 800 PCM' Room to Rent from SpareRoom	Double	800	£9,600	1
Gasfield CO9	'Ground floor room rent, own entrance & ensuite ' Room to Rent from SpareRoom	Double	700	£8,400	1
Great Leighs CM3	'Double bedroom with private bathroom' Room to Rent from SpareRoom	Double	675	£8,100	1
Witham CM8	'Room to Let' Room to Rent from SpareRoom	Double	650	£7,800	1
Great Leighs CM3	'Luxury double en-suite bedroom' Room to Rent from SpareRoom	Double	720	£8,640	1
Witham CM8	'Modern 1 room Available in 2 bed flat' Room to Rent from SpareRoom	Double	610	£7,320	1
Great Dunmow CM6	'Modern Double Rooms Close to Stansted. Dunmow.' Room to Rent from SpareRoom	Double	650	£7,800	1
Hatfield Peverel CM3	'Double room in 2 bedroomed flat ' Room to Rent from SpareRoom	Double	625	£7,500	1
Broomfield CM1	'1 good-sized double room with king-size bed' Room to Rent from SpareRoom	Double	800	£9,600	1
Witham CM8	' Quiet Double Room Close to Station' Room to Rent from SpareRoom	Double	850	£10,200	1
Broomfield CM1	'1 good-sized double room with a king-size bed.' Room to Rent from SpareRoom	Double	800	£9,600	1
Rivenhall CM8	'Beautiful new rooms for rent, All bills included' Room to Rent from SpareRoom	Double	725	£8,700	1
Halstead CO9	' ⍰ Double Room Available in Friendly Female House' Room to Rent from SpareRoom	Double	700	£8,400	1
Manor Street, Braintree CM7	1 bedroom house share for rent in Manor St, Braintree, CM7	Double	650	£7,800	1
Johnson Close, Braintree CM7	1 bedroom house share for rent in Johnson Close, BRAINTREE, CM7	Double	650	£7,800	1
Clare Road, Braintree CM7	1 bedroom house share for rent in Clare Road, Braintree, CM7	Double	750	£9,000	1
Challis Lane, Braintree CM7	Room (48.71 m^2) to rent in Braintree (Challis Lane, Braintree, CM7 1AJ, United Kingdom) - renthero.co.uk	Double	800	£9,600	1
Bamboo Crescent, Braintree CM7	Room (45.66 m^2) to rent in Braintree (Bamboo Crescent, Braintree, CM7 1GP, United Kingdom) - renthero.co.uk	Double	750	£9,000	1
Average				**£8,661**	

7.26 The comparables (Table 7.3) suggest a gross rental of £8,661 per annum.

7.27 Assuming a deduction from gross rent to net rent at 15%, this gives a net rent of £7,362 per square metre.

7.28 I have taken a yield of 7% for HMOs in Essex - https://england.landlordsguild.com/article/hmo-investment-yields-regions-compared-2024. The valuation per room is then:

£7,362 x YP in perp at 7% = £105,171.

7.29 Table 7.4 sets out the development appraisal for a HMO scheme:

Table 7.4 Development appraisal – HMO scheme

Capital Value per Room (HMO)	£105,171
Rooms - Sq M	16
Capital Value per Sq M	£6,573
BCIS Sheltered Housing per Sq M	£2,400
Externals Works at 15%	£360
Contingency at 5%	£138
Total Construction	£2,898
Gross to Net at 20%	£3,478
Fees at 10%	£348
Finance at 8%	£306
Marketing at 3% GDV	£197
Margin at 20% GDV	£1,315
Total Development Costs	£5,643
Residual Value per Sq M	£930
Coverage - 60 flats per ha	
Average flat size at 50 Sq M	
Total Floor Area	3000
	£2,789,897
LVB	£400,000
Surplus	£2,389,897

7.30 This suggest a strong residual and a large surplus over and above the land value benchmark. This type of scheme can therefore deliver significant Section 106 contributions.

CHAPTER 8 – FINDINGS AND CONCLUSIONS

Main objectives

8.1 The main objectives of the Whole Plan Viability Assessment have been have been to test the full spectrum of policies against the range of development types coming forward over the Plan period. The Council require an up-to-date evidence base that will provide a justification for those policies.

8.2 The analysis carried out here is comprehensive and covers high level testing for residential development as well as an analysis of strategic sites. In addition other key sectors have been analysed including commercial (retail, industrial and offices), Retirement Housing, Hotels and HMOs.

The current property market

8.3 Generally the current property market, as measured by residential development is in a very difficult place. A number of factors including the UK exit from the European Union and Covid, have forced labour and material costs higher, increased job insecurity and delivered cost-of-living challenged that previous housing market cycles have not faced. Construction costs are currently rising against a backdrop of static house prices.

8.4 An accumulation of housing shortfall year on year means that infrastructure provision is playing 'catch up' with the existing stock. New house building is falling (Quarter 2 2026 versus Q2 2025) around 100,000 short of the government's target. Supply in the capital has all but collapsed. A lack of housing land supply means land deals are often done at prices which don't discount for infrastructure provision. Local opposition to development prevents LPAs putting sufficient land into the pipeline to prevent this happening.

The assessment process

8.5 The assessment process for the WPVA is rigorous. It involved following national guidance on viability assessment, the use of a leading software model for assessment, the sourcing of best available industry standard data.

8.6 Importantly, the work reflects helpful feedback given by the Council's Steering Group, DAC Planning and development stakeholders.

8.7 The approach and work undertaken also reflects feedback given at the Developer Forum held on the 8th June 2026.

8.8 The inputs on infrastructure requirements and costs therefore, are thanks to the excellent work by Troy Planning.

Analysis – residential High Level Testing

8.9 High Level Testing is critical to policy development as it provides a starting point for understanding what might be viable from any site being brought forward through planning. It provides a template for understanding the results from the large sites as well as for smaller and windfall sites.

8.10 Viability is strong for family housing development – tested in the range 25 to 35 dph. The analysis shows that in the higher value markets a 40% Affordable Housing target is viable even where Social Rent makes up the major part of the Affordable element.

8.11 At the lower end of the market, a 30% Affordable Housing target is viable with that same Affordable Housing composition. With a three way split in the Affordable element, the deliverability of schemes increases up a range 35% to 50%.

8.12 Density however plays a significant role in determining the viability of schemes. Braintree is essentially a suburban and rural housing market and the inclusion of apartments in a scheme is generally detrimental to viability. At much higher densities - 55 dph through to 75 dph – Affordable Housing is much more challenging, and without a higher proportion of Intermediate Affordable the overall levels of delivery will fall significantly.

8.13 Where development happens, is also important for viability not just in terms of dwelling prices. Existing use plays an important role and green field land value benchmarks are conventionally lower than those for brown field.

8.14 This being said, if the Council wants to differentiate targets between green and brown field then it needs to consider that although land value benchmarks might be lower for green field, the costs of development with green field are higher. This particularly relates to infrastructure.

8.15 The High Level Testing results support the current policy position which is a split between 30% and 40% Affordable Housing. This can be sustained for family housing and lower density schemes with the rider that viability does become more challenging with higher density and schemes including flats.

Strategic site viability

8.16 Four major sites have been tested in detail. Two (Kings Dene, North West and South of Kelvedon – LPR 26 and Land North of the A12 at Hatfield Peverel – LPR 28) are from higher value areas. The other (Land East of Braintree – LPR 23; and Land South and North East of Halstead – LPR 24) are in lower value markets. This impacts on viability significantly.

8.17 The infrastructure loading are also highly significant and these are very varied. The highest loading is for the Braintree site (£41,000 per dwelling) which happens in a weaker sub market. The loading for the Hatfield Peverel site is only £12,000 per dwelling which happens in a stronger housing area. The loadings for Kings Dene and Halstead are £34,000 per unit and £20,000 per unit respectively).

8.18 The differential loadings are borne out in the viability. Whilst, in the current market situation, a 45% Affordable Housing target looks viable, at the Braintree site, 13% is the current maximum. At Kings Dene, with relatively high loading, a 33% Affordable Housing target looks viable now, and at Halstead, a 20% Affordable Housing target.

8.19 The housing market, and the key viability gap, which is the relationship between prices and costs, is however key. The analysis demonstrates that should the envisaged plan period mirror the past 15 years in the housing market the large sites will deliver very significant volumes of Affordable Housing (and indeed other Section 106 contributions). Assuming house prices and build costs maintain their historic position, then both the Kings Dene and Hatfield Peverel schemes can deliver 50% Affordable Housing, with both the East of Braintree and Halstead sites delivering 40% Affordable Housing.

8.20 House prices track build costs on an annual percentage, Hatfield Peverel should still deliver 50% Affordable Housing, with Kings Dene delivering close to that; Halstead should still deliver 40% Affordable Housing although Braintree would deliver below 40%.

8.21 The sensitivity tests, which are predominantly critical to the large sites, are of course subject to the timing of infrastructure provision. In many cases, infrastructure will be front loaded, so the percentage of Affordable Housing will be reduced. Currently, it is anticipated that the first 600 homes at Kings Dene will be constructed prior to any infrastructure being built. This will work in favour of viability but until more is known it will not be possible to finalise Section 106 delivery.

8.22 The Council are provided with the Toolkits for all four major sites so that adjustments can be made throughout the Plan period.

Other sectors

8.23 The commercial sector is robust in the District. Light industrial, warehousing and units for logistics all appear in high demand and generally these look viable to deliver in so far that the numbers are concerned.

8.24 Build costs for retail and offices are high and the values appear to be best covered where units are small – 100 to 200 square metres. This does not debar the development of large scale retail and offices, but means that viability relies on smaller units being sold and/or let.

8.25 Retirement Housing has strong viability, not least because GDV will be some 20% to 30% higher than the general market for flats. The advantage means than any inefficiencies in the build are dealt with through sales. Significant commuted sums should be viable for this form of housing.

8.26 Hotels were also tested. These prove viability although it is fair to say that there are several potential models of development and operation here so viability is more challenging to assess. For a scheme financed over the long term, there looks to be much potential to take Section 106 contributions.

8.27 HMO schemes should prove viable, and viable to deliver Section 106 contributions. These schemes yield high value and although build costs are relatively expensive, there should in most cases be an opportunity to deliver community benefits including Affordable Housing.

Small sites

8.28 Currently, the Council has a split threshold, at 10 for the urban areas and at 15 for the rural areas. This means that potentially a lot of Affordable Housing is being missed by the policy.

8.29 In the Affordable Housing report of 2025, the viability of small sites was assessed. This found that there is capacity for delivering Affordable Housing from small sites, particularly in higher value areas and where existing use values are low.

8.30 Some examples are back or garden land, infill and edge of village sites and even Exception Sites in rural locations. Even where these sites cannot deliver on-site Affordable (as they may be unsustainable), they could viably deliver commuted sums.

8.31 A policy requiring Affordable Housing contributions on small sites would need careful introduction however, as many small sites involve demolition or conversion, where existing use value is much higher.

Policy recommendations

8.32 The High Level Testing, upon which policy should rest to a significant extent, suggests that the current policy position of a 30% Affordable Housing target for Braintree, Witham, Halstead and Sible Hedingham is robust. Figure 4.2 is key here.

8.33 For the remaining areas, 40% appears robust so no fundamental change to policy is justified.

8.34 If the Affordable Housing element of schemes includes a higher proportion of Shared Ownership and/or Intermediate Rent then higher targets might be achieved.

8.35 This analysis has not included an assessment of the impact of grant, but Homes England have this, and may put this in, although traditionally not where Section 106 is the route.

8.36 There might be a case to have a split Affordable Housing target around Green and Brown field, but this is always difficult to support because site benchmarks for Brown field are hugely variant. In some cases they involve commercial, in some cases, residential and many cases, other sources of supply which don't fall easily into any category. For these reasons, it is recommended that the Council maintain a policy that splits between location rather than source of supply.

8.37 The strategic sites prove more challenging. This largely because the infrastructure loading is high; and very high in some cases, for example the East of Braintree land. In the current market situation, an Affordable Housing target of 30% looks challenging.

8.38 This being said, the sites at Hatfield Peveril and Kings Dene are more viable to deliver Affordable Housing close or at the policy targets.

8.39 Finally, the market will determine what is viable, and if we see a return to the long term trend of house prices outpacing build costs, then the strategic sites should all deliver to the current policy position.

Appendix 1 Slides presented at the Developer Forum and circulated wider to stakeholder

1

Braintree District Council Whole Plan Viability Assessment (WPVA)

Developer Workshop – Causeway House

Monday 8th June 2026

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Braintree District Council

Andrew Golland Associates

Purpose of the Forum:

2

1) To provide an opportunity for stakeholders to help form policy;

2) To explain the background and role of the WPVA in formulating the new plan;

3) To have feedback on the key assumptions relating to viability – values, costs, margins, benchmarks, etc;

4) To understand better the role of local factors in viability assessment.

3

Viability assessment in the planning process

Guidance:

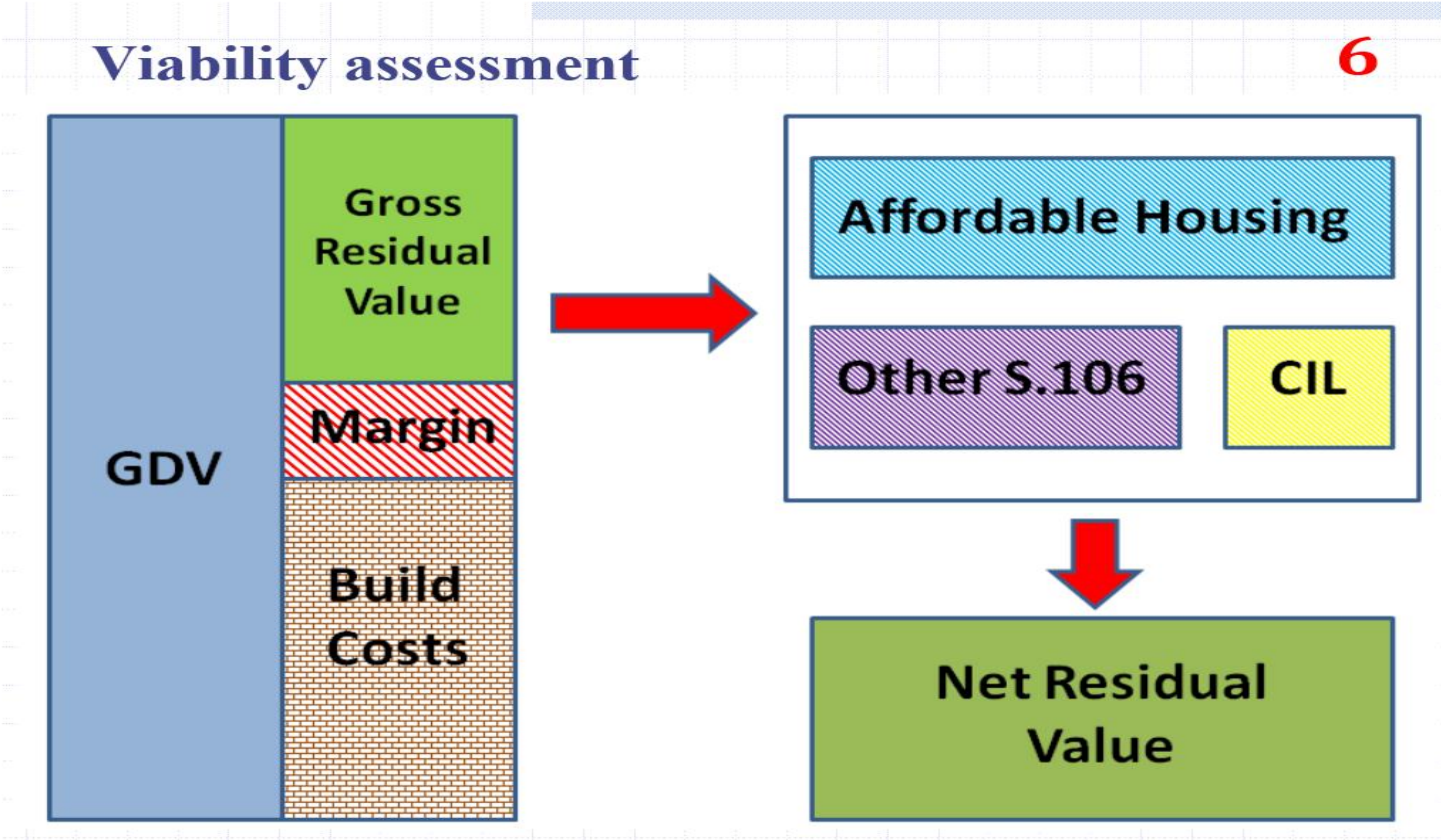
- National guidance – now in NPPG (Dec 2025) – covers plan making and decision taking on viability; guidance on data sourcing;
- Regional planning guidance – example GLA's Affordable Housing SPD – scope covers definition and ancillary issues e.g. commuted sum calculations and review mechanisms;
- Institutional guidance (e.g RICS) – within NPPG framework and elaborates on scheme specific assessments in particular; Harman Review (2012), London Boroughs Viability Protocol (Nov, 2016);
- Legal – appeals and EiPs. Notable decisions – Parkhurst (forerunner to EUV Plus), Shinfield (splitting uplift);
- Main approach – residual valuation.

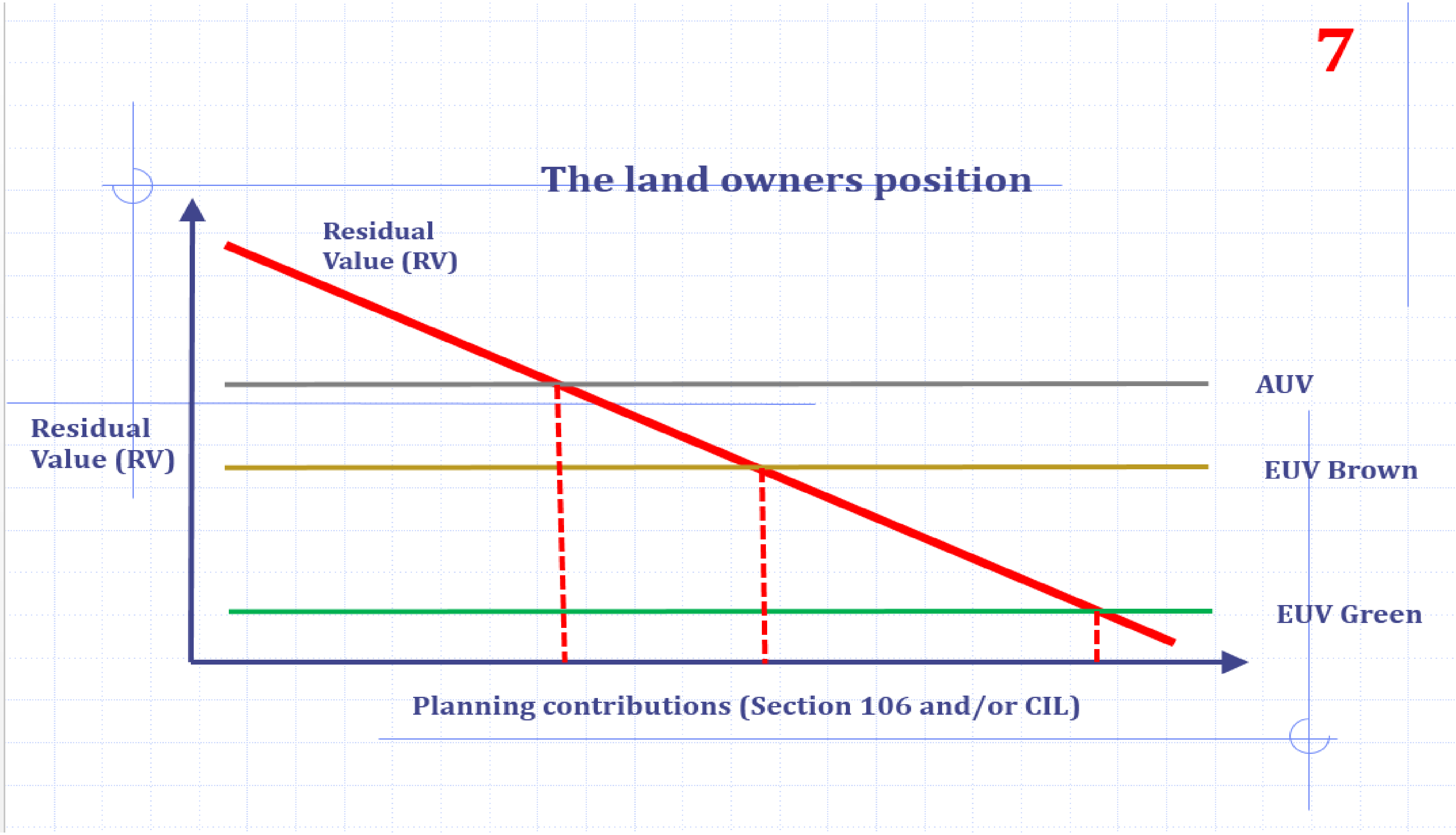
5

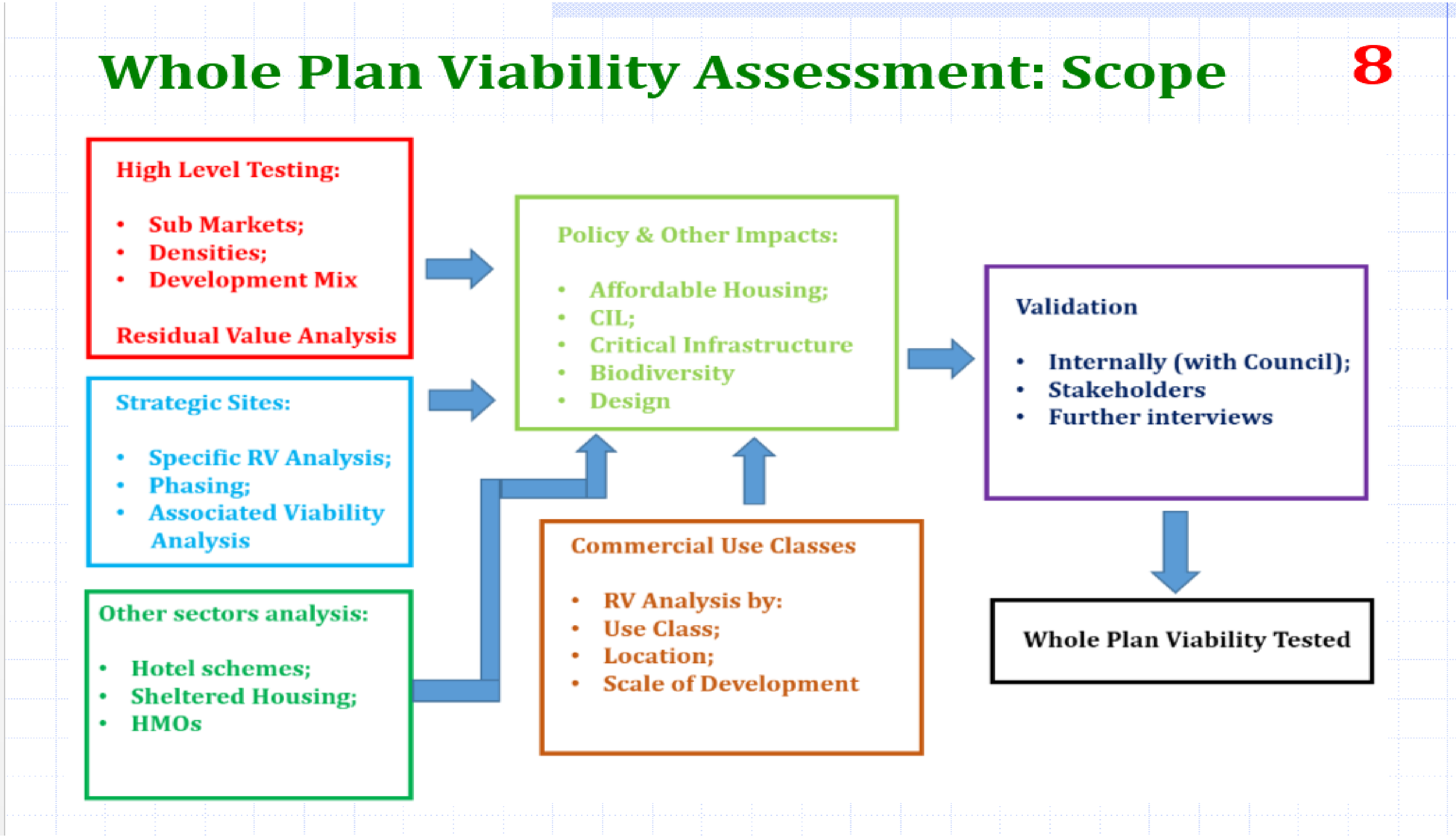
Approach to viability assessment

- Residual value approach;
- Residual is value less costs;
- Allows developer margin;
- Assumes residual value is a ‘pot’ to be shared between several agencies;
- In more detail……………..

Andrew Golland Associates


Viability assessment
6
GDV
Gross Residual Value
Margin
Build Costs
Affordable Housing
Other S.106
CIL
Net Residual Value


7
The land owners position
Residual Value (RV)
Residual Value (RV)
AUV
EUV Brown
EUV Green
Planning contributions (Section 106 and/or CIL)


Whole Plan Viability Assessment: Scope
8
High Level Testing:
Sub Markets;
Densities;
Development Mix
Residual Value Analysis
Strategic Sites:
Specific RV Analysis;
Phasing;
Associated Viability Analysis
Other sectors analysis:
Hotel schemes;
Sheltered Housing;
HMOs
Policy & Other Impacts:
Affordable Housing;
CIL;
Critical Infrastructure
Biodiversity
Design
Commercial Use Classes
RV Analysis by:
Use Class;
Location;
Scale of Development
Validation
Internally (with Council);
Stakeholders
Further interviews
Whole Plan Viability Tested

9

Key assumptions (Residential) ....

10

2026 MAY PRICES

Sub Markets	Main Settlements/Areas	Other Settlements/Areas	PCSs	Detached			Semis	Terraced		Flats	
				5 Bed	4 Bed	3 Bed	3 Bed	3 Bed	2 Bed	2 Bed	1 Bed
High Value Eastern Settlements	Kelvedon		CO5 9	£693,000	£630,000	£480,000	£431,000	£422,000	£367,000	£297,000	£198,000
	Coggeshall		CO6 1								
	The Colnes	Earls; White; Engaine	CO6 2								
	Hatfield Peverel	Terling	CM3 2								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,950	£5,250	£5,053	£5,321	£5,342	£5,397	£4,641	£4,400
Notleys & Rayne	Black Notley, Cressing & Stisted		CM77 8	£672,000	£611,000	£489,000	£418,000	£409,000	£356,000	£288,000	£192,000
	Great Notley		CM77 7								
	Rayne		CM77 6								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,800	£5,092	£5,147	£5,160	£5,177	£5,235	£4,500	£4,267
Northern Rural	North West Rural	The Yeldhams; Ridgewell	CO9 4	£627,000	£571,000	£456,000	£390,000	£382,000	£332,000	£269,000	£180,000
	North West Rural - Hamlets		CO10 8								
	Rural NW Braintree	Panfield	CM7 5								
	Rural West	Gt Bardfield; Wethersfield; Finchingfield	CM7 4								
	North West Rural	The Bumpsteads	CB9 7								
	North West Rural - Hamlets		CO10 7								
	Rural East -Hamlets		CO8 5								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,479	£4,758	£4,800	£4,815	£4,835	£4,882.35	£4,203	£4,000
Witham	South Witham	White Notley	CM8 1	£616,000	£560,000	£447,000	£384,000	£376,000	£326,000	£265,000	£177,000
	North Witham		CM8 2								
	Rivenhall & Silver End		CM8 3								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,400	£4,667	£4,705	£4,741	£4,759	£4,794	£4,140.63	£3,933
Braintree Town	NE Braintree Town		CM7 9	£577,000	£524,000	£419,000	£359,000	£352,000	£305,000	£247,000	£165,000
	S Braintree		CM7 1								
	SE Braintree Town		CM7 3								
	W Braintree Town		CM7 2								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,121	£4,367	£4,411	£4,432	£4,456	£4,485	£3,859	£3,667
Halstead & Sible Hedingham	Halstead North	NE Rural; the Belchamps	CO9 2	£572,000	£520,000	£416,000	£356,000	£350,000	£303,000	£244,000	£163,000
	Halstead South		CO9 1								
	Sible Hedingham		CO9 3								
Sq M				140	120	95	81	79	68	64	45
Value per Sq M				£4,086	£4,333	£4,379	£4,395	£4,430	£4,456	£3,813	£3,622

Affordable Housing Testing, Tenure Split and Revenues

11

- **AH Percentages to be tested: 5%: 10%; 15%; 20%; 25%; 30%; 35%; 40%; 45% and 50%**

	Social Rent	Affordable Rent	Intermediate	Totals
1 Bed	648	63	211	922
2 Beds	1277	191	370	1838
3 Beds	1408	239	165	1812
4 Beds	435	51	0	486
	3768	544	746	5058
	74.5	10.8	14.7	5058
Working %s	75%	10%	15%	
Rental PW	£130	£200		
Rental PA	£6,760	£10,400		
M and M at 15%	£5,746	£8,840		
Yield	5	5		
Years Purchase	20	20		
Capital Value per Unit	£114,920	£176,800		
2 Bed Terrace (BDC)			£350,000	
At 65% OMV			0.65	
Value			£227,500	
Factors	0.75	0.1	0.15	
Values	£114,920	£176,800	£227,500	
Value	£86,190	£17,680	£34,125	
Blended AH Rate	£137,995			
Working Revenue per AH Dwelling	**£138,000**			

Figure 30 Overall Dwelling need for Affordable Housing (including households aspiring to home ownership) and Market Housing by property size (Source: ORS Housing Model. Note: Figures may not sum due to rounding)

	Require Social Rent	Require Affordable Rent	Require Affordable to Own	Total Affordable Housing (Total columns 2-4)	Total Market Housing	Total (Total columns 5-6)
1 bedroom	648	63	211	922	911	**1,833**
2 bedrooms	1,277	191	370	1,839	2,895	**4,734**
3 bedrooms	1,408	239	165	1,812	6,585	**8,397**
4+ bedrooms	435	51	0	486	3,109	**3,595**
C2 Dwellings	-	-	-	-	396	**396**
TOTAL	3,769	545	746	5,060	13,895	18,955
1 bedroom	3.4%	0.3%	1.1%	4.9%	4.8%	9.7%
2 bedrooms	6.7%	1.0%	2.0%	9.7%	15.3%	25.0%
3 bedrooms	7.4%	1.3%	0.9%	9.6%	34.7%	44.3%
4+ bedrooms	2.3%	0.3%	0.0%	2.6%	16.4%	19.0%
C2 Dwellings	-	-	-	-	2.1%	2.1%

[6] The most significant finding overall from Figure 30 is that **the need for affordable to rent housing, the vast majority of which will be social housing, is 4,314 dwellings.**

BDC Housing Needs Assessment (2025)

From BDC Housing Needs Assessment (2025);

12

High Level Testing – Density and Mix

	Dwellings per Hectare					
	25	35	45	55	65	75
1 Bed Flats				10	15	25
2 Bed Flats			10	10	25	30
2 Bed Terraces		25	15	15	15	15
3 Bed Terraces	10	10	15	15	10	10
3 Bed Semis	15	15	15	15	10	10
3 Bed Detached	15	15	15	15	15	10
4 Bed Detached	35	20	20	10	10	
5 Bed Detached	25	15	10	10		
Percentage of Scheme	100	100	100	100	100	100

From BDC Housing Needs Assessment (2025); Developer schemes

Construction Costs - Residential

13

Building function (Maximum age of projects)	£/m² gross internal floor area Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	Sample
810.1 Estate housing							
Generally (15)	£1,615	£802	£1,366	£1,544	£1,768	£5,519	1,271
Single storey (15)	£1,849	£1,070	£1,548	£1,775	£2,014	£5,519	197
2-storey (15)	£1,559	£802	£1,340	£1,509	£1,715	£3,354	1,007
3-storey (15)	£1,635	£996	£1,392	£1,583	£1,815	£3,257	62
4-storey or above (15)	£3,346	£1,637	£2,679	£2,990	£4,451	£4,971	5
816. Flats (apartments)							
Generally (15)	£1,929	£998	£1,583	£1,814	£2,203	£6,464	724
1-2 storey (15)	£1,856	£1,091	£1,544	£1,724	£2,135	£3,548	150
3-5 storey (15)	£1,893	£998	£1,574	£1,798	£2,146	£3,918	483
6 storey or above (15)	£2,242	£1,360	£1,833	£2,149	£2,502	£6,464	91

	Houses	Flats
Baseline	£1,544	£1,814
External Works at 15%	£232	£272
Braintree Location Factor at 1.03	£53	£63
Contingency at 5%	£91	£107
Gross to Nett (at 10%)	£0	£226
Total	£1,920	£2,482
Working Costs	**£1,900**	**£2,500**

Source: RICS BCIS

16

Further cost assessments – scale and land source:

- Greenfield infrastructure costs at £1 million per hectare;
- Brownfield abnormals at BCIS costs plus 10%;
- 7% lower build costs for green field schemes at 100 units;
- 15% lower build costs for green field schemes at 500 units;
- **Feedback needed please – any other viability thresholds which can be evidenced?**

17

Other Development Costs:

Cost	%	Base
Professional Fees	10%	Build Costs
Finance	8%	Build and Fees
Marketing Fees	2.5%	GDV
Return - Market Housing	20%	GDV
Return - Affordable Housing	6%	Build Costs

Other than (Affordable Housing) Section 106 items for BDC

18

- Health and NHS, Open Space, Community Benefits, Public Transport, Education and Libraries
- The 2025 study allowed £15,000 per dwelling based on research by BDC;
- It is proposed to carry this assumption forward for this study.

19

GDV for other residential sectors – Sheltered Housing

- Sheltered Housing - £350,000 per flat (c.60 Sq M).
- Assume 50% split one and two beds.
- Test 60 unit scheme at Gross to nett at 85%;
- Based on recent local scheme;

20

GDV for other residential sectors – Hotels - Example

Rooms per Hectare	150
Income per Room per Day	£90
Income per Room per Annum	£32,850
Income per Annum	£4,927,500
Occupancy at 85%	£4,188,375
Labour - Staff/Management at 30% Turnover	£1,256,513
Expenses - Property, Utilities & Food at 25% of Turnover	£1,047,094
Marketing at 10% of Turnover	£418,838
Total Expenses	£2,722,444
Gross Profit	£1,465,931
Tax at 25%	£366,483
Nett Profit	£1,099,448
Yield	5
YP	20
Capital Value	£21,988,969
Cap Value per Room	£146,593
Working Valuation Per Room	£150,000

21

GDV for other residential sectors – HMOs - Example

15 Bed HMO	
15 Beds	
Rental per Month	£800
15 Rooms	£12,000
Rental per Annum	£144,000
Management and Maintenance at 15%	£122,400
Yield	7%
YP	14.2857143
Capital Value	£1,748,571

22

Values for Commercial Property

Retail	Rents per Sq M	Yield	YP	Capital Value per Sq M
100 Sq M	£250	7%	14.29	£3,571
200 Sq M	£180	8%	12.50	£2,250
400 Sq M	£140	9%	12.50	£1,750

Offices	Rents per Sq M	Yield	YP	Capital Value per Sq M
100 Sq M	£250	7%	14.29	£3,571
200 Sq M	£170	8%	12.50	£2,125
400 Sq M	£100	9%	12.50	£1,250

Light Industrial	Rents per Sq M	Yield	YP	Capital Value per Sq M
100 Sq M	£120	5%	20.00	£2,400
200 Sq M	£100	6%	16.67	£1,667
400 Sq M	£80	7%	14.29	£1,143

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Construction Costs – Commercial Development

Building function	£/m² gross internal floor area						Sample
(Maximum age of projects)	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
282. Factories							
Generally (20)	£1,362	£303	£739	£1,065	£1,571	£4,989	84
284. Warehouses/stores							
Generally (15)	£1,040	£454	£710	£913	£1,110	£3,392	49
320. Offices							
Generally (15)	£2,573	£1,202	£2,125	£2,547	£2,879	£4,478	27
341.1 Retail warehouses							
Generally (25)	£1,164	£597	£887	£1,026	£1,237	£3,365	44
342. Shopping centres (30)	£1,348	-	-	-	-	-	1
343. Department stores (55)	£1,822	£666	£1,428	£1,505	£2,136	£3,376	5
344. Hypermarkets, supermarkets							
Generally (35)	£1,951	£805	£1,361	£1,742	£2,632	£3,406	29
345. Shops							
Generally (30)	£1,979	£929	£1,080	£1,571	£2,376	£5,100	14
1-2 storey (30)	£2,007	£929	£1,061	£1,527	£2,475	£5,100	13
3-5 storey (30)	£1,614	-	-	-	-	-	1

	Light Industrial	Offices	Retail
Baseline	£1,065	£2,547	£1,474
External Works at 10%	£107	£382	£147
Braintree Location Factor at 1.03	£35	£88	£49
Contingency at 5%	£60	£151	£84
Total	£1,267	£3,168	£1,754
Working Costs	**£1,300**	**£3,200**	**£1,750**

Source: RICS BCIS

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Construction Costs – Other Residential Uses

Building function	£/m² gross internal floor area						Sample
(Maximum age of projects)	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
843. Supported housing							
Generally (15)	£2,081	£1,042	£1,678	£1,909	£2,315	£4,977	110
852. Hotels (15)	£2,869	£1,467	£2,287	£2,981	£3,503	£3,826	15
856.2 Students' residences, halls of residence, etc (15)	£2,441	£1,379	£2,118	£2,458	£2,690	£3,912	51

	Sheltered Housing	Hotels	Retail
Baseline	£1,909	£2,981	£2,458
External Works at 15%	£286	£447	£369
Braintree Location Factor at 1.03	£66	£103	£85
Contingency at 5%	£113	£177	£146
Total	£2,374	£3,708	£3,057
Working Costs	**£2,400**	**£3,200**	**£3,050**

Source: RICS BCIS

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Strategic Sites

Land, NE of the A12 Hatfield Peveril

LAND NORTH EAST OF THE A12, HATFIELD PEVERIL		
Issue	**Viability Assumption**	**Comments/Queries**
Dwellings	1123	Circa
Timings	2031 to 2041	Phasing information? Market prospects?
Land Areas	70% Developable Area	Confirmation needed
Area/Sub Market	High Value Eastern Settlement	3 Bed Semi at £430,000
Development Mix	Family Housing	Masterplan?
Affordable Housing	Yes	% Subject to Viability Testing
Construction Costs	£1,900 Houses; £2,500 Flats	Plot Costs, Externals and Contingency
Green Field Infrastructure Costs on Site	£1 million per Hectare	Utilities; Services; Groundworks
Other Planning Costs	Noise Mitigation	Costs needed
Other (than AH) Section 106	Education	Costs needed
	SANGs/Open Space	Areas and Costs needed
	Cycle paths	Costs needed
Transport Infrastructure	Significant works to A12 & Junctions	Mileage involved (£30 million a mile?); Costs needed - which option?
Non residential Uses		?

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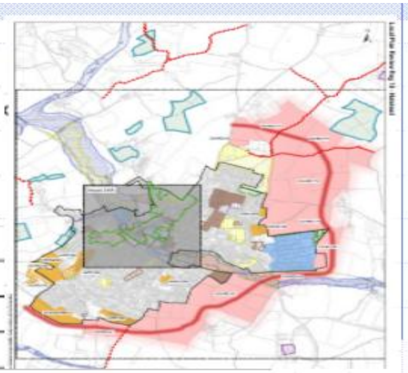
Land South and North East of Halstead



LAND SOUTH AND NORTH EAST OF HALSTEAD

Issue	Viability Assumption	Comments/Queries
Dwellings	2850	Circa
Timings	2031 to 2041	Phasing information? Market prospects?
Land Areas	70% Developable Area	Confirmation needed
Area/Sub Market	Halstead & Sible Hedingham	3 Bed Semi at £360,000
Development Mix	Family Housing	Masterplan?
Affordable Housing	Yes	% Subject to Viability Testing
Construction Costs	£1,900 Houses; £2,500 Flats	Plot Costs, Externals and Contingency
Green Field Infrastructure Costs on Site	£1 million per Hectare	Utilities; Services; Groundworks
Other Planning Costs		
Other (than AH) Section 106	Education	Primary School & Contrib to Secondary - Costs?
	SANGs/Open Space	Areas and Costs needed
	Cycle paths	Costs needed
	Gypsy & Traveller site	Pitches and Costs?
Transport Infrastructure	Bypass/Spine Road	Mileage involved (£30 million a mile?); Costs needed
Non residential Uses	Yes	Retail - likely floor space?

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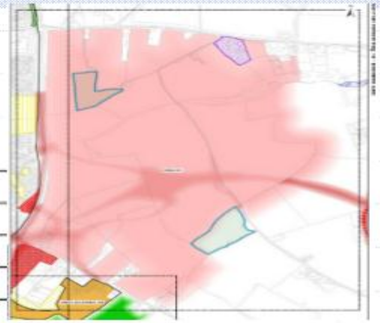
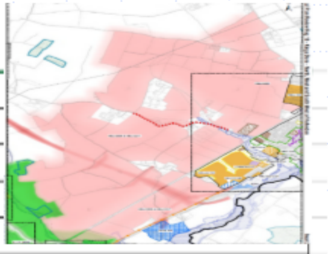
Land East of Braintree



LAND EAST OF BRAINTREE		
Issue	**Viability Assumption**	**Comments/Queries**
Dwellings	2500	Circa
Timings	2031 to 2041	Phasing information? Market prospects?
Land Areas	70% Developable Area	Confirmation needed; Land reserved for A120 widening
Area/Sub Market	Braintree	3 Bed Semi at £360,000
Development Mix	Family Housing	Masterplan?
Affordable Housing	Yes	% Subject to Viability Testing
Construction Costs	£1,900 Houses; £2,500 Flats	Plot Costs, Externals and Contingency
Green Field Infrastructure Costs on Site	£1 million per Hectare	Utilities; Services; Groundworks
Other Planning Costs		
Other (than AH) Section 106	Education	All - Early Years; Primary; Secondary
	SANGs/Open Space	Areas and Costs needed
	Sustainable Transport	Costs needed
	Gypsy & Traveller site	Pitches and Costs?
Transport Infrastructure	Galleys Corner Linkages	Costs needed
Non residential Uses	Yes	Retail - likely floor space?

29

Kings Dene – North, West and South West Keldedon



KINGS DENE - NORTH, WEST AND SW OF KELVEDON		
Issue	**Viability Assumption**	**Comments/Queries**
Dwellings	5600	Circa
Timings	2031 to 2041	Phasing information? Market prospects?
Land Areas	70% Developable Area	Confirmation needed - Historic Landscape?
Area/Sub Market	High Value Eastern Settlement	3 Bed Semi at £430,000
Development Mix	Family Housing	Masterplan?
Affordable Housing	Yes	% Subject to Viability Testing
Construction Costs	£1,900 Houses; £2,500 Flats	Plot Costs, Externals and Contingency
Green Field Infrastructure Costs on Site	£1 million per Hectare	Utilities; Services; Groundworks
Other Planning Costs		
Other (than AH) Section 106	Education	All - Early Years; Primary; Secondary
	SANGs/Open Space	Areas and Costs needed
	Sustainable Transport	Costs needed
	Gypsy & Traveller site	Pitches and Costs?
Transport Infrastructure	Coggeshall Road; A12 junction/links; railway crossing	Costs needed
Non residential Uses	Yes	Retail - likely floor space? 'Employment Land - floor space/uses?

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Land Value Benchmarks

- Typically for green field in the range 10 to 25 existing use (agricultural)
- At c. £18,000 a hectare therefore (x 17.5 mid point) – c. £300,000.
- Brown field at EUV plus 20% (range typically 10% to 30%)
- Brown field based on commercial use/s.

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Any Questions?
Please can all feedback be addressed to:
Andrew Golland
drajg@btopenworld.com

Thank you!

2 Responses

Developer Forum

Feedback on the Whole Plan Viability Assessment

Generally, feedback on the day of the forum was not extensive on the assumptions in the Viability Paper. There were no comments on the overall principles to be adopted. The specific points raised were limited to:

- RICS BCIS costs – sometimes these miss the most recent additional costs – particularly relating to regulation. Need to make sure that these are as up to date as possible;
- Land Value Benchmarks – Existing Use Value Plus appeared to be an accepted way of defining Benchmarks. With Green Field, this can be based on a multiple of agricultural value. Agricultural value was queried. The Savills report:

  https://www.savills.co.uk/landing-pages/rural-land-values.aspx

  Sets out how the value of circa £7,000 per acre (£18,000 per hectare rounded up) is arrived at.

Subsequent to the forum, two responses were received (both from CBRE). One from Geoff Machin (29th June 2026 in relation to Blue Mills Hill, Witham, and the other from Lillian Barth (29th June 2026). The main points of response were:

- Prices at Kings Dene were overstated;
- Prices at Witham were too optimistic;
- Indicative Affordable Housing revenues were offered – these ranged from 35% up to 65% of open market value;
- Construction costs – feedback here emphasized the importance of taking account of current costs. BCIS costs were backed and Lower Quartile costs for larger sites;
- Assumptions on cost over the Plan , e.g. Future Homes were considered reasonable;

- Additional costs for garages and Accessibility were identified;
- The need to quantify infrastructure costs for the strategic sites was emphasised;
- Other developer cost assumptions were agreed – fees, marketing, finance and margin;
- A LVB of £400,000 was suggested.

These feedbacks have been carefully considered.

On GDV, the prices at Kings Dene have been revised downwards. The selling prices at Witham were found not to be too optimistic;

Indicative Affordable Housing revenue aligns with the assumptions made in the analysis.

Construction costs were tested at different levels to see if the residual values broadly aligned with ongoing land values. The initial assumptions were adopted.

The remaining feedback was adopted throughout.

APPENDIX 3 Appraisal (High Level Testing) – 35 dph, Braintree Sub Market – Affordable Housing at policy

Site Details

Use these arrows to naviagate Toolkit pages. You should ensure there are no warning messages on a page before continuing.

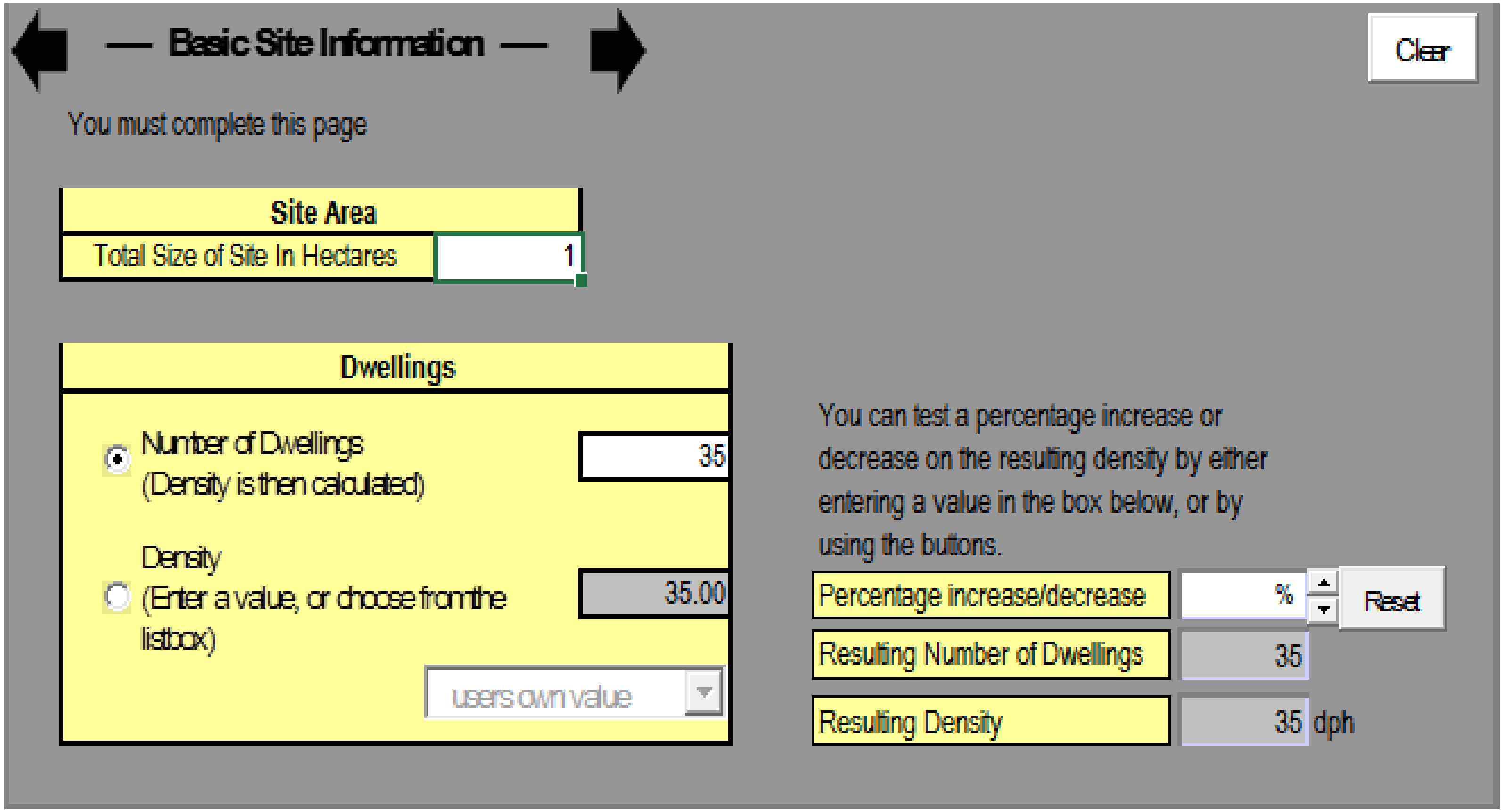
Clear

Site Address	Braintree HLT

Site Reference	
Application Number	
NLUD Reference	
UPRN or Grid Reference	

Scheme Description	35 DPH - High Level Testing

Use of this software implies acceptance of the license terms and conditions (click here to read)


Basic Site Information
Clear
You must complete this page
Site Area
Total Size of Site In Hectares
1
Dwellings
Number of Dwellings
(Density is then calculated)
35
Density
(Enter a value, or choose from the listbox)
35.00
users own value
You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.
Percentage increase/decrease
%
Reset
Resulting Number of Dwellings
35
Resulting Density
35
dph

Unit Types & Details

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Number of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel-chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1										
2										
3	2 Bed Terraces	2	3		3		NO	NO	n/a	68
4	3 Bed Terraces	3	4		4		NO	NO	n/a	79
5	3 Bed Semis	3	4		4		NO	NO	n/a	81
6	3 Bed Detached	3	4		4		NO	NO	n/a	95
7	4 Bed Detached	4	6		6		NO	NO	n/a	120
8	5 Bed Detached	5					NO	NO	n/a	140

Tenure Mix

Clear

You can distribute units across the tenures in two ways:

- (•) Input by Percentages
- ( ) Input by Quantity

Total units to enter:	35
Total units entered:	35

	Sale	Affordable Units						
	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
%	70%			5%		3%	23%	100%
Units	24.5			1.6		1.1	7.9	35.0

Ref.	Description	Units	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
1										
2										
3	2 Bed Terraces	9	6.3			0.4		0.3	2.0	9.0
4	3 Bed Terraces	4	2.8			0.2		0.1	0.9	4.0
5	3 Bed Semis	5	3.5			0.2		0.2	1.1	5.0
6	3 Bed Detached	5	3.5			0.2		0.2	1.1	5.0
7	4 Bed Detached	7	4.9			0.3		0.2	1.6	7.0
8	5 Bed Detached	5	3.5			0.2		0.2	1.1	5.0

Market Values

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

Ref.	Description of Unit Type	Total Units	User Market Value	Adjusted Market Value
		Sale		
		You can adjust all market values by entering a percentage in the box to the right (this affects other tenures):		100%
1				£ -
2				£ -
3	2 Bed Terraces	6	£ 305,000	£ 305,000
4	3 Bed Terraces	3	£ 352,000	£ 352,000
5	3 Bed Semis	4	£ 359,000	£ 359,000
6	3 Bed Detached	4	£ 419,000	£ 419,000
7	4 Bed Detached	5	£ 524,000	£ 524,000
8	5 Bed Detached	4	£ 577,000	£ 577,000
9				£ -

Development Costs

Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,739	
Flats (16-40 storeys)	£3,001	
Flats (6-15 storeys)	£2,331	
Flats (5 & less storeys)	£1,713	
Houses <= 75m2	£1,274	£1,935.00
Houses > 75m2	£1,116	£1,935.00

Code for Sustainable Homes level (3-6)	

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%	8.0%	of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hous	6.75%	8.0%	of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%	3.5%	of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)

Construction Period (1+ Years)	1.00

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£	-
Regulatory Costs at £25,100 per Unit	£	878,500
<Enter cost description>	£	-
<Enter cost description>	£	-

— Planning Obligations —

Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit							Calculated Total (Affordable and Sale)
				Affordable						
	Enter Total?	User Total	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution	☐									£0
Highway works	☐									£0
Contribution to public transport	☐									£0
Contribution to community facilities	☐									£0
Provision for open space	☐									£0
Contribution to public art	☐									£0
Environmental improvements	☐									£0
Town centre improvements	☐									£0
Waterfront improvements	☐									£0
Support for employment development	☐									£0
Employment related training	☐									£0
Other	☐		£10,000			£10,000		£10,000	£10,000	£350,000

Does CIL apply on this scheme?	No	Please select Yes or No

Total for Scheme	£350,000
Total for Scheme per hectare	£350,000
Total for Scheme divided by total number of units	£10,000
Total for Scheme divided by number of sale units	£14,286

— Known Payments for — Affordable Housing —

Clear

Enter the fixed payments for each tenure below.

	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Total: No. Of Affordable Units
	Affordable Housing Tenures						**Total**
Number of units	0.0	0.0	1.6	0.0	1.1	7.9	11
Payment By Unit			£ 136000		£ 136000	£ 136000	
Or Payment By Tenure							
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures						
Tenure Total	£	£	£ 214200	£	£ 142800	£ 1071000	
Method by which Affordable Housing Revenue is calculated	N/A	N/A	By Unit	N/A	By Unit	By Unit	
Total Known Payment for Affordable Housing	£ 1428000						

Please select one of the below options;

- (selected) There is no grant, or it is included in the above values
  (in which case grant will not be shown separately on the results page)
- Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

Land Finance & Site Value Comparisons

Clear

Land Finance

Reduction of Residual (%)	10%

Guide Values

Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.

Existing use value	£	400,000
Acquisition cost	£	-
Value for offices	£	-
Value for industrial	£	-
Value as hotel site	£	-
Value as other alternative use	£	-

--------- Results ---------

Site Address	Braintree HLT
Scheme Description	35 DPH - High Level Testing

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results

View Results

Discounting Function

Floor Space Analysis

Costs Analysis

Child Occupancy & Bedrooms

RESIDUAL before land finance	**£502,000**
RESIDUAL after land finance	**£452,000**
Per hectare	£452,000
Per dwelling	£13,000
Per market dwelling	£18,000
Per habitable room	£4,000
Per bedspace	£4,000

SCHEME UNITS		per ha.
No. of Dwellings	35	35
No. of Habitable rooms	125	125
No. of Bedrooms	113	113
Total floorspace (m2)	3,348	3348
% Wheelchair Units		

SCHEME REVENUE	£11,645,000
Contribution to revenue from:	
Market housing	£10,217,000
Affordable Housing	£1,428,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	£214,000
- Intermediate Rent	
- Affordable Rent	£143,000
- Social Rent	£1,071,000
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£50,000

AFFORDABLE UNITS	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units			1.575		1.05	7.875	10.5
Units %			5%		3%	23%	30%
Hab rooms			5%		3%	23%	30%
Bedrooms							
Persons			5%		3%	23%	30%
Floorspace			5%		3%	23%	30%

SCHEME COSTS	£11,143,000
Contribution to costs from:	
Market housing	£7,571,000
Affordable Housing	£2,344,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	£352,000
- Intermediate Rent	
- Affordable Rent	£234,000
- Social Rent	£1,758,000
Planning Obligations	£350,000
Community Infrastructure Levy	
Exceptional Development Costs	£879,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)	
Whole scheme	£ -
Per Social Rent dwelling	£ -
Per Shared Ownership dwelling	£ -
Per Intermediate Rent dwellings	£ -
Per Affordable Rent dwelling	£ -

Alternative Site Values		Against residual
Existing Use Value	£ 400,000	£52,000
Acquisition Cost	£ -	
Value for offices	£ -	
Value for industrial	£ -	
Value as hotel site	£ -	
Value as other alternative	£ -	

Costs Analysis

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Commercial Elements
Number of units	24.5			1.575		1.05	7.875	
Base build costs	£4,534,866			£291,527		£194,351	£1,457,636	
Prof fees	£453,487			£29,153		£19,435	£145,764	
Finance	£181,395			£11,661		£7,774	£58,305	-
Marketing	£357,602			-	-	-	-	-
Developer's Return	£2,043,440			-	-	-	-	-
Contractor's Return	-	-	-	£19,241		£12,827	£96,204	
Total Costs	£7,571,000			£352,000		£234,000	£1,758,000	
Exceptional Development	£615,300			£39,555		£26,370	£197,775	

NB: Exceptional Development Costs are apportioned across tenures and all values rounded to nearest thousand

APPENDIX 4 Assessment for LPR26 – Kings Dene – Land North, West and SW of Kelvedon

Site Details

Use these arrows to navigate Toolkit pages. You should ensure there are no warning messages on a page before continuing.

Clear

Site Address	Kings Dene Strategic Site

Site Reference	
Application Number	
NLUD Reference	
UPRN or Grid Reference	

Scheme Description	5,600 New Homes on Green Field

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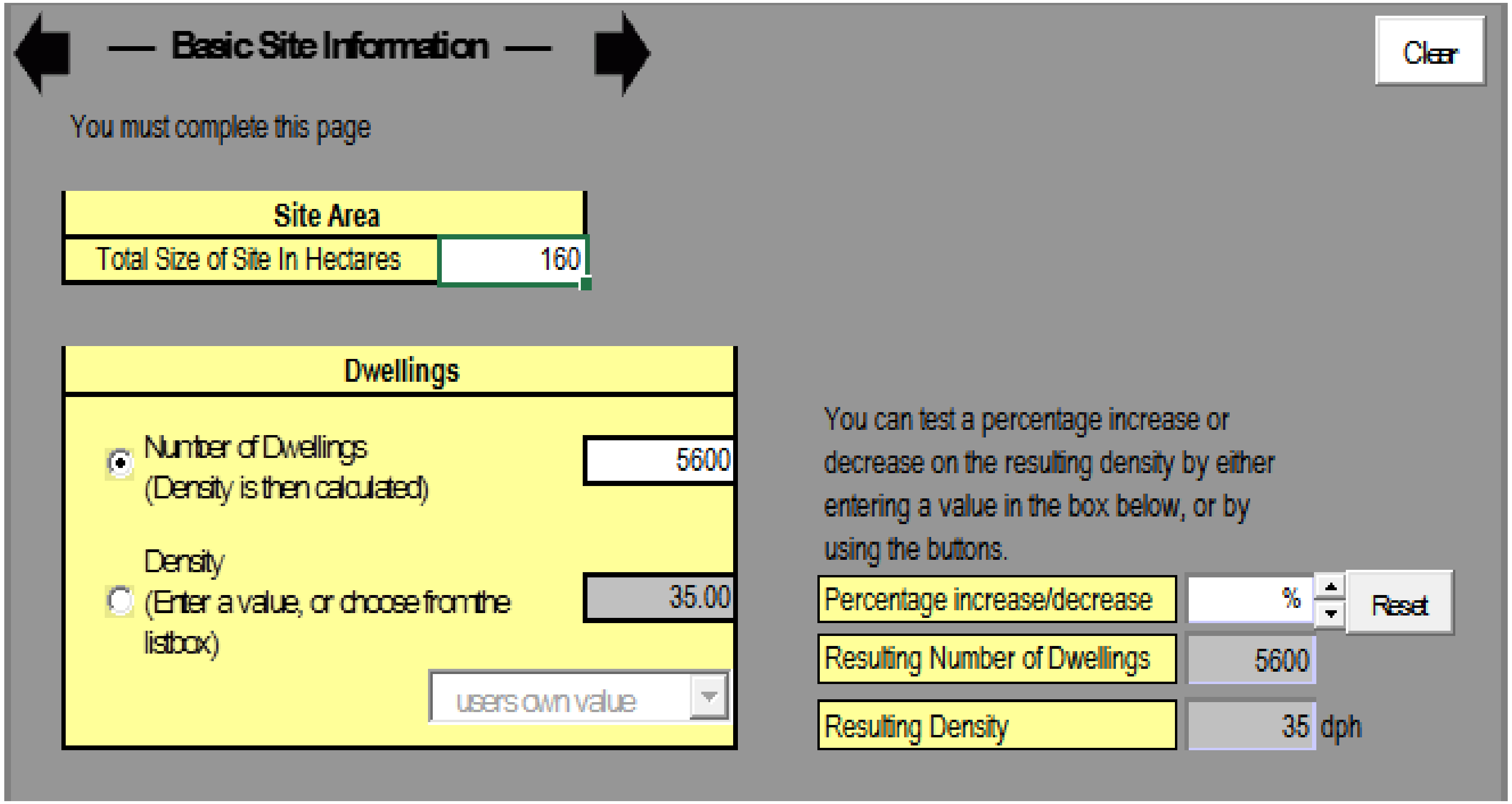
Basic Site Information
Clear
You must complete this page
Site Area
Total Size of Site In Hectares
160
Dwellings
Number of Dwellings
(Density is then calculated)
5600
Density
(Enter a value, or choose from the listbox)
35.00
users own value
You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.
Percentage increase/decrease
%
Reset
Resulting Number of Dwellings
5600
Resulting Density
35
dph

Unit Types & Details

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Number of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel-chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1										
2										
3	2 Bed Terraces	2	3		3		NO	NO	n/a	68
4	3 Bed Terraces	3	4		4		NO	NO	n/a	79
5	3 Bed Semis	3	4		4		NO	NO	n/a	81
6	3 Bed Detached	3	4		4		NO	NO	n/a	95
7	4 Bed Detached	4	6		6		NO	NO	n/a	120
8	5 Bed Detached	5					NO	NO	n/a	140

Tenure Mx

Clear

You can distribute units across the tenures in two ways:

- (•) Input by Percentages
- ( ) Input by Quantity

Total units to enter:	5600
Total units entered:	5600

Ref.	Description	Units	Sale	Affordable Units						Units allocated
				Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
			68%					33%		100%
			3780.0					1820.0		5600.0
1										
2										
3	2 Bed Terraces	1400	945.0					455.0		1400.0
4	3 Bed Terraces	560	378.0					182.0		560.0
5	3 Bed Semis	840	567.0					273.0		840.0
6	3 Bed Detached	840	567.0					273.0		840.0
7	4 Bed Detached	1120	756.0					364.0		1120.0
8	5 Bed Detached	840	567.0					273.0		840.0

Market Values

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

Sale

You can adjust all market values by entering a percentage in the box to the right (this affects other tenures): 100%

Ref.	Description of Unit Type	Total Units	User Market Value	Adjusted Market Value
1				£ -
2				£ -
3	2 Bed Terraces	700	£ 338,000	£ 338,000
4	3 Bed Terraces	280	£ 388,000	£ 388,000
5	3 Bed Semis	420	£ 397,000	£ 397,000
6	3 Bed Detached	420	£ 465,000	£ 465,000
7	4 Bed Detached	560	£ 579,000	£ 579,000
8	5 Bed Detached	420	£ 638,000	£ 638,000
9				£

Development Costs

Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,739	
Flats (16-40 storeys)	£3,001	
Flats (6-15 storeys)	£2,331	£1,720.00
Flats (5 & less storeys)	£1,713	£1,720.00
Houses <= 75m2	£1,274	£1,720.00
Houses > 75m2	£1,116	£1,720.00

Code for Sustainable Homes level (3-6)	

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%	8.0%	of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hous	6.75%	8.0%	of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%	3.5%	of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)

Construction Period (1+ Years)	1.00

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£	-
Regulatory Costs at £25,100 per Unit	£	140,560,000
Green Field Infrastructure Costs	£	192,000,000
<Enter cost description>	£	-

— Planning Obligations —

Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked	Input by Total		Input by Unit							Calculated Total (Affordable and Sale)
				Affordable						
	Enter Total?	User Total	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution										£0
Highway works										£0
Contribution to public transport										£0
Contribution to community facilities										£0
Provision for open space										£0
Contribution to public art										£0
Environmental improvements										£0
Town centre improvements										£0
Waterfront improvements										£0
Support for employment development										£0
Employment related training										£0
Other			£33,619					£33,619		£188,266,400

Does CIL apply on this scheme?	Yes	Please select Yes or No

Total for Scheme	£188,266,400
Total for Scheme per hectare	£1,176,665
Total for Scheme divided by total number of units	£33,619
Total for Scheme divided by number of sale units	£67,238

Known Payments for Affordable Housing

Clear

Enter the fixed payments for each tenure below.

	Affordable Housing Tenures						Total
	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	No. Of Affordable Units
Number of units	0.0	0.0	0.0	0.0	2800.0	0.0	2800
Payment By Unit					£ 180000		
Or Payment By Tenure							
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures						
Tenure Total	£	£	£	£	#########		
Method by which Affordable Housing Revenue is calculated	N/A	N/A	N/A	N/A	By Unit	N/A	
Total Known Payment for Affordable Housing	#########						

Please select one of the below options;

There is no grant, or it is included in the above values (in which case grant will not be shown separately on the results page)

Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

Land Finance & Site Value Comparisons

Clear

Land Finance

Reduction of Residual (%)	10%

Guide Values

Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.

Existing use value	£	64,000,000
Acquisition cost	£	-
Value for offices	£	-
Value for industrial	£	-
Value as hotel site	£	-
Value as other alternative use	£	-

Results

Site Address	Kings Dene Strategic Site
Scheme Description	5,600 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results | View Results | Discounting Function | Floor Space Analysis | Costs Analysis | Child Occupancy & Bedrooms

RESIDUAL before land finance	**£71,495,000**
RESIDUAL after land finance	**£64,345,000**
Per hectare	£402,000
Per dwelling	£11,000
Per market dwelling	£17,000
Per habitable room	£3,000
Per bedspace	£4,000

SCHEME UNITS		per ha.
No. of Dwellings	5600	35
No. of Habitable rooms	19880	124
No. of Bedrooms	18200	114
Total floorspace (m2)	539,280	3371
% Wheelchair Units		

SCHEME REVENUE	**£2,081,898,000**
Contribution to revenue from:	
Market housing	£1,754,298,000
Affordable Housing	£327,600,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£327,600,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£7,150,000

AFFORDABLE UNITS

	Low Cost	Equity Share	Shared	Intermediate	Affordable	Social Rent	Total
Units					1820		1820
Units %					33%		33%
Hab rooms					33%		33%
Bedrooms							
Persons					33%		33%
Floorspace					33%		33%

SCHEME COSTS	**£2,010,403,000**
Contribution to costs from:	
Market housing	£1,126,019,000
Affordable Housing	£363,558,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£363,558,000
- Social Rent	
Planning Obligations	£188,266,000
Community Infrastructure Levy	
Exceptional Development Costs	£332,560,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	**£**	**-**
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values			**Against residual**
Existing Use Value	£	64,000,000	£345,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative u:	£	-	

Costs Analysis

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Commercial Elements
Number of units	3780					1820		
Base build costs	£626,104,080					£301,457,520		
Prof fees	£62,610,408					£30,145,752		
Finance	£25,044,163					£12,058,301		-
Marketing	£61,400,430			-	-	-	-	-
Developer's Return	£350,859,600			-	-	-	-	-
Contractor's Return	-	-	-			£19,896,196		
Total Costs	£1,126,019,000					£363,558,000		
Exceptional Development	£224,478,000					£108,082,000		

NB: Exceptional Development Costs are apportioned across tenures and all values rounded to nearest thousand

APPENDIX 5 Assessment for LPR23 – East of Braintree

Site Details

Use these arrows to naviagate Toolkit pages. You should ensure there are no warning messages on a page before continuing.

Clear

Site Address	East of Braintree

Site Reference	
Application Number	
NLUD Reference	
UPRN or Grid Reference	

Scheme Description	2,660 New Homes on Green Field

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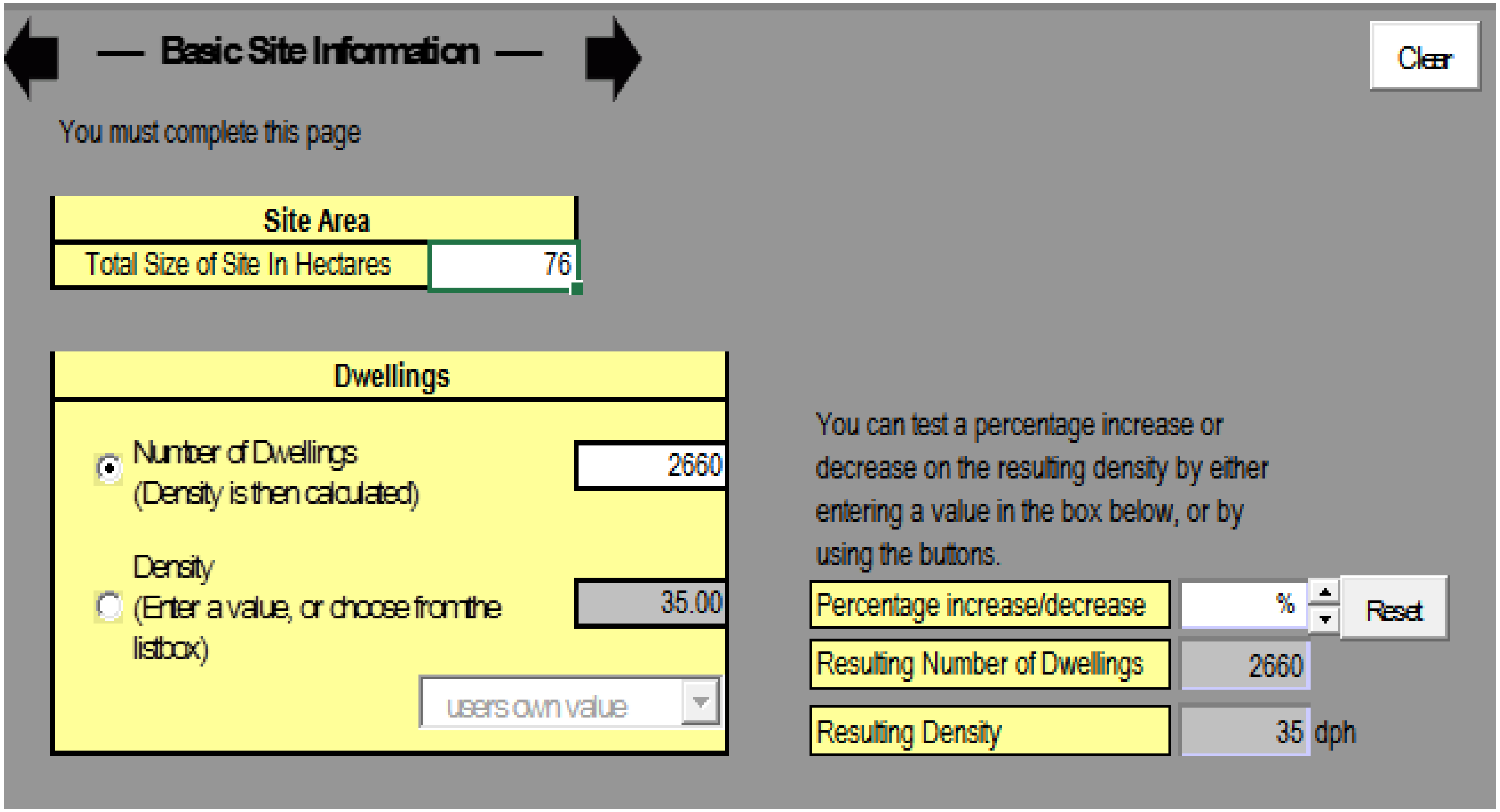
— Basic Site Information —
Clear
You must complete this page
Site Area
Total Size of Site In Hectares
76
Dwellings
Number of Dwellings
(Density is then calculated)
2660
Density
(Enter a value, or choose from the listbox)
35.00
users own value
You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.
Percentage increase/decrease
%
Reset
Resulting Number of Dwellings
2660
Resulting Density
35 dph

Unit Types & Details

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Number of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel-chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1										
2										
3	2 Bed Terraces	2	3		3		NO	NO	n/a	68
4	3 Bed Terraces	3	4		4		NO	NO	n/a	79
5	3 Bed Semis	3	4		4		NO	NO	n/a	81
6	3 Bed Detached	3	4		4		NO	NO	n/a	95
7	4 Bed Detached	4	6		6		NO	NO	n/a	120
8	5 Bed Detached	5					NO	NO	n/a	140

Tenure Mix

Clear

You can distribute units across the tenures in two ways:

- (•) Input by Percentages
- ( ) Input by Quantity

				Affordable Units						
			Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
	Total units to enter:	2660	88%					13%		100%
	Total units entered:	2660	2327.5					332.5		2660.0
Ref.	Description	Units								
1										
2										
3	2 Bed Terraces	665	581.9					83.1		665.0
4	3 Bed Terraces	266	232.8					33.3		266.0
5	3 Bed Semis	399	349.1					49.9		399.0
6	3 Bed Detached	399	349.1					49.9		399.0
7	4 Bed Detached	532	465.5					66.5		532.0
8	5 Bed Detached	399	349.1					49.9		399.0

Market Values

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

Sale

You can adjust all market values by entering a percentage in the box to the right (this affects other tenures): 100%

Ref.	Description of Unit Type	Total Units	User Market Value	Adjusted Market Value
1				£ -
2				£ -
3	2 Bed Terraces	582	£ 305,000	£ 305,000
4	3 Bed Terraces	233	£ 352,000	£ 352,000
5	3 Bed Semis	349	£ 359,000	£ 359,000
6	3 Bed Detached	349	£ 419,000	£ 419,000
7	4 Bed Detached	466	£ 524,000	£ 524,000
8	5 Bed Detached	349	£ 577,000	£ 577,000
9				£ -

Development Costs

Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,739	
Flats (16-40 storeys)	£3,001	
Flats (6-15 storeys)	£2,331	£1,720.00
Flats (5 & less storeys)	£1,713	£1,720.00
Houses <= 75m2	£1,274	£1,720.00
Houses > 75m2	£1,116	£1,720.00
Code for Sustainable Homes level (3-6)		

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%	8.0%	of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hous	6.75%	8.0%	of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%	3.5%	of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)
Construction Period (1+ Years)		1.00	

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£	-
Regulatory Costs at £25,100 per Unit	£	66,766,000
Green Field Infrastructure Costs	£	91,200,000
<Enter cost description>	£	-

Clear

— Planning Obligations —

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit							Calculated Total (Affordable and Sale)
				Affordable						
	Enter Total?	User Total	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution	☐									£0
Highway works	☐									£0
Contribution to public transport	☐									£0
Contribution to community facilities	☐									£0
Provision for open space	☐									£0
Contribution to public art	☐									£0
Environmental improvements	☐									£0
Town centre improvements	☐									£0
Waterfront improvements	☐									£0
Support for employment development	☐									£0
Employment related training	☐									£0
Other	☐		£41,179					£41,179		£109,536,140

Does CIL apply on this scheme?	Yes	Please select Yes or No

Total for Scheme	£109,536,140
Total for Scheme per hectare	£1,441,265
Total for Scheme divided by total number of units	£41,179
Total for Scheme divided by number of sale units	£47,062

— Known Payments for —
– Affordable Housing –

Clear

Enter the fixed payments for each tenure below.

	Affordable Housing Tenures						Total
	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	No. Of Affordable Units
Number of units	0.0	0.0	0.0	0.0	332.5	0.0	333
Payment By Unit					£ 180000		
Or Payment By Tenure							
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures						
Tenure Total	£	£	£	£	£59850000		
Method by which Affordable Housing Revenue is calculated	N/A	N/A	N/A	N/A	By Unit	N/A	
Total Known Payment for Affordable Housing	£59850000						

Please select one of the below options;

- (•) There is no grant, or it is included in the above values (in which case grant will not be shown separately on the results page)
- ( ) Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

Land Finance & Site Value Comparisons

Clear

Land Finance

Reduction of Residual (%)	10%	Guide Values

Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.

Existing use value	£	30,400,000
Acquisition cost	£	-
Value for offices	£	-
Value for industrial	£	-
Value as hotel site	£	-
Value as other alternative use	£	-

-------- Results --------

Site Address	East of Braintree
Scheme Description	2,660 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results

View Results

Discounting Function

Floor Space Analysis

Costs Analysis

Child Occupancy & Bedrooms

RESIDUAL before land finance	**£33,374,000**
RESIDUAL after land finance	**£30,037,000**
Per hectare	£395,000
Per dwelling	£11,000
Per market dwelling	£13,000
Per habitable room	£3,000
Per bedspace	£3,000

SCHEME UNITS		per ha.
No. of Dwellings	2660	35
No. of Habitable rooms	9443	124
No. of Bedrooms	8645	114
Total floorspace (m2)	256,158	3371
% Wheelchair Units		

SCHEME REVENUE	**£1,036,236,000**
Contribution to revenue from:	
Market housing	£976,386,000
Affordable Housing	£59,850,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£59,850,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£3,337,000

AFFORDABLE UNITS	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units					332.5		332.5
Units %					13%		13%
Hab rooms					13%		13%
Bedrooms							
Persons					13%		13%
Floorspace					13%		13%

SCHEME COSTS	**£1,002,862,000**
Contribution to costs from:	
Market housing	£668,941,000
Affordable Housing	£66,419,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£66,419,000
- Social Rent	
Planning Obligations	£109,536,000
Community Infrastructure Levy	
Exceptional Development Costs	£157,966,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	**£**	-
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values			**Against residual**
Existing Use Value	£	30,400,000	-£363,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative	£	-	

Costs Analysis

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Commercial Elements
Number of units	2327.5					332.5		
Base build costs	£385,517,790					£55,073,970		
Prof fees	£38,551,779					£5,507,397		
Finance	£15,420,712					£2,202,959		-
Marketing	£34,173,519			-	-	-	-	-
Developer's Return	£195,277,250			-	-	-	-	-
Contractor's Return	-	-	-			£3,634,882		
Total Costs	£668,941,000					£66,419,000		

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent
Exceptional Development	£138,220,250					£19,745,750	

NB: Exceptional Development Costs are apportioned across tenures and all values rounded to nearest thousand

APPENDIX 6 Assessment for LPR28 – Land North of Hatfield Peverel

Site Details

Use these arrows to naviagate Toolkit pages. You should ensure there are no warning messages on a page before continuing.

Clear

Site Address	Land North of A12 Hatfield Perverel

Site Reference	
Application Number	
NLUD Reference	
UPRN or Grid Reference	

Scheme Description	1135 New Homes on Green Field

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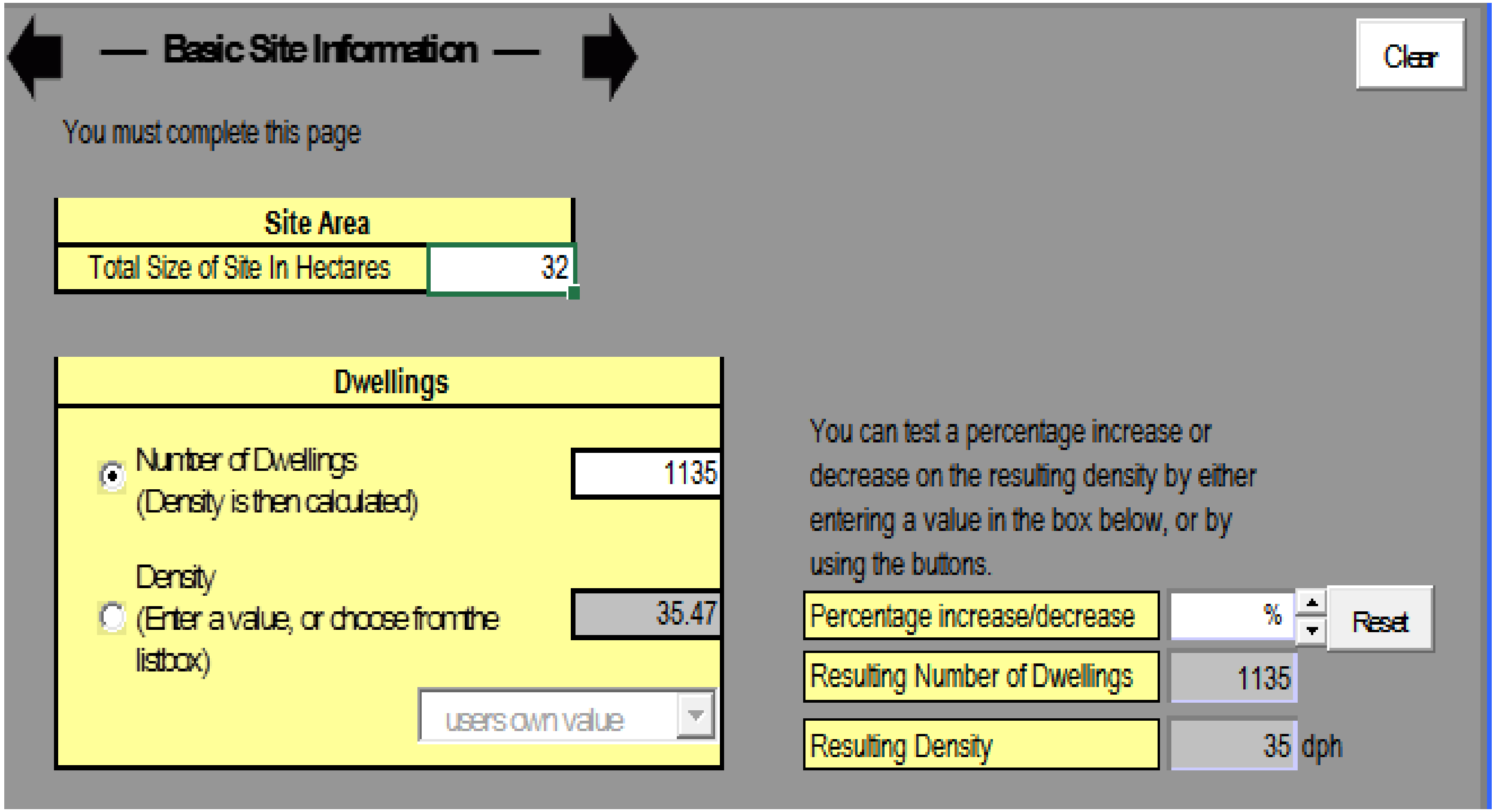
Basic Site Information
Clear
You must complete this page
Site Area
Total Size of Site In Hectares
32
Dwellings
Number of Dwellings
(Density is then calculated)
1135
Density
(Enter a value, or choose from the listbox)
35.47
users own value
You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.
Percentage increase/decrease
%
Reset
Resulting Number of Dwellings
1135
Resulting Density
35
dph

Unit Types & Details

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Numbe r of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel-chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1										
2										
3	2 Bed Terraces	2	3		3		NO	NO	n/a	68
4	3 Bed Terraces	3	4		4		NO	NO	n/a	79
5	3 Bed Semis	3	4		4		NO	NO	n/a	81
6	3 Bed Detached	3	4		4		NO	NO	n/a	95
7	4 Bed Detached	4	6		6		NO	NO	n/a	120
8	5 Bed Detached	5					NO	NO	n/a	140

Tenure Mix

Clear

You can distribute units across the tenures in two ways:

- (selected) Input by Percentages
- Input by Quantity

Total units to enter:	1135
Total units entered:	1135

Ref.	Description	Units	Sale	Affordable Units: Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
			55%					45%		100%
			624.3					510.8		1135.0
1										
2										
3	2 Bed Terraces	283	155.7					127.4		283.0
4	3 Bed Terraces	115	63.3					51.8		115.0
5	3 Bed Semis	170	93.5					76.5		170.0
6	3 Bed Detached	170	93.5					76.5		170.0
7	4 Bed Detached	227	124.9					102.2		227.0
8	5 Bed Detached	170	93.5					76.5		170.0

Market Values

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

		Sale		
		You can adjust all market values by entering a percentage in the box to the right (this affects other tenures):		100%
Ref.	Description of Unit Type	Total Units	User Market Value	Adjusted Market Value
1				£ -
2				£ -
3	2 Bed Terraces	156	£ 338,000	£ 338,000
4	3 Bed Terraces	63	£ 388,000	£ 388,000
5	3 Bed Semis	94	£ 397,000	£ 397,000
6	3 Bed Detached	94	£ 465,000	£ 465,000
7	4 Bed Detached	125	£ 579,000	£ 579,000
8	5 Bed Detached	94	£ 638,000	£ 638,000
9				£ -

Development Costs

Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,739	
Flats (16-40 storeys)	£3,001	
Flats (6-15 storeys)	£2,331	£1,720.00
Flats (5 & less storeys)	£1,713	£1,720.00
Houses <= 75m2	£1,274	£1,720.00
Houses > 75m2	£1,116	£1,720.00
Code for Sustainable Homes level (3-6)		

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%	8.0%	of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hous	6.75%	8.0%	of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%	3.5%	of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)
Construction Period (1+ Years)		1.00	

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£	-
Regulatory Costs at £25,100 per Unit	£	28,187,300
Green Field Infrastructure Costs	£	38,400,000
<Enter cost description>	£	-

— Planning Obligations —

Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit							Calculated Total (Affordable and Sale)
				Affordable						
	Enter Total?	User Total	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution	☐									£0
Highway works	☐									£0
Contribution to public transport	☐									£0
Contribution to community facilities	☐									£0
Provision for open space	☐									£0
Contribution to public art	☐									£0
Environmental improvements	☐									£0
Town centre improvements	☐									£0
Waterfront improvements	☐									£0
Support for employment development	☐									£0
Employment related training	☐									£0
Other	☐		£11,926					£11,926		£13,536,010

Does CIL apply on this scheme?	Yes	Please select Yes or No

Total for Scheme	£13,536,010
Total for Scheme per hectare	£423,000
Total for Scheme divided by total number of units	£11,926
Total for Scheme divided by number of sale units	£21,684

Clear

Known Payments for Affordable Housing

Enter the fixed payments for each tenure below.

	Affordable Housing Tenures						Total
	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	No. Of Affordable Units
Number of units	0.0	0.0	0.0	0.0	510.8	0.0	511
Payment By Unit					£ 180000		
Or Payment By Tenure							
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures						
Tenure Total	£	£	£	£	£91935000		
Method by which Affordable Housing Revenue is calculated	N/A	N/A	N/A	N/A	By Unit	N/A	
Total Known Payment for Affordable Housing	£91935000						

Please select one of the below options;

(selected) There is no grant, or it is included in the above values (in which case grant will not be shown separately on the results page)

Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

Land Finance & Site Value Comparisons

Clear

Land Finance

Reduction of Residual (%)	10%

Guide Values

Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.

Existing use value	£ 12,800,000
Acquisition cost	£ -
Value for offices	£ -
Value for industrial	£ -
Value as hotel site	£ -
Value as other alternative use	£ -

------ Results ------

Site Address	Land North of A12 Hatfield Perverel
Scheme Description	1135 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results

View Results

Discounting Function

Floor Space Analysis

Costs Analysis

Child Occupancy & Bedrooms

RESIDUAL before land finance	**£13,547,000**
RESIDUAL after land finance	**£12,192,000**
Per hectare	£381,000
Per dwelling	£11,000
Per market dwelling	£20,000
Per habitable room	£3,000
Per bedspace	£3,000

SCHEME UNITS		per ha.
No. of Dwellings	1135	35
No. of Habitable rooms	4031	126
No. of Bedrooms	3689	115
Total floorspace (m2)	109,289	3415
% Wheelchair Units		

SCHEME REVENUE	**£381,624,000**
Contribution to revenue from:	
Market housing	£289,689,000
Affordable Housing	£91,935,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£91,935,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£1,355,000

AFFORDABLE UNITS	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units					510.75		510.75
Units %					45%		45%
Hab rooms					45%		45%
Bedrooms							
Persons					45%		45%
Floorspace					45%		45%

SCHEME COSTS	**£368,077,000**
Contribution to costs from:	
Market housing	£185,939,000
Affordable Housing	£102,015,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£102,015,000
- Social Rent	
Planning Obligations	£13,536,000
Community Infrastructure Levy	
Exceptional Development Costs	£66,587,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)	
Whole scheme	£ -
Per Social Rent dwelling	£ -
Per Shared Ownership dwelling	£ -
Per Intermediate Rent dwellings	£ -
Per Affordable Rent dwelling	£ -

Alternative Site Values		Against residual
Existing Use Value	£ 12,800,000	-£608,000
Acquisition Cost	£ -	
Value for offices	£ -	
Value for industrial	£ -	
Value as hotel site	£ -	
Value as other alternative	£ -	

Costs Analysis

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Commercial Elements
Number of units	2137.5					712.5		
Base build costs	£354,052,110					£118,017,370		
Prof fees	£35,405,211					£11,801,737		
Finance	£14,162,084					£4,720,695		-
Marketing	£31,148,198			-	-	-	-	-
Developer's Return	£177,989,700			-	-	-	-	-
Contractor's Return	-	-	-			£7,789,146		
Total Costs	£612,757,000					£142,329,000		
Exceptional Development	£126,551,250					£42,183,750		

NB: Exceptional Development Costs are apportioned across tenures and all values rounded to nearest thousand

APPENDIX 7 Assessment for LPR24 – Land South and North East of Halstead

Site Details

Use these arrows to naviagate Toolkit pages. You should ensure there are no warning messages on a page before continuing.

Clear

Site Address	Land N and SE of Halstead

Site Reference	
Application Number	
NLUD Reference	
UPRN or Grid Reference	

Scheme Description	2,850 New Homes on Green Field

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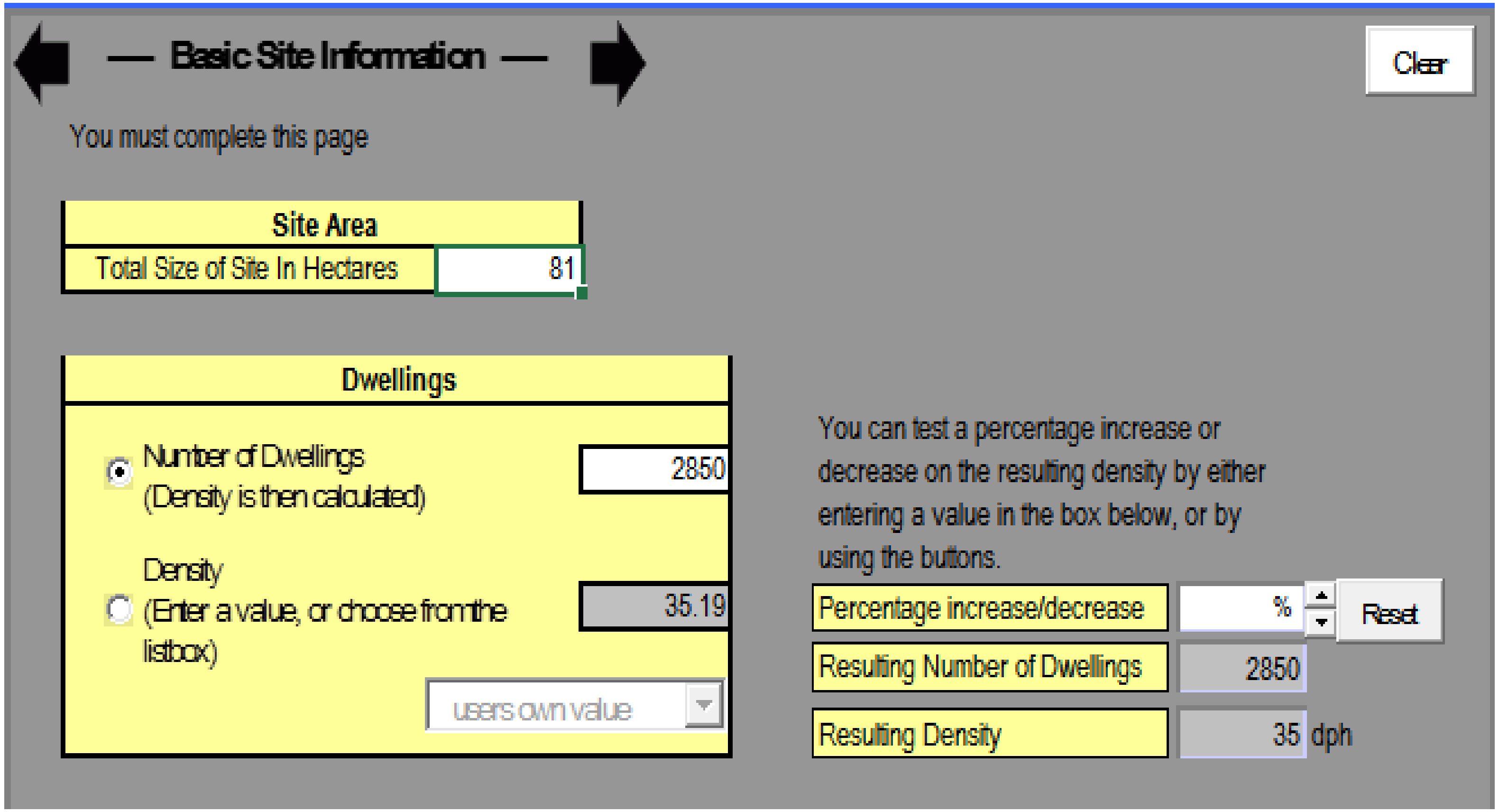

— Basic Site Information —
Clear
You must complete this page
Site Area
Total Size of Site In Hectares
81
Dwellings
Number of Dwellings
(Density is then calculated)
2850
Density
(Enter a value, or choose from the listbox)
35.19
users own value
You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.
Percentage increase/decrease
%
Reset
Resulting Number of Dwellings
2850
Resulting Density
35
dph

Unit Types & Details

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Number of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel-chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1										
2										
3	2 Bed Terraces	2	3		3		NO	NO	n/a	68
4	3 Bed Terraces	3	4		4		NO	NO	n/a	79
5	3 Bed Semis	3	4		4		NO	NO	n/a	81
6	3 Bed Detached	3	4		4		NO	NO	n/a	95
7	4 Bed Detached	4	6		6		NO	NO	n/a	120
8	5 Bed Detached	5					NO	NO	n/a	140

Tenure Mx

Clear

You can distribute units across the tenures in two ways:

- (•) Input by Percentages
- ( ) Input by Quantity

Total units to enter:	2850
Total units entered:	2850

	Affordable Units						
Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
75%					25%		100%
2137.5					712.5		2850.0

Ref.	Description	Units	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
1										
2										
3	2 Bed Terraces	712	534.0					178.0		712.0
4	3 Bed Terraces	285	213.8					71.3		285.0
5	3 Bed Semis	428	321.0					107.0		428.0
6	3 Bed Detached	428	321.0					107.0		428.0
7	4 Bed Detached	569	426.8					142.3		569.0
8	5 Bed Detached	428	321.0					107.0		428.0

Market Values

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

Sale

You can adjust all market values by entering a percentage in the box to the right (this affects other tenures): 100%

Ref.	Description of Unit Type	Total Units	User Market Value	Adjusted Market Value
1				£ -
2				£ -
3	2 Bed Terraces	534	£ 303,000	£ 303,000
4	3 Bed Terraces	214	£ 350,000	£ 350,000
5	3 Bed Semis	321	£ 356,000	£ 356,000
6	3 Bed Detached	321	£ 416,000	£ 416,000
7	4 Bed Detached	427	£ 520,000	£ 520,000
8	5 Bed Detached	321	£ 572,000	£ 572,000
9				£ -
10				£ -

Development Costs

Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,739	
Flats (16-40 storeys)	£3,001	
Flats (6-15 storeys)	£2,331	£1,720.00
Flats (5 & less storeys)	£1,713	£1,720.00
Houses <= 75m2	£1,274	£1,720.00
Houses > 75m2	£1,116	£1,720.00
Code for Sustainable Homes level (3-6)		

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%	8.0%	of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hous	6.75%	8.0%	of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%	3.5%	of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)
Construction Period (1+ Years)		1.00	

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£	-
Regulatory Costs at £25,100 per Unit	£	71,535,000
Green Field Infrastructure Costs	£	97,200,000
<Enter cost description>	£	-

— Planning Obligations —

Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked	Input by Total		Input by Unit							Calculated Total (Affordable and Sale)
				Affordable						
	Enter Total?	User Total	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution	☐									£0
Highway works	☐									£0
Contribution to public transport	☐									£0
Contribution to community facilities	☐									£0
Provision for open space	☐									£0
Contribution to public art	☐									£0
Environmental improvements	☐									£0
Town centre improvements	☐									£0
Waterfront improvements	☐									£0
Support for employment development	☐									£0
Employment related training	☐									£0
Other	☐		£20,355					£20,355		£58,011,750

Does CIL apply on this scheme?	Yes	Please select Yes or No

Total for Scheme	£58,011,750
Total for Scheme per hectare	£716,194
Total for Scheme divided by total number of units	£20,355
Total for Scheme divided by number of sale units	£27,140

Known Payments for Affordable Housing

Clear

Enter the fixed payments for each tenure below.

	Affordable Housing Tenures						Total
	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	No. Of Affordable Units
Number of units	0.0	0.0	0.0	0.0	712.5	0.0	713
Payment By Unit					£ 180000		
Or Payment By Tenure							
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures						
Tenure Total	£	£	£	£	#########		
Method by which Affordable Housing Revenue is calculated	N/A	N/A	N/A	N/A	By Unit	N/A	
Total Known Payment for Affordable Housing	#########						

Please select one of the below options;

There is no grant, or it is included in the above values (in which case grant will not be shown separately on the results page)

Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

Land Finance
& Site Value Comparisons

Clear

Land Finance

Reduction of Residual (%)	10%	Guide Values

Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.

Existing use value	£ 32,400,000
Acquisition cost	£ -
Value for offices	£ -
Value for industrial	£ -
Value as hotel site	£ -
Value as other alternative use	£ -

Results

Site Address	Land N and SE of Halstead
Scheme Description	2,850 New Homes on Green Field

Site Reference Number	
Application Number	
NLUD Ref. Number	
UPRN or Grid Ref.	

Save Results

View Results

Discounting Function

Floor Space Analysis

Costs Analysis

Child Occupancy & Bedrooms

RESIDUAL before land finance	**£36,366,000**
RESIDUAL after land finance	**£32,729,000**
Per hectare	£404,000
Per dwelling	£11,000
Per market dwelling	£15,000
Per habitable room	£3,000
Per bedspace	£4,000

SCHEME UNITS		per ha.
No. of Dwellings	2850	35
No. of Habitable rooms	10114	125
No. of Bedrooms	9263	114
Total floorspace (m2)	274,459	3388
% Wheelchair Units		

SCHEME REVENUE	**£1,018,199,000**
Contribution to revenue from:	
Market housing	£889,949,000
Affordable Housing	£128,250,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£128,250,000
- Social Rent	
Grant	
Capital Contribution	
Commercial Elements	

LAND FINANCE	
Total land finance	£3,637,000

AFFORDABLE UNITS

	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units					712.5		712.5
Units %					25%		25%
Hab rooms					25%		25%
Bedrooms							
Persons					25%		25%
Floorspace					25%		25%

SCHEME COSTS	**£981,833,000**
Contribution to costs from:	
Market housing	£612,757,000
Affordable Housing	£142,329,000
- Low Cost Sale	
- Equity Share	
- Shared Ownership	
- Intermediate Rent	
- Affordable Rent	£142,329,000
- Social Rent	
Planning Obligations	£58,012,000
Community Infrastructure Levy	
Exceptional Development Costs	£168,735,000
Commercial Elements	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	**£**	-
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values			Against residual
Existing Use Value	£	32,400,000	£329,000
Acquisition Cost	£	-	
Value for offices	£	-	
Value for industrial	£	-	
Value as hotel site	£	-	
Value as other alternative	£	-	

Costs Analysis

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Commercial Elements
Number of units	2137.5					712.5		
Base build costs	£354,052,110					£118,017,370		
Prof fees	£35,405,211					£11,801,737		
Finance	£14,162,084					£4,720,695		-
Marketing	£31,148,198			-	-	-	-	-
Developer's Return	£177,989,700			-	-	-	-	-
Contractor's Return	-	-	-			£7,789,146		
Total Costs	£612,757,000					£142,329,000		

Exceptional Development	£126,551,250					£42,183,750	

NB: Exceptional Development Costs are apportioned across tenures and all values rounded to nearest thousand

APPENDIX 8 – East of Braintree – over Plan period

--- Discounting Function ---

Print Tables

Revenue Sections	Cost Sections
Market Tenures*	Market Tenures*
Affordable Tenures*	Affordable Tenures*
Contributions to Revenue*	Developer Returns*
Scheme Revenue	Planning and Commercial*
	Scheme Costs

Finance, Discount Rate and NPV *

* indicates sections requiring user values

Years to run DF (1 to 20): 15

Show calculation rows

User entered values
Toolkit calculated values

Market Tenures' Revenue

				Time span (years)															
Inflation				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
House price inflation	- Expected house price inflation rate (%) (All market tenures)			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Annual Build Rate and Revenue		Total Entered	Total Expected																
Sale	- Annual sale completion	1596 of	1596.00	1.00	1.00	1.00	1.00	1.00	1.00	177.00	177.00	177.00	177.00	177.00	177.00	177.00	177.00	174.00	1596.00
Low Cost Sale	- Annual sale completion	0 of	0.00																0.00
Equity Share	- Annual sale completion	0 of	0.00																0.00
Total Revenue with Inflation for these Market Tenures				£ 440,475	£ 462,499	£ 485,624	£ 509,905	£ 535,400	£ 562,170	£ 104,479,317	£ 109,703,283	£ 115,188,447	£ 120,947,869	£ 126,995,263	£ 133,345,026	£ 140,012,277	£ 147,012,891	£ 151,747,205	

--- Discounting Function ---

Print Tables

Years to run DF (1 to 20)

15

Show calculation rows

Revenue Sections
- Market Tenures*
- Affordable Tenures*
- Contributions to Revenue*
- Scheme Revenue

Cost Sections
- Market Tenures*
- Affordable Tenures*
- Developer Returns*
- Planning and Commercial*
- Scheme Costs

Finance, Discount Rate and NPV *

* indicates sections requiring user values

User entered values

Toolkit calculated values

Affordable Tenures' Revenue

Time span (years)

Inflation		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Shared Ownership	- Expected change in revenue (annual increase/decrease) (%)															
Intermediate Rent	- Expected change in revenue (annual increase/decrease) (%)															
Affordable Rent	- Expected change in revenue (annual increase/decrease) (%)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Social Rent	- Expected annual house price inflation rate (%)															

Build Rate and Revenue		Total Entered		Total Expected	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Shared Ownership	- Annual sale completion	0	of	0.00																0.00
Intermediate Rent	- Annual sale completion	0	of	0.00																0.00
Affordable Rent	- Annual sale completion	1064	of	1064.00	1.00	1.00	1.00	1.00	1.00	1.00	117.00	117.00	117.00	117.00	117.00	117.00	117.00	117.00	122.00	1064.00
Social Rent	- Annual sale completion	0	of	0.00																0.00
Total Revenue with Inflation for these Affordable Tenures					£ 185,400	£ 190,962	£ 196,691	£ 202,592	£ 208,669	£ 214,929	£ 25,901,144	£ 26,678,178	£ 27,478,523	£ 28,302,879	£ 29,151,965	£ 30,026,524	£ 30,927,320	£ 31,855,140	£ 34,212,964	

--- Discounting Function ---

Print Tables

Revenue Sections	Cost Sections
Market Tenures*	Market Tenures*
Affordable Tenures*	Affordable Tenures*
Contributions to Revenue*	Developer Returns*
Scheme Revenue	Planning and Commercial*
	Scheme Costs

Finance, Discount Rate and NPV *

* indicates sections requiring user values

Years to run DF (1 to 20): 15

Show calculation rows

User entered values

Toolkit calculated values

Market Tenures' Development Costs

				Time span (years)															
Inflation				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Development costs	- Expected development cost inflation rate (%)			3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Development Costs				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Sale	- Total Costs (without inflation)		£ 458,702,434																
	- Total Costs less Returns (without inflation)		£ 324,798,034																
	- Annual build	1596 of:	1596.00	1	1	1	1	1	1	177	177	177	177	177	177	177	177	174	1,596
Low Cost Sale	- Total Costs (without inflation)		£ -																
	- Total Costs less Returns (without inflation)		£ -																
	- Annual build	0 of:	0.00																-
Equity Share	- Total Costs (without inflation)		£ -																
	- Total Costs less Returns (without inflation)		£ -																
	- Annual build	0 of:	0.00																-
Total Costs with inflation for these Market Tenures				£ 209,613	£ 215,901	£ 222,378	£ 229,050	£ 235,921	£ 242,999	£ 44,301,083	£ 45,630,116	£ 46,999,019	£ 48,408,990	£ 49,861,259	£ 51,357,097	£ 52,897,810	£ 54,484,744	£ 55,168,112	

--- Discounting Function ---

Print Tables

Revenue Sections	Cost Sections
Market Tenures*	Market Tenures*
Affordable Tenures*	Affordable Tenures*
Contributions to Revenue*	Developer Returns*
Scheme Revenue	Planning and Commercial*
	Scheme Costs

Finance, Discount Rate and NPV *

* indicates sections requiring user values

Years to run DF (1 to 20): 15

Show calculation rows

User entered values

Toolkit calculated values

Affordable Tenures Development Costs

Inflation		Time span (years) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Shared Ownership	- Expected annual development cost inflation rate (%)															
Intermediate Rent	- Expected development cost inflation rate (%)															
Affordable Rent	- Expected annual development cost inflation rate (%)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Social Rent	- Expected annual development cost inflation rate (%)															

Development Costs			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Shared Ownership	- Total Costs (without inflation)	£ -																
	- Total Costs less Returns (without inflation)	£ -																
	- Annual build 0 of	0.00																-
Intermediate Rent	- Total Costs (without inflation)	£ -																
	- Total Costs less Returns (without inflation)	£ -																
	- Annual build 0 of	0.00																-
Affordable Rent	- Total Costs (without inflation)	£ 212,541,465																
	- Total Costs less Returns (without inflation)	£ 200,909,843																
	- Annual build 1064 of	1064.00	1	1	1	1	1	1	117	117	117	117	117	117	117	117	122	1,064
Social Rent	- Total Costs (without inflation)	£ -																
	- Total Costs less Returns (without inflation)	£ -																
	- Annual build 0 of	0.00																-
Total Costs with inflation for these Affordable Tenures			£ 194,490	£ 200,324	£ 206,334	£ 212,524	£ 218,900	£ 225,467	£ 27,171,025	£ 27,986,156	£ 28,825,740	£ 29,690,512	£ 30,581,228	£ 31,498,665	£ 32,443,625	£ 33,416,933	£ 35,890,358	

--- Discounting Function ---

Print Tables

Years to run DF (1 to 20): 15

Show calculation rows

Revenue Sections	Cost Sections
Market Tenures*	Market Tenures*
Affordable Tenures*	Affordable Tenures*
Contributions to Revenue*	Developer Returns*
Scheme Revenue	Planning and Commercial*
	Scheme Costs

Finance, Discount Rate and NPV *

* indicates sections requiring user values

User entered values
Toolkit calculated values

Developer Returns

			Time span (years) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Market Housing	Annual Return assumed (benchmark 20%)	Apply Benchmark	20%	20%	20%	20%	20%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
Sale	- Annual Revenue (with inflation)		£ 440,475	£ 462,499	£ 485,624	£ 509,905	£ 535,400	£ 562,170	£ 104,479,317	£ 109,703,283	£ 115,188,447	£ 120,947,869	£ 126,995,263	£ 133,345,026	£ 140,012,277	£ 147,012,891	£ 151,747,205
	- Annual Return		£ 88,095	£ 92,500	£ 97,125	£ 101,981	£ 107,080	£ 95,569	£ 17,761,484	£ 18,649,558	£ 19,582,036	£ 20,561,138	£ 21,589,195	£ 22,668,654	£ 23,802,087	£ 24,992,191	£ 25,797,025
Low Cost Sale	- Annual Return	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Equity Share	- Annual Return	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Affordable Housing	Annual Return assumed (benchmark 6%)	Apply Benchmark	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Shared Ownership	Annual Housing Costs (with inflation)		£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
	Annual Return		£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Intermediate Rent	Annual Housing Costs (with inflation)		£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
	Annual Return		£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Affordable Rent	Annual Housing Costs (with inflation)		£ 194,490	£ 200,324	£ 206,334	£ 212,524	£ 218,900	£ 225,467	£ 27,171,025	£ 27,986,156	£ 28,825,740	£ 29,690,512	£ 30,581,228	£ 31,498,665	£ 32,443,625	£ 33,416,933	£ 35,890,358
	Annual Return		£ 11,669	£ 12,019	£ 12,380	£ 12,751	£ 13,134	£ 13,528	£ 1,630,261	£ 1,679,169	£ 1,729,544	£ 1,781,431	£ 1,834,874	£ 1,889,920	£ 1,946,617	£ 2,005,016	£ 2,153,421
Social Rent	Annual Housing Costs (with inflation)		£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
	Annual Return		£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Total Returns with inflation for all Tenures			£ 99,764	£ 104,519	£ 109,505	£ 114,732	£ 120,214	£ 109,097	£ 19,391,745	£ 20,328,727	£ 21,311,580	£ 22,342,569	£ 23,424,068	£ 24,558,574	£ 25,748,705	£ 26,997,207	£ 27,950,446

--- Discounting Function ---

Print Tables

Revenue Sections	Cost Sections
Market Tenures*	Market Tenures*
Affordable Tenures*	Affordable Tenures*
Contributions to Revenue*	Developer Returns*
Scheme Revenue	Planning and Commercial*
	Scheme Costs

Finance, Discount Rate and NPV *

* indicates sections requiring user values

Years to run DF (1 to 20): 15

Show calculation rows

User entered values

Toolkit calculated values

Exceptional Costs, Planning Obligations and Commercial Costs

		Total Entered	Total Expected	Time span (years) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Exceptional Costs and Sustainable	- Expected annual cost	£ 157,966,000 of:	£ 157,966,000	£ 1	£ 1	£ 1	£ 1	£ 1	£ 1	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,770	£ 157,966,000
	- Expected annual inflation rate (Exceptional and Sustainable Homes)																		
	- Exceptional and Sustainable Homes Costs with Inflation			£ 1	£ 1	£ 1	£ 1	£ 1	£ 1	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,778	£ 17,551,770	
Planning Obligations	- Expected annual cost	£ 109,536,000 of:	£ 109,536,000	£ 1	£ 1	£ 1	£ 1	£ 1	£ 1	£ 12,170,666	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,659	£ 109,536,000
	- Expected Planning Obligations annual inflation																		
	- Obligations with inflation			£ 1	£ 1	£ 1	£ 1	£ 1	£ 1	£ 12,170,666	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,667	£ 12,170,659	
Community Infrastructure Levy	- Expected annual cost	£ - of:	£ -																£ -
	- Expected Planning Obligations annual inflation																		
	- Obligations with inflation			£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	
Commercial Element Costs	- Expected annual costs	Total Entered	Total Expected																
	Office	£ - of:	£ -																£ -
	Industrial	£ - of:	£ -																£ -
	Retail	£ - of:	£ -																£ -
	Hotel	£ - of:	£ -																£ -
	Leisure/Community Services	£ - of:	£ -																£ -
	Other	£ - of:	£ -																£ -
	- Expected Commercial Element Costs inflation rate																		
	- Commercial Element Costs with inflation			£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	

--- Discounting Function ---

Print Tables

Revenue Sections	Cost Sections
Market Tenures*	Market Tenures*
Affordable Tenures*	Affordable Tenures*
Contributions to Revenue*	Developer Returns*
Scheme Revenue	Planning and Commercial*
	Scheme Costs

• Finance, Discount Rate and NPV *

* indicates sections requiring user values

Years to run DF (1 to 20): 15

Show calculation rows

User entered values

Toolkit calculated values

Finance, Discount Rate and NPV

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Time span (years)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Residual (Total inflated revenue less total inflated costs)		£ 122,006	£ 132,714	£ 144,095	£ 156,188	£ 169,032	£ 199,535	£ 9,794,163	£ 12,714,017	£ 15,808,186	£ 19,086,233	£ 22,558,228	£ 26,234,769	£ 30,127,013	£ 34,246,701	£ 37,228,824
Interest Rate	- Debit Interest rate (Benchmark 6%)	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
	- Credit Interest Rate (Benchmark 4%)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
	- Cumulative Residual / Balance	£ 125,666	£ 266,132	£ 422,534	£ 596,084	£ 788,070	£ 1,017,233	£ 11,135,738	£ 24,565,248	£ 41,584,636	£ 62,490,995	£ 87,600,699	£ 117,250,533	£ 151,798,872	£ 191,626,940	£ 235,721,437
Discount Rate	- Annual Discount rate (%)	4.00%														
	- Cumulative discount rate	96.00%	92.16%	88.47%	84.93%	81.54%	78.28%	75.14%	72.14%	69.25%	66.48%	63.82%	61.27%	58.82%	56.47%	54.21%
	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Discounted Residual		£ 120,640	£ 245,267	£ 373,831	£ 506,282	£ 642,570	£ 796,247	£ 8,367,922	£ 17,721,114	£ 28,798,774	£ 41,546,053	£ 55,910,212	£ 71,840,545	£ 89,288,304	£ 108,206,619	£ 127,781,380

Apply Benchmarks

Measures Of Return

Net Present Value	£ 127,781,380
per ha.	£ 1,681,334

GLOSSARY OF TERMS

A

Abnormal Development Costs: Costs associated with difficult ground conditions e.g. contamination.

Affordable Housing: As defined in PPS3 as housing that includes Social Rented and Intermediate Affordable housing.

Affordable Rented Housing: Housing let at above Social Rented levels and up to 80% of Open Market Rent

Appraisal: development calculation taking into account scheme revenue and scheme cost and accounting for key variables such as house prices, development costs and developer profit.

B

Base Build Costs: including costs of construction: preliminaries, sub and superstructure; plus an allowance for external works.

C

Commuted Sum: a sum of money paid by the applicant in lieu of providing affordable housing on site.

Community Infrastructure Levy: A levy raised by local authorities from developers and land owners in order to cover the costs of providing infrastructure, where the form of provision can include physical, social and environmental infrastructure. The levy is charged on a per square metre basis across a range of development uses.

D

Developer's Profit or margin: a sum of money required by a developer to undertake the scheme in question. Profit or margin can be based on cost, development value; and be expressed in terms of net or gross level.

Developer Cost: all encompassing term including base build costs (see above) plus any additional costs incurred such as fees, finance and developer margin.

Development Economics: The assessment of key variables included within a development appraisal; principally items such as house prices, build costs and affordable housing revenue.

E

Existing Use Value (EUV): The value of a site in its current use; for example, farmland, industrial or commercial land.

F

Finance (developer): usually considered in two ways. Finance on the building process; and finance on the land. Relates to current market circumstances

G

Gross Development Value (GDV): the total revenue from the scheme. This may include housing as well as commercial revenue (in a mixed use scheme). It should include revenue from the sale of open market housing as well as the value of affordable units reflected in any payment by a housing association(s) to the developer.

I

Intermediate Affordable Housing: defines intermediate affordable housing as housing at prices and rents above those of social rent, but below market price or rents, and which meet the criteria set out above. These can include shared equity products (e.g. HomeBuy), other low cost homes for sale and intermediate rent.

L

Land Value: the actual amount paid for land taking into account the competition for sites. It should be distinguished from Residual Value (RV) which is the figure that indicates how much should be paid for a site.

M

Market Housing: residential units sold into the open market at full market price to owner occupiers, and in some instances, property investors. Usually financed through a mortgage or through cash purchase in less frequent cases.

P

Planning Obligation: a contribution, either in kind or in financial terms which is necessary to mitigate the impacts of the proposed development.

Affordable housing is a planning obligation as are, for example, education and open space contributions. (See Section 106)

Proportion or percentage of Affordable Housing: the proportion of the scheme given over to affordable housing. This can be expressed in terms of units, habitable rooms or floorspace

R

Residual Valuation: a key valuation approach to assessing how much should be paid for a site. The process relies on the deduction of development costs from development value. The difference is the resulting 'residue'

Residual Value (RV): the difference between Gross Development Value (GDV) and total scheme costs. Residual value provides an indication to the developer and/or land owner of what should be paid for a site. Should not be confused with land value (see above)

Registered Provider: a housing association or a not for profit company which provides affordable housing

S

Scheme: development proposed to be built. Can include a range of uses – housing, commercial or community, etc

Section 106 (of the Town and Country Planning Act 1990): This is a legally binding agreement between the parties to a development; typically the developer, housing association, local authority and/or land owner. The agreement runs with the land and bids subsequent purchasers. (See Planning Obligation)

Shared Ownership (SO): Also known as a product as 'New Build HomeBuy'. From a developer or land owner's perspective SO provides two revenue streams: to the housing association as a fixed purchase sum on part of the value of the unit; and on the rental stream. Rent charged on the rental element is normally lower than the prevailing interest rate, making this product more affordable than home ownership.

Social Rented Housing (SR): Rented housing owned and managed by local authorities and registered social landlords, for which guideline target rents are SET through the national rent regime.

Sub Markets: Areas defined in the Viability Study by reference to house price differentials. Areas defined by reference to postcode sectors, or amalgams thereof.

Supplementary Planning Guidance (SPG): planning documents that provide specific policy guidance on e.g. affordable housing, open space, planning obligations generally. These documents expand policies typically set out in Local Development Plans.

T

Target: Affordable housing target. Sets the requirement for the affordable housing contribution. If say 30% on a scheme of 100 units, 30 must be affordable (if viable).

Tenure Mix: development schemes usually comprise a range of housing tenures. These are described above including market and affordable housing.

Threshold: the trigger point which activates an affordable housing contribution. If a threshold is set at say 15 units, then no contribution is payable with a scheme of 14, but is payable with a scheme of 15. The appropriate affordable housing target is then applied at the 15 units, e.g. 20%, or 30%.

V

Viability: financial variable that determines whether a scheme progresses or not. For a scheme to be viable, there must be a reasonable developer and land owner return. Scale of land owner return depends on the planning process itself.