

Birmingham City Council



Sutton Coldfield Green Belt sites, Phase 2 Report of Study

Peter Brett Associates June 2014

Planning & Development

16 Brewhouse Yard, Clerkenwell, London EC1V 4LJ T: +44 (0)207 566 8600 E: london@peterbrett.com



Document Control Sheet

Project Name:Sutton Coldfield Green Belt Sites, Phase 2Report Title:Report of StudyProject Ref:27704Doc Ref:001

	Name	Position	Signature	Date									
Prepared by:	Mike Bodkin	Senior Associate	HØP	June 2014									
Reviewed by:	Andrew Clarke	Senior Associate	A.Cm	June 2014									
Approved by:	Cristina Howick	Partner	Chorid	June 2014									
	For and on behalf of Peter Brett Associates LLP												

Revision	Date	Description	Prepared	Reviewed	Approved

Peter Brett Associates LLP disclaims any responsibility to the client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the contract with the client and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the client. This report has been prepared for the client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

© Peter Brett Associates LLP 2014

THIS REPORT IS FORMATTED FOR DOUBLE-SIDED PRINTING

CONTENTS

1	INTRODUCTION	1
	Background to the Commission	1
	The response by Savills	1
	This Commission	2
2	PAST DELIVERY ON GREEN BELT SITES IN SUTTON COLDFIELD	4
	Introduction: the Sutton Coldfield sites	4
	Delivery on the three Sutton Coldfield sites.	5
3	SUSTAINABLE URBAN EXTENSIONS: AN OVERVIEW OF DELIVERY	7
	Introduction	
	The nationwide evidence base	
	CLG & University of Glasgow Research	
	Hourigan Connolly Research1	
	Other potential SUEs known to us1	4
	Conclusions on the Sutton Coldfield sites examined in Section 21	4
4	CHANGES IN THE HOUSEBUILDING MARKET: A COMMENTARY1	5
	Dynamics post 20081	5
	A market-perspective commentary on the Savills' response to the previous study1	8
5	DELIVERY OF INFRASTRUCTURE ACROSS MORE THAN ONE OPTION AREA2	0
	Introduction2	0
	Scaling of infrastructure requirements2	0
	Implications of slower delivery across more than one development area2	2
6	CONCLUSIONS	4
	Ability of the market to provide across multiple option areas2	4
	Delivery of infrastructure across more than one option area2	4

APPENDICES

APPENDIX A DETAILED ANALYSIS OF DELIVERY AT SELECT SUSTAINABLE URBAN EXTENSIONS APPENDIX B SUSTAINABLE URBAN EXTENSIONS SUGGESTED FOR COMPARISON

1 INTRODUCTION

Background to the Commission

- 1.1 In 2012, Peter Brett Associates LLP, in conjunction with HDH Planning & Development, was commissioned to advise Birmingham City on the numbers of homes that the market might be willing and able to provide on development areas within Birmingham's Green Belt. The Final Report was published in January 2013¹.
- 1.2 The study looked at a number of potential development areas in the Birmingham Green Belt on the outskirts of Sutton Coldfield. Each prospective development area was broken down into potential outlets (each outlet representing one housebuilder) and the total possible number of units calculated for each outlet.
- 1.3 The study considered that 5-6 outlets within one of the options (development areas) would be deliverable but that "... release of a second site (option) irrespective of size would only increase overall delivery of housing by a relatively small amount, even if it were geographically distinct from the primary option site."²
- 1.4 The study concluded that under a weak market scenario 20 year output might range from 3,135 to 3,779 total units; under a stronger market scenario the output might be from 3,135 to 4,985 total units.

The response by Savills

- 1.5 On behalf of Richborough Estates and Taylor Wimpey, Savills produced a response³ to our earlier work. In it, Savills argued that the size of the Green Belt arc in the Sutton Coldfield area, ie the areas covered by the Options we considered, was so large and the housing market so suited to the delivery by volume housing developers, that up to three of the Options could proceed independently of each other.
- 1.6 Under these circumstances, Savills argued that delivery could be significantly increased in this area. The "... Savills estimate of potential market delivery up to 2031 is conservatively and comfortably 9,360 to 11,700 homes; based on simultaneous development on three Areas for say 13 years of delivery up to 2031. Upper potential credibly could be 12,000 to 15,600." (Savills emphasis).
- 1.7 Savills have not included upside capacity from starts earlier than 2018. Hence, delivery pa under their conservative scenario would be between 668 and 836 units pa. Under the more optimistic scenario it would be between 857 and 1114 units pa.

¹ PBA Roger Tym & HDH Planning & Development, January 2013, Housing delivery on greenbelt options, study commissioned by Birmingham City Council.

² *ibid*, para 10.15 pp32-33.

³Savills, Final Report, Birmingham Strategic Growth Review, January 2013.

This Commission

- 1.8 We (PBA and HDH) have again been commissioned by Birmingham City Council to advise them on these issues. In our view, the principal differences between our work and Savill's response are as follows:
 - i. For each area (A-D) Savills considered that there could be eight outlets, whilst our view was five or six;
 - ii. Savills considered that three of the areas could be developed in parallel. As stated at paragraph 1.3 above, we consider that the market would only bear one area whilst release of a second site, even if it were geographically distinct, would not deliver significant additional numbers of dwellings when set in the overall context of growth.
- 1.9 These disagreements are about what the market can bear, as opposed to supplyside constraints. Our original views on this were based on judgment, as are Savill's views now. There is some historic evidence about delivery on sites released from the Green Belt in Sutton Coldfield, and this is presented in the following section of this report. However, the kind of development by the private developer market that Savills appear to be advocating is unprecedented there and perhaps nationwide.
- 1.10Given this context, our research has now focused on examples of delivery rates in Sustainable Urban Extensions (SUEs) and other large developments in the last 15 years or so. We have researched the largest schemes across the country, showing how many homes they delivered over the years from a standing start. We have sought to identify the duration of different phases to completion. We consider how long it might take to deliver the 12,000 or so homes proposed by Savills for Sutton Coldfield on the basis of this evidence.
- 1.11We also consider the implications for infrastructure delivery of more than one option proceeding at once and finally draw conclusions on the likely response of the market to the release of more than one development area in Sutton Coldfield.
- 1.12This study report is set out in the following way:
- 1.13In **Section 2** we present the evidence of the delivery track record of three sites released from the Green Belt in the Sutton Coldfield area since the turn of this century.
- 1.14In **Section 3** we look the delivery of Sustainable Urban Extensions across the country and draw out some conclusions of relevance to the Birmingham context.
- 1.15**Section 4** sets out a market commentary on the delivery of SUEs, in particular the relationship between competition and delivery.
- 1.16In **Section 5** we consider the implications for the delivery of infrastructure if development is provided across up to three option areas.

1.17And in **Section 6** we give some overall conclusions regarding our assessment of the potential pace of housing delivery across the area and the associated implications for the delivery of infrastructure.

2 PAST DELIVERY ON GREEN BELT SITES IN SUTTON COLDFIELD

Introduction: the Sutton Coldfield sites

- 2.1 In order to examine the assertions made by Savills in response to our previous report, we have first looked at the closest information to hand, relating to delivery of sites in the Sutton Coldfield area.
- 2.2 In discussion with Birmingham City Council, we have identified three such large sites taken out of the Green Belt for development. These sites included two sites at New Hall Valley and Dutton's Lane which were released through the 1993 Birmingham UDP. The first completions on these sites began in 1999. All three sites were around 500 units in size.
- 2.3 A further site at St George's Barracks became available around the same time. This was a brownfield site but displayed similar characteristics to a greenfield site in that it is located on the urban edge adjoining existing Green Belt. The location of these three sites is set out in the plan at Figure 1 below.



Figure 1: Former Green Belt sites, Sutton Coldfield

2.4 It is notable that these three sites are all within the arc of potential development areas set out in our previous report and thus it is relevant to test both our and Savills' conclusions on them, through examination of the track record of delivery since they were removed from the Green Belt. We have been unable to identify the number of outlets on each site.

Delivery on the three Sutton Coldfield sites.

- 2.5 In Table 1 overleaf we set out the number of units delivered on each land parcel on each site since it was opened up⁴
- 2.6 As can be seen from Table 1, the maximum annual completion rate on the three sites was 422 dwellings in 2002 and the Dutton's Lane site (now known as Harvest Fields) is still under construction 15 years since development began). Whilst the global credit crunch and ensuing recessions undoubtedly have affected delivery significantly in the latter part of the period (see discussion in Section 3 below) the peak output of the three sites has only been greater than 300 units in two years (2001 and 2002) over the past fifteen, acknowledging that two of the sites were built out by 2006.
- 2.7 Of course, past delivery does not necessarily mean that the Sutton Coldfield development area(s) allocated in the BDP will perform in exactly the same way. So, in the following section we go on to consider delivery rates on Sustainable Urban Extensions nationally and examine the extent to which these Sutton Coldfield examples are representative of national trends.

⁴ Data provided by Birmingham City Council.

Report of Study

Table 1: Housing Completions – three Sutton Coldfield sites by year

Site/Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 (part)	TOTAL
H7 – Sutton New Hall, Walmley Road	6	174	204	126	35	8											553
H42 St. Georges Barracks, Rectory Road	15	57	136	77	102	107	22										516
H1 - Duttons Lane			29	219	64	62	83	0	0	0	0	0	0	7	41	17	522
Totals	21	231	369	422	201	177	105	0	0	0	0	0	0	7	41	17	1591

Source: Birmingham City Council, 'BLADES'

3 SUSTAINABLE URBAN EXTENSIONS: AN OVERVIEW OF DELIVERY NATIONWIDE

Introduction

- 3.1 Since the Second World War, there have been various attempts to institute a widespread housebuilding programme involving new settlements or significant expansions to existing towns and cities. These have included the New Towns, Expanded and Railway Towns, the LCC/GLC overspill estates programme, Growth Areas, Growth Points, eco-towns and the current phase of thinking around new Garden Cities with the first proposed by the Government for Ebbsfleet in Kent.
- 3.2 Each of these initiatives has taken place in very different delivery and market conditions. The earlier programmes were almost exclusively delivered by the public sector (LAs or New Town Development Corporations) and the balance has now shifted to become very largely provided by the private sector and, with this scale of housing delivery, the volume housebuilders in particular.
- 3.3 In order to ensure relevance to the current market conditions and prevailing policy context, we have therefore focused our research on recent delivery experience, dating back approximately to the previous (Labour) Government's Growth Areas & Growth Points programmes of the last decade (although of course not all SUEs were designated under either of these programmes).
- 3.4 It is acknowledged that during that period (2008 and onwards) the UK has undergone the longest and deepest economic recession in living memory and the property industry has been particularly badly hit. Nonetheless we do have a good evidence base from the boom years immediately pre-recession. As a cyclical market, one would expect at least one more property recession between now and 2031 in any event, irrespective of any Government macro-economic or fiscal adjustments seeking to avoid such an outcome.
- 3.5 So, whilst there was a marked reduction in delivery across the country in the recessionary and post-recessionary period, we have enough evidence from the pre-recessionary period to put this into perspective and draw conclusions on likely delivery rates moving forward. During the immediate pre-recessionary period, the economy was of course particularly buoyant and delivery rates high.

The nationwide evidence base

3.6 The mechanisms for increasing delivery of housing nationwide have been much debated of late in both the property and mainstream press. The challenges facing the industry in increasing delivery are well documented. For example, a recent report by Knight Frank⁵based in part upon a survey of the volume housebuilders, concluded

⁵ Knight Frank Residential Research, *Building Momentum, Housebuilding Report*, May 2014.

that there is insufficient capacity in the property industry to increase delivery nationwide in excess of 200,000 units pa. Indeed only 6% of respondents to the Knight Frank survey thought that this would be possible.⁶ The report notes that the rate of delivery has been broadly stable (allowing for fluctuations in the market) at around this figure, for the last forty years or so – see Figure 1 below.





Source: Knight Frank, after DCLG

3.7 Figure 2 above also gives more credence to the assertion at paragraph 2.5 that we have enough evidence to draw conclusions about likely delivery rates moving forward. It is also reasonable to assume that given the nationwide context, the volume housebuilders would not wish to get drawn into an overly competitive environment in one area – because the demand vs supply situation means that they could spread the risk by developing elsewhere.

CLG & University of Glasgow Research

3.8 This study⁷, based on research undertaken in the immediate pre-recessionary period, presented the results of a literature review, survey work amongst 18 national housebuilders and an examination of one large site developed by ten separate companies. It concluded, *inter alia*:

"Government policy and industry practice have thus combined to encourage developer caution about the ability of local housing markets to 'absorb' new-build supply. This finds expression in unambitious build-out rates." And

⁶ *ibid*, p.4.

⁷ DCLG & University of Glasgow, *Factors Affecting Housing Build Out Rates*, February 2008

"Even if substantially more land were to be released by the planning system, it is likely that housing developers will take a considerable length of time before responding by bidding at lower land acquisition prices and building out more quickly."⁸

3.9 The study noted that market differentiation was important, with different developers present on a large site serving different sectors of the market, otherwise as noted by one respondent there was a risk that competition would result in diminishing returns – one respondent noting that on a 1200 unit scheme in Southern England, several developers all provided similar family-type housing and as a result:

*"The market was swamped and sales virtually ground to a halt. To gain maximum advantage from splitting, products on adjacent sites should be quite distinct"*⁹

3.10Of further relevance to the Sutton Coldfield situation is the study's conclusions relating to the distance between development sites considered by developers to be competitive to their own. This varies considerably according to the type of location involved, as follows:

T ab le 9: Perceived Competition Limits for Individual Devel	op ments	
Development Type	M	les
	Mean	SD
A partments in outer London	2.40	2.79
A partments in outer London	3.88	3.48
A partments in major provincial city centres	2.73	2.48
A partments within major provincial cities but beyond the city centre	3.37	2.54
Houses on greenfield sites on the edge of major provincial cities	6.00	3.96
Houses on greenfield sites on the edge of small and medium-sized towns	5.62	2.78
Houses on greenfield sites in mainly sural areas	7.97	4.09

Table 2: Perceived Competition Limits for Individual Developments

Note: SD = Standard Deviation, see original source for explanation.

Source: CLG & University of Glasgow

3.11The Sutton Coldfield options would fall within the category 'Houses on greenfield sites on the edge of major provincial cities' in the table above. This suggests that the mean distance between sites which would be considered to be competitive as 6.00

⁸*ibid*, Executive Summary, p.2

⁹ *ibid*, p.8

miles. As Savills note¹⁰, the distance north-south of the Sutton Coldfield 'arc' is 6.2 miles. Given the CLG & University of Glasgow's conclusions, it would suggest that the volume housebuilders would consider developments on more than one option to be competitive and hence be likely to dampen the developers' assumptions in respect of build-out rates.

3.12These initial assumptions were found by CLG & the University of Glasgow to be critical. Once development had commenced external factors (such as demand) were unlikely to result in increased build-out rates:

*"If housing demand changes after the point of site acquisition, most developers are generally reluctant to alter their planned production rates. Whether demand rises or falls, most prefer to alter prices or incentives. Companies generally see production rates as a marginal factor that cannot generally be varied very far from what was planned."*¹¹

3.13These production rates are based upon what developers consider to be the likely sales rate. The CLG/University of Glasgow research found that sales rates varied between 40-80 units on each outlet, according to the size of developer. The volume housebuilders generally fell at slightly more than one unit per week (55.83 units pa).¹² This is consistent with our experience across the Practice.

Hourigan Connolly Research

3.14A timely report was published earlier this year¹³. Commissioned on behalf of Gladman Developments, a development investment company that specialises in promoting SUEs through the planning system. The report is intended to:

"... be a useful tool in benchmarking assumptions for the delivery of housing on sites which already have planning permission and is likely to be useful in cases where there is a dispute over the extent to which such sites might deliver housing over a given period."

- 3.15Hourigan Connolly (HC) sought to identify 100 greenfield sites across England, Scotland and Wales, of greater than 500 units, ten sites from each of the English regions plus ten sites from England & Scotland. Brownfield sites, new settlements and schemes receiving government assistance were screened out. It is thus highly relevant to this study.
- 3.16In presenting their analysis, Hourigan Connelly noted that:

"Importantly, of all the case study proformas received in response to the study requests, none of the sites have been completed and all are yet to deliver the

¹⁰ Savills, p.4.

¹¹ p.2.

¹² p.8.

¹³ Hourigan Connolly, *A report into the delivery of urban extensions*, February 2014.

housing numbers originally forecast for the site in the timeframe originally forecast.^{*n*14}

3.17HC found that on average that the time period in England from initial concept (ie from the site originally being proposed) to grant of planning permission is 6.67 years¹⁵. And in relation to the time period from commencement of preparation of an outline planning permission:

"Based upon the foregoing analysis of the results received from Local Authorities, it is reasonable to suggest that the delivery of houses from urban extensions takes approximately **9 years**. Whilst there are instances of speedier delivery, these are in the minority whereas there are many more examples of sites that take far longer to deliver houses, with many yet to deliver any houses at all."¹⁶

- 3.18HC have produced a typical breakdown of the time periods for the planning and postplanning (delivery) phases. This is reproduced as Figure 3 overleaf.
- 3.19In the Sutton Coldfield situation, of course, the overall clock has already started ticking (we would be in the 'concept' period leading up to allocation in the emerging BDP, and we understand that for the Langley proposal masterplanning has been commissioned and collation of the baseline evidence base is underway). One can assume that once a Community Infrastructure Levy regime is in place in the City, the timescale for negotiation of legal agreements ought to decrease a little, but significant s106/278 contributions would still need to be negotiated and agreed. But based upon the HC research it would be reasonable to assume that a minimum of 5-7 years would be needed post allocation for delivery from any of the new options. In the case of Langley, this is likely to be at the bottom of the range, as work is underway, however that may be optimistic, as demonstrated by the HC research.
- 3.20In their research and in contrast to the earlier CLG/University of Glasgow study, HC found:

"From analysis of those proformas received that include information on completed dwellings and from subsequent discussions with the relevant developers (including Taylor Wimpey, Barratt, David Wilson Homes, Bellway and Redrow), an **average annual delivery rate of 30 - 35 dwellings per annum** per single house builder is realistically achievable (ie of private market housing, not affordable)."¹⁷

Additional research on specific sites identified by Hourigan Connolly

3.21We have identified a cross section of relevant sites identified by HC and undertaken additional research, involving contacting the relevant LPA and/or developer(s) to update the information and attempt to plug any gaps. To avoid any distortion caused

¹⁴ p.55

¹⁵ p.56.

¹⁶ p.63 (original emphasis).

¹⁷ p.61 (original emphasis).

Report of Study

by the economic recessions, HC considered completion rates up to Q1 2008 only. We have updated this information where we have been able.

3.22At Appendix A we set out the results of this analysis for each of the individual SUEs.

Report of Study

Figure 3: Indicative Delivery Trajectory for SUEs

							_							Table	e 1: îni	dice 1 v	e Urba	n Brit	n dan	De tel	lop me	entT ra	ijeoto	ry:				_	—		_		—		_	—	_		
8 tage	Тасн		20	114			20	116			20	18			20	٧			20	12			20	19			20	20			20	21			20	22		2028	П
		@1	62	625	@4	@1	62	625	@4	@1	62	62	@4	@1	62	625	@4	@1	62	œ	@4	@1	62	62	@4	@1	62	62	@4	@1	62	62	@4	@1	62	62	@4	@1 0	<u>62</u>
1	Prepare and Autorits Outline planning Application Electronination																																						
2	af Oudine Application up ca reachtelain ca graine																																						
8	Legyl Agreemens negasù dane																																						
4	Oudine pizoning permission issued																																						
6	Equilier dan Agreemens Klegasirdan																																						
8	Canericeiri Nigash dani																																						
7	úlse e Jie																																						
3	First new encode na store a spolice dan prepers dan prepers dan af prepers dan af and charge candidane precedents an activities																																						
B	First reversed na score s pplics dans cansiders dan																																						
10	P recedens conditione s pplics done conviders don																																						
11	Ocher Technicol Approvale																																						
	Sice vore (Physe 1) Cleiveryof																																						
18	first hars w.																																						

June 2014

Other potential SUEs known to us

- 3.23As a multi-disciplinary development & infrastructure consultancy operating nationwide, we have been involved in the planning and promotion of a considerable number of SUEs in recent years. We have undertaken research across the Practice with a view to identifying any of them where delivery has been at the level anticipated by Savills for the Sutton Coldfield releases (between 668 and 1114 units pa).
- 3.24The following SUEs were suggested as being of relevance (some of these were also examined identified by Hourigan Connolly). There is a short description of each of these SUEs set out in Appendix B.
 - Lawley, Telford;
 - Bradley Stoke, South Gloucestershire;
 - Cranbrook, East Devon (new settlement);
 - Brooklands, Milton Keynes;
 - Newton Leys, Milton Keynes;
 - Hampton, Peterborough;
 - Filton, Bristol;
 - South Worcester;
 - North Whitely, Fareham, Hampshire;
 - Monkton Heathfield, Taunton.
- 3.25We have briefly analysed each of the schemes above as the descriptors indicate. Although we must acknowledge the impact of the 2008-12 downturns, nowhere has delivery reached the levels that Savills indicate the market would achieve in Sutton

Coldfield. Since there are a range of housing markets identified including some on the outskirts of larger cities, we can only treat with caution the conclusions reached by Savills.

Conclusions on the Sutton Coldfield sites examined in Section 2

- 3.26There are a number of features demonstrated by the three Sutton Coldfield sites examined in Section 2 which are consistent with the research examined in this Section. These are, namely:
 - 6-7 years from release to first delivery of housing;
 - Maximum delivery on any site in one year of 219 units (suggesting 2-3 developers were present);
 - Peak mean delivery of 141 units pa per site across the area (422 divided by three sites); and
 - Mean delivery across the three sites of 106 units pa (1591 divided by 15 years), or 35 units pa per site as an equivalent flat trajectory ironing out the peaks and troughs of the housebuilding cycle through the years in question.

4 CHANGES IN THE HOUSEBUILDING MARKET: A COMMENTARY

Dynamics post 2008

- 4.1 The global credit crunch and turbulent economic period between 2008-2012, followed by the gathering recovery (particularly in the residential sector of the property industry), have ushered in a number of significant structural changes to the housebuilding industry at local, regional and national levels.
- 4.2 In this section we outline some features of the current market which are of relevance to this study, including some aspects of original research undertaken by Simon Drummond-Hay of HDH Development & Planning.¹⁸:
 - In the pre-recessionary period (ie pre-2008) there were around 7,000 outlets nationally of which 4,000 were sites of over three dwellings. In 2006 these outlets produced 2.7 units a month on average;
 - In the post-recessionary period (around 2010-11) there were about 3,200 outlets nationally, producing 2.2 units a month on average;
 - In 2014 there are 6,000 outlets nationally, producing 2.5 units a month on average;
 - In 1988 there were 12,000 builders nationally building up to 100 units pa plus 250 regional and 13 national housebuilders;
 - By 2010 this had reduced to 2,800 builders nationally, building up to 100 units pa plus 85 regional and 9 national housebuilders;
 - Generally the national total housing stock increases by 0.53% per year.
 - In the pre-recessionary period about 45% of houses were delivered on small sites, now it is just 10% nationally. In part this is due to funding constraints for small developers (and the disappearance of many of them, as noted above);
 - Since April 2013 37% of new homes sales nationally have been assisted by the Help To Buy scheme; and
 - Pre April 2013 21% were assisted under HomeBuy / NewBuy.
- 4.3 Combined, these factors show the rapid change in the sector, of particular relevance is the consolidation and reduction of developers with the financial and logistical capacity to undertake large schemes and to use their competitive advantages including land banks to 'squeeze' financially smaller developers.
- 4.4 There are a number of 'rules of thumb' accepted by the Homebuilders' Federation (HBF), as follows:

¹⁸ Unpublished, 2014.

- Sites of up to 100 units on a site would usually be built out by one developer;
- Sites of 100 500 units (some would argue 300) would usually be built out by two developers;
- Sites of over 500 units would usually be built out by three developers; and
- The planning process for 1,000 houses costs about £1.5m
- 4.5 HDH conclude that these main factors affecting delivery are in line with the studies discussed in Section 3 above, namely:
 - The need to provide for distinct markets (ie affordable to rent, affordable to buy, build to rent, and market housing); and
 - Within each sector there is a need to provide different products and price points, designs and personal factors.
- 4.6 Other than the CLG / University of Glasgow study discussed in Section 3, there is little published research into how development sites compete and complement each other. The English housing market is strongly influenced by internal (within England) migration and on the whole development is not specifically designed to meet the requirements, preferences and demand of the local population. It is instead, in the first instance, based on the products that developers will expect to be in highest demand.
- 4.7 In an attempt to inform the phasing and number of outlets, we have considered development in and around two towns that are growing rapidly, those being Milton Keynes and Swindon.
- 4.8 In and around Swindon, in early 2014, there were 15 active outlets. Swindon's delivery rate is about 610 units pa, of which approximately 50% were from smaller sites, which equates to circa 300 units or 20 units per outlet pa;
- 4.9 It was notable that where a developer had more than one active outlet they are geographically separate and quite different in character. Whilst the physical product in terms of buildings is not necessarily very different, the schemes are.
- 4.10A broadly comparable situation prevailed in Milton Keynes where there were 28 outlets and a similar conclusion could be drawn although in Milton Keynes there is a greater diversity of products being offered by developers. Milton Keynes' delivery is about 1500 units pa, of which approximately 25% were from smaller sites which leaves 1,125 or so from 28 main outlets, or circa 40 per main outlet.



Figure 4: Sales turnover as a percentage of whole market turnover.

Source: HDH research 2014

- 4.11What conclusions can we draw from the HDH research, of relevance to the Sutton Coldfield situation?
 - In terms of competition, the market is likely to view all the potential outlets identified as being in competition with each other, because they are within the distances identified in Table 2 above. Indeed, Options B & C are immediately adjacent, separated only by roads or natural features and hence would be directly competitive; and
 - The provision of more than 25% of output from the main outlets is limited to the exceptional case of Milton Keynes, where strategic growth was planned for many years through the New Town Development Corporation and special delivery mechanisms still exist. Without such mechanisms in place, reliance on significant output from main outlets should therefore be guarded against.

A market-perspective commentary on the Savills' response to the previous study.

- 4.12The rates set out by Savills in its response to our earlier study are substantially above our own advice. That earlier work is nearly 18 months old as are Savills' comments. Their section three is very out of date now, prices and transactions are both up but it is notable that there is now talk of a cooling (albeit slight) in the housing market. However, in our experience nowhere nationally within a similar size area as the Sutton Coldfield Green Belt 'arc' has the private developer market delivered at anywhere near even the 'conservative' rates identified by Savills.
- 4.13There is no doubt that generally builders are seeing more enquiries, more offers and more reservations and on the majority of sites a significant number of units are being sold off-plan. It is important to keep this is perspective through the builders are not building a lot of stock and putting it on the market, and to a large extent the supply is being matched with demand. That is to say, they will build a few show houses but the completion of the houses for sale is much better tuned to reservations than before the downturn. This is part of the de-risking of development to ensure that should the market turn (when it does) they are not left with built but unsold stock.
- 4.14As Savills note, it is important not to rely simply on local past delivery when considering the potential output from the sites. It is correct to note that there has been a limited land supply of big greenfield sites of estate housing, although it is wrong to suggest that simply allocating land would result in the market instantly delivering at maximum theoretical capacity.
- 4.15Savills have assumed that each site could bear six outlets at a consistent rate of delivery even though some of those sites are adjacent. Their calculations are based on 4 sites x 6 outlets x 50 per year = 1200 per year. In these assumptions we do not believe proper regard has been given to the relationship of sites and outlets to each other. When access points are considered, the only way to achieve the 24 outlets would be for many to be immediately adjacent and directly competing (as in the case of Options B and C). Even in the current market with the demand for housing, we do not believe this is likely to occur. This would result in direct competition between sites which is likely to have an adverse impact on prices and the consequential impact on overall viability as demonstrated by the research work by CLG and University of Glasgow cited in Section 3 above.
- 4.16We have not been able to rationalise the phasing assumptions that Savills have used. It would appear that Savills have assumed that all the 24 potential outlets will reach an output of 50 units per year in just one year. At present there is developer interest in some of the sites, but not all are under the control of developers. Before development can commence some of it will need to be marketed, the planning process pursued (none of the land has a planning consent) and those applications, all of which will be very major applications will need to run their course. An important element of that process will be the infrastructure (services, highways, green

infrastructure, health, education etc) as discussed in the following section. We understand that this work has commenced but is not yet complete.

- 4.17Even when consent is granted it will take some time before development can actually get underway. Not only will the developers need to marshal their own resources but the necessary on and off site infrastructure (spine roads, SUDS etc) will need to be put in place before housing can be delivered all of which are reasons behind the lag identified in the research cited in Section 3.
- 4.18A further concern is which developers may wish to be involved in the sites. It is difficult to name 10 housebuilders who are active building large-scale estate housing in the area let alone 24. Whilst, due to the scale of the area, some developers may have more than one outlet it is highly unlikely that any developer would be willing to promote what are in effect competing schemes.
- 4.19Whilst there is no doubt that there is a strong demand for estate housing Savills' assumptions are unrealistic, even their 'conservative' rates. The assumptions used in our previous work are prepared on a high-level basis but consider multiple outlets, a phased work up of the sites to allow the planning system to run its course and for the industry to mobilise and start on site; and reflect the fact that it takes some time for development to reach peak output. The modelling looked at different rates of delivery to reflect that development is likely to take place across multiple economic cycles and up and downs in the housing market.
- 4.20All of these comments are backed up by the research cited in Section 3, notably the CLG / University of Glasgow and Hourigan Connolly reports.

5 DELIVERY OF INFRASTRUCTURE ACROSS MORE THAN ONE OPTION AREA

Introduction

- 5.1 We have been asked to consider the implications in general for delivery of infrastructure across the area if more than one development area was to be released from the Green Belt for concurrent development.
- 5.2 If there was to be more than one option released and delivery at the pace suggested by Savills, there would need to be a significant scaling up of infrastructure across the area to support the growth. The following section focuses on utility infrastructure, but similar issues would be faced in the provision of off-site transport or community infrastructure such as schools and health facilities.

Scaling of infrastructure requirements

- 5.3 Table 3 overleaf sets out a series of generic infrastructure costs which could be expected to be required to support growth at increasing numbers of units. The chart at Figure 5 then plots these infrastructure costs against the number of units.
- 5.4 The infrastructure costs have been derived from information collected from other projects. However as all schemes are different, any infrastructure costing work will always need to consider site specific aspects and therefore be bespoke in nature. Due to time and resource constraints, we have not been able to assess the local network in terms of capacity, so the attached schedule provides on-site generic costs only and does not consider capacity issues.
- 5.5 The proximity of some of the option areas (eg B and C) could also mean that the cumulative burden on, for example, highway infrastructure would necessitate a greater range of interventions than if the areas were more remote from one another.
- 5.6 The costs have been calculated at 35dph, the midpoint between our original 40dph and Savills' 30dph.
- 5.7 Costs for infrastructure for large developments are significantly influenced by prevailing conditions in the open energy market, and the asset management plans of Direct Network Operators. The capacity of network corridors off-site are unlikely to be able to accommodate these demands without upgrades. Utility supplies upward of 3.5MvA are likely to require a new primary sub-station and 33kV feed.
- 5.8 Assuming each residential unit is worth £150K, the schedule attached puts the infrastructure cost for 5000 units at about 12.2%.

Report of Study

Table 3: Generic Infrastructure costs for numbers of housing units

				U				
GENERIC ON-SITE INFRASTRUCTURE (This schedule provides generic, none site specific	COSTS							
costs for significant infrastructure elements for illustration.								eu
н	ousing Units	250	500	1000	2000	3000	4000	5000
Relative development area (ha) (based on 35 resi		7	14	29	57	86	114	143
Utility Demand	Unit							
Electricity Demand	MVA	1	1	2	4	6	8	10
Gas Demand	MWh	2.6	5	10	21	31	42	52
Potable Water Demand	I/s	7	14	28	56	84	112	140
Telecoms Demand	lines	500	1000	2000	4000	6000	8000	10000
FW Drainage Demand	I/s	12	24	48	96	144	192	240
Utility Infrastructure								
Sub Station	£ ,000, £	181	353	688	1303	1846	2317	2715
Electricity cable (LV)	£,000	1100	2145	4180	7920	11220	14080	16500
Electricity cable (HV)	£,000	1269	2474	4821	9135	12942	16241	19032
Gas mains (90mm to 180mm)	£,000	335	653	1272	2411	3415	4285	5022
Water mains (90mm - 150mm)	£,000	409	798	1555	2946	4174	5238	6138
Comms Cable in duct	£,000	146	285	556	1054	1493	1874	2196
Foul water pipes (150mm)	£,000	181	352	687	1301	1843	2313	2711
Drainage and water storage								
On-site SW drains/sewers	£,000	150	293	570	1080	1530	1920	2250
Attenuation storage (ponds and underground storage)	£,000	263	512	998	1890	2678	3360	3938
Roads and access								
Primary Access Road 7.3m wide	£,000	1,300	2535	4940	9360	13260	16640	19500
Secondary Access Road, parking, hard standing areas	£,000	850	1658	3230	6120	8670	10880	12750
TOTAL COST		6183	12058	23497	44520	63071	79148	92751
	1,000	0185	12058	23437	44520	03071	79148	92731
NOTES	1. Costs are units	proportio	oned agai	nst the e	stimated	costs for	r 250 resio	dential
	2. The cost e	stimates	consider	on-site d	costs only	/-		
	3. Assessme				•			
	4. All fees, clinflationary	•			profits, lo	osses, tax	es, intere	est and
	5. Total estir		-		or each 1	.000 units	s built to a	Э
	maximum re	duction	of 30% ov	erall.				
	6. Storage fo				-	ischarge	rate of 6l,	/s/ha,
	provided for 7. 30% allow			-		fforts to	surfaco ···	ator
	storage.	ance mcl	aueu IOF	cimate (liange ei	inects to s	surrace w	ater

Report of Study



Figure 5: Infrastructure costs by numbers of units

5.9 It is highly improbable that the development industry would be able to scale up to meet this scale of delivery of infrastructure, both onsite and strategic offsite. In our experience the capacity of the utility providers and their supply chains, working alongside the development industry, is quite limited and prone to delays during periods of high demand for upgrades.

Implications of slower delivery across more than one development area

- 5.10Should more than one development area be released and housing delivery commence, for the reasons set out in the preceding sections we consider that the number of units produced would be slower than that predicted by Savills, such that across the area it is typical of the national average.
- 5.11The inevitable consequence of this slower rate of delivery would be that trigger points for the provision of infrastructure would not be reached as per the anticipated trajectory. There is a risk that Option C (the proposed allocation in the BDP) would not deliver the critical mass of housing to trigger infrastructure provision if additional options were allocated.
- 5.12This would mean that provision of new infrastructure would be delayed and the pressure on existing infrastructure, whether roads, utilities or schools, as capacity is neared would become significant. We are aware that certain elements of this infrastructure are already at capacity and reliant on the growth for additional provision.

- 5.13A good example of this problem is in relation to primary school places. We understand that, in common with much of the country, there is little spare capacity in primary schools in the Sutton Coldfield area. Typically developments of around 1000 dwellings and over tend to have a new primary school provided within them, often delivered via a s.106 agreement between the developer(s) and the Local Education Authority, linked to trigger points of the number of dwellings on site.
- 5.14Even where there is only one development site in the area, the programming of delivery of the new school has to be carefully undertaken; too early and many of the places will be taken by children from the surrounding urban area, forcing children in later phases of the development to commute out of the estate to other schools in the locality. Too late, and the children will already be settled in those surrounding schools and commuting patterns will be established, placing considerable additional strain on the transport system during the morning and afternoon peaks.
- 5.15In the circumstances where there were a number of competing development areas in close proximity, it would render primary education provision planning even more problematic, especially where housing delivery would be difficult to predict other than at the high-level. Longer daily commutes could easily become the norm for some children, which would be undesirable in terms of transport and related environmental impact as well as their personal development.
- 5.16Although this is only one example, similar challenges would be faced in the provision of other elements of physical and community infrastructure.
- 5.17Conversely, concentrating development on one option would prevent this situation occurring since the housing trajectory would be much more predictable and the provision of new infrastructure can be linked to trigger points as is the current norm.

6 CONCLUSIONS

Ability of the market to provide across multiple option areas

- 6.1 We have set out in this study the evidence of past delivery on former Green Belt sites in Sutton Coldfield and comparisons with recent national trends. This research has shown that the three Sutton Coldfield sites examined have performed much as the national trend would suggest, producing typical numbers of units each year and with no housing at all delivered at Harvest Field the period of downturn 2006-11.
- 6.2 This would suggest that delivery around the levels recommended in our original study would be expected, consistent with the experience on the three sites examined in the local area.
- 6.3 The national research examined, backed by our further research as set out in Appendix A, suggests that the market is highly unlikely to respond to the allocation of up to three development areas by the scaling up of delivery to the levels predicted by Savills, even at the 'conservative' levels which they identified.
- 6.4 As noted in the research cited, the housebuilding industry (particularly the volume housebuilders) is inherently cautious and this trend has been reinforced through the recent downturn.
- 6.5 So, there would be inherent resistance due to the fact that each of the areas would be viewed as in competition with each other. There would be little potential for sufficient differentiation of products and price points to enable up to 24 housebuilders to operate across the Sutton Coldfield area (even if 24 volume housebuilders operated in this market, which we doubt).
- 6.6 Furthermore, it is worth noting that the land allocated at Langley in the emerging BDP has capacity for 6,000 dwellings. This is in excess of our original recommendation at the maximum delivery rate so in effect there is some flexibility should the market perform more strongly.

Delivery of infrastructure across more than one option area

- 6.7 From our high-level appraisal, we have set out the generic costs for scaling up the provision of certain infrastructure to support growth by numbers of units.
- 6.8 In our experience, we consider that the development industry would struggle to provide the necessary infrastructure to support growth at the pace predicted by Savills, even at the 'conservative' levels. The utilities providers, their supply chains, as well as the housebuilders themselves would be faced with considerable challenges year-on-year in rolling out the infrastructure on-site but more particularly

in providing the strategic enhancements required offsite to support the provision of so many additional housing units in one relatively small area.

6.9 Furthermore, for the reasons set out above, in our view the release of more than one development area would not be accompanied by delivery at the rates predicted by Savills. Thus the new units would be provided over a wider area and trigger points for the provision of new infrastructure would not be reached on the timescales originally predicted. This could place considerable additional strain on a range of existing infrastructure including roads, utilities and schools.

APPENDIX A DETAILED ANALYSIS OF DELIVERY AT SELECT SUSTAINABLE URBAN EXTENSIONS

A.1 Introduction

In the tables that follow, we set out an analysis of a cross-section of the SUEs identified by Hourigan Connolly, updated where we have been able through discussions with the LPA and/or the developer(s) themselves.

CONCEPTION													
	July 1999, Guild	ford BC approved a	a development brie	ef for Queen Eliz	abeth Barracks a	nd 8 Map, and C	nart						
	Depot.												
PLANNED NUMBER OF	450, as set in the	e development brie	f.										
DWELLINGS													
SITE AREA	23 ha												
PROCESS TO	 First app 	lication submitted in	n 1999 for up to 50	00 units – but wi	thdrawn.								
DEVELOPMENT	 Outline s 	ubmitted in 2001 fo	or 525 dwellings ar	nd associated us	ses.								
	 First reset 	erved matters applie	cation in 2002 - 4 i	months between	outline and reser	ved matters.							
START OF	Approximately 2	002											
DEVELOPMENT													
ANNUAL DELIVERY	2002												
	6	206	126	55	90	39	3						
TOTAL DWELLINGS TO	525 between 20	02 and 2008. Com	pleted in 2008.										
DATE													
HOUSEBUILDER(S)	Linden Homes /	•											
DEVELOPMENT PHASES	9 phases of dev			_									
		oodlands (Linden F		ings									
		ount (Laing Homes											
	0	t's Circus (Linden H	,	Q									
		llage Green (Laing											
		ry Gardens (Linder											
	Phase 6 & 8: The Lanes (Laing Homes) – 110 dwellings Phase 7: Kensington Park (Linden Homes) – 46 dwellings												
	Phase /: Kensin	gton Park (Linden	Homes) – 46 dwel	llings									
Source: A report into the deli	ivery of urben avt	anaiona (Houriana											

URBAN EXTENSION	Marks I	arm, Bra	intree										
CONCEPTION	Historic	al site all	ocation										
PLANNED NUMBER OF DWELLINGS	1,000 –	as put fo	rward in	planning	application	on							
PROCESS TO DEVELOPMENT	•	Outline p RM applie month lat Many RN	cation wa er - July	is submit 1990.	ted June	1990 for	46 units			pproved [·]	1		
START OF DEVELOPMENT	1989	Many RM applications were submitted subsequently.											
ANNUAL DELIVERY	1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 143 169 150 155 243 138 55 55 70 4 41 94 12												
TOTAL DWELLINGS TO DATE		vellings co eted in 20	•	in 1991	but no da	ta availal	ble until 1	996. Bet	ween 19	96 and 20	008, 1,32	9 comple	etions.
HOUSEBUILER(S)	Bovis w	vere the m	nain deve	loper									
COUNCIL INSIGHT Marks Farm as a development benefitted from having a single landowner and a one main developer (Bovis). The rates of delivery benefitted from the strong market in the 2000s and was near enough finished by the time of the economic downturn in late 2000s.													
Source: A report into the de	livery of u	urban ext	ensions (Hourigar	n Connolly	y, 2014) /	Catherir	ne Carpe	nter (Brai	ntree Dis	trict Cou	ncil)	

URBAN EXTENSION	Pondholton	Farm, Brai	ntree (Malting	gs Lane)									
CONCEPTION	Historic site	allocation.	Developmen	t brief (1999) was adopte	ed as SPG.							
PLANNED NUMBER OF	1,100		•	x									
DWELLINGS													
PROCESS TO	• An a	application f	or the erectio	n of 800 dw	ellings, a bus	siness park, p	rimary schoo	l, neighbourh	nood centre				
DEVELOPMENT	and	associated	community fa	acilities was	submitted or	n 30.12.91.	-						
	Out	line planning	permission	was granted	l 08.08.00 wi	th the S106 b	eing signed (08/08/2000.					
	Sup	plementary	S106 agreen	nent was sig	ned 01/12/20	004.							
	• A m	asterplan w	as validated	November 2	000 and app	roved 28/06/0	01.						
START OF 2001													
DEVELOPMENT		•											
ANNUAL DELIVERY	2002	2003	2004	2005	2006	2007	2008	2009	2010				
	72	206	222	119	65	85	25	-	55				
TOTAL DWELLINGS TO	849												
DATE													
HOUSEBUILDER						ylor Wimpey (
COUNCIL INSIGHT						cession – Co							
									lly set at 800 in				
						ngs. In contra							
						ofit share. De	velopers inclu	uded Country	/side				
	Properties Barratts, Persimmon, Taylor Wimpey.												
Source: A report into the de	livery of urba	in extension	s (Hourigan (Connolly, 20	14) / Catheri	ne Carpenter	(Braintree D	istrict Counci	l)				

URBAN EXTENSION	NE Carte	erton (Shilt	on Park), '	West Oxfo	rdshire						
CONCEPTION	Expansion 1988.	on at Carte	erton was p	out forward	l for a cons	ultation on	the West	Oxon Rura	l Areas Re	view Local	Plan in
PLANNED NUMBER OF DWELLINGS	1,499										
SITE AREA	6 ha										
PROCESS TO	• 5	Site allocate	ed in Loca	l Plan (199	7) and car	ried throug	h to Local	Plan (2011).		
DEVELOPMENT	• (Dutline app	lication in	1997 and 1	oermission	granted S	ept 98.	,	,		
 Reserved matters application submitted December '98 and approved February '99. Further reserved matters submitted February 2000, and approved September 2000. 											
START OF DEVELOPMENT	2000										
ANNUAL DELIVERY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	12	90	124	139	330	175	237	222	84	46	40
TOTAL DWELLINGS TO DATE	Total be	ween 200	1 and 201	1 was 1,49	9. Develop	ment com	oleted.				·
HOUSEBUILDER	David W	ilson Home	es; Carter	Constructi	on						
Source: A report into the de	livery of u	rban exten	sions (Hou	urigan Con	nolly, 2014)					

URBAN EXTENSION	Poundbury	, West Dor	set										
CONCEPTION	Conceived	l as an urba	n extension	to Dorches	ster in the 19	980s.							
PLANNED NUMBER OF	2,200 dwe	llings are e	kpected to b	e built by 2	025.								
DWELLINGS													
SITE AREA	94.17 ha												
PROCESS TO	• First	st applicatio	n submitted	l for a mixed	d use develo	opment in Ja	an 1989.						
DEVELOPMENT			een brough	t forward in	the 1998 ad	lopted Loca	l Plan and t	he 2006 Loc	al Plan and	the new			
	-	cal Plan.											
					as adopted i								
						opment was	s granted in	1989 and th	ne first reser	ved			
		•••		ubmitted in e	•								
		•		•		•		elopment pu	•				
								commenced		1993.			
		Poundbury is approximately one third built and is planned to grow to 2,200 homes by 2025.											
		Poundbury is being phased according to market demand											
	1993												
DEVELOPMENT ANNUAL DELIVERY	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04			
ANNOAL DELIVER I	38	31	38	28	47	34	16	64	57	63			
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	03			
	108	137	97	78	74	64	75	187	2012-13				
TOTAL DWELLINGS TO		-	-			-	-	nsent and 98		r			
DATE		on at March								•			
HOUSE BUILDERS,		ection A (P											
DELIVERY PHASES AND		•		ouah The G	uinness Tru	ust. 34 sold	privatelv.						
COMPLETIONS		· · ·		0				started work	in the autu	mn of			
	• 19		,) ,				-			
	• Bu	Building was completed in the summer of 1996. All were sold and occupied at the time building works											
		npleted.	1				- 1		5				
		•											
	Phase 1 S	ection B (P	1SB)										

	Homes (73): 20 rented through The Guinness Trust including one adapted for special needs, 53 for private
•	sale.
	73 made up of 68 houses and 5 flats.
	Builders: CG Fry & Son Ltd. began in February 1996 and work was completed in February 1999.
•	All were sold by May 1998.
· · ·	All were sold by May 1990.
Phase	1 Section C (P1SC)
	Homes (81): 22 flats, 59 houses.
	nomes (01). 22 nais, 39 nouses.
Phase	2, Sections A-D:
•	Phase 2 Sections A-D is approx. 14 acres (5.66 hectares).
•	These first four sections of Phase 2 were put to tender in August 1999.
•	The successful bidders CG Fry & Son Ltd. commenced work on site in June 2000 and works were
	completed in Spring 2004.
Phase	2, Section E:
•	Phase 2 Section E is approx. 19.3 acres (7.81 hectares).
•	This section of Phase 2 was put to tender in December 2001.
•	The successful bidders CG Fry & Son, Morrish Builders and Westbury Homes Plc. commenced work on
	site in Autumn 2003.
•	There are 338 dwellings of which 68 are affordable.
	West Quadrant
•	This 10acre site forming the remainder of Phase 2.
•	Planning approval was granted in 2006 for 190 homes (of which 59 are affordable, including a mixture of
	shared ownership and rented accommodation), shops, offices and restaurants.
•	The development is being built by CG Fry & Morrish Builders.
•	The development is scheduled for completion in 2013.
Pound	lbury Phases 3 & 4
•	Outline planning permission was granted by West Dorset District Council in September 2011 for the
	remainder of Poundbury (44 hectares), which will cover the northern and western perimeters.

	This will include 1,200 dwellings.
Source: A report into the del	ivery of urban extensions (Hourigan Connolly, 2014) / Dorset County Council (2013) / Poundbury Factsheet 2014
(http://duchyofcornwall.org/a	ssets/images/documents/Poundbury_Factsheet_2013.pdf)

URBAN EXTENSION	Newcas	stle Great	Park, Ne	wcastle									
CONCEPTION		ic Land aı 's UDP.	nd Planni	ng secure	ed the site	e under a	n Option	Agreeme	nt in the	1980s an	d promot	ed it throu	igh the
PLANNED NUMBER OF DWELLINGS	2,500												
SITE AREA	1,200 a	cres											
PROCESS TO DEVELOPMENT		The site v Plan (UD The UDP Outline a The sche SoS form 2000.	P). was ado oplication me was c	pted in Ja 1999/13 called in b	anuary 19 00/01/OU by the Sec	98 T was su cretary of	bmitted A State on	August 19 the 14th	98 for mi February	xed use, 1999.	including	2,500 dw	Ũ
START OF DEVELOPMENT	2001												
ANNUAL DELIVERY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	4	118	194	99	77	54	106	62	181	119	140	108	130
TOTAL DWELLINGS TO DATE		etween 2 it this targ									r policy N	IDA6, but	delivery
HOUSEBUILDER(S)	Persim	mon Hom	es / Taylo	or Wimpe	у								

	lice	ea.	acity	5	6	4	5	9	7	8	6	10	Ŧ	12	13	14	15	16	11	18	19	20	21	53	23	24	25	58	27	28	29	8	ond 2030
	Resol	Net ar	Capa	2001/2	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/	Beyot
ell H	2640	5.7	175	4	109	61	1																										
ell I 'Melbury'	2641	22.3	500		9	133	98	77	54	81	21	27																					
ell G 'Greenside'	2642	19.2	326							25	41	39	57	60	43	40	21																
ell F 'Town Centre' (1)	4569+2649	n/k	300									82									43	50	50	25	25	25							
ell F 'East Village'	4566	3.3	82									33	39	10																			
ell F 'Brunton Grange'	4565	9.2	282										23	70	65	90	34																
ell F Phase 2 "South of Town entre"	4568	10.5	332													10	60	80	80	80	22												
ell F (Phase 3 (East of Town entre) (Reserved Land) ⁽²⁾	East of 2649 North of 4568	0.8	50																		25	25											
ell C (3)	2646	10.5	430												<u> </u>	60	100	100	75	70	25	-+										-	
ell E ⁽⁴⁾	2647	10.5	200												<u> </u>		100	50			50	-+					<u> </u>					_	
ell D ⁽⁴⁾	2643	28.2	800												<u> </u>							70	70	70	70	70	70	70	70	60		_	
ell A ⁽⁵⁾	2644	47.3	1,200												<u> </u>			\vdash					100	100	100					100	100	100	8
	4959	41.5	1,200												<u> </u>						20	100	100	40	70		70	70		70	100	100	34
/estern expansion area (8)	4808			4	118	194	99	77	54	106	62	181	119	140	108	200	245	230	245	270	255	245	220	235	265					230	200	200	42
otals (excluding 4706)			5,677	~																													
otals (cumulative)				4	122	316	415	492	546	652	714	895	1,014	1,154	1,262	1,462	1,677	1,907	2,152				3,142	-	3,642	3,907	4,147	4,387	4,627	4,857	5,057	5,257	5,6
													•							— a	ore Str	ategy Pl	lanning	Period								-	
									1 July	2013					1,317																		
						Annu	al ave	rage							117																		
Notes	s Explaining rati		d legis b	a biadi	_	and b	م اواند					listia		laliuse	able i					NDDC -					i ti								
Notes	Planning Permi		-																														
	1 urban form	ssion to	r 40 Shelt	ered / 3	o Allo	Cable	- Cur	rentim	aster	pian a	IOWS C	letalle	o appi	lication	ns at r	I/Fak	and r	-90 10	provid	ie iurin	er / o	units t	to cre	ate m	assing	9+							
	2 Safeguarded la	nd can	be built u		se Plar	nina i	ssiles	are u	nderst	o boo	n Cells	D+A																					
-	Expansion of M												(Charl	les Ch	urch.	Persin	nmon	High D	ensity	. Persi	mmo	n Lowe	er De	nsity +	- Self								
3	3 Builds) Explains																							1									
4	4 Cells E+D will c	ome for	ward alon	gside C	ell F p	hase :	2 later	build.	Highe	er Late	r build	out d	ue to r	move	of TW	+ PH	+ CC	outlets	onto	site.													
	Cell A will come	e forwar	d alongsid	e Cell 🛛) as Ce	ell F b	uild sta	arts to	"Wind	i Dowr	n" to ai	llow o	utput t	o be r	etaine	d. Bui	ld mov	ed forv	ward o	due to e	arlier	r Cell F	- finis	h+co	mplet	tions							
	5 increased to ac																								-								
	8 Western Expan	cion be	waht form	and in a	oniuna	tion w	iith Ce	lle A.	D to a	naintai	in oute	(V.	2	020.2	0 inon	aneod	build (to report	econt	all outle	ate m	owed a	onto s	(ofic									

URBAN EXTENSION	Charlton Hayes, South	Glouce	estershire													
CONCEPTION	Site allocated in South (Glouce	stershire Local F	Plan (adopt	ed 2006)	through Po	licy H1	(4)								
PLANNED NUMBER	2,200 - 2,400			\	/	0										
OF DWELLINGS																
SITE AREA	96 ha															
PROCESS TO	Charlton Hayes – total 2	2,400 ł	nomes. This is no	ow a well-e	stablishe	d housing si	te with	some 700 h	nomes eith	ner						
DEVELOPMENT	complete or under cons	tructio	n and a further 2	50 homes	with rese	rved matters	s plann	ing permiss	ion. Maste	er plans						
	and detailed design cod	les for	Phases 2 and 3	approved a	and furthe	er Reserved	Matter	s applicatio	ns already	submitted						
	and more expected earl	ly in 20)14.						-							
START OF	2010-11															
DEVELOPMENT																
ANNUAL DELIVERY	2010-11		2011-12		2012-	13		2013-	2013-14							
	83		87		141			50								
TOTAL DWELLINGS	361															
TO DATE																
NO. OF OUTLETS AND DELIVERY PER OUTLET	Site Location	Site Re	f. Developer(s)	Date planning consent granted	Year Site Complete	Number of years when completions recorded	Total Homes	Average Completions per annum	Number of "sales" outlets	Average Completions per "sales" outlet per annum						
	Sea Stores, Yate	0123	Taylor Wimpey	27/09/2010	2013/2014	3.0	228	76	1	76						
	Charlton Hayes, Patchway	0008h	Barratt Homes	19/06/2012	2013/2014	1.0	46	46	1	<mark>46</mark>						
	Hammonds Grove, Patchway	0008f	Bovis Homes	22/11/2011	2013/2014	1.5	53	35	1	35						
	Charlton Hayes, Patchway	0008c	Bovis Homes	25/03/2010	2013/2014	2.0	60	30	0.25	120						
	Land off Southway Drive, Warmley	0041	J A Pye/ Bellway Homes	05/09/2005	2013/2014	1.5	41	27	1	27						
	Charlton Hayes, Patchway	0008e	Bovis Homes	19/09/2011	2012/2013	<mark>1.0</mark>	40	40	0.25	<mark>160</mark>						
	Charlton Hayes, Patchway	0008b	Bovis Homes	14/07/2009	2012/2013	<mark>3.0</mark>	111	37	0.25	<mark>148</mark>						
	Charlton Hayes, Patchway	00080	Bovis Homes	12/08/2009	2011/2012	<mark>1.5</mark>	<mark>51</mark>	<mark>34</mark>	0.25	<mark>136</mark>						
Source: South Glos AMR	e amail request to Council	;I														

APPENDIX B: SUSTAINABLE URBAN EXTENSIONS SUGGESTED FOR COMPARISON

Lawley Village, Telford and Wrekin

Outline permission granted in 2005 for 3,300 dwellings. First phase reserved matters were approved in 2007 with first completions in 2008. But major infrastructure development halted housebuilding, and remaining units in first phase were finished in 2012.

The site has delivered 417 dwellings of 3,300 identified at inception.

(Hourigan Connolly, 2014)

Bradley Stoke, South Gloucester

From the latest AMR there were only two examples for Bradley Stoke in respect of sales outlets. The two sites totalled about 400 dwellings. These were dismissed as they were under 500 units, and because Charlton Hayes is a better case study as it planned for 2,200 dwellings and is located close to Bradley Stoke.)

Cranbrook, East Devon (new settlement)

This site was originally planned for up to 3,500 dwellings in the Devon Structure Plan (2004), but was increased in the Local Plan to 6,000.

The site was granted permission in 2005 subject to completion of s106. This took five years to resolve with planning permission granted in 2010.

First reserved matters for 1,100 dwellings was granted in 2011 with first completions in 2012.

(Hourigan Connolly 2014)

Brooklands, Milton Keynes

Brooklands is part of the Brooklands / Broughton Gate development, which was allocated in the Milton Keynes Local Plan (2005) for 4,000 dwellings.

The outline application for Brooklands (2,500 dwellings) was submitted in 2005, and was subsequently granted in 2006 with the s106 completed in 2007. First reserved matters were submitted 12 months later.

First completions were in 2008 and steady delivery has followed since.

(Hourigan Connolly 2014)

Newton Leys, Milton Keynes

Information on this site was scarce from monitoring reports. At best development was expected to come forward in late 2000s but was delayed, and would be delivered over a 10 year period. 2011-12 AMR states that 121 dwellings were completed.

Hampton, Peterborough

Hampton was granted outline permission in 1991 for 5,200 dwellings, which was subsequently increased to 6,900.

First completions were in 1997. By 2013, 4,313 dwellings have been completed. Delivery expected to continue beyond the Core Strategy plan period which finishes in 2026.

(Peterborough AMR; Housing Development in Peterborough, 2013)

Filton, Bristol

Three of six phases have been completed and the remaining are under construction. Core Strategy states it will be phased up to 2016. Detail not clear in the AMR.

(South Glos AMR / Core Strategy.)

South Worcester

Outline applications were submitted in 2013 for the urban extension as it crosses three local authority areas. The outline proposes up to 2,204 dwellings as part of a mixed-use development. The application has not been approved on the Council's application portal.

(http://www.worcester.gov.uk/index.php?id=2851)

North Whitely, Fareham, Hampshire

North Whiteley is part of a larger allocation for 1,480 dwellings in the Council's Core Strategy. Whiteley is allocated for 180 dwellings, but an outline application has not yet been submitted.

(North of Whiteley Development Forum / Fareham Core Strategy)

Monkton Heathfield, Taunton

Originally allocated for 1,000 dwellings in the Council's Local Plan (2004), it was increased to 4,500 as a strategic allocation in the RSS. Although the RSS did not progress, the Council's Core Strategy included the site as an allocation for 3,500, in addition to the 1,000 in the Local Plan.

Report of Study

The outline application for phase 1 (effectively the Local Plan allocation) was submitted in 2005 for 900 and refused, but granted at appeal in 2007. Development started in 2012. Phase 2 application not yet submitted.

(Hourigan Connolly 2014)