

Affordable Housing Viability Study

Study of Zero CIL Option

For Colchester Borough Council

By Levvel Ltd

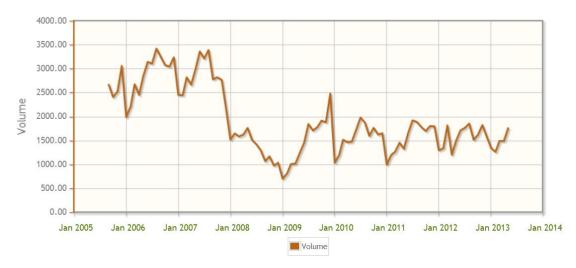
September 2013

Contents

Conte	ents	1
1.0	Introduction	3
2.0	Adjustments relating to Zero CIL Assessments	4
3.0	Testing	6
4.0	Conclusions	11

1.0 Introduction

- 1.1 Levvel Ltd was appointed in 2012 to assist Colchester Borough Council in investigating and setting an appropriate level of CIL. This issue is investigated in some detail in our earlier paper on this subject.
- 1.2 Following the conclusion of that work, The Council has opted to delay the setting of a CIL and to continue to make use of S106 in order to deliver the infrastructure necessary to support new development.
- 1.3 The decision to delay the adoption of a CIL was not taken lightly but it recognised a number of points. First of all, the context of the housing market. Five years on from the peak in house prices observed in 2008 and the housing market remains fragile. Although prices have stabilised (albeit at a level that remains unaffordable to many), the volume of transactions remains low compared to the pre-peak market.
- 1.4 According to the Land Registry, in the period 2005-8 monthly housing sales (new build and second hand) frequently exceeded 3,000/month and averaged around 2,700. In 2013, the average is barely above 1,500. See chart below.



Sales volume

- 1.5 Low overall transaction volumes feed into slower sales for new development and the key housing challenge for Colchester remains the maintenance of an adequate supply of housing.
- 1.6 Into this context, there are two further significant "headwinds". First, unlike S106, CIL is difficult to modify in order to take account of overall scheme viability. The intention is that it should be set at a level which delivers sufficient infrastructure to meet local needs but not so high as to preclude the opportunity to secure a suitable quantity of affordable housing or – worse, to render development completely unviable. This potential to render development unviable is unique to CIL. Affordable housing cannot do so because, if necessary the liability can be reduced to zero on a site by site basis.

- 1.7 At the same time, the Government's Zero Carbon agenda is likely to increase construction cost dramatically, on a steep escalator to 2016. Whilst the objective of zero carbon development is unquestionably a worthwhile one, the potential to increase build cost and reduce coverage at a time when the market is flat and there is no evidence of a significant value premium for energy efficient homes, there is a real risk of further downward pressure on housing output.
- 1.8 Such risks are scarcely unique to Colchester but they cannot be discounted.
- 1.9 For this reason, the initial modelling work carried out by Levvel was deliberately conservative values were set at present day levels, build costs generally estimated on the basis of those seen across the county as a whole (which are generally slightly higher than in Colchester itself) and the cost of the zero carbon agenda was factored in at the costs currently estimated by Davis Langdon. However, the latter point in particular had the effect of casting the impact of zero carbon forwards. This was because a scheme of, say 50 units, coming forward for planning permission in mid- 2014 might well not commence construction until late 2015 and many of the homes would therefore face the full cost of zero carbon.
- 1.10 The findings of our report were that, on many sites not simply those which were unusually beset by particular costs – the delivery of 20% affordable housing seemed to be, even in the early years of the plan, a considerable challenge. On many sites CIL and the other costs completely crowded out any affordable housing delivery.
- 1.11 In view of our own conservative assumptions Levvel recommended that the residential CIL charge should be set between £60/m² and £80/m² and potentially at zero in the case of flatted accommodation. However, we recognise that a low CIL could be portrayed as the worst of both worlds, being too low to deliver necessary infrastructure on the best sites but still high enough to create difficulties on marginal ones.
- 1.12 The Council has therefore taken the decision not to go forward with a CIL charge at this time, to continue to apply S106 charges flexibly and, moreover, to reduce its previous, ambitious target of 35% affordable housing to a more modest target of 20% affordable housing. This reduced level of affordable housing better reflects typical outcomes in the Borough and reflects the minimum level that the Council considers acceptable. The intention is that a clear target, which is demonstrably deliverable on the majority of developments will provide a positive signal to developers who will then have the certainty to bring land forward without delay. This would reduce the uncertainty which is so often a feature of affordable housing viability negotiations.
- 1.13 However, the fact remained that the viability appraisals conducted as part of Levvel's CIL study had not tested the effect of setting CIL at zero and it was therefore necessary to conduct some additional testing in order to investigate this proposed policy.
- 1.14 In doing so, we have made several changes.

2.0 Adjustments relating to Zero CIL Assessments

2.1 If CIL is to be set at zero (or a nominal sum) and infrastructure is to continue to be delivered by S106 then it is necessary not only to reduce the CIL but also to

increase the assumed payments for S106 from the levels assumed in the CIL study.

- 2.2 In that paper, we assumed a minimum of $\pounds 60/m2$ in CIL as well as a "residual" S106 payment of $\pounds 2,000/unit$ for those elements of site specific mitigation that could not be met through the tariff payment. Since CIL is charged only on market housing rather than affordable housing, it can be difficult to convert this assessment into a /unit figure however, as a guide for a development including 20% affordable housing and where the average unit size was $85m^2$, this would be equivalent to around $\pounds 6,000$ per home (of all tenures).
- 2.3 For comparison, the S106 contributions we have assessed are as follows:

2.4 **Community Facilities**

Studios & 1 bedroom dwelling £369

2 bedroom dwelling £739.86

3 bedroom dwelling £1,109.79

4 bedroom dwelling £1,479.72

2.5 **Open Space, Leisure and Recreational Facilities**

1 bedroom dwelling £1,452.33

2 bedroom dwelling £2,904.66

3 bedroom dwelling £5,083.16

4 bedroom dwelling £7,261.65

- 2.6 For a blended mix of units therefore, the difference in the total level is not huge.
- 2.7 However, as noted above, we have also made two further changes:
- 2.8 First, we have removed all the costs associated with Zero Carbon. This has a large effect reducing the construction cost of any development taking place post 2016 by 19%. However, we recognise that the Government's intention was to introduce these changes gradually, incorporating efficiency improvements equivalent to the Code for Sustainable Homes into the Building Regulations. The change equivalent to Code Level 4 was originally to have come into force this year. However, the current position seems to be that it will be introduced in 2014. We have therefore retained this cost increase in our modelling. Because of the uncertainty, we have adopted the approach suggested in Viability Testing Local Plans which is to work on the basis of current costs and values for the first five years.
- 2.9 The second significant change we have made was to the baseline build cost assumption. In our earlier study, we understood from developers that, in the new build market, values were more tightly related to specification than to broad location and we therefore needed to reflect a range of costs. To this end, we assumed that the range of costs would be defined by the difference between the

mean cost reported by BCIS for Essex (which were high at $\pm 848/m^2$) and the median costs for Colchester (which were considerably lower at $\pm 787/m^2$).

- 2.10 Since we were trying to be conservative it made sense that we should use the higher cost as our baseline and the lower end as a "sensitivity" test relating to lower value and hence lower specification units.
- 2.11 However, in the present study, we are interested not in the margin at which CIL renders development unviable but in our best guess as to actual market practice. In this sense, the BCIS estimate of costs for Colchester itself must surely provide a more representative guide to the cost of development in Colchester itself.
- 2.12 As noted above, we have uplifted this base cost in order to allow for next year's tweak to the building regulations and we have also allowed 15% over and above our base cost in order to allow for external works, site roads etc.
- 2.13 All other parameters are as per our earlier study.

3.0 Testing

- 3.1 This study is a limited one and we do not propose to cover anything like the range of parameters covered by the initial work.
- 3.2 We therefore exclude from consideration the larger sites, which were found to be deliverable not only by our own study but also by previous work undertaken by others. On the other hand, we have consistently found that smaller schemes generate higher land values (per hectare). This does not necessarily translate into better viability because smaller sites often have somewhat higher land values. We have therefore limited our consideration to schemes of houses between 5 and 50 units.
- 3.3 We have also focussed on the middle of the value range using the same value data as in the previous study. This means that we have used what we call Value Point 2 with the overall average value equivalent to $\pounds 2,204/m^2$ ($\pounds 205psf$)
- 3.4 The first thing to note is that the effect of a £20/m2 increase in CIL was found by the previous study to be in the order of £30,000/ha. This pattern was continued in the Zero CIL study. When CIL was reduced to zero, the land value of a 35dph site with 20% affordable housing rose by something in the order of £90,000/ha. This is a substantial improvement which will have an effect on viability but it is an unrealistic one as it takes no account of the off-setting increase in S106 assumed.
- 3.5 The first appraisals we undertook were a simple reduction of the CIL to zero leaving the S106 payments at their residual level of £2,000. Unsurprisingly, this assumption produced results that showed viability considerations comfortably met even on land with whose current use value is relatively high.

Figu	ire 1:	50 U	nits 2	0%	arror	able	nous	Value Area: 2										
	Val	ue Area: 2			Val	ue Area: 2			Val	ue Area: 2			Va	ue Area: 2				
	50 dwellin	gs (50 Houses)		50 dwellin	gs (50 Houses)		50 dwellin	gs (50 Houses)		50 dwellir	gs (50 Houses)			
	1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.	 Hectare site @(35 DPH) dph. 						
	Gross	s profit: 20%			Gross	s profit: 20%			Gross	s profit: 20%		Gross profit: 20%						
	Absorpti	on: 60 units p.a.			Absorptio	on: 60 units p.a.			Absorptio	on: 60 units p.a.		Absorption: 60 units p.a.						
	Plannin	g gain at 100%			Planning	g gain at 100%			Planning	g gain at 100%			Plannin	g gain at 100%				
Subsidy	at £0 per unit (r	rent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	rent) & £0 per un	t (intermediate)	Subsidy	at £0 per unit (rent) & £0 per un	it (intermediate)			
	CIL	at £0 per m²			CIL	at £0 per m²			CIL	at £0 per m²			CIL	at£0 perm²				
		rdable Housing				rdable Housing				rdable Housing				rdable Housing				
0/80/20 (ordable Rent/Inte		0/80/20		ordable Rent/Inte		0/80/20 (ordable Rent/Inte		0/80/20 (ordable Rent/Inte				
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1					
	Land val	ue at £400,000 p	er hectare		Land val	ue at £600,000 p	er hectare		Land val	ue at £750,000 p	er hectare		Land val	ue at £1,000,000 p	er hectare			
] [DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 Г	DOWN	MIDDLE	UP	1 [DOWN	MIDDLE	UP			
2012	~ ~	**	**	2012	~ ~	**	••	2012	* *	\leftrightarrow	**	2012	* *		**			
2013	* *	**	**	2013	* *	**	••	2013	* *	\odot	**	2013	* *	• •	**			
2014	* *	**	**	2014	* *	**	••	2014		 	**	2014	* *	~ ~	**			
2015	* *	**	**	2015	* *	**	**	2015	**	\rightarrow	**	2015	* *	~ ~	**			
2016	< +	**	**	2016	* *	**	••	2016		 	**	2016	* *	~ ~	**			
2017	(-	**	**	2017	* *	**	**	2017	**	\rightarrow	**	2017	* *	\rightarrow	**			
2018	\leftrightarrow	**	**	2018	* *	**	**	2018	**	**	**	2018	* *	 	**			
2019	**	**	**	2019	 	**	••	2019	**	**	**	2019	* *	*	**			
2020	**	**	**	2020	\leftrightarrow	**	**	2020	**	**	**	2020	* *	_	**			
2021	**	**	**	2021	\leftrightarrow	••	••	2021	* *	••	**	2021	• •	*	**			
2022	**	**	**	2022	 	**	**	2022	\leftrightarrow	**	**	2022	* *	→	**			
2023	**	**	**	2023	**	**	••	2023	Θ	••	**	2023	• •	*	**			
2024	**	**	**	2024	**	**	**	2024	\leftrightarrow	**	**	2024	* *	*	**			
2025	••	**	**	2025	\leftrightarrow	**	**	2025	••	**	**	2025	••	* *	**			
2026	**	**	**	2026	\leftrightarrow	**	**	2026	* *	**	**	2026	* *	* *	**			
2027	\odot	**	**	2027	••	**	**	2027	••	*	**	2027	••	(-	**			
2028 plus	\leftrightarrow	**	**	2028 plus	* *	**	**	2028 plus	* *	\rightarrow	**	2028 plus	* *	**	\rightarrow			

Figure 1: 50 Units 20% affordable housing – Zero CIL Residual S106

- 3.6 In Figure 1, the delivery of 20% affordable housing in conjunction with $\pounds 2,000/\text{unit}$ in S106 payments is achievable in all the years considered by the study on land with a value of $\pounds 400,000/\text{ha}$ or $\pounds 600,000/\text{ha}$.
- 3.7 Development in the first year of the study would generate a land value of \pounds 722k/ha and, since this is within 10% of \pounds 750k/ha, we consider it marginally viable.
- 3.8 Since smaller developments produce slightly higher land values in our study, the results achieved for 15 unit and 5 unit sites are still more viable. In the case of a 15 unit scheme, the apparent improvement is slight and takes place in the later years of the plan.

							nousi				Volue Arres 2						
		ue Area: 2				ue Area: 2		Value Area: 2 15 dwellings (15 Houses)					Value Area: 2				
	15 dwellin	gs (15 Houses)		15 dwellin	gs (15 Houses)		15 dwellin	gs (15 Houses)		15 dwellin	gs (15 Houses)		
	0.57 Hectare s	ite @(35 DPH)	dph.		0.57 Hectare	site @(35 DPH)	dph.		0.57 Hectare	site @(35 DPH)	dph.		0.57 Hectare	site @(35 DPH)	dph.		
	Gross	profit: 20%			Gross	s profit: 20%			Gross	s profit: 20%		Gross profit: 20%					
	Absorptic	n : 60 units p.a.			Absorptio	on: 60 units p.a.			Absorptio	on : 60 units p.a.		Absorption: 60 units p.a.					
	Planning	gain at 100%			Planning	g gain at 100%			Planning	g gain at 100%			Planning	gain at 100%			
Subsidy	at £0 per unit (n	ent) & £0 per uni	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)		
	CIL at £0 per m ² CIL at £0 per m ²								CIL	at £0 per m²			CIL	at £0 per m²			
	20% Affor	dable Housing	1		20% Affo	rdable Housing	1		20% Affo	rdable Housing	1		20% Affo	rdable Housing	1		
0/80/20 (Social Rent/Affe	ordable Rent/Inte	ermediate Sale)	0/80/20	(Social Rent/Aff	ordable Rent/Inte	ermediate Sale)	0/80/20 (Social Rent/Aff	ordable Rent/Inte	ermediate Sale)	0/80/20 (Social Rent/Aff	ordable Rent/Inte	rmediate Sale)		
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1				
	Land value	ue at £400,000 pr	er hectare		Land val	ue at £600,000 p	er hectare		Land val	ue at £750,000 p	er hectare		Land valu	ie at £1,000,000 p	er hectare		
ΙΓ	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 [DOWN	MIDDLE	UP	[DOWN	MIDDLE	UP		
2012	< •	**	**	2012	~ ~	**	••	2012	* *	\rightarrow	**	2012	* *	~ ~	**		
2013	< v	**	**	2013	~ ~	**	**	2013	* *	\rightarrow	**	2013	. .	• •	**		
2014	< •	••	**	2014		**	••	2014	* *	\rightarrow	**	2014	~ ~		**		
2015	< •	••	**	2015		**	••	2015	* *	\rightarrow	**	2015	~ ~		**		
2016	< -	••	**	2016	- -	**		2016	* *	 ••• 	**	2016		\leftrightarrow	**		
2017	\leftrightarrow	**	**	2017	- -	**		2017	* *	**	**	2017		\leftrightarrow	**		
2018	**	**	**	2018	~ ~	**	**	2018	* *	**	**	2018		* •	**		
2019	**	**	**	2019	 	**	**	2019	••	**	**	2019	. .	*	**		
2020	**	**	**	2020	 	**	••	2020	••	**	**	2020	• •	>	**		
2021	**	**	**	2021	\leftrightarrow	**	**	2021	\leftrightarrow	**	**	2021	• •	*)	**		
2022	**	**	**	2022	\rightarrow	**	**	2022	\leftrightarrow	**	**	2022	• •	*	**		
2023	**	**	**	2023	**	**	**	2023	\leftrightarrow	**	**	2023	• •	**	**		
2024	**	**	**	2024	**	**	**	2024	*	**	**	2024	< •	**	**		
2025	**	**	**	2025	**	**	**	2025	*	**	**	2025	< •	*	**		
2026	**	**	**	2026	\leftrightarrow	**	**	2026	* *	**	**	2026	* *	*	**		
2027	**	**	**	2027	\leftrightarrow	**	**	2027	* *	**	**	2027	* *	*)	**		
2028 plus	Θ	**	**	2028 plus		**	**	2028 plus	- -	*)	**	2028 plus		<	**		

Figure 2: 15 Units 20% affordable housing – Zero CIL Residual S106

3.9 The subtle change in the pattern of years in which development is viable, belies a quite substantial increase in per hectare land value – to £790k/ha in year one.

iigu	Value Area: 2 Value Area: 2								Zeiu		esiuu						
								Value Area: 2 5 dwellings (5 Houses)						ue Area: 2			
	5 dwellin	gs (5 Houses)			5 dwellin	gs (5 Houses)			5 dwellin	gs (5 Houses)			5 dwellin	gs (5 Houses)			
	0.14 Hectare	site @(35 DPH)	dph.		0.14 Hectare s	site @(35 DPH)	dph.		0.14 Hectare	site @(35 DPH)	dph.	0.14 Hectare site @(35 DPH) dph.					
	Gross	s profit: 20%			Gross	s profit: 20%			Gross	s profit: 20%		Gross profit: 20%					
	Absorptio	on: 60 units p.a.			Absorptio	on : 60 units p.a.			Absorptio	on: 60 units p.a.			Absorpti	on: 60 units p.a.			
	Planning	g gain at 100%			Planning	gain at 100%			Planning	g gain at 100%			Plannin	g gain at 100%			
Subsidy	bsidy at £0 per unit (rent) & £0 per unit (intermediate) Subsidy at £0 per unit (rent) & £0 per unit (intermediate)								at £0 per unit (r	rent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)		
	CIL	at£0 perm²			CIL	at £0 per m²			CIL	at£0 perm²			CIL	at£0 perm²			
	20% Affordable Housing 20% Affordable Housing									rdable Housing	1			rdable Housing			
0/80/20	(Social Rent/Aff	ordable Rent/Inte	mediate Sale)	0/80/20	(Social Rent/Affi	ordable Rent/Inte	ermediate Sale)	0/80/20	Social Rent/Aff	ordable Rent/Inte	mediate Sale)	0/80/20 (ordable Rent/Inte			
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1				SHEET 1				
	Land val	ue at £400,000 p	er hectare		Land val	ue at £600,000 pe	er hectare		Land val	ue at £750,000 p	er hectare		Land value	ie at £1,000,000 p	er hectare		
	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 ſ	DOWN	MIDDLE	UP		
2012	٠.	**	**	2012	~ -	**	**	2012	* *	**	**	2012	• •	\leftrightarrow	**		
2013	<u>د ب</u>	**	••	2013	~ ~	**	**	2013	* *	**	**	2013	* *	\rightarrow	••		
2014	< -	**	••	2014		**		2014	* *	••	**	2014	* *	\leftrightarrow	••		
2015	< - -	**	••	2015		**	**	2015	~ ~	••	**	2015	* *	 	••		
2016	< -	**	**	2016		**	**	2016	~ ~	**	**	2016	• •	 	**		
2017	*	**	• •	2017		**	**	2017	* *	**	**	2017	**	\rightarrow	**		
2018	4	**	••	2018	\leftrightarrow	**	**	2018	* *	**	**	2018	* *	**	••		
2019	4	**	••	2019	 	**	**	2019	. .	**	**	2019	* *	**	••		
2020	**	**	**	2020	 	**	**	2020	\leftrightarrow	**	**	2020	• •	**	**		
2021	**	**	••	2021	**	**	**	2021	\leftrightarrow	••	**	2021	••	**	••		
2022	**	**	••	2022	••	**	**	2022	\leftrightarrow	••	**	2022	**	**	••		
2023	**	**	••	2023	••	**	••	2023	••	••	••	2023	\leftrightarrow	**	••		
2024	**	**	**	2024	**	**	**	2024 2025	**	**	**	2024	\leftrightarrow	**	••		
2025	**	**	**	2025					**	**	**	2025	Θ	**	••		
2026	**	**	••	2026					\leftrightarrow	••	**	2026	••	**	••		
2027	**	**	••	2027	\leftrightarrow	**	••	2027	\leftrightarrow		**	2027	* *	**	••		
2028 plus	**	**	**	2028 plus	\odot	**	**	2028 plus	* *	**	**	2028 plus	••	▲)	**		

Figure 3: 5 Units 20% affordable housing – Zero CIL Residual S106

- 3.10 The increase in viability from 15 units to 5 units is more noticeable than between 50 and 15 units. This is borne out in the Year One land value which is just under $\pm 1m/ha$.
- 3.11 However, these levels of planning gain are probably unrealistically low. The point to take from it is that, if the Council wishes to prioritise the delivery of affordable housing, a reduction in the level of S106 sought should be sufficient to render development deliverable in all years of the plan. When more typical levels of S106 are applied, understandably, the viability is compromised a little.

								Value Area: 2					Value Area: 2					
		ue Area: 2				ue Area: 2						Value Area: 2 50 dwellings (50 Houses)						
		gs (50 Houses				gs (50 Houses)			gs (50 Houses								
		ite @(35 DPH)	dph.			ite @(35 DPH)	dph.			ite @(35 DPH)	dph.			ite @(35 DPH)	dph.			
		s profit: 20%				s profit: 20%				s profit: 20%				s profit: 20%				
		on:60 units p.a.				on:60 units p.a.				on: 60 units p.a.		Absorption: 60 units p.a.						
	Planning	gain at 100%			Planning	gain at 100%			Planning	g gain at 100%			Planning	g gain at 100%				
Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)			
	CIL	at £0 per m²	er m ² CIL at £0 per m ²							at£0 perm²			CIL	at£0 perm²				
	20% Affordable Housing 20% Affordable Housing								20% Affo	rdable Housing	1		20% Affo	rdable Housing				
0/80/20 (20% And dable Rodsing							0/80/20 (Social Rent/Aff	ordable Rent/Inte	rmediate Sale)	0/80/20 (Social Rent/Aff	ordable Rent/Inte	rmediate Sale)			
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1					
	Land val	ue at £400,000 pe	er hectare		Land val	ue at £600,000 pe	er hectare		Land val	ue at £750,000 p	er hectare		Land valu	ie at £1,000,000 p	er hectare			
	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 ſ	DOWN	MIDDLE	UP	1 [DOWN	MIDDLE	UP			
2012	* *	**	**	2012	* *	 	••	2012	* *	 	••	2012	* *	* *	\leftrightarrow			
2013	* *	**	**	2013	* *	< >	**	2013	* *	 	**	2013	* *	~ ~	\leftrightarrow			
2014	* *	**	**	2014	~ ~	\leftrightarrow	**	2014	* *	()	**	2014	* *	• •	\rightarrow			
2015	* *	**	**	2015	* *	\leftrightarrow	**	2015	* *	\rightarrow	••	2015	* *	••	\odot			
2016	* *	**	••	2016		**	**	2016	* *	\rightarrow	••	2016	* *		\odot			
2017	* *	**		2017		**	**	2017	* *	 () 		2017	* *		••			
2018	(-	**	**	2018	* *	**	**	2018	* *	\leftrightarrow	**	2018	* *	~ ~	**			
2019	\leftrightarrow	**	**	2019	* *	**	**	2019	* *	\rightarrow	**	2019	• •	\leftrightarrow	**			
2020	**	**	**	2020	* *	**	**	2020	* *	**	**	2020	* *	\rightarrow	**			
2021	**	**	**	2021	\rightarrow	**	**	2021	* *	**	**	2021	* *	* *	**			
2022	**	**	**	2022	\leftrightarrow	**	**	2022	* *	**	**	2022	* *	*	**			
2023	**	**	**	2023	\leftrightarrow	**	**	2023	• •	**	**	2023	* *	*)	**			
2024	**	**	**	2024	\leftrightarrow	**	**	2024	\leftrightarrow	**	**	2024	* *	*	**			
2025	**	**	**	2025	\leftrightarrow	**	**	2025	• •	**	••	2025	* *	*)	**			
2026	\leftrightarrow	**	**	2026	* *	**	**	2026	• •	* *	••	2026	* *	< •	••			
2027	\leftrightarrow	**	**	2027	* *	**	**	2027	* *	\leftrightarrow	••	2027	**		\rightarrow			
2028 plus	**	**	**	2028 plus	~ ~	\leftrightarrow	**	2028 plus	* *	 	••	2028 plus	* *		\rightarrow			

- 3.12 With planning gain increased back to levels typical in Colchester, the Year one land value falls to $\pounds 630$ k/ha. Development should still go ahead on land with a current use value in the order of $\pounds 600$ k/ha. This value is higher than the majority of alternative land values for fairly extensive sites of this type and we would consider this to constitute viable development.
- 3.13 Once again, the land values obtained for developments with 15 units and 5 units are, respectively slightly and considerably better.

Figu	ne s.	12 0	mus z	U 70	anoi	uable	nous	Value Area: 2										
	Val	ue Area: 2			Val	ue Area: 2			Val	ue Area: 2		Value Area: 2 15 dwellings (15 Houses)						
		gs (15 Houses)			gs (15 Houses)			gs (15 Houses								
	0.57 Hectare	site @(35 DPH)	dph.		0.57 Hectare :	site @(35 DPH)	dph.		0.57 Hectare	site @(35 DPH)	dph.		0.57 Hectare	site @(35 DPH)	dph.			
		s profit: 20%			Gross	s profit: 20%			Gross	s profit: 20%		Gross profit: 20%						
	Absorpti	on: 60 units p.a.			Absorptio	on: 60 units p.a.			Absorptio	on: 60 units p.a.		Absorption: 60 units p.a.						
	Plannin	g gain at 100%			Planning	g gain at 100%			Planning	g gain at 100%			Plannin	g gain at 100%				
Subsidy	at £0 per unit (r	rent) & £0 per uni	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	rent) & £0 per un	it (intermediate)			
	CIL at £0 per m ² CIL at £0 per m ²								CIL	at £0 per m²			CIL	at £0 per m²				
	20% Affo	rdable Housing	1		20% Affo	rdable Housing	1		20% Affo	rdable Housing			20% Affo	rdable Housing				
0/80/20	Social Rent/Aff	ordable Rent/Inte	ermediate Sale)	0/80/20 (Social Rent/Aff	ordable Rent/Inte	, ermediate Sale)	0/80/20	Social Rent/Aff	ordable Rent/Inte	, rmediate Sale)	0/80/20 (Social Rent/Aff	ordable Rent/Inte	mediate Sale)			
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1					
	Land val	ue at £400,000 pe	er hectare		Land val	ue at £600,000 p	er hectare		Land val	ue at £750,000 pe	er hectare		Land value	ue at £1,000,000 p	er hectare			
	DOVN	MIDDLE	UP	1 í	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 í	DOWN	MIDDLE	UP			
2012	• •	**	**	2012	* *	**	**	2012	* *	\rightarrow	**	2012	* *	• •	**			
2013	~ ~	**	**	2013	. .	**	**	2013	~ ~	 	**	2013	~ ~	* *	**			
2014	• •	**	**	2014	* *	**	**	2014	* *	\rightarrow	**	2014	* *	• •	**			
2015	~ ~	**	**	2015	. .	**	**	2015	~ ~	 	**	2015	* *		**			
2016	* *	**	**	2016	* *	**	**	2016	* *	\rightarrow	**	2016	* *	• •	**			
2017		**	**	2017	~ ~	**	**	2017	~ ~	 	**	2017	* *		**			
2018	< -	**	**	2018	. .	**	**	2018		\rightarrow	**	2018	* *	\rightarrow	**			
2019	\leftrightarrow	**	**	2019	~ ~	**	**	2019	~ ~	**	**	2019	* *	 () 	**			
2020	**	**	**	2020	* *	**	**	2020		**	**	2020	* *	* >	**			
2021	**	**	**	2021	\leftrightarrow	**	**	2021	~ ~	**	**	2021	* *	* >	**			
2022	••	**	**	2022	\leftrightarrow	**	**	2022	* *	**	**	2022	* *	~ >	**			
2023	**	**	**	2023	\leftrightarrow	**	**	2023	\leftrightarrow	**	**	2023	* *	*	**			
2024	**	**	**	2024	**	**	**	2024	\leftrightarrow	**	**	2024	* *	*	**			
2025	**	**	**	2025	\leftrightarrow	**	**	2025	\leftrightarrow	**	**	2025	* *	*	**			
2026	**	**	**	2026	\leftrightarrow	**	**	2026	* *	**	**	2026	* *	*	**			
2027	\odot	**	**	2027	• •	**	**	2027	* *	*)	**	2027	• •		**			
2028 plus	\leftrightarrow	**	**	2028 plus	* *	**	**	2028 plus	• •	 	**	2028 plus	* *	* *	\leftrightarrow			

Figure 5: 15 Units 20% affordable housing – Zero CIL Existing S106

Figure 6: 5 Units 20% affordable housing – Zero CIL Existing S106

		0.011	100 20			abici	10451		2010			Ing S100					
	Val	ue Area: 2			Val	ue Area: 2			Val	ue Area: 2			Val	ue Area: 2			
		gs (5 Houses)				gs (5 Houses)				gs (5 Houses)				gs (5 Houses)			
	0.14 Hectare s	site @(35 DPH)	dph.		0.14 Hectare s	site @(35 DPH)	dph.		0.14 Hectare	site @(35 DPH)	dph.		0.14 Hectare	site @(35 DPH)	dph.		
	Gross	s profit: 20%			Gross	s profit: 20%		Gross profit: 20%					Gross profit: 20%				
	Absorptio	on: 60 units p.a.			Absorptio	on:60 units p.a.			Absorptio	on: 60 units p.a.			Absorpti	on:60 units p.a.			
	Planning	gain at 100%			Planning	g gain at 100%			Planning	g gain at 100%			Plannin	g gain at 100%			
Subsidy	Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Subsidy at £0 per unit (rent) & £0 per unit (intermediate)								at £0 per unit (r	rent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	rent) & £0 per uni	t (intermediate)		
	CIL	at £0 per m²			CIL	at £0 per m²			CIL	at£0 perm²			CIL	at£0 perm²			
		rdable Housing				rdable Housing				rdable Housing	1			rdable Housing			
0/80/20 (Social Rent/Aff	ordable Rent/Inte	ermediate Sale)	0/80/20		ordable Rent/Inte		0/80/20 (ordable Rent/Inte		0/80/20 (Social Rent/Aff	ordable Rent/Inte	rmediate Sale)		
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1				
	Land val	ue at £400,000 p	er hectare		Land val	ue at £600,000 pe	er hectare		Land val	ue at £750,000 p	er hectare		Land value	ue at £1,000,000 p	er hectare		
]	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 1	DOWN	MIDDLE	UP	1 r	DOWN	MIDDLE	UP		
2012	**	••	**	2012	* *	**	**	2012	* *	**	**	2012	* *	\leftrightarrow	**		
2013		**	**	2013		**	**	2013	. .	**	**	2013	* *	 	**		
2014	• •	**	**	2014	~ ~	**	**	2014	* *	**	**	2014	• •	\rightarrow	**		
2015		**	••	2015	~ ~	**	**	2015 🕶 🔺				2015	* *	\rightarrow	**		
2016	* *	**	**	2016	* *	**	**	2016	. .	**	**	2016	* *	\rightarrow	**		
2017	* *	••	••	2017		**	**	2017	* *	**	**	2017	* *	\rightarrow	**		
2018	< •	**	**	2018		**	**	2018		**	**	2018	* *	\rightarrow	**		
2019	*	**	**	2019	* *	**	**	2019	* *	**	**	2019	* *	\rightarrow	**		
2020	* *	**	**	2020	 	**	**	2020		**	**	2020	• •	**	**		
2021	**	••	**	2021	\leftrightarrow	**	**	2021	 	**	**	2021	* *	**	**		
2022	**	**	**	2022	**	**	**	2022	\leftrightarrow	**	**	2022	• •	**	**		
2023	**	**	**	2023	**	**	**	2023	\odot	**	**	2023	* *	**	**		
2024	**	**	**	2024	**	**	**	2024 2025	\leftrightarrow	**	**	2024	\leftrightarrow	**	**		
2025	••	••	••	2025					\odot	**	**	2025	* *	**	**		
2026	**	**	**	2026					\leftrightarrow	**	**	2026	* *	**	**		
2027	**	**	••	2027	Θ	**	**	2027		**	**	2027	* •	* *	**		
2028 plus	\leftrightarrow	**	**	2028 plus	~ ~	**	**	2028 plus	* *	**	**	2028 plus	* *	\rightarrow	**		

3.14 On the most "typical" developments considered by the study then, the Council's current strategy of seeking 20% affordable housing in conjunction with infrastructure funded through S106 seems fully deliverable. We therefore assume that development which achieves the higher values consistent with Value Point 1

will be similarly deliverable. We recognise that the achievement of higher values may depend on a higher specification but, we take the view that, provided the increased value off-sets the higher cost then viability should be either the same or slightly improved.

- 3.15 In Value Point 1, the average values were as much as £200/m2 higher than in Value Point 2, whereas the higher build costs we assumed were only £61/m2 higher. Our focus therefore turns to the impact on lower value development consistent with Value Point 3 where the mix adjusted average value is £2,097/m2 (£195psf) whereas costs remain the same as before.
- 3.16 Figure 7 shows the results obtained on a 50 unit scheme in Value Point 3.

Figure 7: 50 Units VP3 20% affordable housing - Zero CIL Existing S106

								Value Area: 3										
		ue Area: 3				ue Area: 3						ue Area: 3						
	50 dwellin	gs (50 Houses)		50 dwellin	gs (50 Houses)		50 dwellin	gs (50 Houses)			gs (50 Houses				
	1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.			
		s profit: 20%				s profit: 20%				s profit: 20%		Gross profit: 20%						
	Absorpti	on : 60 units p.a.			Absorpti	on : 60 units p.a.			Absorptio	on: 60 units p.a.		Absorption: 60 units p.a.						
	Planning	g gain at 100%			Plannin	g gain at 100%			Planning	g gain at 100%			Plannin	g gain at 100%				
Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (n	rent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	rent) & £0 per un	it (intermediate)			
	CIL	at£0 perm²			CIL	at£0 perm²			CIL	at£0 perm²			CIL	at £0 per m²				
	20% Affo	rdable Housing			20% Affo	rdable Housing	1		20% Affor	rdable Housing			20% Affo	rdable Housing				
0/80/20 (Social Rent/Aff	ordable Rent/Inte	ermediate Sale)	0/80/20	(Social Rent/Aff	ordable Rent/Inte	mediate Sale)	0/80/20 (Social Rent/Affe	ordable Rent/Inte	ermediate Sale)	0/80/20 (Social Rent/Aff	ordable Rent/Inte	, rmediate Sale)			
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1					
	Land val	ue at £400,000 p	er hectare		Land val	ue at £600,000 p	er hectare		Land val	ue at £750,000 p	er hectare		Land value	ue at £1,000,000 p	er hectare			
	DOVN	MIDDLE	UP	DOWN MIDDLE UP					DOWN	MIDDLE	UP	1 [DOWN	MIDDLE	UP			
2012	* *	**	**	2012	* *	 	**	2012	* *	* *	**	2012	* *	* *	\leftrightarrow			
2013	* *	**	**	2013	~ ~	 	**	2013	* *	* *	**	2013	* *	* *	\leftrightarrow			
2014	* *	**	**	2014		+>	**	2014	~ ~		**	2014	* *	~ ~	¢			
2015	• •	**	**	2015		()	**	2015 🗸 🗸 🔺				2015		~ ~	¢			
2016	• •	**	**	2016		()	**	2016	~ ~	~ ~	**	2016	• •	~ ~	¢			
2017	• •	**	**	2017		()	**	2017	~ ~	~ ~	**	2017	••		¢			
2018	• •	**	••	2018		 	••	2018	* *	 	**	2018	• •	* *	\leftrightarrow			
2019	• •	••	••	2019		**	••	2019	• •	\leftrightarrow	**	2019	• •	* *	\leftrightarrow			
2020	• •	••	••	2020	••	**	••	2020	• •	\rightarrow	**	2020	••	• •	**			
2021	\leftrightarrow	••	••	2021	• •	**	••	2021	• •	\rightarrow		2021	••	**	**			
2022	\leftrightarrow		••	2022		**		2022	* *	**		2022	• •	- - >	**			
2023	**	••	••	2023	\leftrightarrow	**	••	2023	* *	**	**	2023	• •	~ >	**			
2024	**	••	••	2024	\leftrightarrow	**	••	2024	* *	**	**	2024	**	~ >	**			
2025	\leftrightarrow	••	••	2025	• •	**	••	2025 2026	* *	~ >	**	2025	* •	(-	**			
2026	\leftrightarrow	**	••	2026					* *	\leftrightarrow	**	2026	* •	• •	\leftrightarrow			
2027	* *	••	••	2027	• •	\leftrightarrow	••	2027	~ ~	• •	**	2027	* *	• •	\leftrightarrow			
2028 plus	* *	**	**	2028 plus	• •	\rightarrow	**	2028 plus	* *	• •	**	2028 plus	• •	• •	\leftrightarrow			

- 3.17 The Year One land value obtained is £500k/ha considerably below the £600k/ha benchmark – which is why our methodology considers it only marginally viable on land at this value. Even so, the value obtained is considerable and it would be for developers to demonstrate why any individual site could not be brought forward at this value.
- 3.18 However, at this point, the land value becomes very sensitive to the level of S106. A reduction in the non-affordable housing S106 burden brings the Year One land value up to £570k/ha. Alternatively, a reduction in the level of affordable housing to 10% increases the Year One Land value to fractionally over £600k/ha.

Figure 8: 50 Units VP3 10% afforda Value Area 3 Value Are								hou	sing ·	- Zerc								
	Value Area: 3 Value Area: 3 50 dwellings (50 Houses) 50 dwellings (50 Houses) 1.9 Hectare site (0/35 DPH) doh. 1.9 Hectare site (0/35 DPH) doh.								Val	ue Area: 3			Val	ue Area: 3				
)			gs (50 Houses				gs (50 Houses				
	1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.		1.9 Hectare s	ite @(35 DPH)	dph.			
	Gross	s profit: 20%			Gross	s profit: 20%			Gross	s profit: 20%		Gross profit: 20%						
	Absorpti	on:60 units p.a.			Absorptio	on:60 units p.a.			Absorpti	on : 60 units p.a.			Absorption: 60 units p.a.					
	Plannin	g gain at 100%			Planning	g gain at 100%			Plannin	g gain at 100%			Planning	g gain at 100%				
Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per uni	it (intermediate)	Subsidy	at £0 per unit (r	ent) & £0 per un	it (intermediate)			
	CIL	at£0 perm²			CIL	at£0 perm²			CIL	at£0 permª			CIL	at £0 per m²				
		10% Affordable Housing 10% Affordable Housing								rdable Housing				rdable Housing	.			
0/80/20 (ordable Rent/Inte		0/80/20		ordable Rent/Inte		0/80/20 (ordable Rent/Inte		0/80/20 (ordable Rent/Inte				
TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1			TEST 1	SHEET 1					
	Land val	ue at £400,000 p	er hectare		Land val	ue at £600,000 pe	er hectare		Land val	ue at £750,000 pe	er hectare		Land valu	ie at £1,000,000 p	er hectare			
Γ	DOWN	MIDDLE	UP	1	DOWN	MIDDLE	UP	1 [DOWN	MIDDLE	UP	1 [DOWN	MIDDLE	UP			
2012	* *	**	**	2012	~ ~	 	**	2012	* *	 	**	2012		~ ~	\rightarrow			
2013	• •	**	**	2013		\odot	**	2013	* *	\rightarrow	**	2013		• •	\rightarrow			
2014	* *	**	* *	2014	- -	\leftrightarrow	**	2014	* *	 	* *	2014	* *	* *	\rightarrow			
2015	* *	**	**	2015		\leftrightarrow	**	2015	* *		**	2015		* *	 (*) 			
2016	* *	**	**	2016	**	\leftrightarrow	**	2016	* *	 	**	2016	* *	* *	()			
2017	• •	**	**	2017	• •	••	**	2017	• •	 	**	2017	••	* *	**			
2018	**	**	••	2018	••	••	**	2018	• •	 	••	2018	* *	••	**			
2019	4 -	**	**	2019	••	**	**	2019	• •	 	**	2019	••	 	**			
2020	Θ	**	••	2020	••	••	**	2020	• •	••	••	2020	••	\odot	**			
2021	**	**	**	2021	\leftrightarrow		**	2021	* *	**		2021	**	~ >	**			
2022	**	**	**	2022	\leftrightarrow	••	**	2022	• •	**	••	2022	• •	*)	**			
2023	**	**		2023	\leftrightarrow		**	2023	* *			2023	**	~ >				
2024	**	**	**	2024	\leftrightarrow	**	**	2024	\leftrightarrow	**	**	2024	••	*)	**			
2025	••	**	**	2025	\leftrightarrow	**	**	2025	**	**	••	2025	••	* *	**			
2026	\leftrightarrow	**	**	2026	••	••	**	2026	• •	*)	**	2026	••	(•	**			
2027	\leftrightarrow	**	**	2027	••	**	**	2027	• •	Θ	**	2027	••	••	\rightarrow			
2028 plus	• •	**	**	2028 plus	~ ~	\leftrightarrow	**	2028 plus	**	 	**	2028 plus	**	* *	\rightarrow			

Figure 8: 50 Units VP3 10% affordable housing – Zero CIL Existing S106

- 3.19 In practice, it is likely that a combination of a slight reduction in the required affordable housing and other elements of the S106 would be negotiated in order to minimise the impact on each.
- 3.20 We therefore conclude that, even on sites in lower value areas, the proposed policy of seeking 20% affordable housing in combination looks completely deliverable and should reduce the number of schemes needing to submit viability appraisals taking a positive approach to the maintaining a supply of housing over the near term.

4.0 Conclusions

- 4.1 We conclude that the Council is taking steps to address the on-going fragility of the housing market and, in particular the challenge of overall supply.
- 4.2 The revised policy of reducing the affordable housing target gives developers certainty about the level of obligations they will face and sets those obligations at a level which should be generally deliverable on the vast majority of sites – not just greenfield land but also sites where the land is an existing profitable use.
- 4.3 At the same time, the decision to delay adoption of a CIL provides the necessary flexibility for those sites where the existing use value of the land is high or where contamination or other issues increase costs. The generally deliverable nature of the policy should allow the Council to focus more attention on those where these challenges arise.
- 4.4 This is not to say that the greatest challenge identified by our earlier work has been resolved. The costs associated with the move towards zero carbon are likely to be large (even if not quite as large as predicted in advance) and, as noted above, there is no reason to suppose that people will be willing to pay more for efficient homes. Indeed, the behavioural compromises necessary to meet the zero carbon standard may even prove unpopular (as has been the case with compact fluorescent light bulbs in some quarters).

- 4.5 The Council will certainly need to monitor the emerging information on the costs (spatial as well as financial) as the deadline of 2016 comes closer. However, the opportunity to do so is in place as the Council is already working on a complete overhaul of its Local Plan prior to 2016, which can reflect the implications of energy efficiency requirements..
- 4.6 There are, however, two important points to make here:
- 4.7 First, there is no reason these additional costs should fall, in the first instance, upon the Council's infrastructure and affordable housing requirements. The NPPF does not guarantee a minimum value to land owners – only a "competitive return". Since land values are determined residually, if mandatory costs increase, then the level of a "competitive return" may fall substantially. Obviously, where the site has a current use value – such as a tenanted office or occupied home then it will not be possible to reduce the land value below the current use value. However, the size of the premium over and above the current use value may be reduced. This issue will be particularly important in the case of greenfield land – where the existing use value is small and the uplift associated with the grant of residential planning permission comparatively large.
- 4.8 The second issue is that, in order to navigate the changes of the next few years, the Council would benefit from better market knowledge which can then be fed into later iterations of the evidence base.
- 4.9 We would therefore suggest that, at the same time as reducing its headline affordable housing requirement, the Council might wish to create a duty upon developers to report certain key development information as development goes ahead.
- 4.10 Such information could include;
 - The value achieved for each home sold (both the unit and per/m2 value net of incentives);
 - The level of affordable housing delivered;
 - The level of other S106 payments;
 - The amount paid for the site (gross and net) and the date;
 - An estimate of the value of the site in its prior use.
- 4.11 None of this information is sensitive (at least in retrospect) and much of it is already reported to the Land Registry. However, having the information in one place and in a consistent format will provide the Council with information which is not only essential to its own decision making but will assist it and its advisors in ensuring that future policies remain deliverable at all times.