

Affordable Housing Viability Study

Lichfield District Council

Final Report

April 2010

*f*ordham
RESEARCH

Executive summary

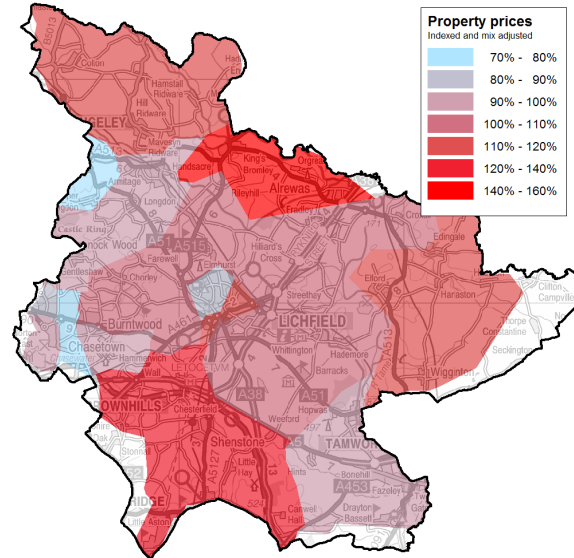
Introduction

- S1 Fordham Research was commissioned by Lichfield District Council to carry out a study of affordable housing viability in the District. The viability study is intended to inform ongoing work on the preparation of Local Development Frameworks (LDF).
- S2 Government Guidance in PPS3 (2006 para 29) requires councils to set a '*plan wide*' affordable housing target, and to test this for '*deliverability*' by means of the '*economic viability of land for housing within the area*'.

Technical approach

- S3 The study involved preparing financial appraisals for a representative range of sites to give a picture of the district wide ability of such sites to afford given targets for affordable housing. The approach was to '*model*' viability using a range of variables and our bespoke spreadsheet software. The key features were:
- i) A set of 15 sites was selected, in discussion with the Council, from a longer list of possible sites. All were considered to be representative.
 - ii) The sites covered a wide range of site size (3 dwellings to 314), types (greenfield and 'brownfield') and urban/rural areas
 - iii) The sites were at various stages in the development process, including sites within the District Council's Strategic Housing Land Availability Assessment where there is at present no policy commitment to development.
- S4 A typical development in the council area might generate 15,500 sq ft per acre (3,550 sq m per ha). However this 'floorspace density' was varied up (for more urban sites) and down for more rural sites to reflect plausible development scenarios for each site. A wide range of data was collected about housing in the district; this included prices (second-hand, and newbuild, of which there is a reasonable supply locally), rents and RSL information about affordable housing costs. The map below illustrates house price variations across the District.

Figure S1 Postcode price indices



Indices compare prices to value for median postcode sector in England & Wales

Source: Lichfield Affordable Housing Viability Study, Fordham Research 2009

Testing the sites

- S5 In order to provide reliable evidence on deliverability, the sites were examined under a range of assumptions about the key factors affecting viability:
- i) Affordable housing target levels of 20%, 30% and 40%
 - ii) Affordable housing split 80% social rented and 20% intermediate
 - iii) Land values for alternative uses for the sites: clearly the site viability cannot plausibly fall below the level of alternative use, and so this must be established
 - iv) A base case of zero Social Housing Grant, the safest assumption for this purpose; plus levels of planning gain
 - v) Level 3 of the Code for Sustainable Homes was assumed, and also the RSS requirement for 10% renewable energy.
 - vi) Abnormal costs were taken into account where the sites indicated they were likely

S6 Clearly this range of elements generated a large range of possible outcomes. These were assessed through our bespoke valuation methodology to indicate 'residual land values'. This is the standard approach, and assumes that all costs and returns are measured, except for the land value outcome. The latter is the key variable. It can then be compared with other scenarios, and with alternative use values. The latter are typically agricultural in rural areas and industrial in urban ones.

Appraisal outcomes

S7 The general result with no affordable housing and no grant indicated residual values:

- i) Ranging between £100k and £1.4m per acre (£250k – £3.46m per ha)
- ii) A typical range of £200-£500k per acre (£500-£1.24m per ha)

S8 These values are a bit below the main alternative source (VOA: Valuation Office Agency) published data, and the very limited land sales information available in the credit crunch. The first of these sources is a little out of date, however, which is material in a falling market. However this finding does suggest that our valuations are on the safe side.

S9 As affordable housing contributions are included, so the land values fall. The size of the effect can be summarised for a typical site showing £500k per acre without affordable housing (£1.24m per ha):

- i) Target of 20%: reduced to £250k per acre (£620k per ha)
- ii) Target of 30%: reduced to £130k per acre (£320k per ha)

S10 These typical findings vary considerably with site type. The worst performing are high density sites (such as blocks of flats) as the land value is proportionately much less of the overall site value, and is hit harder by the effect of a rising target.

S11 The lowest alternative use value, which as usual is agricultural, was judged to be £10k per acre (£25k per ha). However to produce a land sale the price would clearly have to be higher than that. The size of the required 'cushion' of extra value required to produce a land supply is always debateable, and the views take vary with the nature of the interest. After consideration, we took the view that 'cushion' should in this case be £75k per acre (£185k per ha).

S12 Applying this approach, the results for the 15 sites can be summarised (and show in the Figure below):

- i) Even at 100% market housing only 10 sites were fully viable (plus 3 were marginal)
- ii) At a 20% target 6 were viable (plus 2 marginal)

- iii) At a 30% target 3 sites were viable (and 2 were marginal)
- iv) At 40% only 1 site was viable (with another marginal)

Table S1 Appraisal outcomes: zero grant							
No	Site	Alt use value	Value £k per acre				
			No affordable	20%	30%	40%	50%
1	Old Hall Farm	10/	203	23	-71	-166	-263
		85	VIABLE	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
2	South Burntwood	10/	191	6	-91	-190	-289
		85	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
3	Bison Concrete	265/	290	71	-41	-157	-272
		340	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
4	S Shortbutts Lane	10/	344	138	33	-75	-186
		85	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
5	Park Lane Mile Oak	10/	402	191	85	-25	-139
		85	VIABLE	VIABLE	VIABLE	NOT VIAB	NOT VIAB
6	Lynn Lane Shenstone	275/	521	269	144	14	-121
		350	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
7	Abattoir Chase Terr	172/	-196	-430	-548	-669	-789
		247	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
8	Fazeley Saw Mill	201/	240	39	-65	-171	-278
		276	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
9	Handsacre Serv Stn	90/	105	-230	-399	-571	-743
		165	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
10	Whittington Gr Sch	187/	521	246	101	-45	-194
		262	VIABLE	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
11	Orchard Farm	161/	585	328	199	64	-73
		236	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
12	Central Garage	275/	175	-253	-470	-687	-906
		350	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Mastrom Printers	179/	1,378	895	643	397	136
		254	VIABLE	VIABLE	VIABLE	VIABLE	NOT VIAB
14	Millbrook Drive	75/	723	410	245	78	-90
		150	VIABLE	VIABLE	VIABLE	MARGINAL	NOT VIAB
15	Pear Tree Cottage	100/	421	199	85	-31	-147
		175	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB

Source: Lichfield Affordable Housing Viability Study, Fordham Research 2009

- S13 On this basis, we would suggest that a 20% target is broadly reasonable for the whole district. As can be seen from the summary above, that target does not radically alter the position with no affordable housing, but higher target levels do. Such a target should be capable of exceptions where applicants can show, in a transparent manner, that there are extra site specific costs which indicate a lower target.
- S14 There is, however, a systematic variation in the viability results: they are far higher in rural areas, and lower in urban ones. Thus it would be possible to envisage separate rural and urban targets.
- S15 We also considered whether it would be sensible to use a lower site threshold than the standard 15 dwelling one in CLG Guidance. We found that it is, in the rural areas, although extending it to urban areas would require further work.

Dynamic Viability analysis

- S16 This is designed to overcome a dilemma created by the Credit Crunch. During the history of affordable housing targets since their creation in 1991 there had been a broadly rising market. This meant that targets could rise also, and reach their current level of around 40-50%. The downturn following the Credit Crunch meant that target had to be lowered. It was always a condition of such targets that they should not remove viability from the market housing developments of which they were a part (such targets only apply to market housing developments, not to ones that are fully funded by public grants).
- S17 Fordham Research has devised a system which permits deliverable targets to be set, regardless of future fluctuations in the market, using sets of price and cost indices. It means that the Core Strategy Inquiry can be presented with the full range of possible target outcomes, and once approved (in whatever form) no new policy change is required to alter the target. It is changed only by the movement of published indexes. The intervals at which it is changed must be infrequent enough to permit an orderly land market, thus perhaps annually.
- S18 In order to generate the data below it is necessary to agree a Benchmark Site. This is necessary to permit a reasonably simple outcome. In the case of Lichfield that site is No 4: South of Shortbutts Lane. As will be seen from Table 6.3 this is marginal at a 30% target. We consider that 20% is a reasonable target in the present market. The benchmark site is judged to be typical of future development sites in the Borough, and will remain so for the plan period. This is immaterial of whether the site itself is built. Sites of this character will remain typical: this is the assumption.
- S19 In order to provide the LDF Examination and its Inspector with a robust range of variation, wider than is likely to arise during the plan period, the detailed tables shown in Chapter 8 below contain three layers of detail:

- i) Coarse matrix: this is based on 10% intervals in the indexes and therefore shows a very wide range. It goes from price/cost falls of -20% to price/cost rises of 50-60%. These are greater than are likely to arise in the plan period, but the array does provide the widest likely range of target possibilities.
- ii) Fine matrix. This is based on 4% intervals in the indexes and is designed to provide workable jumps between target levels. The Coarse matrix can imply leaps of 10 or 20% in targets, which would not be workable in practice. The Fine matrix normally overcomes that by typically generating 5% levels of change. In Lichfield's case, however, the Fine matrix did not uniformly achieve this.
- iii) Hence we have produced in Lichfield's case only a Superfine matrix based on 2% intervals in the indexes.

S20 The figure below shows the Superfine Matrix, with intervals of 2% in the indexes. As can be seen from examining the 0%/0% point (the 20% deliverable affordable housing target) the changes around that point either show no change or 5% movements. This appears a reasonable level of movement for a target.

Figure S2 Superfine Matrix: base alternative use value

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%	498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4	
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Source: Figure 8.4 below

S21 From Figure S2 it can be seen that if the indices for price and cost move from the 0%/0% point on price and cost the target will either stay at 20% or move by 5% steps up or down.

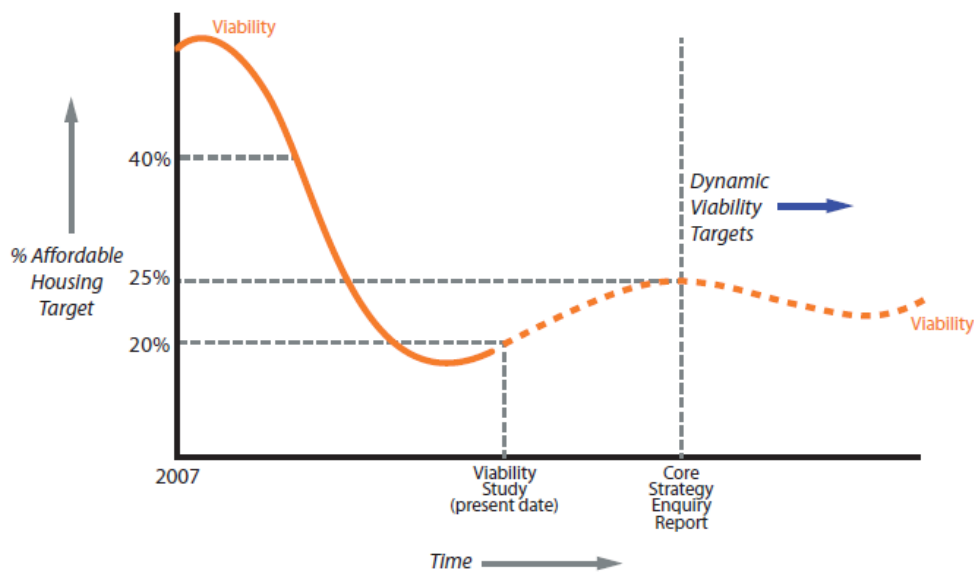
S22 The way in which this works is that at periodic intervals: the obvious one being the Annual Monitoring Report which all councils produce, the indexes are examined to see whether their movement has been enough to trigger a target change.

S23 There are three indexes to be checked, and this needs to be done in an order:

- i) Firstly has the Alternative Use Value index changed enough to trigger a shift from the base table to one of the other eight tables? If it has, then the latter table is used for the second step
- ii) Using whichever is the relevant Alternative Use value table, check the Halifax and BCIS indexes to see whether there has been enough change to require a target change.
- iii) In doing this the principle is to average downwards. Thus if the index change would allow the target to move from 25% to around 29%, the target should remain at 25% since the next step to 30% is not deliverable.

S24 Since the formal target varying procedure cannot begin until the LDF is approved, it may well be necessary to update the current figure when the LDF's Examination in Public is conducted. Figure S3 indicates this process schematically.

Figure S3 Implementing Dynamic Viability



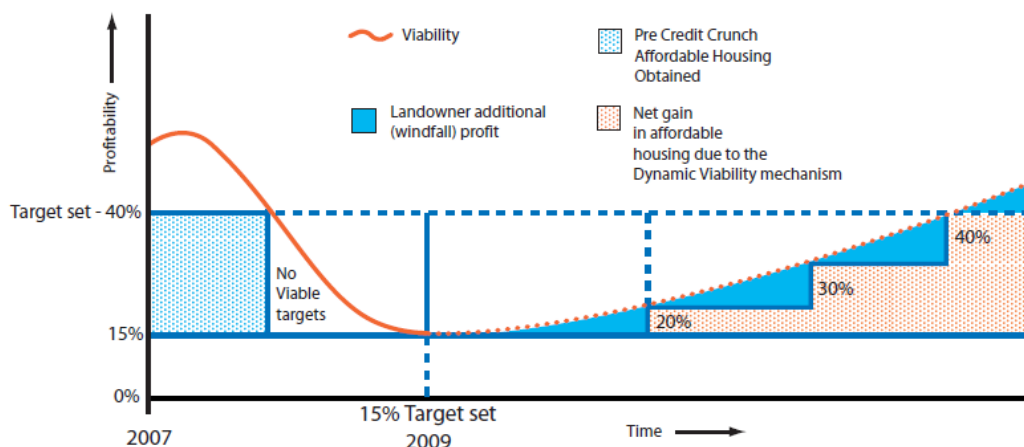
Source: Lichfield Affordable Housing Viability Study, Fordham Research 2009

S25 The diagram illustrates the possible change in viability between completion of the viability study and Core Strategy EIP. After that, of course, the Dynamic Viability matrix will take account of future variations in viability.

Conclusion

- S26 The main point is that the Dynamic Viability matrices will ensure that all future changes in the housing market are tracked by deliverable affordable housing targets.

Figure S4 Gain of Affordable Housing from Dynamic Viability



Note: This diagram is schematic and does not apply to Lichfield

- S27 This figure also shows that the landowners/developers will gain from any uplift in the market (again, the 40% pre-credit crunch target shown is general and not specific to Lichfield). The basic viability assessment assures the landowner and the developer of a reasonable return. When the market goes up, the private sector will gain a windfall profit (shown by the blue areas under the viability curve) and the public interest will gain affordable housing as the targets are periodically altered.
- S28 The Dynamic Viability procedure ensures that the maximum of deliverable affordable housing is achieved.

Table of Contents

Executive summary	i
Introduction.....	i
Technical approach.....	i
Testing the sites.....	ii
Appraisal outcomes.....	iii
Dynamic Viability analysis.....	v
Conclusion.....	viii
List of abbreviations	v
1. Introduction	1
Introduction.....	1
Reasons for this study.....	1
What this means for the study.....	3
Stage 1 viability methodology.....	3
Fordham Research.....	4
Structure of this report.....	5
2. Individual development sites	7
Introduction.....	7
An area of attractions.....	7
Identifying a range of sites.....	8
The sites.....	8
Development assumptions.....	9
3. Affordable housing and other developer contributions	13
Introduction.....	13
Affordable housing assumptions.....	13
Other developer contributions.....	15
4. Local market conditions	17
Introduction.....	17
Issues to consider.....	17
The residential market.....	18
Price assumptions for financial appraisals.....	20
Land values.....	22
Current and Alternative Use Values.....	23

5. Assumptions for viability analysis	27
Introduction.....	27
Development costs.....	27
Financial and other appraisal assumptions.....	31
Site acquisition and disposal costs.....	33
Alternative use value comparison	34
6. Results of viability analysis.....	35
Introduction.....	35
Financial appraisal approach and assumptions	35
Appraisal results.....	35
Alternative use benchmarks	37
Comparison results.....	40
History: the last market recession	42
The pattern of future movements	43
Sensitivity: price and cost levels.....	45
Sensitivity: the market peak	47
Sensitivity: tenure split.....	48
Sensitivity: dwelling size mix	50
7. Implications of results	51
Our approach.....	51
Implications of appraisal results	52
Other points.....	54
Recommendations.....	55
8. Dynamic Viability results	57
What Dynamic Viability does.....	57
Benchmark Site	57
Key indexes.....	57
Outputs of the various matrices.....	58
Implementing Dynamic Viability	61
Conclusion.....	62
Appendices	65
Appendix 1 Newbuild schemes.....	67
Appendix 2 House price variations.....	69
Appendix 3 Small plots for sale.....	71

Appendix 4 Proposed benchmark appraisal73

 Benchmark site.....73

 Indexation73

 The three sets of tabulations73

Appendix 5 Financial appraisal summaries83

List of abbreviations

£ k	thousand pounds
£ m	million pounds
dw	dwelling
dwgs	dwellings
ft	foot
ha	hectare
m	metre
sq	square
Q1	Quarter 1

1. Introduction

Introduction

- 1.1 Fordham Research was commissioned by Lichfield District Council to produce guidance on the financial viability implications of alternative targets and size thresholds for affordable housing provision within the District area. The study builds in part upon results from an earlier study, a Strategic Housing Market Assessment (SHMA) for Lichfield and adjoining areas and, like that study, will provide input into the ongoing work on preparation of Local Development Documents for the District.

Reasons for this study

- 1.2 Government Guidance (PPS3:Housing (2006)) contains a paragraph which says that affordable targets should:

*'reflect an assessment of the **likely** economic viability of land for housing within the area, taking account of the risks to delivery and drawing on informed assessments of the likely levels of finance available for affordable housing, including public subsidy and the level of developer contribution that can reasonably be secured.'* (S29) (our emphasis)

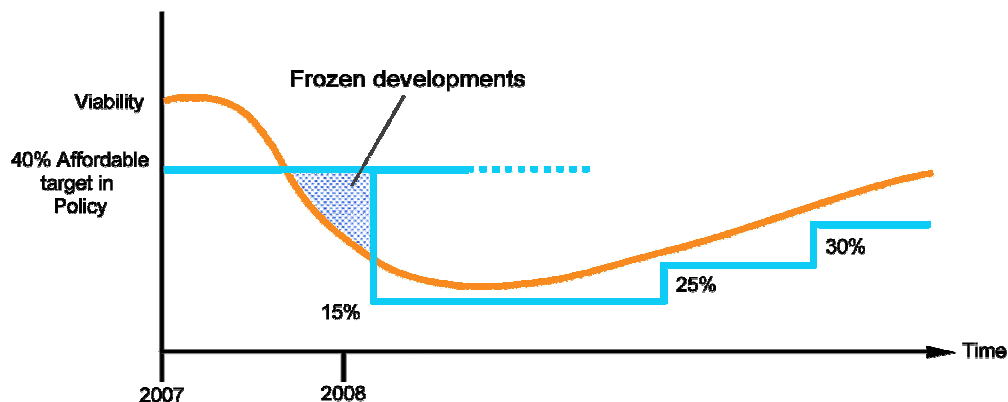
- 1.3 Until the Court of Appeal decision of August 2008 over the Blyth Valley Core Strategy Inspector's report nobody really understood that this statement in PPS3 conferred a new duty on local authorities. In summary:

'There is now a duty on every local authority to ensure that any affordable housing target is broadly deliverable within the area.'

- 1.4 The word 'likely' in the above quotation from PPS3 is taken to mean that the duty is a 'broad brush' one: the typical site in the local authority should be able to bear whatever target is set. Some sites within the area will not be able to do so, but of course they still have the original scope to make specific submissions at the planning applications stage.

- 1.5 The date at which this new duty was legally defined to exist coincided with the Credit Crunch downturn. This had the effect of reducing the profitability of new housing developments, and hence their viability. This situation is shown schematically in the figure below:

Figure 1.1 The effect of the credit crunch on viability



Source Fordham Research 2009

- 1.6 The diagram shows that where once a 40% target was easily viable, at the time shown in the diagram, only a 15% target is viable. Projected future improvements in viability mean that at various times in the future 25% and 30% targets may be viable.
- 1.7 The situation depicted in Figure 1.1 has caused difficulty in setting targets. The Homes and Communities Agency (HCA) issued Good Practice Guidance on affordable target setting in July 2009. This sets out (in para 19) two alternative bases for target setting:
- Set the target to the minimum (probably current) level of viability: 15% in the example. This would evidently under-provide affordable housing when taken over a plan period.
 - Set the target for a 'normal' market and treat it as flexible
- 1.8 The second approach is based on an unpublished note from the Planning Inspectorate and the Good Practice note advises its use. But the result will not be robust:
- The concept of the 'normal' market is unsound. Prices have always varied, and it is not possible to state which of them is 'normal'. Prices rose unevenly for the whole period 1991 to 2007 but no part of the curve can be labelled 'normal'

- ii) In the present recession there is no agreement as to how long it will last, and what the curve of viability over time (as illustrated in Figure 1.1) will look like. It could be 'V' shaped, 'U' shaped or 'bath' shaped. Nobody knows. It is quite possible that things will get worse before they get better, and that there will be reverses along the way. In short any 'normal market' target is likely to be undeliverable for much of its life. Some attempts to set one have based themselves on the 2007 peak. This is unlikely ever to repeat, as the cost and price environment will be quite different in future. There is no safe basis for guessing a 'deliverable' target for a 'normal' market.
- 1.9 The 'normal market' target would therefore be vulnerable to S78 appeal, probably for much of its life, and applicants who went to appeal saying that it was 'undeliverable' would be likely to succeed. Such targets are therefore not robust, or sensible to set.
 - 1.10 The Dynamic Viability model was constructed by Fordham Research to provide a third option: affordable targets that are both deliverable, and provide a reasonable maximum of affordable housing.

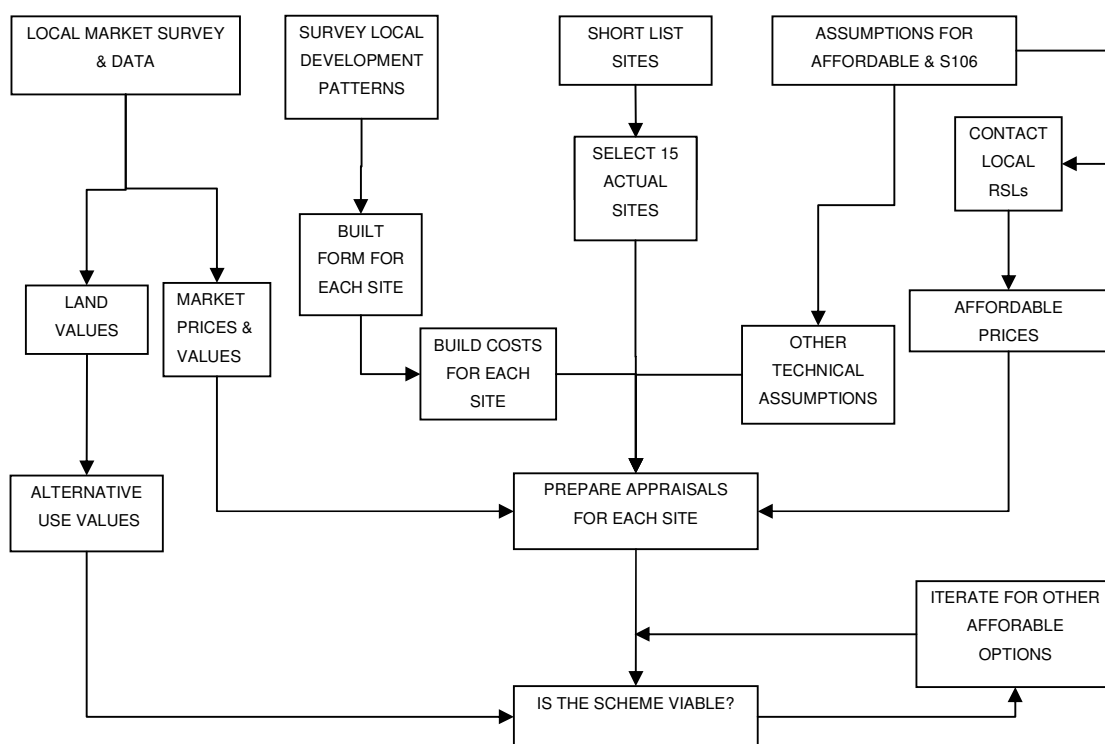
What this means for the study

- 1.11 This means that the study is in two stages: the first being the standard viability analysis (in Chapters 4-7) and then the second stage containing the Dynamic Viability analysis in the latter part of Chapter 8.

Stage 1 viability methodology

- 1.12 The stage 1 methodology is summarised in Figure 1.2 below. Fundamentally, it involves preparing financial appraisals for a representative range of sites across the study area. In this case a selection of sites was chosen from a shortlist.
- 1.13 The appraisals tested alternative levels of affordable housing provision, in each case a combination of social rented and intermediate housing. RSLs were asked to provide guidance on the likely purchase prices they would pay for units in each category. Assumptions were also required for the developer contributions that would be sought under other headings like education and open space.
- 1.14 We surveyed the local housing market, in order to obtain a picture of sales values for the market housing, and also of land values - for residential development, to calibrate the appraisals; and for other uses, to assess alternative use values. Alongside this we considered local development patterns, in order to arrive at appropriate built form assumptions for those sites where information from a current planning permission or application was not available. These in turn informed the appropriate build cost figures.

Figure 1.2 Stage 1 viability methodology



Source: Fordham Research 2009

- 1.15 A number of other technical assumptions were required before appraisals could be produced. The appraisal results were in the form of £ per acre/ha 'residual' land values, showing the maximum value a developer could pay for the site and still return a target profit level.
- 1.16 Finally, the residual value was compared to the benchmark alternative use value for each site. Only if the residual value exceeded the benchmark figure, and by what is explained in due course to be a satisfactory margin, could the scheme be judged to be viable.

Fordham Research

- 1.17 Fordham Research has been providing advice to Councils in respect of planning gain and development viability since the late 1980s. The firm's approach throughout this time has involved the preparation of financial appraisals. Over the last few years in particular, Councils have increasingly commissioned the firm to evaluate financial appraisals which have been prepared by developers in order to support a case for a reduced affordable housing contribution, for enabling development, and so on.

- 1.18 Since 1993 Fordham Research has become a leading consultancy in carrying out Housing Needs Surveys (and more recently the more wide ranging Strategic Housing Market Assessments that have largely replaced them) and advising Councils on affordable housing policy issues.
- 1.19 Since that time the firm has assisted Councils on very many occasions by providing expert witness services at Local Plan and S78 Inquiries, successfully supporting housing need and affordable housing policies. Particularly in recent years, this has regularly included evidence in respect of viability issues.

Structure of this report

- 1.20 The remainder of the report covers the following topics:

Chapter 2 - The individual development sites

Chapter 3 - Affordable housing and developer contributions assumptions

Chapter 4 - Local market conditions

Chapter 5 - Assumptions for viability analysis

Chapter 6 - Results of viability analysis

Chapter 7 - Implications of viability results

2. Individual development sites

Introduction

- 2.1 This chapter deals with the sites identified for study, first outlining the key characteristics of each site, and then considering the assumptions made about proposed development upon each site for the purpose of producing a financial appraisal. The individual sites chosen were visited at an early stage in the work.

An area of attractions

- 2.2 The District of Lichfield is located immediately to the north of the West Midlands Metropolitan area. Consequently whilst it is a large and comparatively rural area with only two sizeable urban communities, the City of Lichfield and Burntwood it closely abuts other urban areas at Brownhills and Sutton Coldfield, as well as two other major settlements in adjoining Districts. These are Rugeley, towards the north-western corner of the area, and Tamworth, which the District wraps around on three sides, to the south-east.
- 2.3 The splendid hills and wooded areas of Cannock Chase lie just to the west of the area. These and the open water of Chasewater reservoir provide important leisure opportunities for the people of Lichfield and other adjoining districts, as well as for the conurbation to the south. Cannock Chase and indeed much of Burntwood were shaped by and carry the consequences of the historic coal mining and other related activities. Much progress has been made with regeneration in Burntwood, and the open land between Lichfield and Burntwood lies within the Forest of Mercia.
- 2.4 Further north the River Trent forms the northern boundary of the District and part of the area bounding the Trent Valley, around Alrewas and Edingale, lies within the National Forest. The Trent and Mersey canal crosses the northern part of the district from the north-east to the north-west, forming a junction at Fradley with the Coventry Canal which then follows a winding course southwards, passing Lichfield and on towards Tamworth.
- 2.5 The District has good transportation links; the A5 and M6 Toll Road both cross the southern part of the District, and these roads both link with the A38 dual carriageway a short distance south of Lichfield. The West Coast Rail line runs north-west to south-east across the District, whilst a route from the conurbation towards Derby traverses and links with this at Lichfield Trent Valley Station. The station serving Rugeley is located just within the north-west corner of the District.
- 2.6 Much of the District is pleasantly rural and there are a number of attractive and sought after villages, located as they are within easy reach of the conurbation.

Identifying a range of sites

- 2.7 It was decided that for Lichfield District the required guidance on viability would best be achieved by looking at a range of site sizes, and at sites that were actual rather than notional. In discussion with the Council, it was decided that a total of fifteen representative sites should be examined, and this number would provide some scope for exploring viability on sites below the current national guidance size threshold of 15 dwellings.
- 2.8 A final list of 15 sites was established in discussion. It was chosen to give an appropriate balance between greenfield and previously developed land; a range of site sizes; and to give coverage across the five market sub-areas of Lichfield, Burntwood, Fazeley, and North and South Rural. Consequently a number of smaller settlements are represented along with the two principal urban areas, Lichfield and Burntwood.
- 2.9 The sites ranged in size from three to 300+ dwellings. Ten sites were on previously developed land, four on agricultural land and one on under-used garden land.
- 2.10 The sites were at various stages in the planning process. Six were subject to a planning application; five of these had been approved with one pending. Construction was under way on one permitted site and one was completed. The remaining nine sites were actual or potential allocations.
- 2.11 Information available from the various planning applications was taken into account in considering the appropriate development forms to use in our appraisals.

The sites

- 2.12 Summary details of the sites identified by the Councils are set out in the table below. The table shows both total site area, and where a significant area of non developable area applied, the net residential area.
- 2.13 The sites accommodated just 1,100 dwellings on an area of 25.65 ha net, giving an average density of 42.9 dwellings per ha. There is some emphasis on smaller sites, with eight of the 15 having 25 or fewer dwellings.

Table 2.1 Actual site details						
Site No	Name	Area ha		No dwgs	net (dw/ha)	Planning status
		Gross	Net			
1	Old Hall Farm Fradley	9.00	7.90	314	39.7	Identified in SHLAA
2	South Burntwood Highfields Rd Chasetown	6.38	5.75	250	43.5	Identified in SHLAA
3	Bison Concrete Lichfield	4.09	4.09	175	42.8	Under construction
4	South Shortbutts Lane Lichfield	2.40	2.40	100	41.7	Identified in SHLAA
5	Off Park Lane Mile Oak	1.93	1.93	78	40.4	Identified in SHLAA
6	Lynn Lane Shenstone	1.07	1.07	54	50.5	Identified in SHLAA
7	Abattoir Eastgate St Chase Terrace	0.57	0.57	49	86.0	Identified in SHLAA
8	Fazeley Saw Mill	0.62	0.62	25	40.3	Identified in SHLAA
9	Handsacre Service Station	0.18	0.18	14	77.8	Planning permission
10	Whittington Grange School	0.32	0.32	12	37.4	Completed
11	Orchard Farm, Hill Ridware	0.31	0.31	9	29.0	Full permission
12	Central Garage Depot Lichfield	0.07	0.07	7	100	Identified in SHLAA
13	Mastrom Printers Park Rd Alrewas	0.17	0.17	6	35.3	Permission subject to S106
14	N of Millbrook Drive Shenstone	0.15	0.15	4	26.7	Planning permission
15	Pear Tree Cottage Lullington Rd Edingale	0.12	0.12	3	25.0	Identified in SHLAA
	Total	27.38	25.65	1,100	42.9	

Source: Fordham Research

Development assumptions

- 2.14 In arriving at appropriate assumptions for residential development on each site, the development form in an approved planning application must always be an important consideration. However the application could conceivably now be so historic, that it represents something that would either not now be proposed, or not be permitted. After consideration we took the view that the built form in the current application remains the best basis for carrying out appraisals.
- 2.15 In recent years, as development proposals have engaged with the various implications of PPG3 but aided by rising land values, a common development format has emerged for significant sized sites in most larger urban areas, initially in the more prosperous or pressured parts of the country, but increasingly also in smaller centres. This format provides for a majority of houses (with perhaps 15-30% flats) in a mixture of two storey and two and a half to three storey form, with some rectangular emphasis to the layout.

- 2.16 Typically, these would generate a floorspace density of around 15,500 sq ft per acre (3,550 sq m per ha) on a substantial site, or sensibly shaped smaller site. A representative density might be 40-45 dwellings per ha.
- 2.17 Alongside this, there are of course schemes where land is used more intensively. In many inner urban locations, and indeed sometimes elsewhere, there have been large numbers of higher density schemes providing largely or wholly apartments, in blocks of three storeys and often rather higher. These provide floorspace density from around 30,000 sq ft per acre (6,900 sq per ha) upwards, at densities of 100 dw per ha plus.
- 2.18 Even ignoring the wholly apartment schemes, sites with a stronger urban emphasis than described at above, with rather higher proportions of flats, or of three storey town houses, will typically deliver around 19,000 sq ft per acre (4,350 sq m per ha).
- 2.19 In contrast, there will be situations where, for planning reasons, particularly on small sites, in rural, edge of town or more sensitive locations, schemes with densities below the 15,500 sq ft per acre (3,550 sq m per ha) 'baseline' will come forward. A typical density might be around 12,500 sq ft per acre (2,850 sq m per ha).
- 2.20 These observations suggest a built form typology as set out in the table below. It comprises four categories.
- 2.21 There is a 'base' category to reflect the common urban form referred to above, i.e. giving 15,500 sq ft per acre (3,550 sq m per ha), and one less dense and two more dense variations from this starting point. We would stress that the short titles used to describe the categories have been adopted for convenience only, and must not be taken to imply anything specific about where, or when, they might apply.
- 2.22 The above typology was used to develop model development assumptions for the sites where actual information on planning proposals was not available.

Table 2.2 Typology of development form			
Category title	Density		Built form characteristics
	Floorspace net sq ft/acre (net sq m per ha)	Dwellings (typical dw/ha)	
Lower density	12,500 (2,875)	20-33	Edge of settlement, less pressured location. Mostly 2 storey, largely 3 & 4 bed detached houses with garages.
Base	15,500 (3,550)	40-45	Mixture of 2 & 2.5/3 storey houses, many terraced; some (15-25%) flats, limited garaging.
Urban	19,000 (4,350)	45-60	Mixture of 3 storey flats (c 30-35%) and town houses. Normally no significant open space.
High	30,000 (6,900)	100+	Flats in small blocks on 3 storeys, parking spaces

Source: Fordham Research

2.23 The resulting assumptions for residential development for each of the 15 sites are set out in the Table below. The sites where actual data was available (shown as P in the table) conform fairly well to the sites using model data informed by the typology (shown as M).

Table 2.3 Site development assumptions					
Site ref	Category	Development form (M/P)	Net sq ft/acre	Net sq m/ha	Ave dw net sq ft (sq m)
1	Old Hall Farm Fradley	Base M	15,500	3,550	964 (90)
2	South Burntwood	Base M	15,500	3,550	881 (82)
3	Bison Concrete Lichfield	Base/Urban P	17,100	3,950	988 (92)
4	S Shortbutts Lane Lichfield	Base M	15,500	3,550	919 (85)
5	Park Lane Mile Oak	Base M	15,500	3,550	948 (88)
6	Lynn Lane Shenstone	Base M	15,500	3,550	759 (71)
7	Abattoir Chase Terrace	Urban/High M	22,100	5,050	635 (59)
8	Fazeley Saw Mill	Base M	15,500	3,550	950 (88)
9	Handsacre Service Station	Urban/high P	26,550	6,100	843 (78)
10	Whittington Grange School	Urban P	18,600	4,250	1,230 (114)
11	Orchard Farm Hill Ridware	Base P	15,300	3,500	1,300 (121)
12	Central Garage Lichfield	Urban/High P	25,500	5,850	630 (59)
13	Mastrom Printers Alrewas	Urban P	19,500	4,500	1,368 (127)
14	Millbrook Drive Shenstone	Urban P	18,350	4,200	1,700 (158)
15	Pear Tree Cottage Edingale	Lower M	12,500	2,850	1,235 (115)

Source: Fordham Research

2.24 Although seven sites are in the Base group, the remainder provide a reasonable spread across the other categories. There are no sites fully in the High category; nevertheless three sites are in an intermediate group falling between Urban and High.

3. Affordable housing and other developer contributions

Introduction

- 3.1 This chapter considers the assumptions used to test a range of affordable housing scenarios for the individual sites, and similarly the developer contributions assumed for each site.

Affordable housing assumptions

- 3.2 We undertook appraisals for a number of development scenarios which involved varying proportions of affordable housing, and tenure split. The assumptions in respect of proportions, and the financial terms on which they are to be provided, are considered below.

(i) Affordable proportion

- 3.3 Following discussions with the Council we agreed to test the following options:

- **NO** affordable housing
- 20% affordable
- 30% affordable
- 40% affordable

- 3.4 Current policy provides for a target proportion of 25%.

- 3.5 New and higher targets may of course be proposed in emerging Local Development Framework Documents. Any such targets would of course be informed by the recent Strategic Housing Market Assessment, as well as by the present study.

(ii) Tenure split

- 3.6 The Council currently seeks a mixture of social rented and intermediate housing, though with a large majority (80%) provided as social rented. We were asked to test this option, giving an 80%:20% split between social rented and intermediate housing. The Council subsequently asked for guidance on the impact of an alternative tenure split.

3.7 In principle, intermediate tenure could constitute a wide range of different housing propositions. After discussion with the Councils it was agreed that intermediate housing should be assumed to be shared ownership provided at a 25% share with rent at a maximum of 2.75% of unsold equity.

(iii) Size profile

3.8 After discussion we assumed that the mix of affordable housing on each site should broadly follow the market housing, achieving an average dwelling size (i.e. net sq ft/sq m) in line with that of the market housing. This assumption is a convenient one which ensures that as the affordable housing proportion varies between the options being tested, the floorspace density remains constant - a desirable aim if the appraisals are to constitute a realistic development scenario, consistently, across the options.

3.9 In working up development assumptions for the sites we made broad assumptions about the indicative mix of dwellings on each individual site. Collectively these deliver an overall mix profile as set out in the table below.

Table 3.1 Aggregate size mix profile		
	No of dwgs	%
1 bed flat	50	5
2 bed flat	160	14
2 bed house	196	18
3 bed house	416	38
4 + bed house	278	25
Total	1,100	100

Source: Fordham Research 2009

3.10 The profile reflects the particular characteristics of the sites chosen for assessment. The profile shows a reasonable balance between different sizes of units. However there are only 19% one and two bedroom flats overall, and conversely 25% of the dwellings have four or more bedrooms, whilst the Council wishes to promote the production of smaller and medium sized dwellings. It is reasonable to ask what impact on viability would result if the Council were to use planning policy to constrain the mix on the selected sites in favour of smaller units. This is a matter to which we return when evaluating the appraisal findings, in Chapter 7.

(iv) Financial terms

- 3.11 To be consistent with national guidance the viability study must take into account the likely availability of public subsidy i.e. Social Housing Grant. The future availability of grant – both the total quantum of grant, and the amounts forthcoming for different sizes of dwelling and tenure – is typically subject to some uncertainty, as increasingly the available funding has been directed to achieving specific regional or strategic priorities. An assumption based on a ‘default position’ of zero Social Housing Grant has become a common starting point in this situation. The zero grant assumption also has the incidental advantage of allowing the requirement for grant in individual cases to be calculated more simply than if a set level were already allowed for.
- 3.12 After some consideration and discussion it was agreed that appraisals should be produced with an assumption of zero Social Housing Grant, showing its impact of an upon the base appraisal results.
- 3.13 It was necessary to seek advice from the Councils’ partner RSLs about the financial terms on which properties of various sizes would be purchased from the developer in order to achieve the ‘zero grant’ scenario.
- 3.14 The RSL responses in conjunction with drawing upon our own experience from other Viability Assessments provide a basis for the figures as set out below. Variations in the proposed figures provided by the RS’s were anticipated, as each Association has its own investment criteria, which is particularly relevant in the current market conditions. The response from the RSLs was limited as recent investment in new projects within the Councils area has been limited.
- 3.15 After carefully considering the RSL data available it was decided to take a broad average, which was also in line with our own expectations. The table below outlines the figures included within the study.

Table 3.2 Selling prices: zero grant basis				
	£ per sq ft (sq m)			
	Social rented		Intermediate	
	Flat	House	Flat	House
Zero grant - income stream only	70 (753)	65(699)	108 (1,162)	102 (1,098)

Source: Fordham Research 2009

Other developer contributions

- 3.16 Aside from affordable housing, developer contributions could potentially be sought by the District and County Councils under a number of headings. They might be either made in kind, or as financial payments. In either case, it is necessary to allow for the additional financial cost of such contributions in preparing appraisals for each site.

- 3.17 Some information was available in respect of the sites with planning permission. Contributions had been achieved under a variety of headings on individual sites. The main items include: Social and Community Facilities, this is charged at a rate of £2,500 on average and Education at a rate of £550 and £600 per dwelling. The education contribution is for both primary and secondary schools. The rates only apply to house dwellings and the levy for secondary schools has been only charged against private market dwellings. Education is not charged to sites of less than seven dwellings. It has not been charged to the Sites no. 9, 10, and 11 as none of these consented sites were required to make an education contribution.
- 3.18 We have also considered information on the actual contributions sought or obtained from the sites in the study.

Table 3.3 Developer contributions assumption				
Site		total cost £ per:		
		dw	mkt dw	mkt house
1	Old Hall Farm Fradley	5,500	550	600
2	South Burntwood	5,100	0	0
3	Bison Concrete Lichfield	8,300	550	600
4	S Shortbutts Lane Lichfield	7,300	550	600
5	Park Lane Mile Oak	5,100	550	600
6	Lynn Lane Shenstone	5,100	550	600
7	Abattoir Chase Terrace	5,100	550	600
8	Fazeley Saw Mill	5,100	550	600
9	Handsacre Service Station	5,100	0	0
10	Whittington Grange School	5,100	0	0
11	Orchard Farm Hill Ridware	5,100	0	0
12	Central Garage Lichfield	5,100	0	0
13	Mastrom Printers Alrewas	5,100	0	0
14	Millbrook Drive Shenstone	5,100	550	600
15	Pear Tree Cottage Edingale	5,100	550	600

Source: Fordham Research

- 3.19 It must be emphasised that this approach is simply intended to treat the 15 sites consistently and equitably in order to allow financial appraisals to be produced which provide a strategic overview. The figures do not purport to represent necessarily what would be sought, offered or negotiated, on specific sites.
- 3.20 Many Councils are currently considering the introduction of a Community Infrastructure Levy (CIL) providing a standard charge based on an assessment of aggregated infrastructure costs. It is quite possible that such a charge might well lead to higher costs than those assumed here.

4. Local market conditions

Introduction

- 4.1 This chapter sets out an assessment of the local housing market in Lichfield, providing a basis for the assumptions on house prices and costs to be used in financial appraisals for the 15 sites tested in the study.
- 4.2 As well as house prices, however, land values are also considered. They are required in order to form a view of likely alternative use values for all of the sites, and it is such values which will represent a minimum viability threshold when appraisals are prepared for the range of affordable housing scenarios.
- 4.3 Before looking at the results from the market assessments, there are some general points arising from the nature of the exercise.

Issues to consider

- 4.4 It is necessary to assess property market conditions in the study area in order to provide a reasonable guide as to likely values to use in evaluating different development proposals.
- 4.5 Although development schemes do have similarities, every scheme is unique to some degree, even schemes on neighbouring sites. While market conditions in general will broadly reflect a combination of national economic circumstances and local supply and demand factors, even within a town there will be particular localities, and ultimately site specific factors, that generate different values and costs. There are indeed quite significant value variations in different parts of the study area.
- 4.6 Property market forces are in a constant state of flux and assessments of viability can change over relatively short periods of time, in response to broader economic fluctuations such as the impact of changes in interest rates on the costs of borrowing, the actual availability of funding, and the outlook in the employment market. Equally significant, sub-area market conditions are often changed by local factors.
- 4.7 For example, high value areas encourage demand in lower value neighbouring areas, where new developments encourage changes in value growth in what perhaps were previously less popular areas.

The residential market

- 4.8 The housing market in the District will, to some extent, reflect national trends but there are local factors that underpin the market including:
- attractive and contrasting landscapes along the western and northern edges of the area, at Cannock Chase and the Trent Valley, providing for recreation opportunities for residents of the area
 - the pleasant city of Lichfield with a historic centre, many attractive buildings and employment opportunities
 - many attractive smaller settlements, with attractive buildings and settings, providing housing within convenient commuting distance of the West Midlands conurbation
 - a range of other employment opportunities in the area or as with Tamworth, close by
 - good transportation links via the M6 Toll Road, A5 and M42/A42 to the national motorway network
 - some older areas undergoing regeneration and providing cheaper housing stock, predominantly around Burntwood, Fazeley and Handsacre.
- 4.9 We analysed various sources of market information but the most relevant are the prices of units on new developments. A list setting out details of some relevant new developments in the area, as at February 2009, is provided in Appendix 1. The Appendix also has details of recently developed and completed schemes directly relevant to the sample sites. Any historic prices have been adjusted to current date levels by reference to the Halifax House Price Index.
- 4.10 Analysis of these, and other schemes in the study area, shows that prices for newbuild homes vary quite widely across the area, ranging between approximately £145 and £300 per square foot (£1,600 - £3,225 per square metre). This is the range for individual properties; averaged over the complete scheme the degree of variation will of course be somewhat less than this and many sites had average values around the £200 per sq ft level (£3,225 per sq m). However there were fluctuations in price level and it is clear that a typical price per sq ft /per sq m can vary across the study area and therefore between the 15 sample sites tested. The range in capital sums varied from circa £105k to an upper level around £475k. These ranges are broadly in line with the Land Registry data as set out in Table 4.1
- 4.11 Table 4.1 shows average prices for Lichfield for the latest quarter available from Land Registry, Q4 2008. Although the Land Registry data covers both second-hand and newbuild prices, the former will predominate. The average prices in the Table are compared to a corresponding England & Wales figure and expressed as indices.

Table 4.1 Average house prices Q4 2008: comparison with England & Wales average

Area		Ave price (£k & % index)			
		Detached	Semi	Terrace	Flat
Q4 08	ave £k	£314.8	£167.5	£143.0	£128.2
	no of sales	64	62	45	18
	index	112%	95%	97%	100%

Source: Land Registry data.

Index compares LA's ave £k price figure to the median LA value across England & Wales for house type.

- 4.12 Prices in the Lichfield Council area are around average (median LA area), though a little higher for detached houses, which are the type with the largest number of sales.
- 4.13 As in the country generally, prices have fallen back over the last 12 months. However because Land Registry data reports sales after completion there is some lag and the figures show the decline to only a limited extent, although the decline in sales numbers does show up quite clearly (sales are seasonally low in the first quarter).

Table 4.2 Average house prices in previous quarters

Area		Ave price (£k & % index)			
		Detached	Semi	Terrace	Flat
Q4 07	ave £k	£356.3	£184.9	£159.0	£137.5
	no of sales	138	163	82	51
Q1 08	ave £k	£338.8	£183.8	£169.2	£143.8
	no of sales	88	91	53	42
Q2 08	ave £k	£327.7	£177.7	£159.2	£143.8
	no of sales	109	115	61	42
Q3 08	ave £k	£340.2	£184.5	£178.4	£163.9
	no of sales	84	80	42	34

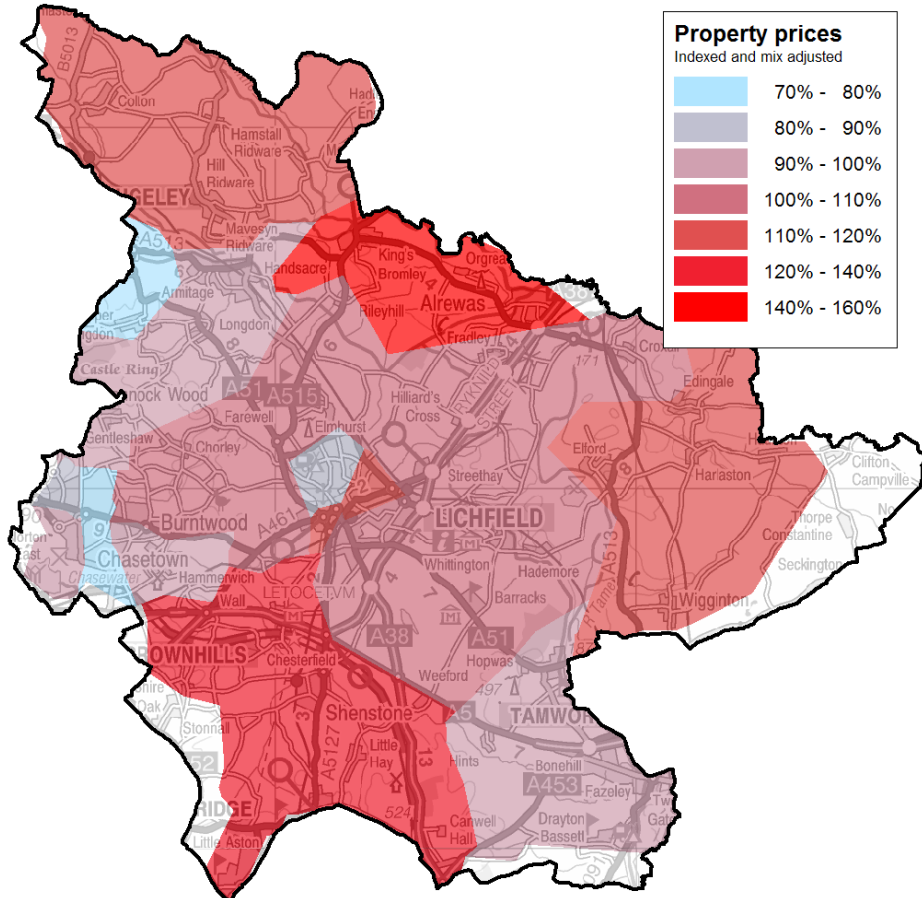
Source: Land Registry data.

Index compares LA's figure to the median LA value across England & Wales for house type.

- 4.14 Within a Council area there can be considerable variations in price, and Land Registry house price data at postcode sector level also helps to illuminate these variations. Because the number of sales in individual postcode areas in a single quarter can be quite small, we looked at information for three separate quarters (Q4 2007, Qs 2 and 4 2008). The data has been expressed as an index – as a percentage of the nationwide average price level - and standardised, to allow for variations in type mix. (Appendix 2 provides a worked example of the index calculation, and sets out the resulting price index figures for the three quarters examined).

- 4.15 It can be seen from the indices in Appendix 2 that variations between the three quarters' indices are, in a number of cases, relatively slight. Variations tend to be greater for rural and town centre areas, which are mostly numerically smaller and/or more diverse, than for urban areas generally, where postcode sectors are larger numerically and can often be more uniform.
- 4.16 The average figures for the three quarters are mapped in Figure 4.1 below.

Figure 4.1 Postcode price indices



© Crown copyright

Indices compare prices to value for median postcode sector in England & Wales

Source: Land Registry

Price assumptions for financial appraisals

- 4.17 It is necessary to form a view about the appropriate prices for the 15 individual schemes to be appraised in the study. The preceding analysis suggests that although prices in much of the area will be relatively close there will be some areas where prices are appreciably lower than or higher than the price 'standard'.

- 4.18 It is also clear that we should allow for differences between apartments and houses, particularly in locations where flats are going to be attractive. Finally, in drawing on the newbuild price data we have to bear in mind that, particularly in the present market conditions, the prices at which homes are offered may include appreciable discounts, such as deposit paid for first-time purchasers, or stamp duty.
- 4.19 Taking these points into consideration we considered what sale prices should be for flats, for detached or semi-detached houses and for terraced or town houses on each of the fifteen sites. These were then to be combined on the basis of the proportions of each type on each scheme, to produce a single composite average price.
- 4.20 The evidence of sales prices across the area, as summarised in Appendix 1, points to a 'base price' level of £180 per sq ft for houses and £195 per sq ft for flats which it was felt should apply in three of the fifteen sites (nos 1, 2 and 8). Prices below this base level were anticipated in Chase Terrace and Handsacre (Sites 7 and 9). Prices a little above base level would apply in Lichfield City area (Sites 3, 4 & 12) and at Whittington and Mile Oak (Sites 10 and 5). Prices higher again would be expected at Shenstone, Alrewas and the two smaller rural settlements (Sites 6, 14, 13, and 11, 15). Many of the sites were in locations where there was reasonable comparable evidence to support the price assumptions.
- 4.21 The majority of the 15 sites have the benefit of being able to draw upon current newbuild comparable sales information. Values for Sites 1,6,7,10,14 and 15 were in part informed by the newbuild sales information available, but were also additionally supported by a range of relevant modern second-hand properties. A number including Sites 10 and 14 (Whittington and Shenstone) were supported by sales values achieved historically on the actual site or on adjacent schemes. Where appropriate the prices have been rebased to current prices using the Halifax House Price Index.
- 4.22 The site figures resulting from our type-specific assumptions are set out in the table below.

Table 4.3 Price bands						
Site/location	Price £ per		Site/location	Price £ per		
	Sq ft	Sq m		Sq ft	Sq m	
1 Old Hall Farm Fradley	182	1,956	9 Handsacre Service Station	178	1,914	
2 South Burntwood	181	1,946	10 Whittington Grange School	195	2,098	
3 Bison Concrete Lichfield	193	2,073	11 Orchard Farm Hill Ridware	212	2,281	
4 S Shortbutts Lane Lichfield	192	2,064	12 Central Garage Lichfield	209	2,249	
5 Park Lane Mile Oak	192	2,064	13 Mastrom Printers Alrewas	275	2,959	
6 Lynn Lane Shenstone	212	2,279	14 Millbrook Drive Shenstone	215	2,313	
7 Abattoir Chase Terrace	164	1,768	15 Pear Tree Cott Edingale	215	2,313	
8 Fazeley Saw Mill	182	1,953				

Source: Fordham Research

- 4.23 The figures cover a range from the cheapest £164 per sq ft (£1,768 per sq m) at Chase Terrace to £275 per sq ft (£2,959 per sq m) at Alrewas. This is not quite as great as the spread of prices we saw in the Land Registry data for second-hand prices.
- 4.24 It is necessary to consider whether the presence of affordable housing would have a discernible impact on sales prices. In fact affordable housing will be present on many of the sites whose selling prices have informed our analysis. Our view is that in any case any impact can and should be minimised through an appropriate quality design solution.

Land values

- 4.25 We have considered general figures from the Valuation Office Agency (VOA) relating to residential land values. Land values vary dramatically depending upon the development characteristics (size and nature of the site, density permitted etc.) and any affordable or other development contribution.
- 4.26 The VOA publishes figures for residential land in the Property Market Report. These cover areas which generate sufficient activity to discern a market pattern. That means locally we have figures for the West Midlands Region as a whole, and major towns including Lichfield – but no information for smaller towns or for rural areas.
- 4.27 These values can, in any case, only provide broad guidance because it is likely that the figures will, to some degree, be net of allowances for developer contributions and/or affordable housing requirements. They can therefore be only indicative, and it may be that values for ‘oven ready’ land with no affordable provision or other contribution, or servicing requirement, are in fact higher.

Table 4.4 Residential Land Values half yr to July 2008			
Area	Land Value £m per acre (hectare)		
	Small sites (< 5 dwgs)	Bulk sites (> 2 ha)	Land for apartments
West Midlands Region	£0.96m (£2.36m)	£0.86m (£2.12m)	£0.88m (£2.18m)
Lichfield	£0.89m (£2.20m)	£0.81m (£2.00m)	£0.97m (£2.40m)
Birmingham	£0.85m (£2.10m)	£0.81m (£2.00m)	£0.73m (£1.80m)
Derby	£0.87m (£2.15m)	£0.81m (£2.00m)	£0.77m (£1.90m)

Source: VOA Property Market Report July 2008

- 4.28 With the decline in the market and general economic conditions these values are now in any case going to be rather historic; values will be falling faster than prices have. We therefore sought information about values from residential land currently on sale in the District.
- 4.29 There are a small number of sites for residential development currently available in the immediate and adjacent areas, the limited availability perhaps reflecting gloomy views about current prospects. Those we found varied in value from around £1.0m per acre (Rugeley, Brereton, Hednesford) for plots for a single dwelling, up to £2.2m per acre for a site at Four Oaks, Sutton Coldfield. A more detailed schedule of residential land available is set out in Appendix 3.

Current and Alternative Use Values

- 4.30 In order to assess development viability it is necessary to analyse current and alternative use values. Current use values refer to the value of the land in its current use, for example, as agricultural land. Alternative use values refer to any potential use for the site. For example, a brownfield site may have an alternative use as industrial land.
- 4.31 To assess viability, the value of the land for the particular residential scheme adopted needs to be compared to the alternative use value, to determine if there is another use which would derive more revenue for the landowner. If the assessed value does not exceed the alternative use value, then the development is not viable.
- 4.32 For the purpose of the present study, it is necessary to take a comparatively simplistic approach to determining the alternative use value. In practice a wide range of considerations could influence the precise value that should apply in each case, and at the end of extensive analysis the outcome might still be contentious.
- 4.33 Our 'model' approach is outlined below.
- i) For sites previously in agricultural use, then agricultural land represents the existing use value
 - ii) Where the development is on former industrial, warehousing or similar land, then the alternative use value is considered to be industrial, and an average value of industrial land for the area is adopted as the alternative use value
 - iii) The Whittington site was formerly occupied by school buildings and that at Hill Ridware by farm buildings
 - iv) Two sites had existing uses as garden or paddock land
- 4.34 The VOA's typical industrial land values for the region and nearby towns are set out in the table below. The nearest location for which data is available is Tamworth.

Table 4.5 Industrial land values			
Area	Land Value per acre (hectare)		
	Low	High	Typical
West Midlands Region	£125k (£310k)	£525k (£1,300k)	£235k (£581k)
Tamworth	£140k (£350k)	£245k (£600k)	£200k (£500k)
Derby	£150k (£375k)	£210k (£525k)	£180k (£450k)
Birmingham	£200k (£500k)	£525k (£1,300k)	£365k (£900k)
Stoke/Stafford	£130k (£325k)	£265k (£650k)	£170k (£425k)

Source: VOA Property Market Report July 2008

- 4.35 Although at regional level there is quite a diverse range of values, the figures for individual locations within a reasonable distance of Lichfield are mostly quite similar, though with higher values being found in the regional centre of Birmingham. If Lichfield was broadly in line with the other locations excluding Birmingham, we might expect to find typical values in the area of £175k-£200k per acre (£430k-£500k per ha).
- 4.36 Of course, these figures could now be out of date, as values have dropped with the general downturn, since mid-2008. We spoke to agents with knowledge and experience of the local market. There were few transactions to provide evidence in the current market situation, in which there remains a reasonable level of interest but liquidity problems mean few enquiries are coming to fruition.
- 4.37 Whilst before the downturn a reasonable price for fully serviced industrial land might have been £375k per acre (£925k per ha), the best view of today's price was felt to be in the vicinity of £275k per acre (£680k per ha) in the Lichfield City area, or the best locations in Burntwood. Values would fall way from this benchmark, with the lowest values in the less accessible rural locations. Agricultural values rose for a time recently, after a long historic period of stability. They are around £5-10k per acre (£15-25k per ha) depending upon the specific use. A benchmark of £10k per acre (£25k per ha) is assumed to apply here. The view we have formed is that the buildings would have a value somewhat below the industrial land benchmark.
- 4.38 Consideration has to be given to an appropriate value for the garden/paddock land at Millbrook Drive and Pear Tree Cottage. Whilst it has not acquired previously developed status, clearly the owners of such land would regard it as having rather more value than agricultural land. In this case we accepted figures of £75k per acre (£185k per ha) at Millbrook Drive and £100k per acre (£250k per ha) for the garden land at Edingale.
- 4.39 The value basis for each individual site that results from the foregoing analysis is summarised in the table below.

Table 4.6 Alternative Use Value bases				
	<i>Site</i>	<i>Basis</i>	<i>£k per acre</i>	<i>£k per ha</i>
1	Old Hall Farm Fradley	Agricultural	10	25
2	South Burntwood	Agricultural	10	25
3	Bison Concrete Lichfield	Industrial/warehouse	275	680
4	S Shortbutts Lane Lichfield	Agricultural	10	25
5	Park Lane Mile Oak	Agricultural	10	25
6	Lynn Lane Shenstone	Industrial/warehouse	275	680
7	Abattoir Chase Terrace	Industrial/warehouse	225	555
8	Fazeley Saw Mill	Industrial/warehouse	250	620
9	Handsacre Service Station	Industrial/warehouse	225	555
10	Whittington Grange School	School buildings	250	620
11	Orchard Farm Hill Ridware	Farm buildings	200	495
12	Central Garage Lichfield	Industrial/warehouse	275	680
13	Mastrom Printers Alrewas	Industrial/warehouse	250	620
14	Millbrook Drive Shenstone	Garden/paddock	75	185
15	Pear Tree Cottage Edingale	Garden land	100	250

Source: Fordham Research 2009

- 4.40 It was noted earlier that brownfield sites may face 'abnormal costs' if they are to be redeveloped for residential use. Some of those costs, but not necessarily all, might also arise if the site were redeveloped for the alternative use. The alternative use value would need to be reduced to allow for those costs that would still arise in that situation.
- 4.41 The costs arising from development or redevelopment of the 15 sites are considered in the next chapter, along with the other financial and technical assumptions required to prepare financial appraisals for each of the sites.

5. Assumptions for viability analysis

Introduction

- 5.1 This chapter considers the costs and other assumptions required to produce financial appraisals for the 15 sites.

Development costs

(i) Construction costs: baseline costs

- 5.2 Drawing upon our own experience, and taking into account published Building Cost Information Service (BCIS) data, we have developed a set of base £ per sq ft construction costs for different built forms of residential development. The costs are specific to different built forms (flats v houses; number of storeys). On the basis of these cost figures, it is possible to draw up appropriate cost levels for constructing newbuild market housing in Lichfield at a base date of March 2009.
- 5.3 The question arises as to what extent the Code for Sustainable Development should impact on build costs in the study. Whilst from April 2008 the Code's Level 3 has been a requirement for all homes commissioned by RSLs that would not necessarily be the case for affordable homes built by developers for disposal to an RSL, unless grant is made available from the Homes and Communities Agency. However, the Government indicates that Level 3 will apply to all newbuild housing (i.e. will be incorporated in Building Regulations) from 2010, with higher levels (4 then 6) intended to be triggered from 2013 onwards. Accordingly for the present study we have therefore assumed that Level 3 applies to both market and affordable housing on the sites being appraised.
- 5.4 Guidance on the impact of Level 3 is available from a Report commissioned by the Housing Corporation & English Partnerships (*A Code For Sustainable Development, 2007*) in respect of the impact of Level 3 on construction costs. This guide estimates (Table S2) the increase in costs arising for different house types under various scenarios. On average, current newbuild costs would need to increase by 4.2% to achieve Level 3.
- 5.5 In addition to this national requirement, RSS policy SR3 also seeks a proportion of 10% of energy costs of new residential building to be to be from renewable sources. This requirement will add to baseline building costs, although it is possible that there would be some overlap with the Level 3 specification. For the purpose of the study we assumed a 3.5% increase in costs, representing a premium of about £3,500 on the build cost for the average dwelling (£97,000) across the fifteen sites.

- 5.6 After allowing for the above ‘Level 3’ and ‘10% renewable’ premia, we drew up appropriate cost levels for constructing market housing for the various built forms in the study, taking into account the mix of house types on each. These are set out in the table below.

Table 5.1 Construction costs: market housing								
Build cost £ per sq ft/sq m								
Site	sq ft	(sq m)	Site	sq ft	(sq m)	Site	sq ft	(sq m)
1	83.34	(897)	6	83.34	(897)	11	81.17	(873)
2	82.37	(886)	7	89.41	(961)	12	90.99	(979)
3	85.18	(917)	8	83.05	(894)	13	80.17	(863)
4	83.34	(897)	9	85.88	(924)	14	80.17	(863)
5	83.34	(897)	10	83.38	(897)	15	80.17	(863)

Source: Fordham Research derived from analysis of BCIS cost data

(ii) Construction costs: site specific adjustments

- 5.7 It is necessary to consider whether any site specific factors would suggest adjustments to these baseline cost figures. Two factors need to be considered in particular; small sites, and high specifications.
- 5.8 Since the mid 1990s, planning guidance on affordable housing has been based on a view that construction costs were appreciably higher for smaller sites, with the consequence that, as site size declined, an unchanging affordable percentage requirement would eventually render the development uneconomic. Hence the need for a ‘site size threshold’, below which the requirement would not be sought.
- 5.9 It is not clear to us that this view is completely justified. Whilst, other things held equal, build costs would increase for smaller sites, other things are not normally equal, and there are other factors which may offset the increase. The nature of the development will change. The nature of the developer will also change, as small local firms with lower central overheads replace the regional and national house builders. Furthermore, very small sites may be able to secure a ‘non estate’ price premium, which we have not allowed for.
- 5.10 In the present study, seven of the sites are considered to fall into the ‘small site’ category –those with less than 15 dwellings, i.e. Sites 9 onwards. It is felt necessary to make some allowance for the economics of this site in preparing financial appraisals. A range of cost premiums has been estimated for each specific site size, ranging from 1% for the 14 dwellings at Handsacre through to 16% for the smallest site Peartree Cottage with three dwellings. Any such premium must be based on judgement; as explained above, it is difficult to see how hard data could ever be obtained to show the effect of scale alone.

- 5.11 In addition, we considered that Sites 13 to 15 would be built to a higher specification than the other larger sites. An allowance of an additional 4% was assumed to cover this.

(iii) Construction costs: affordable dwellings and final figures

- 5.12 The procurement route for affordable housing is assumed to be through construction by the developer, and disposal to an RSL on completion. In the past, when considering the build cost of affordable housing provided through this route, we took the view that it should be possible to make a small saving on the market housing cost figure, on the basis that one might expect the affordable housing to be built to a slightly different specification than market housing. However, the pressures of increasingly demanding standards for RSL properties have meant that for conventional schemes of houses at least, it is no longer appropriate to assume a reduced build cost.
- 5.13 Taking all the above into account, we arrived at build costs for all (market and affordable) housing which after rounding were as in the Table below.

Table 5.2 Construction costs adjusted and rounded: all housing								
<i>Build cost £ per sq ft/sq m</i>								
<i>Site</i>	<i>sq ft</i>	<i>(sq m)</i>	<i>Site</i>	<i>sq ft</i>	<i>(sq m)</i>	<i>Site</i>	<i>sq ft</i>	<i>(sq m)</i>
1	83.50	(899)	6	83.50	(898)	11	86	(925)
2	82.50	(888)	7	89.50	(963)	12	98.50	(1,060)
3	85	(915)	8	83	(893)	13	91.50	(985)
4	83.50	(898)	9	86.50	(931)	14	95	(1,022)
5	83.50	(898)	10	86	(925)	15	96.50	(1,038)

Source: Fordham Research derived from analysis of BCIS cost data

(iv) Other normal development costs

- 5.14 In addition to the per sq ft/m build cost figures described above, allowance needs to be made for a range of infrastructure costs – roads, drainage and services within the site, parking, footpaths, landscaping and other external costs; off site costs for drainage and other services, and so on. Many of these items will depend on individual site circumstances and can only properly be estimated following a detailed assessment of each site. This is not practical within the present study, and would require at least a design or layout for each site.
- 5.15 Nevertheless, it is possible to generalise. Drawing on experience it is possible to determine an allowance related to total build costs. This is normally lower for higher density than for lower density schemes, since there is a smaller area of external works, and services can be used more efficiently. Large greenfield sites would also be more likely to require substantial expenditure on bringing mains services to the site.

5.16 In the light of these considerations we have developed a scale of allowances ranging from 26.0% of build costs for the greenfield site at South Burntwood, down to 9% for the small, comparatively high density scheme at Millbrook Drive. The Table below sets out the individual site assumptions.

Table 5.3 Development cost allowances		
Ref	Site/location	% of build costs
1	Old Hall Farm Fradley	23.0%
2	South Burntwood	26.0%
3	Bison Concrete Lichfield	16.0%
4	S Shortbutts Lane Lichfield	16.0%
5	Park Lane Mile Oak	15.0%
6	Lynn Lane Shenstone	13.5%
7	Abattoir Chase Terrace	11.5%
8	Fazeley Saw Mill	11.5%
9	Handsacre Service Station	10.0%
10	Whittington Grange School	11.0%
11	Orchard Farm Hill Ridware	11.0%
12	Central Garage Lichfield	10.0%
13	Mastrom Printers Alrewas	11.5%
14	Millbrook Drive Shenstone	9.0%
15	Pear Tree Cottage Edingale	10.0%

Source: Fordham Research 2009

(v) Abnormal development costs

5.17 In some cases where the site involves redevelopment of land which was previously developed, there is the potential for abnormal costs to be incurred. Abnormal development costs might include demolition of substantial existing structures, piling or flood prevention measures at waterside locations, remediation of any land contamination; remodelling of land levels and so on.

5.18 The majority of the sites are on previously developed land. On several sites, from the information made available to us and visits to the sites, it appears that exceptional or abnormal development costs would need to be taken into account in preparing appraisals for some of the sites. As pointed out in the previous chapter (4.41) some abnormal costs could also arise in the event of the site's redevelopment with an alternative use.

5.19 The schedule below sets out the abnormal costs considered to apply in each case where they arise.

Table 5.4 Abnormal development costs					
Ref	Site	Item	Residential: cost		Industrial: cost
			Total £k	£k per acre	£k per acre
1	Old Hall Farm	POS	£100k	£5	-
2	South Burntwood	POS, slope, brook ecology	£145k	£10k	-
3	Bison Concrete	Demolition, asbestos, ground	£245k	£24k	£10k
4	S Shortbutts Lane	Slope, power cables	£45k	£8k	-
5	Park Lane Mile Oak	Demolition	£50k	£31k	-
6	Lynn La Shenstone	Demolition, slope, access	£120k	£45k	-
7	Abattoir Chase Terr	Demolition, contamination	£120k	£85k	£53k
8	Fazeley Saw Mill	Demolition/clearance, canalside	£150k	£98k	£49k
9	Handsacre Serv Stn	Demolition, fuel tanks	£60k	£135k	£135k
10	Whittington Gr Sch	Demolition	£50k	£63k	£63k
11	Orchard Farm	Demolition	£30k	£71k	£39k
12	Central Garage	Demolition	£25k	£33k	-
13	Mastrom Printers	Demolition, asbestos, ground	£65k	£155k	£71k
14	Millbrook Drive	None	-	-	-
15	Pear Tree Cottage	Access, slope	£10k	£34k	-

Source: Fordham Research 2009

5.20 The table also shows where applicable the adjustment needed to ensure that an alternative land value reflects the costs incurred in developing an alternative use.

(vi) Fees

5.21 We have assumed professional fees amount to 10% of build costs, in each case.

(vii) Contingency

5.22 For previously undeveloped and otherwise straightforward sites, we would normally allow a contingency of 2.5%, with a higher figure of 5% on more risky types of development, previously developed land and central locations. The lower figure was used for the six greenfield sites and 5% on the other, previously developed sites.

Financial and other appraisal assumptions

(i) VAT

5.23 For simplicity it has been assumed throughout, as with most financial appraisals, that either VAT does not arise, or its effect can be ignored.

(ii) Interest rate

5.24 Our appraisals assume 7.5% pa for both debits and credits. This may seem high given the very low current base rate figure (MLR 0.5% mid March 2009) but has to reflect banks' view of risk for housing developers in the present housing market situation. Credit would in practice only arise for a short period at the end of the scheme

(iii) Developers profit

5.25 We normally assume that the developer requires a return of 20% on total costs (or 16.7% of the Net Development Value) to reflect the risk of undertaking the development. That assumes that the costs are estimates of costs, as they are indeed here intended to be, rather than contract prices which would include a profit element.

5.26 However, where a guaranteed sale applies, the developer's profit margin ought to be reduced, in order to reflect the reduction in risk. The affordable units will be sold at an agreed price and programme. With a range of affordable provision being tested, it was felt appropriate to reflect the resulting variations in risk with variations in the developer's profit. Consequently a sliding scale of profit margins was used, as shown below. It should be noted that residential developers commonly use a more conservative profit margin of 15% on income, which equates to about 17.5% on costs. Bearing in mind the current financial climate, we see no justification for reducing the profit margins from the levels suggested.

Table 5.5 Profit margins	
<i>% affordable</i>	<i>Profit % on costs</i>
0%	20%
20%	19%
30%	18.5%
40%	18%

Source: Fordham Research 2009

(iv) Void

5.27 On a scheme comprising mainly individual houses, one would normally assume only a nominal void period, as the housing would not be progressed if there was no demand. In the case of apartments in blocks, this flexibility is reduced. Whilst these may provide scope for early marketing, the ability to tailor construction pace to market demand is more limited.

5.28 For the purpose of the present study a three month void period is assumed for all sites.

(v) Phasing & timetable

- 5.29 The appraisals are assumed to have been prepared using prices and costs at a base date of February 2009, with an immediate start on site.
- 5.30 A pre-construction period of six months is assumed for all of the sites. Each dwelling is assumed to be built over a nine month period.
- 5.31 The phasing programme for an individual site will reflect market take-up, and would in practice be carefully estimated taking into account the site characteristics and, in particular, size and the expected level of market demand. We have developed a suite of modelled assumptions to reflect site size and development type, as set out in Table 5.6 below.

Site		No of dwgs	Ceiling level of completions per qtr
1	Old Hall Farm Fradley	314	16
2	South Burntwood	250	15
3	Bison Concrete Lichfield	175	8
4	South Shortbutts Lane Lichfield	100	8
5	Park Lane Mile Oak	78	8
6	Lynn La Shenstone	54	7
7	Abattoir Chase Terr	49	6
8	Fazeley Saw Mill	25	5
9	Handsacre Serv Stn	14	3
10	Whittington Gr Sch	12	3
11	Orchard Farm	9	2
12	Central Garage	7	2
13	Mastrom Printers	6	2
14	Millbrook Drive	4	1
15	Pear Tree Cottage	3	1

Source: Fordham Research 2009

Site acquisition and disposal costs**(i) Site holding costs and receipts**

- 5.32 Each site is assumed to proceed immediately and so, other than interest on the site cost during construction, there is no allowance for holding costs, or indeed income, arising from ownership of the site.

(ii) Acquisition costs

5.33 Acquisition costs include stamp duty at 4% on site values of £0.5 million and above (reduced below this level), together with an allowance of 1.5% for acquisition agents' and legal fees.

(iii) Disposal costs

5.34 For the market housing, sales and promotion and legal fees are assumed to amount to some 3.5% of receipts. For disposals of affordable housing these figures can be reduced significantly depending on the category, we have assumed total allowances of 0.5% for social rented housing and 1.5% for shared ownership.

Alternative use value comparison

5.35 In the previous chapter we identified alternative use values to be used as benchmarks in determining viability for each site. As we saw above, these values would need to be adjusted in many cases to allow for abnormal costs that would arise if the alternative use were implemented. The values from Chapter 4 are adjusted to net off these abnormals in the table below.

Table 5.7 Alternative use value figures				
No	Site	Alternative use value £k per acre		
		Gross	Abnormal cost adj	Net of abnormals
1	Old Hall Farm	£10k	-	£10k
2	South Burntwood	£10k	-	£10k
3	Bison Concrete	£275k	£10k	£265k
4	S Shortbutts Lane	£10k	-	£10k
5	Park Lane Mile Oak	£10k	-	£10k
6	Lynn Lane Shenstone	£275k	-	£275k
7	Abattoir Chase Terr	£225k	£53k	£172k
8	Fazeley Saw Mill	£250k	£49k	£201k
9	Handsacre Serv Stn	£225k	£135k	£90k
10	Whittington Gr School	£250k	£63k	£187k
11	Orchard Farm	£200k	£39k	£161k
12	Central Garage	£275k	-	£275k
13	Mastrom Printers	£250k	£71k	£179k
14	Millbrook Drive	£75k	-	£75k
15	Pear Tree Cottage	£100k	-	£100k

Source: Fordham Research 2009

6. Results of viability analysis

Introduction

- 6.1 This chapter considers the results of financial appraisals carried out for the identified sites.

Financial appraisal approach and assumptions

- 6.2 On the basis of the assumptions set out in Chapter 5, we prepared financial appraisals for each of the identified sites, using a bespoke spreadsheet-based financial analysis package.
- 6.3 The appraisals use the residual valuation approach – that is, they are designed to assess the value of the site after taking into account the costs of development, the likely income from sales and/or rents and an appropriate amount of developer's profit. The resulting valuation is commonly expressed in £s per acre (or hectare). In order for the proposed development to be described as viable, it is necessary for this value to exceed the value from a valid alternative use. We have already seen that, for a greenfield site, where the only alternative use is likely to be agricultural, this figure may be very modest. However, most of the sites have been previously developed, and therefore may have a more substantial existing or competing alternative use value.
- 6.4 As outlined in Chapter 3, our appraisals considered three options for the amount and type of affordable housing provision, plus a zero affordable option.

Appraisal results

- 6.5 We produced financial appraisals based on the stated build, abnormal, and infrastructure costs, and financial assumptions for the four options (three affordable options, plus all-market).
- 6.6 Detailed appraisal printouts for all the sites are provided as Appendix 5 to this report. To keep to a manageable sized document, only one option, that of 20%, has been provided.
- 6.7 The resulting residual land values for the four options are set out in Table 6.1.

Table 6.1 Appraisal results for five affordable options					
Zero grant:					
No	Site	Residual value £k per acre for affordable option:			
		No aff	20%	30%	40%
1	Old Hall Farm	203	23	-71	-166
2	South Burntwood	191	6	-91	-190
3	Bison Concrete	290	71	-41	-157
4	S Shortbutts Lane	344	138	33	-75
5	Park Lane Mile Oak	402	191	85	-25
6	Lynn Lane Shenstone	521	269	144	14
7	Abattoir Chase Terr	-196	-430	-548	-669
8	Fazeley Saw Mill	240	39	-65	-171
9	Handsacre Serv Stn	105	-230	-399	-571
10	Whittington Gr School	521	246	101	-45
11	Orchard Farm	585	328	199	64
12	Central Garage	175	-253	-470	-687
13	Mastrom Printers	1,378	895	643	397
14	Millbrook Drive	723	410	245	78
15	Pear Tree Cottage	421	199	85	-31

Source: Fordham Research

- 6.8 Table 6.1 shows that with no requirement for affordable housing, all but one of the sites deliver a positive land value. Those values range from around £100k per acre (£250k per ha) to almost £1,400k per acre (£3.46m per ha).
- 6.9 Allowing for additional development costs and our planning gain assumptions, values on the remaining sites are broadly in line with but mostly below what the first half 2008 VOA figures indicate for ‘oven ready’ land in Lichfield, or what was suggested by small sites actually on the market. This confirms that our appraisal assumptions are, taken as a whole, unlikely to be unduly optimistic.
- 6.10 Table 6.1 confirms that, as increasing amounts of affordable housing are introduced, the land value reduces. In each case the impact is progressive, but at a broadly linear rate. At the maximum affordable contribution shown, 40%, four schemes still deliver a positive land value (at 50% this falls to one).
- 6.11 However, it is clear that land value falls away more quickly for some schemes, than for others. It is the most densely developed sites – Handsacre Service Station, Central Depot, Mastrom Printers, and Millbrook Drive – where affordable housing has the greatest negative impact upon land value.

- 6.12 This is because the land value is the primary source of any developer subsidy. With the high density schemes, land value is a much lower proportion of the total value of the development, and is therefore used up more quickly. To put it another way, broadly the same amount of land value is available to subsidise affordable units on a scheme of 120 flats on one hectare, as on 35 houses occupying the same land. Clearly, that sum will 'buy' a higher percentage of the houses, than of the flats.
- 6.13 In order to draw out the implications of these results for the Council's proposed affordable housing policy, as has already been suggested, it will be necessary to consider values from alternative uses for each. This step follows below.

Alternative use benchmarks

- 6.14 The results from Table 6.1 would need to be compared with the alternative use values set out in Table 5.7 in order to form a view about the likely viability of the affordable options for each site. However it does not automatically follow that if the residual value produces a surplus over the alternative use value benchmark, the site is viable. The surplus needs to be sufficiently large to provide an incentive to the landowner to release the site, and any other appropriate cost required to bring the site forward for development. We therefore have to consider how large such a 'cushion' should be for our sites.
- 6.15 In practice the size of the element will vary from case to case, depending on how many landowners are involved, each landowner's attitude and his degree of involvement in the current property market, the location of the site and so on. A cushion equivalent to £25k per acre might be perfectly sufficient in some cases, whilst in a particular case it might need to be five times that figure or even more.
- 6.16 After consideration we took the view that a broad average figure of £75k per acre should be used to provide an incentive to the landowner for all of the sites in the study. This figure would represent a mark-up of some 25% or so on the industrial benchmark land value.
- 6.17 The figures are set out below and combined with the net alternative use values from Table 5.7 to show the resulting benchmark thresholds for viability.

Table 6.2 Viability cushion & threshold values				
Ref	Site	£ per acre		
		GROSS alt use value	Cushion	Viability threshold value
1	Old Hall Farm	£10k	£75k	£85k
2	South Burntwood	£10k	£75k	£85k
3	Bison Concrete	£265k	£75k	£340k
4	S Shortbutts Lane	£10k	£75k	£85k
5	Park Lane Mile Oak	£10k	£75k	£85k
6	Lynn Lane Shenstone	£275k	£75k	£350k
7	Abattoir Chase Terr	£172k	£75k	£247k
8	Fazeley Saw Mill	£201k	£75k	£276k
9	Handsacre Serv Stn	£90k	£75k	£165k
10	Whittington Gr School	£187k	£75k	£262k
11	Orchard Farm	£161k	£75k	£236k
12	Central Garage	£275k	£75k	£350k
13	Mastrom Printers	£179k	£75k	£254k
14	Millbrook Drive	£75k	£75k	£150k
15	Pear Tree Cottage	£100k	£75k	£175k

Source: Strategic Housing Viability Study

- 6.18 It must be emphasised that these figures are simply a view of what it is reasonable to assume as a minimum residual value for the purposes of assessing viability. The figures do not represent what a landowner or promoter might actually receive. This will quite often be rather more, at any given affordable target some sites will be generate a higher value and it is not unreasonable to expect at least some of the surplus to benefit the landowner/promoter, rather than passing to the developer.

Table 6.3 Appraisal outcomes: zero grant							
No	Site	Alt use value	Value £k per acre				
			No affordable	20%	30%	40%	50%
1	Old Hall Farm	10/	203	23	-71	-166	-263
		85	VIABLE	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
2	South Burntwood	10/	191	6	-91	-190	-289
		85	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
3	Bison Concrete	265/	290	71	-41	-157	-272
		340	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
4	S Shortbutts Lane	10/	344	138	33	-75	-186
		85	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
5	Park Lane Mile Oak	10/	402	191	85	-25	-139
		85	VIABLE	VIABLE	VIABLE	NOT VIAB	NOT VIAB
6	Lynn Lane Shenstone	275/	521	269	144	14	-121
		350	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
7	Abattoir Chase Terr	172/	-196	-430	-548	-669	-789
		247	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
8	Fazeley Saw Mill	201/	240	39	-65	-171	-278
		276	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
9	Handsacre Serv Stn	90/	105	-230	-399	-571	-743
		165	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
10	Whittington Gr Sch	187/	521	246	101	-45	-194
		262	VIABLE	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB
11	Orchard Farm	161/	585	328	199	64	-73
		236	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB
12	Central Garage	275/	175	-253	-470	-687	-906
		350	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB
13	Mastrom Printers	179/	1,378	895	643	397	136
		254	VIABLE	VIABLE	VIABLE	VIABLE	NOT VIAB
14	Millbrook Drive	75/	723	410	245	78	-90
		150	VIABLE	VIABLE	VIABLE	MARGINAL	NOT VIAB
15	Pear Tree Cottage	100/	421	199	85	-31	-147
		175	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB

Source: Strategic Housing Viability Study

Comparison results

- 6.19 With zero affordable housing, ten sites are viable (and three are marginal). Residential development as 100% market housing is of course a relatively profitable development option and in stable market conditions the sites should not be proposed for development otherwise. However market conditions are not stable; house prices have fallen considerably over the last year, and so there are several sites which could not proceed at present even as 100% market housing.
- 6.20 Turning to the various levels of affordable contribution, at 20% six sites are viable and two marginal. At 30% these two marginal sites become unviable, and a further two become marginal. By 40%, however, only one site is fully viable with one other, marginal. At 50% all the sites are unviable.
- 6.21 These results are summarised in tabular form, and broken down for the five SHMA sub-areas, below.

Table 6.4 Viability results summary					
	No of sites in category with affordable at:				
	No aff	20%	30%	40%	50%
Viable	4	3	1	1	0
Marginal	1	1	1	0	0
Not viable	0	1	3	4	5
Total Rural North	5	5	5	5	5
Viable	3	1	1	0	0
Marginal	0	1	0	1	0
Not viable	0	1	2	2	3
Total Rural South	3	3	3	3	3
Viable	1	1	0	0	0
Marginal	1	0	1	0	0
Not viable	1	2	2	3	3
Total Lichfield City	3	3	3	3	3
Viable	1	1	1	0	0
Marginal	1	0	0	0	0
Not viable	0	1	1	2	2
Total Fazeley	2	2	2	2	2
Viable	1	0	0	0	0
Marginal	0	0	0	0	0
Not viable	1	2	2	2	2
Total Burntwood	2	2	2	2	2
Viable	10	6	3	1	0
Marginal	3	2	2	1	0
Not viable	2	7	10	13	15
Total	15	15	15	15	15

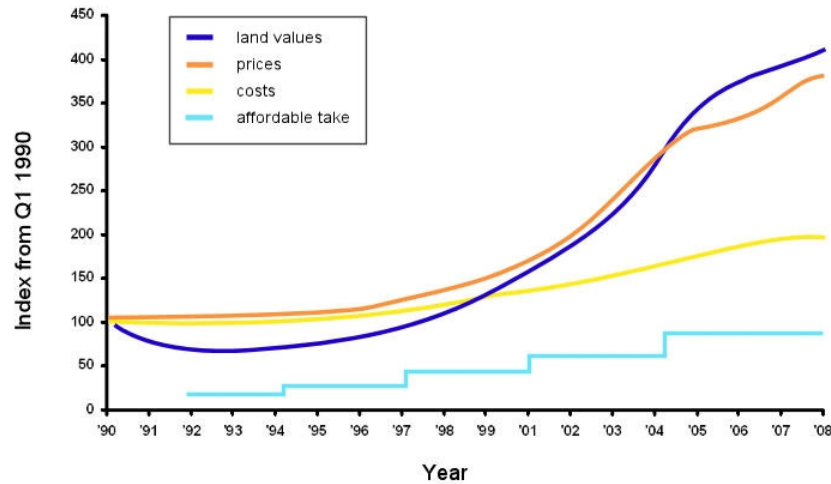
Source: Strategic Housing Viability Study

6.22 We will consider the implications of these results for future policy in the final chapter of this document. However before we can do this we should consider how likely future movements in our appraisal assumptions might impact upon them. The decline in the housing market since the beginning of 2008 underlines that whilst the results represent a 'snapshot' of viability as at February 2009; the immediate prospect is for viability to deteriorate further in the coming months.

History: the last market recession

- 6.23 It is understandable and the normal reaction to expect that 'history will repeat itself'. In that sense there have been a string of newspaper and magazine articles pointing to the last recession in 1989/90, and to almost every downturn in the economy since the great Depression of the 1930s.
- 6.24 The truth is that each recession has its own individual character. The 1989-90 one featured substantially different behaviour from that which preceded the current credit crunch. The earlier one featured lending on high multiples of income, which has happened this time, but is incidental to the main problem. The problem this time has features which have never been present before, such as:
- i) Very cheap credit over a long period, which led in its later phases to large scale poor lending in America and to the 'toxic debt' which these bad loans now represent. This happened on a massive and unprecedented scale through financial derivatives: hybrid loan packages based only indirectly upon the original loans.
 - The internet. This has only existed for a decade, but has become the main medium of financial transactions. Hence the scale of the problem, which could spread rapidly across the world and the suddenness with which the economy has ground to a halt.
 - Frozen credit. The shock of the toxic debt problem for the banks has not only made a number of them effectively dependent on public loans, but has also removed in large part the credit which is the normal function of banking. Hence the dramatic fall in business activity and in such things as buying houses.
- 6.25 The previous recession also featured, for the first-time, a growth in affordable housing targets. This is a form of land tax which did not exist in 1989-90, as it only came in with Circular 7/91, and as the light blue line shows in Figure 6.1 gradually increased in its effect until 2007, when viability peaked before falling.

Figure 6.1 Price and cost trends in the recovery from the 1990 recession



Source: Valuation Office Agency, Land Registry, BCIS (ave of indices for costs & tender prices)

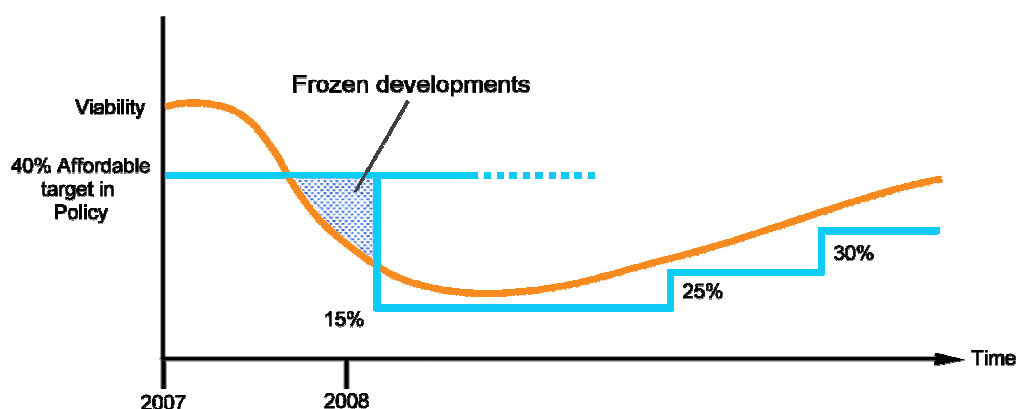
- 6.26 There are many other differences between different previous recessions and the present one which make parallel drawing an unrewarding activity.
- 6.27 What the graph does show, albeit schematically, is that the proportion of overall housing profit taken by affordable housing has grown considerably. When and if the recovery happens from the present recession it will be different for that reason. Studies such as the present one are geared to ensure that the affordable housing tax via S106 is not unreasonably high. However it did not exist last time there was a recession, but it is now a standard part of the financial landscape.
- 6.28 What history tells us is, therefore, that the present recession has major characteristics that have never been present in any previous recession and which therefore mean that we shall look in vain for parallels, comforting or otherwise, with previous recessions.

The pattern of future movements

- 6.29 We have emphasised the uniqueness of the present credit crunch. Although that is a correct view, there is a common fact in all recessions which is the drop in prices. In this case we are concerned with house prices, and they have fallen considerably. However nobody knows what the 'bottom' is. It is far from clear whether we are, at the end of the first quarter of 2009, near the bottom. Arguments have been put that up to another 50% drop in prices may occur.

- 6.30 The prices used in the appraisals are significantly down on those that obtained at the peak. They reflect the present situation, but clearly will not reflect that of the second quarter 2009, or necessarily any future quarter. There is therefore a much bigger premium on addressing the dynamics of viability than there has been before.
- 6.31 But there is a tension involved. Local Development Frameworks, whose rules were cast before the credit crunch, expect affordable housing targets to be set for an enduring period. That is only possible in present circumstances by setting them extremely low, in some cases almost to zero, as the current housing market can bear very little if any extra cost.
- 6.32 In order to cater for this Fordham Research has devised a 'dynamic viability' approach. This is illustrated in the following diagram.

Figure 6.2 Fordham Research Dynamic Viability



Source Fordham Research 2009

- 6.33 In the illustration, the housing needs situation would justify a 40% target, using the traditional approach which derives indeed from Fordham Research's work in the 1990s relating need to target levels. Thus a Target A (needs based) level of 40% is indicated.
- 6.34 But, using the hypothetical example, viability means at present that only 15% is actually deliverable. Hence the only justifiable target, if one were in an LDF, would be 15%. But if, as most people assume, there is a recovery in house prices within the next five years, the scope for higher, and perhaps up to 40% targets might re-emerge during that period.
- 6.35 Thus if a single 15% target were set for five years, it would be very damaging for the Council and for those in need of affordable housing, since a good deal of quite deliverable affordable housing would not be obtained.

- 6.36 Hence the point of 'dynamic viability' analysis is to re-do the viability at regular intervals and build the resultant changed targets into an appropriate Plan Document, presumably a Supplementary Planning Document, so that the actual affordable target level is varied over the plan period. It is important to avoid doing this too often: about once a year is probably the minimum period not to disrupt the negotiations between house builders and landowners.
- 6.37 But at least every year it is worth reconsidering the issue and if necessary issuing a changed target. In this way the house building industry is able to function and whatever level of affordable housing that is deliverable actually is obtained

Sensitivity: price and cost levels

- 6.38 Whilst variations in any of the appraisal assumptions will affect the results, the key elements which most dramatically affect the outcome are the price and build cost assumptions. In the present market situation however it is future movements in prices which are of greatest interest; what if prices continue to fall at the present rate? What if they recover?
- 6.39 Broadly speaking, an x% increase in costs would have a similar impact to a corresponding x% reduction in prices. For simplicity we therefore considered two scenarios only, which were as follows:
- i) Prices fall by 20% (equivalent also to a 15% fall in price plus 5% rise in costs)
 - ii) Prices rise by 10% (equivalent also to a 15% rise in price plus 5% rise in costs)
- 6.40 Accordingly the impact of (i) and (ii) was assessed through variant appraisals upon the 20% option. The results are compared to the base appraisal results in Table 6.5 below.

Table 6.5 Sensitivity tests for 20% appraisals: zero grant					
No	Site	Alt use value	1 Prices -20%	Base	2 Prices + 10%
1	Old Hall Farm	10/	-252	23	155
		85	NOT VIAB	MARGINAL	VIABLE
2	South Burntwood	10/	-274	6	140
		85	NOT VIAB	NOT VIAB	VIABLE
3	Bison Concrete	265/	-245	71	224
		340	NOT VIAB	NOT VIAB	NOT VIAB
4	S Shortbutts Lane	10/	-162	138	285
		85	NOT VIAB	VIABLE	VIABLE
5	Park Lane Mile Oak	10/	-115	191	341
		85	NOT VIAB	VIABLE	VIABLE
6	Lynn Lane Shenstone	275/	-70	269	437
		350	NOT VIAB	NOT VIAB	VIABLE
7	Abattoir Chase Terr	172/	-811	-430	-241
		247	NOT VIAB	NOT VIAB	NOT VIAB
8	Fazeley Saw Mill	201/	-269	39	188
		276	NOT VIAB	NOT VIAB	NOT VIAB
9	Handsacre Serv Stn	90/	-743	-230	27
		165	NOT VIAB	NOT VIAB	NOT VIAB
10	Whittington Gr Sch	187/	-152	246	435
		262	NOT VIAB	MARGINAL	VIABLE
11	Orchard Farm	161/	-20	328	498
		236	NOT VIAB	VIABLE	VIABLE
12	Central Garage	275/	-836	-253	40
		350	NOT VIAB	NOT VIAB	NOT VIAB
13	Mastrom Printers	179/	323	895	1,184
		254	VIABLE	VIABLE	VIABLE
14	Millbrook Drive	75/	-20	410	625
		150	NOT VIAB	VIABLE	VIABLE
15	Pear Tree Cottage	100/	-99	199	345
		175	NOT VIAB	VIABLE	VIABLE
No of sites at 20% affordable with zero grant		viable	1	6	10
		marginal	0	2	0

Source: Strategic Housing Viability Study

6.41 It can be seen that a price increase of 10% (option 2) would improve the viability situation, as two sites currently marginal and two unviable sites become viable.

- 6.42 Option 1, a fall in price of 20% from our assessed prices, removes five viable sites and two which were marginal in our base appraisal, leaving the Mastrom site as the sole representative of viability. Unfortunately, this option has to be regarded as an entirely feasible short term scenario.

Sensitivity: the market peak

- 6.43 The above approach, varying the price level, could also be applied retrospectively to assess viability at the peak viability level of November 2007. In this case we believe that prices would have been about 20% higher and costs 5% lower than those assumed in the base appraisals (effectively equivalent to a 25% increase in prices).
- 6.44 The approach was applied with both 20% and 40% target proportions, and the results are set out below. Results for 30% were inferred by interpolation where appropriate.

Table 6.6 Sensitivity tests at market peak viability level					
No	Site	Alt use value	Value £k per acre		
			20%	30%	40%
1	Old Hall Farm	10/	354		90
		85	VIABLE		VIABLE
2	South Burntwood	10/	342		72
		85	VIABLE		MARGINAL
3	Bison Concrete	265/	454	296	138
		340	VIABLE	MARGINAL	NOT VIAB
4	S Shortbutts Lane	10/	504		205
		85	VIABLE		VIABLE
5	Park Lane Mile Oak	10/	567		260
		85	VIABLE		VIABLE
6	Lynn Lane Shenstone	275/	691		330
		350	VIABLE		MARGINAL
7	Abattoir Chase Terr	172/	46		-308
		247	NOT VIAB		NOT VIAB
8	Fazeley Saw Mill	201/	409	264	119
		276	VIABLE	MARGINAL	NOT VIAB
9	Handsacre Serv Stn	90/	407	161	-85
		165	VIABLE	MARGINAL	NOT VIAB
10	Whittington Gr Sch	187/	721		324
		262	VIABLE		VIABLE

Table 6.6 Sensitivity tests at market peak viability level					
No	Site	Alt use value	Value £k per acre		
			20%	30%	40%
11	Orchard Farm	161/	750		388
		236	VIABLE		VIABLE
12	Central Garage	275/	473	170	-134
		350	VIABLE	NOT VIAB	NOT VIAB
13	Mastrom Printers	179/	1,604		937
		254	VIABLE		VIABLE
14	Millbrook Drive	75/	930		483
		150	VIABLE		VIABLE
15	Pear Tree Cottage	100/	566		248
		175	VIABLE		VIABLE

Source: Strategic Housing Viability Study

- 6.45 The results indicate that at the peak level of prices an overall target of 40% could have been held to be viable

Sensitivity: tenure split

- 6.46 Sensitivity testing was also undertaken to assess the impact of varying the tenure split to which affordable homes are provided. The impact of moving from the assumed 80/20 to 60/40 was assessed with the 30% target proportion, to see how much viability improved compared to the base appraisals. The results are set out in Table 6.7.

Table 6.7 Appraisal outcomes: zero grant				
No	Site	Alt use value	Value £k per acre	
			30% 80/20	30% 60/40
1	Old Hall Farm	10/	-71	-50
		85	NOT VIAB	NOT VIAB
2	South Burntwood	10/	-91	-70
		85	NOT VIAB	NOT VIAB
3	Bison Concrete	265/	-41	-18
		340	NOT VIAB	NOT VIAB
4	S Shortbutts Lane	10/	33	55
		85	MARGINAL	MARGINAL
5	Park Lane Mile Oak	10/	85	107
		85	VIABLE	VIABLE
6	Lynn Lane Shenstone	275/	144	166
		350	NOT VIAB	NOT VIAB
7	Abattoir Chase Terr	172/	-548	-515
		247	NOT VIAB	NOT VIAB
8	Fazeley Saw Mill	201/	-65	-41
		276	NOT VIAB	NOT VIAB
9	Handsacre Serv Stn	90/	-399	-360
		165	NOT VIAB	NOT VIAB
10	Whittington Gr Sch	187/	101	130
		262	NOT VIAB	NOT VIAB
11	Orchard Farm	161/	199	220
		236	MARGINAL	MARGINAL
12	Central Garage	275/	-470	-428
		350	NOT VIAB	NOT VIAB
13	Mastrom Printers	179/	643	673
		254	VIABLE	VIABLE
14	Millbrook Drive	75/	245	272
		150	VIABLE	VIABLE
15	Pear Tree Cottage	100/	85	104
		175	NOT VIAB	MARGINAL

Source: Strategic Housing Viability Study

6.47 In fact the change has only a modest impact on residual land values, improving them typically by around £20-30k per acre (£50-75k per ha). In this particular case the impact is very slight, insufficient to change the viability status of any of the sites. There remain nine unviable sites; the change certainly does not make the 30% target achievable.

- 6.48 One way to consider the impact might be that in broad terms it increases the viable proportion by about 3%, so that if a 20% target was just viable with 80/20, then a 23% target, say, would be just viable with 60/40.

Sensitivity: dwelling size mix

- 6.49 Earlier in the Report (3.10) we suggested that the size profile assumed for the 15 sites provided a larger proportion larger (4 bed) dwellings, and fewer small to medium sized (2-3 bed) dwellings, than the profile suggested in the SHMA to meet local needs. The question arises whether a planning policy which constrained the profile of development would impact materially on the appraisal results outlined in this chapter.
- 6.50 The appraisal methodology does not allow us to model variations in size mix in sufficient detail to quantify any impact that a size mix policy would have. However it is possible to make some qualitative observations. In doing so we assume that the effect of any size mix policy would be to leave the average floorspace density (sq ft per acre/sq m per ha) unchanged, so that a reduction in dwelling size was fully offset by an increase in dwelling numbers. Clearly, if the dwelling numbers did not increase so as to maintain the floorspace density, there would be a serious impact on viability.
- 6.51 The high proportion of four bedroom dwellings in the overall 15 site profile resulted from relatively high proportions of four bed units firstly on the two largest sites, and secondly on smaller sites in more rural locations, where such a profile matched the existing stock and what was being produced. The proportion of four bedroom units on the large development sites could in our view be reduced quite significantly with only a marginal impact upon residual value. Such large sites will in any case need to provide a sustainable and reasonably well balanced profile. However because the sites are large, changing them will significantly modify the overall profile.
- 6.52 The smaller more rural sites provide opportunities which are not available on the large development sites, to provide larger more expensive dwellings in an attractive setting with other similar properties nearby. The three smallest sites are good examples. Changing the mix substantially on such sites towards smaller dwellings may affect the residual values to a greater extent. However they are the sites which perform best overall and their viability is less vulnerable to a reduction in residual value than the smaller and urban sites are.
- 6.53 Overall therefore we conclude that a planning policy which favoured the production of small to medium sized dwellings would have only a limited impact upon the viability results outlined above. One could also comment however that smaller dwellings are likely to bear a heavier developer contributions burden because most contributions are levied on a per dwelling basis; increased dwelling numbers would therefore increase the total contributions cost for the same overall floorspace.

7. Implications of results

Our approach

- 7.1 The purpose of the Viability Study was to assess the impact of alternative affordable housing requirements upon development viability. In order to provide appropriate guidance, we have produced financial appraisals in respect of residential developments on a range of sites, selected following discussion. Our approach has involved the use of the actual development proposals for the sites with recent planning permissions, and 'model' developments for those sites for which applications have yet to be submitted. A bespoke financial appraisal package has been used to produce residual valuations for each site under a series of affordable housing options.
- 7.2 In order to prepare financial appraisals, whether for a general study like this, or on behalf of a landowner or developer proposing a specific development, it is necessary to make a considerable number of assumptions. We believe that in general the assumptions we have made are fair and reasonable. They reflect considerable experience drawn from a variety of development situations, and are designed to reflect the circumstances of each site which, even in a relatively compact area like Lichfield District, might be expected to display some degree of diversity. The appraisal results would produce open market land values which, compared to the limited information we have about recent values and prices currently sought for small sites in the area, are consistent and if anything somewhat lower. This suggests that the package of development assumptions is not unduly optimistic.
- 7.3 The relatively low land values emerging also reflect two other factors which we will need to take into account when reflecting on the appraisal results:
- i) the combined effect of a serious restriction on credit availability since the early autumn of 2007 and the consequential, more general, business downturn which became increasingly established in the last quarter of 2008.
 - ii) the impact of relatively challenging requirements in respect of sustainability:
 - Level 3 of the Sustainability Code for both market and affordable homes, without any offsetting uplift in values
 - a 'Merton rule' requirement as proposed in Regional Spatial Strategy

- 7.4 The financial appraisals produce a series of residual values, showing the value generated for each site for all market housing, and further tested under a range of affordable housing scenarios. In an exercise of this nature, the figures have to be interpreted in order to draw conclusions for LDF policies. We have suggested a basis for interpretation which draws on indicative alternative use values, and sets a standard 'cushion' over alternative use value to provide an incentive for the landowner to bring the site forward. Again, as a strategic approach, we believe this to be reasonable. Producing detailed assessments and valuations for each site would involve resources well beyond the scope of the current exercise, and we suspect would probably still leave room for disputation.
- 7.5 There are variations in house prices between different parts of the study area. Most of the chosen sites are in the main settlements and we feel those areas where prices are likely to be lowest are reasonably well represented. The sites covered the 'worst case', by fully including locations in which viability is (other things equal) likely to be worst. The range of sites includes both smaller and larger sites, straightforward and complex development situations, previously developed land and sites not previously developed.
- 7.6 The appraisals tested various proportions of affordable housing, combined with a proposed tenure split of 80:20 social rented: intermediate housing, with intermediate housing represented by shared ownership at 25% share. In estimating the values which developers would be likely to achieve from affordable housing of the above types, we have used information provided by locally active RSLs. The response from RSLs whilst slightly disappointing was, we felt, sufficient to provide a basis for carrying out our appraisals.
- 7.7 We have taken a necessarily strategic approach. This is because the analysis is designed to test and demonstrate district-wide deliverability, in line with the requirements in para 29 of PPS3. Thus we have made assumptions for developer contributions which we believe reflect the Council's published requirements and broad needs.
- 7.8 We would emphasise that this work has to be seen as a strategic study, designed to inform the development of Plan policy, rather than per se, as an exercise to predict as accurately as possible the actual financial outcomes of development on specific sites. The actual sites used in the study should be regarded as indicating more general patterns of development across the study area.

Implications of appraisal results

- 7.9 The viability study tested affordable target proportions from 20% up to 50%, assumed to be delivered with zero grant. The base appraisals assumed a tenure split of 80:20 social rented to intermediate.

- 7.10 The results from the appraisals indicate that at present, without grant, it would difficult to sustain a target of more than 20% affordable housing across the study area as a whole. It appears that in present market conditions only around half of the sites could produce 100% market housing, and remain viable. Three other sites are marginal at 20%, and two of the unviable sites are also unviable at zero affordable. In our view therefore a 20% target would not be unreasonable as at February 2009.
- 7.11 In the past Lichfield has typically negotiated more than 20% affordable housing on privately developed sites. The fall in house prices, combined with the additional cost of sustainable development (Level 3 plus 10% renewable), has made achieving more than 20% unrealistic for most sites in the current market circumstances.
- 7.12 There are still some areas and types of site where it should be possible to exceed a 20% affordable requirement without rendering the site unviable. Table 6.5 in the previous chapter suggests that the Rural North and Rural South/East hold up best. Even so, a 30% target for these combined areas would barely be justified by the appraisal results, and a more realistic target might be 25%.
- 7.13 The two rural areas perform well because they contain areas of mainly higher priced housing, and also because greenfield sites, well represented in the rural parts of the area, tend to do better than brownfield sites, which have a substantial existing or alternative use value. The downside of an affordable proportion higher than 20% in the rural parts of the District would be to lower the proportion that could be sought, on brownfield sites at any rate, in the three urban areas, Lichfield, Fazeley and Burntwood.
- 7.14 Relaxing the tenure split to 60% social rented: 40% intermediate improves viability, though only slightly. It would allow the maximum District wide requirement in present circumstances to increase from 20% to perhaps 22-23%.
- 7.15 Viability varies from site to site for other reasons than price. For instance, we are aware that on higher density schemes of mainly or wholly flats, it is more difficult to deliver high proportions of affordable housing whilst achieving a viable development. The results from the Lichfield site appraisals do tend to confirm this pattern. It comes about primarily because the affordable housing subsidy comes from land value, and there is proportionately much less land value available on such higher density schemes than on a more suburban density development.
- 7.16 In considering the implications for an individual Council's affordable housing policy of studies like the present one, we must recognise the complexity and diversity of the development process in reality. There will always be sites and development proposals which, because of exceptional circumstances cannot produce the level of affordable housing set by a generally reasonable target. Such factors include abnormal development costs associated with the site; particularly onerous development contribution requirements; an exceptionally high alternative user value; low market prices in a particular locality, and so on.

- 7.17 In setting targets, it is therefore necessary to strike a balance, setting a target which can be achieved in many situations and accepting that in other cases provision will fall short of the target. In such cases a process or protocol might be required, allowing the landowner or developer to demonstrate to the Council, through properly detailed financial evidence, that the due affordable contribution cannot be produced. In such cases, the desired mix could be supported through a Social Housing Grant contribution, subject to funding availability. Alternatively, a reduced affordable contribution could be accepted for the scheme.
- 7.18 If, on the other hand, an unduly cautious target were set, the total delivery of affordable housing would be significantly reduced, whilst there would probably still be particular sites or situations where the target could not be secured viably.
- 7.19 The evidence suggests that a: 20% target would be the highest that would be reasonable to put forward in present circumstances. If, as hoped, there is a recovery from the credit crunch, then the Dynamic Viability approach described below will permit the raising of the 20% target. But to what ultimate ceiling? Typically a housing needs assessment provides a basis for an upper limit to the target. We have, however, suggested that in late 2007, immediately before the credit crunch it would have just been possible to justify a 40% target. This level could, in principle, be treated as a ceiling beyond which targets should not be raised.

Other points

- 7.20 The results for the five smaller sites (11-15) provide considerable support for a size threshold below the national guidance. Indeed, the two sites which do not become unviable at 40% are both in this group. However four of the five are in the rural area; the one urban small site could not provide any affordable housing viably. At this stage a threshold of five dwellings for rural areas could be supported, but further work to test additional small urban sites would be required before this could be extended to cover Lichfield and Burntwood.
- 7.21 The appraisals assume that all dwellings, market and affordable, will be built to CSH Level 3. Given that Level 3 is to be a national requirement from 2010, it seems a sensible assumption to be making at this point. However Level 3 imposes additional build costs which we have assumed cannot be recovered from enhanced values. Furthermore, it is the Government's intention that Level 4 would apply from 2013 and Level 6, from 2016. With what is currently known about technology, the additional costs of these further changes are going to be considerable. They may well push developers to focus rather more on premium and niche products where the additional costs can be, wholly or at least partially, recovered in enhanced prices, though with the present regulatory framework it is difficult to see how that could apply to the affordable elements. Whatever happens, the impact on viability following the CSH changes may be a matter for concern in the future.

Recommendations

- 7.22 It is suggested that, in accordance with PPS3 para 29 a 'plan-wide target' is set. At current viability levels in Lichfield the evidence would suggest that this be set at 20%, with suitable allowance for applicants for planning permission to make the case, based on detailed valuation evidence, that the target level cannot be achieved on particular sites due to local factors.
- 7.23 The next chapter explains the procedure for Core Strategy purposes, to ensure future deliverable targets.

8. Dynamic Viability results

- 8.1 This chapter takes the results of the viability analysis, the first stage, and provides a basis for policy by providing deliverable affordable housing targets through the plan period.

What Dynamic Viability does

- 8.2 The Dynamic Viability model is designed to provide robust targets at all phases of the housing market during the plan period. This is taken to mean that the full range of possibilities must be set out to the Core Strategy Inquiry, so that its Inspector can consider and decide on the level of target setting for the whole plan period. The target cannot be left of supplementary guidance, and the alternative would be a costly re-opening of the Core Strategy examination at each change in the housing market.
- 8.3 The model begins with the viability assessment, based on the residual valuations carried out as part of the main viability study (covering a dozen or so sites characteristic of the area). In some cases the data may refer to notional sites, agreed to represent the viability situation of the local authority area.

Benchmark Site

- 8.4 The Dynamic Viability approach requires that a single benchmark site, or a synthetic site, is identified that currently reflects the affordable target level that is deliverable in that area. This site should ideally be consulted with stakeholders to ensure that so far as possible there is agreement that it is representative (The benchmark site for Lichfield is No 4: South of Shortbutts Lane in Table 6.3).

Key indexes

- 8.5 The model then takes the key factors affecting future viability and builds their future change into the model. Future change in target levels is purely dependent on published indexes. This means that the process of target setting through the plan period is entirely transparent. The model is set up prior to the Core Strategy Inquiry, is assessed and approved in whatever form during that Inquiry, and afterwards is entirely dependent on three published indexes:
- **Price change:** We use the Halifax Price Index but others are available.
 - **Building costs change:** The RICS building cost index based on tenders (BCIS) provides a general index of building costs.

- **Alternative use value:** The appropriate measure would depend on the specific alternative use applying to the benchmark site but usually it is the Valuation Office Agency's Industrial Land index.

8.6 Each of the indexes is taken as a range, to produce a reasonably limited number of tabulations. The set of indices is based on the assumption that price and cost are the key changes that affect the viability of a benchmark site, and that alternative use value must be checked in case it has risen above newbuild housing value and thus limits the target in itself.

8.7 The following table, taken from Appendix 4, shows the initial values of the three indexes:

Table 8.1 Update indices		
Variable	Proposed index	Starting Value
House Price	Halifax House Price Index	Feb 2009 = 519.9
Build cost	BCIS General Building Cost Index	March 2009 = 286.3
Alternative use value	Property Market Report (VOA) Value of Industrial/Warehousing Land for West Midlands – 'Typical' Value	July 2009 = figure is £275k per ha

Sources: as shown; this table is also printed as Table A4.1

Outputs of the various matrices

8.8 The model generates the full plausible range of target variations based on the above three indexes. The following illustration is base case of a set of eight (one for each of the values for the Alternative Use value). The full set of Dynamic Viability tables is presented in Appendix 4. Both the *Coarse* and *Fine Matrix* tables show 20% as the base affordable target.

8.9 Our normal practice is to produce a 'Coarse' matrix to cover a very wide range of variation in indexes, using a big 10% gap) and a Fine matrix with smaller (4%) gaps in the indexes. By chance in the case of Lichfield this did not produce the normal small variations in the resultant affordable target. We assume that 5% steps in the affordable target are acceptable. Planning Inspectors have generally accepted 5% or 10% approximations for targets rather than precise numbers (ie 35% not 31.5%).

8.10 In the case of Lichfield, however, the Fine matrix still left relatively large steps in some of the targets. It is just the chance combination of prices and costs in the benchmark site. Hence we have produce a 'Superfine' matrix with 2% gaps. This is generated an acceptable array of targets which do not involve big gaps between the indexes.

8.11 The following three figures show the three index results for the base alternative use value position.

Figure 8.1 Coarse Matrix output: Base Alternative Use Value

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%	415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6	
	-20%	229.0	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	15%	25%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Source: Fordham Research 2009: Lichfield Viability Study. Note that the table shows proposed % target for each cost/price combination, with 0% change in alternative use value

Figure 8.2 Fine Matrix with base alternative use value

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%	477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7	
	-8%	263.4	20%	25%	30%	35%	35%	40%	45%	45%	50%
	-4%	274.8	10%	20%	25%	30%	30%	35%	40%	40%	45%
	0%	286.3	5%	10%	20%	25%	25%	30%	35%	40%	40%
	4%	297.8	0%	5%	10%	15%	20%	25%	30%	35%	35%
	8%	309.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
	12%	320.7	0%	0%	0%	5%	15%	15%	20%	25%	30%
	16%	332.1	0%	0%	0%	0%	10%	15%	15%	20%	25%
	20%	343.6	0%	0%	0%	0%	5%	10%	15%	15%	20%

Source: Fordham Research 2009: Lichfield Viability Study. . Note that the table shows proposed % target for each cost/price combination, with 0% change in alternative use value

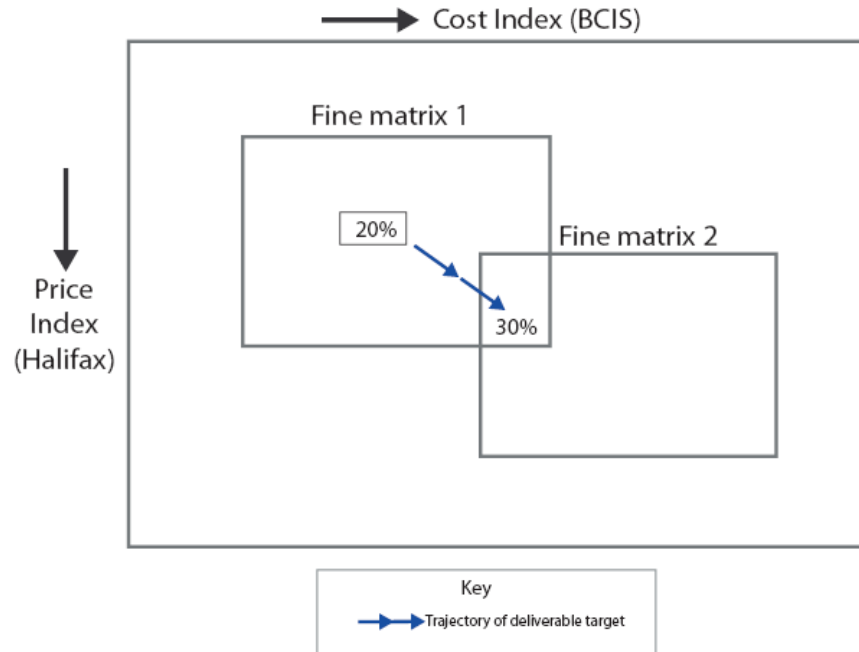
Figure 8.3 Superfine Matrix: base alternative use value

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Source: Fordham Research 2009: Lichfield Viability Study. Note that the table shows proposed % target for each cost/price combination, with 0% change in alternative use value

- 8.12 It is important to emphasise that the Fine (and Superfine) matrices are like a ‘close up’ mechanism. The figures are all available from the initial *Coarse Matrix* and require no further policy or other judgements: they are automatically derived from the indexes. The only issue is the fineness of the intervals and the production of a manageable size of tabulation. The tabulation, of course, has to be accessible to a wide range of stakeholders and so must not be too daunting.
- 8.13 The following diagram shows the relationship between the Coarse Matrix and the Superfine one (the Fine Matrix is only included in Lichfield’s case to show how we arrived at the Superfine one). The diagram is designed for the Coarse/Fine combination so that for ‘Fine’ one should in Lichfield’s case read ‘Superfine’. The mechanics are exactly the same.
- 8.14 The Coarse matrix covers a very wide variation of prices and costs, bigger than has happened over two decades in the recent past. The Superfine matrix covers only a part of the overall Coarse picture. It can be readily moved from one place to another as the target moves through the trajectory dictated by the housing market’s changes.

Figure 8.4 Coarse and Fine Matrices related

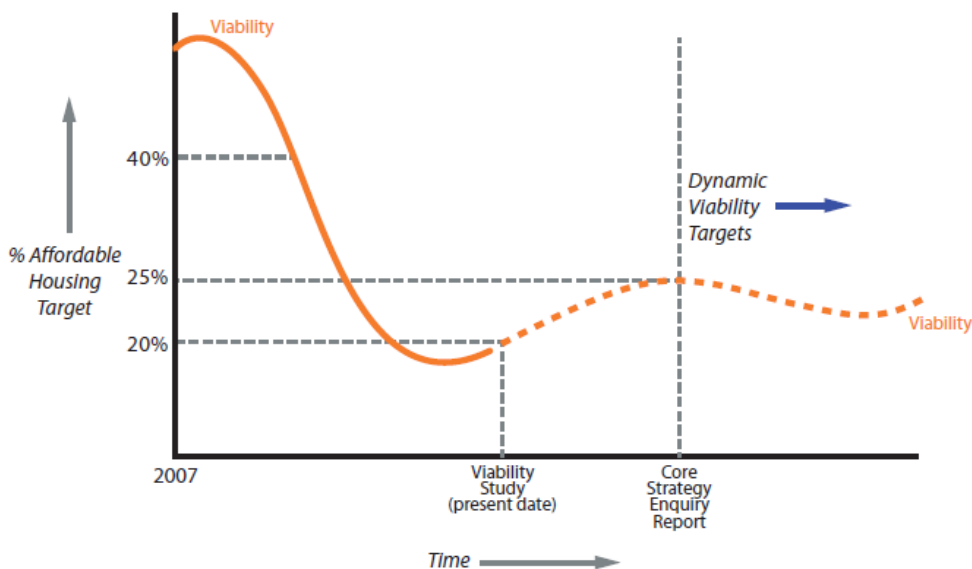


Source: Fordham Research 2009

Implementing Dynamic Viability

- 8.15 The Viability study which is the input into Dynamic Viability is likely to be done as part of the preparation of the Core Strategy Affordable Housing Policy. There will then be a delay of months or years until the actual inquiry. During that period there may well be changes in the market. Thus it is likely to be necessary to redo the base viability analysis at the time of the Core Strategy Inquiry to ensure that the Dynamic Viability process starts from the period of the Examination.
- 8.16 Since the automatic target varying procedure cannot begin until approved by the Inspector's Report, it is desirable to have it as up to date as possible. Figure 8.4 indicates this process schematically.

Figure 8.5 Implementing Dynamic Viability



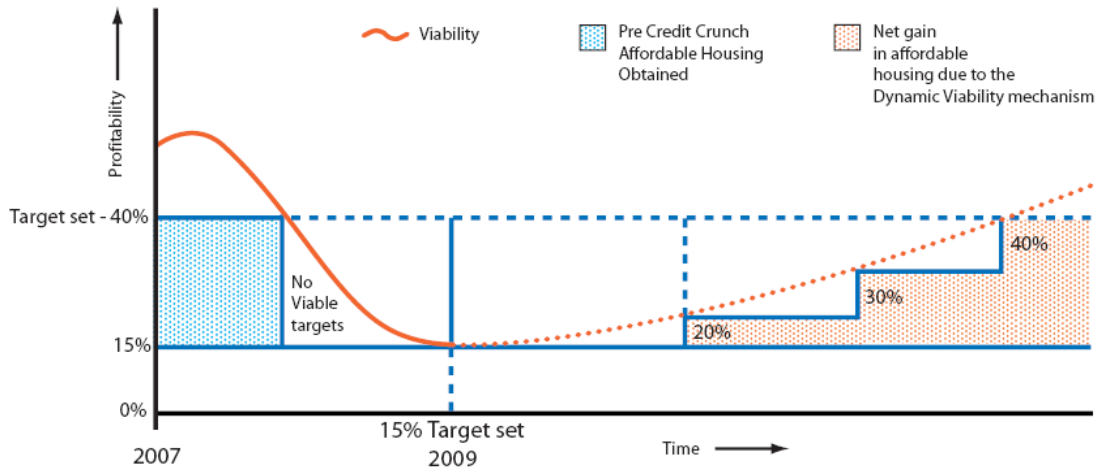
Source: Fordham Research 2009

- 8.17 The diagram illustrates the possible change in viability between study and Core Strategy Examination. After that, of course, the Dynamic Viability matrix will take account of future variations in viability. As the diagram suggests, these could be downward as well as upward. The future course of the market is uncertain.

Conclusion

- 9.1 The printouts in Appendix 4 provide the detailed background to the two tables presented above. Together they allow for the Core Strategy Examination to set the basis for deliverable affordable housing targets over the plan period. They should achieve the practical maximum of affordable housing without prejudicing the delivery of market housing. As shown below, there will be points in the process where, if land is given planning permission, there will be a windfall land profit, and others where the enhancement of viability is largely or full converted into an increased target.
- 9.2 It is possible, as part of the Section 106 Agreement on sites, particular larger ones, to include within them an updating mechanism essentially parallel to the Dynamic Viability process.

Figure 8.6 Gain of Affordable housing through Dynamic Viability



Source: Fordham Research 2009:

- 8.18 The 'broad brush' viability process is therefore enhanced by Dynamic Viability. It provides a process, established in the Plan, whereby deliverable targets are adjusted to the particular future housing market situation.

Appendices

Appendix 1 Newbuild schemes

A1.1 The schedules below provide details of a number of current newbuild developments and other comparable housing in the District.

Table A1.1 Newbuild schemes				
<i>Site / location</i>	<i>Builder</i>	<i>No. Of dwgs</i>	<i>Range of dwgs</i>	<i>Prices</i>
Sandfields Falkland Rd Lichfield	Persimmon Homes		2, 3 & 4 bed houses	£130k-£239k
Charter Place , Shortbutts Lane, Lichfield	Bryant Homes	175	2, 3 4 & 5 bed apartments & houses	£119k-£379k
City Wharf, Wharf Close, Lichfield	Redrow Homes		2 bed apartments & houses	£105k-£128k
The Firs, Hammerwich Hospital, Hospital Road, Burntwood	Charles Church	50	3 & 4 bed houses	£219k-289k
Orchard Hill Farm, Hill Ridware, Rake End	Friel Homes	9	1, 2, 3 & 4 bed apartments & houses	£149k-£499k
Primrose Cottage, Main Street, Alrewas	Walton Homes	1	3 bed house	£315k
Honeybourne Grange, Main Street & Fox Lane, Alrewas	Walton Homes	12	2 bed bungalow & 4 bed houses	£310k-£475k
Briarfields, Rugeley Road, Armitage	Walton Homes		1 bed coach house & 5 bed house	£120k-£220k
Tame Village, Valley Drive, Wilnecote, Tamworth	Persimmon Homes		1 bed coach house, 2 bed apartments 3 bed houses	£85k-£195k
Greenway Park, Parkfield Crescent, Two Gates, Tamworth	Walton Homes	39	2 bed apartments & 3 bed houses	£119k-£224k
Bradden House, Bradden Court, Lichfield Road, Tamworth	Elan Homes	13	2 bed apartments	£170k
Pegasus Court, Bird Street, Lichfield	Pegasus Homes	19	1 & 2 bed apartments	£179k-£249k
Green Acres, Bone Hill, Fazeley		4	4 & 5 bed houses	£425k-£475k

Table A1.2 Other comparable properties

Site / location	Builder	No. Of dwgs	Range of dwgs	Prices
***The Maltings, Burton Old Road, Streethay, Lichfield	Bellway Homes	35	2, 3 & 4 bed houses	£150k-£240k
*** Millbrook Avenue, Shenstone, Lichfield	Antler Homes	4	4 bed homes	£364k
***Swan Croft, Whittington Grange School,	Cameron Homes	12	3 & 4 bed houses	£185k-£320K
***Edingale (general)	Rowley Close		3 bed end terrace	£180k
	Blakeways Close		5 bed house	£370k
	Pessall Lane		4 bed house	£335k
***Chase Terrace (general)	Angel Croft		3 bed det	£209k
	Gullick Way		3 bed town house	£159k
	St John Close		3 bed town house	£145k
	Two Oaks Ave		3 bed terraced house	£134k
	Chaselands		2 bed house	£113k-£119k
***Fradley (general)	Ward Close		2 bed house	£134k-£119k
	Gillespie Close		3 bed house	£159k
	Williams Ave		3 bed Town house	£169k
	Webb Close		4 bed house	£269k

Appendix 2 House price variations

- A2.1 The indices in the table which follows compare prices in each postcode sector in the study area with an England and Wales 'average' figure – actually the median postcode value.
- A2.2 The indices are standardised, to eliminate the effect of variations in type mix; separate indices for each house type are combined with weightings based on the mix of overall sales.

Table A2.1 Price variations by postcode sector				
Postcode sector	Areas covered in sector	Q4 08	Q2 08	Q4 07
WS15 1	Upper Longdon [Brereton]	66%	81%	75%
WS7 4	Chasetown C	80%	77%	69%
WS7 2	Burntwood E	70%	86%	83%
WS7 1	Burntwood W	76%	77%	90%
WS13 7	Lichfield N W	76%	99%	89%
WS15 4	Armitage	82%	100%	88%
WS7 3	Chasetown W		114%	78%
B78 3	Fazeley	93%	104%	93%
WS7 0	Hammerwich	103%	89%	105%
WS13 8	Chorley Fradley	107%	87%	113%
WS7 9	Chasetown E		101%	108%
WS14 9	Lichfield SE Whittington	102%	110%	109%
WS13 6	Lichfield C	111%	110%	111%
WS15 3	Colton, Hamstall	130%	103%	121%
B79 9	Harlaston	84%	128%	145%
WS14 0	Shenstone	113%	121%	134%
B75 5	Canwell Hall [Mere Green]	121%	130%	122%
B74 3	Aldridge	135%	132%	141%
DE13 7	Alrewas Kings Bromley	223%	134%	116%

Source: Analysis of Land Registry data

Notes

1. Where a postcode sector includes areas inside and outside the District, the areas outside are shown in brackets, as [Brereton]
2. Data has been mix adjusted to remove differences in house type mix between postcode sectors; individual indices have been calculated for each house type, and combined using weights reflecting the nation-wide type mix. A worked example is provided below.

Table A2.2 Worked example for WS14 9 at Q4 2008					
	Land Registry data Q4 2008				
	Detached	Semi	Terraced	Flat	Total
England & Wales - median price	£271,583	£161,250	£135,995	£142,688	
England & Wales - no of sales	22,381	28,916	31,005	19,775	102,077
WS14 9 – ave price	£321,559	£165,343	£142,187	£112,785	
WS14 9 price as % E & W median value	118.4%	102.5%	104.6%	79.0%	
Weighted average index for WS14 9 =	$[(22381 \times 118.4\%) + (28916 \times 102.5\%) + (31005 \times 104.6\%) + (19775 \times 79.0\%)] / 102,077$				
	= 102.1%				

Source: Analysis of Land Registry data

Appendix 3 Small plots for sale

Table A3.1 Asking prices for building sites/plots: values					
Location	No dwgs	site area acres (ha)	Asking price	Land value	
				per acre	per ha
Ravenhurst Drive Great Barr	1	0.06 (0.025)	£125k	£2.04m	£5.05m
Bower Lane Rugeley	1	0.12 (0.048)	£160k	£1.35m	£3.33m
Sherifoot Lane Four Oaks	1	0.12 (0.05)	£265k	£2.21m	£5.46m
Main Road Brereton	8	est 0.30 (0.12)	£340k	£1.13m	£2.80m
Bradbury Lane Hednesford	13	0.75 (0.30)	£720k	£960k	£2.37m
Sutton Coldfield	20	0.08 (0.32)	£1.20m	£1.50m	££3.71m

Source: Internet listings March 2009

Appendix 4 Proposed benchmark appraisal

Benchmark site

- A4.1 It is proposed that the benchmark site appraisal should be based upon an amended version of site 4, South of Shortbutts Lane. The (minimal) amendment is necessary to ensure it is just viable at the proposed target level of 30%. The alternative use value for site 4 is industrial/warehousing land.

Indexation

- A4.2 The periodic review would be initiated by a specifically constituted forum including stakeholders. It would involve establishing current values of the indices in the Table below. For information the table shows July 2009 'starting' values.

<i>Variable</i>	<i>Proposed index</i>	<i>Starting Value</i>
House Price	Halifax House Price Index	Feb 2009 = 519.1
Build cost	BCIS General Building Cost Index	Mar 2009 = 286.3
Alternative use value	Property Market Report (VOA) Value of Industrial/Warehousing Land for Eastern Region – 'Typical' Value	July 2009 = figure is £936k per ha

The three sets of tabulations

- A4.3 There are three sets of tables, as discussed in Chapter 8: Coarse (10% gaps in the two main indexes); Fine (4% gaps) and Superfine (2% gaps). All the affordable targets are rounded to the nearest 5%. As explained, the third (Superfine) set is required for Lichfield to produce reasonable 5% gaps in the index changes.
- A4.4 Each index is set out by 8 10% bands of alternative use value (the Alternative Use value figures are stated on the Tables: the Valuation Office Agency like the valuation profession still uses Imperial measures). Each set of eight tables begins with the base case (£10,000 per acre).

Lichfield Benchmark Site Appraisal

Coarse Matrix

Table C1 Base Alternative Use Value: 0% Change - £10,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%	415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6	
	-20%	229.0	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	15%	25%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C2 Alternative Use Value: - 60% Change - £4,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%	415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6	
	-20%	229.0	20%	35%	45%	55%	55%	55%	55%	55%	55%
	-10%	257.7	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	20%	30%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	20%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C3 Alternative Use Value: - 40% Change - £6,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6
	-20%	229.0	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	20%	30%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C4 Alternative Use Value: - 20% Change - £8,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6
	-20%	229.0	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	15%	25%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C5 Alternative Use Value: + 20% Change - £12,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6
	-20%	229.0	25%	40%	50%	55%	55%	55%	55%	55%	55%
	-10%	257.7	5%	25%	35%	45%	50%	55%	55%	55%	55%
	0%	286.3	0%	5%	20%	35%	40%	45%	50%	55%	55%
	10%	314.9	0%	0%	10%	20%	30%	40%	45%	50%	55%
	20%	343.6	0%	0%	0%	10%	20%	30%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	10%	20%	30%	35%	40%
	40%	400.8	0%	0%	0%	0%	0%	10%	20%	25%	35%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	20%	25%

Table C6 Alternative Use Value: + 40% Change - £14,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6
	-20%	229.0	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	15%	25%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C7 Alternative Use Value: + 60% Change - £16,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6
	-20%	229.0	15%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	15%	25%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C8 Alternative Use Value: + 80% Change - £18,000 Per Acre

		Price Change HPI									
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
Cost Change BCIS Index	%		415.3	467.2	519.1	571.0	622.9	674.8	726.7	778.7	830.6
	-20%	229.0	15%	35%	45%	50%	55%	55%	55%	55%	55%
	-10%	257.7	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	10%	314.9	0%	0%	5%	15%	25%	35%	40%	45%	50%
	20%	343.6	0%	0%	0%	5%	15%	25%	35%	40%	45%
	30%	372.2	0%	0%	0%	0%	5%	15%	25%	30%	35%
	40%	400.8	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	429.5	0%	0%	0%	0%	0%	0%	10%	15%	25%

Lichfield Benchmark Site Appraisal

Fine Matrix (4%)

Table F1 Base Alternative Use Value: 0% Change - £10,000 Per Acre

		Price Change HPI									
		-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
Cost Change BCIS Index	%	477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7	
	-8%	263.4	20%	25%	30%	35%	35%	40%	45%	45%	50%
	-4%	274.8	10%	20%	25%	30%	30%	35%	40%	40%	45%
	0%	286.3	5%	10%	20%	25%	25%	30%	35%	40%	40%
	4%	297.8	0%	5%	10%	15%	20%	25%	30%	35%	35%
	8%	309.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
	12%	320.7	0%	0%	0%	5%	15%	15%	20%	25%	30%
	16%	332.1	0%	0%	0%	0%	10%	15%	15%	20%	25%
	20%	343.6	0%	0%	0%	0%	5%	10%	15%	15%	20%

Table F2 Alternative Use Value: - 30% Change - £4,000 Per Acre

		Price Change HPI									
		-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
Cost Change BCIS Index	%	477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7	
	-8%	263.4	20%	35%	45%	55%	55%	55%	55%	55%	55%
	-4%	274.8	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	20%	30%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	20%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table F3 Alternative Use Value: - 20% Change - £6,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7
	-8%	263.4	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-4%	274.8	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	20%	30%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table F4 Alternative Use Value: - 10% Change - £8,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7
	-8%	263.4	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-4%	274.8	0%	20%	30%	40%	50%	55%	55%	55%	55%
	0%	286.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	15%	25%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table F5 Alternative Use Value: +10% Change - £12,000 Per Acre

		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7
	-8%	263.4	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-4%	274.8	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	15%	25%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table F6 Alternative Use Value: + 20% Change - £14,000 Per Acre											
		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7
	-8%	263.4	20%	35%	45%	50%	55%	55%	55%	55%	55%
	-4%	274.8	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	15%	25%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table F7 Alternative Use Value: + 30% Change - £16,000 Per Acre											
		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7
	-8%	263.4	15%	35%	45%	50%	55%	55%	55%	55%	55%
	-4%	274.8	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	15%	25%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table F8 Alternative Use Value: + 40% Change - £18,000 Per Acre											
		Price Change HPI									
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index	%		477.6	498.3	519.1	539.9	560.6	581.4	602.2	622.9	643.7
	-8%	263.4	15%	35%	45%	50%	55%	55%	55%	55%	55%
	-4%	274.8	0%	15%	30%	40%	45%	55%	55%	55%	55%
	0%	286.3	0%	0%	15%	30%	35%	45%	50%	55%	55%
	4%	297.8	0%	0%	5%	15%	25%	35%	40%	45%	50%
	8%	309.2	0%	0%	0%	5%	15%	25%	35%	40%	45%
	12%	320.7	0%	0%	0%	0%	5%	15%	25%	30%	35%
	16%	332.1	0%	0%	0%	0%	0%	10%	15%	25%	30%
	20%	343.6	0%	0%	0%	0%	0%	0%	10%	15%	25%

Lichfield Benchmark Site Appraisal

Superfine Matrix (2%)

Table SF1 Base Alternative Use Value: 0% Change – £10,000 Per Acre

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Table SF2 Alternative Use Value: -30% Change – £4,000 Per Acre

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	20%	20%	25%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	20%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	20%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	20%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	15%	15%	20%	20%

Table SF3 Alternative Use Value: -20% Change – £6,000 Per Acre											
		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	20%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	20%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	20%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	15%	15%	15%	20%

Table SF4 Alternative Use Value: -10% Change - £8,000 Per Acre											
		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	20%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Table SF5 Alternative Use Value: +10% Change - £12,000 Per Acre											
		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	15%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	15%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	15%	20%	20%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Table SF6 Alternative Use Value: +20% Change - £14,000 Per Acre

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	15%	20%	25%	25%	25%	30%	30%	35%	35%
	-2%	280.6	15%	15%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	15%	20%	20%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Table SF7 Alternative Use Value: +30% Change - £16,000 Per Acre

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	15%	20%	25%	25%	25%	30%	30%	35%	35%
	-2%	280.6	15%	15%	20%	20%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	15%	20%	20%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Table SF8 Alternative Use Value: +40% Change - £18,000 Per Acre

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%		498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4
	-4%	274.8	15%	20%	25%	25%	25%	30%	30%	35%	35%
	-2%	280.6	15%	15%	20%	20%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	15%	20%	20%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	0%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

Appendix 5 Financial appraisal summaries

- A5.1 The development viability **summaries** contained in the following pages set out the assumptions and outputs of the viability appraisals for a 20% affordable 'zero grant' scenario.

SITE 1: Old Hall Farm Fradley

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% intermediate																																																			
Lichfield site viability study				Dwellings																																																			
Site details																																																							
Site	Lich 01 Old Hall farm																																																						
Location	Fradley																																																						
Area	ha	7.90																																																					
	acres	19.52																																																					
No dwgs		314																																																					
Density dw/ha		39.7																																																					
				<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="2">ave floor space</th> <th>build cost</th> <th>sales value</th> </tr> <tr> <th colspan="2"></th> <th>gross sq ft</th> <th>net sq ft</th> <th>per sq ft</th> <th>per sq ft</th> </tr> </thead> <tbody> <tr> <td>Market housing</td> <td>251.2</td> <td>80.00%</td> <td>984</td> <td>964</td> <td>182.00</td> </tr> <tr> <td>Affordable soc rent</td> <td>50.2</td> <td>16.00%</td> <td>984</td> <td>964</td> <td>66.00</td> </tr> <tr> <td>Affordable sh oship</td> <td>12.6</td> <td>4.00%</td> <td>984</td> <td>964</td> <td>103.00</td> </tr> <tr> <td>Aff other 1</td> <td>0.0</td> <td>0.00%</td> <td>984</td> <td>964</td> <td>0.00</td> </tr> <tr> <td>Aff other 2</td> <td>0.0</td> <td>0.00%</td> <td>0</td> <td>0</td> <td>0.00</td> </tr> <tr> <td>Total</td> <td>314.0</td> <td>100.00%</td> <td>308,976</td> <td>302,696</td> <td>£48,516,115</td> </tr> </tbody> </table>						ave floor space		build cost	sales value			gross sq ft	net sq ft	per sq ft	per sq ft	Market housing	251.2	80.00%	984	964	182.00	Affordable soc rent	50.2	16.00%	984	964	66.00	Affordable sh oship	12.6	4.00%	984	964	103.00	Aff other 1	0.0	0.00%	984	964	0.00	Aff other 2	0.0	0.00%	0	0	0.00	Total	314.0	100.00%	308,976	302,696	£48,516,115
		ave floor space		build cost	sales value																																																		
		gross sq ft	net sq ft	per sq ft	per sq ft																																																		
Market housing	251.2	80.00%	984	964	182.00																																																		
Affordable soc rent	50.2	16.00%	984	964	66.00																																																		
Affordable sh oship	12.6	4.00%	984	964	103.00																																																		
Aff other 1	0.0	0.00%	984	964	0.00																																																		
Aff other 2	0.0	0.00%	0	0	0.00																																																		
Total	314.0	100.00%	308,976	302,696	£48,516,115																																																		
				Floorspace density = 15,506 net sq ft per acre																																																			
Contingency				Other costs																																																			
allowance	2.50%	645		Planning	540.1	£ per dwelling																																																	
				Survey	500	£ per dwelling																																																	
				Marketing	0	£ per dwelling																																																	
Development costs				Interest																																																			
standard % build	23.00%	6,082		% per annum	7.50%																																																		
plus abnormals	0.2%	60		Notes																																																			
Total	23%																																																						
Design fees																																																							
on build costs	10.0%	2,644																																																					
on dev costs	0%																																																						
Planning gain																																																							
£ per dwg		5,100																																																					
£ per HOUSE		550																																																					
£ per MKT HOUSE		600																																																					
Assumed flats %		12%																																																					

SITE 1 LAND COST & PHASING

Land				
Iterate to achieve 20.0% profit				
		Affordable	No affordable	Hectare
		Affordable	No affordable	Affordable No affordable
Land purchase price	£	439,651	4,008,597	
RV per acre	£	22,522	205,349	£55,652 £507,417
Dev profit	£	7,770,166	9,189,520	
Total costs	£	40,747,899	45,903,102	
profit as % of costs		19.07%	20.02%	

Programme	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started			8.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	0.0	0.0	251.2
Market housing			1.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0	0.0	50.2
Affordable soc rent			0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	12.6
Affordable sh oship			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	10	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	0	0	314.0
Units 'built'			0	0	8	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	251
Market housing			0	0	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	50
+2Q			0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed			0	0	8	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	251	
Market housing			0	0	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	50	
+3Q			0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Units purchased			0	0	8	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	251	
Market housing			0	0	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	50	
+4Q			0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

SITE 2: South Burntwood

Input assumptions	Scenario & option	Affordable 20% = split 80% social rented 20% intermediate			
Lichfield site viability study					
Site details	Lich 02 Highfields Rd Chase Terrace BURNTWOOD				
Site					
Location					
Area	ha 5.75				
	acres 14.21				
No dwgs	250				
Density dw/ha	43.5				
Contingency					
	allowance 2.50%	£k			
		459			
Development costs					
	standard % build 26.00%	4,892			
	plus abnormals 0.8%	145			
	Total	27%			
Design fees					
	on build costs 10.0%	1,882			
	on dev costs 0%				
Planning gain					
	£ per dwg 5,100				
	£ per HOUSE 0				
	£ per MKT HOUSE 0				
	Assumed flats % 6%				
		Dwellings			
		Dwellings			
		<i>ave floor space</i>		<i>build</i>	
		<i>gross</i>		<i>cost</i>	
		<i>sq ft</i>		<i>per sq ft</i>	
		<i>net</i>		<i>sales</i>	
		<i>sq ft</i>		<i>value</i>	
		<i>per sq ft</i>		<i>per sq ft</i>	
Market housing	200.0 80.00%	890	881	82.50	181.00
Affordable soc rent	40.0 16.00%	890	881	82.50	65.00
Affordable sh oship	10.0 4.00%	890	881	82.50	102.00
Aff other 1	0.0 0.00%	890	881	82.50	0.00
Aff other 2	0.0 0.00%	0	0	82.50	0.00
Total	250.0 100.00%	222,500	220,250	£18,356,250	£35,081,420
Floorspace density = 15,502 net sq ft per acre					
Other costs					
Planning	526.0	£ per dwelling			
Survey	500	£ per dwelling			
Marketing	0	£ per dwelling			
Interest					
% per annum	7.50%				
Notes					

SITE 2 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit			
		Affordable		No affordable	
		Hectare			
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	91,818	2,800,778		
RV per acre	£	6,462	197,123	£15,968	£487,092
Dev profit	£	5,599,495	6,650,285		
Total costs	£	29,483,650	33,216,690		
profit as % of costs		18.99%	20.02%		

Programme	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Units started			8.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0
Market housing																								
Affordable soc rent			1.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Affordable sh oship			0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	10	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	0	0	0	0	0	0
Units 'built'			0	0	8	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	0	0	0
Market housing																								
+2Q			0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0
Affordable soc rent			0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed			0	0	8	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	0	0
Market housing																								
+3Q			0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0
Affordable soc rent			0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased			0	0	8	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	0	0
Market housing																								
+4Q			0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Affordable soc rent			0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 2 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				TOTALS	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
INCOME																											
Housing sales	Market housing	0	0	0	0	0	0	1,276	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	1,914	0	31,892
	Affordable soc rent	0	0	0	0	0	0	92	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	0	2,291
	Affordable sh oship	0	0	0	0	0	0	36	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	0	899
	Aff other 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff other 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sales fees	0	0	0	0	0	0	-46	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	0	-1,141
Total income																											
0 0 0 0 0 0 0 1,403 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 0 35,081																											
COSTS																											
Land	Land acquisition	92																									92
	Stamp duty	1																									1
	Purchase fees	3																									3
	Total																										95
Build costs	Market housing	0	0	0	0	587	881	881	881	881	881	881	881	881	881	881	881	881	881	881	881	881	881	881	881	0	14,685
	Affordable soc rent	0	0	0	0	117	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	0	2,937
	Affordable sh oship	0	0	0	0	29	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	0	734
	Aff other 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aff other 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Build contingency	2.5%	0	0	0	18	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	0	459
	Total																										18,815
Dev costs	Upfront	13.0%	611	611	611	611																					2,446
	Build related	13.0%	0	0	98	147																					2,446
	Abnormals	1%	72	72			147	147	147	147	147	147	147	147	147	147	147	147	147	147	0						145
	Total																										5,037
Fees	Fees on build costs	10.0%	0	0	0	0	75	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	0	1,882
	Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																										1,882
PG	Planning gain				51	77				77	77	77	77	77	77	77	77	77	77	77	0						1,275
	Total																										1,275
Other	Planning	£526	44	44	44																						132
	Survey	£500	125																								125
	Marketing	£0			0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																										257
Sales fees	b/forward from above		0	0	0	0	0	46	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	0	1,141
Total costs																											
948 728 804 835 1,051 1,465 1,511 1,534 1,534 1,534 1,534 1,534 1,534 1,534 1,534 1,534 1,534 1,534 1,534 1,310 1,310 68 68 0 28,501																											
Net profit/loss from quarter																											
-948 -728 -804 -835 -1,051 -1,465 -1,07 571 6,580																											
Profit/loss bf from last quarter																											
0 -966 -1,725 -2,577 -3,475 -4,611 -6,190 -6,416 -5,954 -5,483 -5,004 -4,516 -4,018 -3,511 -2,995 -2,469 -1,933 -1,387 -831 -265 540 1,360 3,460 5,599																											
Cumulative profit/loss																											
-948 -1,693 -2,529 -3,411 -4,526 -6,076 -6,298 -5,844 -5,382 -4,912 -4,433 -3,944 -3,447 -2,940 -2,424 -1,898 -1,362 -816 -260 530 1,335 3,396 5,496 5,599																											
Interest	Charged at Total	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	-982
			-18	-32	-47	-64	-85	-114	-118	-110	-101	-92	-83	-74	-65	-55	-45	-36	-26	-15	-5	10	25	64	103	0	
Cumulative developer profit carried forward to RV calc																											
-966 -1,725 -2,577 -3,475 -4,611 -6,190 -6,416 -5,954 -5,483 -5,004 -4,516 -4,018 -3,511 -2,995 -2,469 -1,933 -1,387 -831 -265 540 1,360 3,460 5,599 5,599 5,598																											

SITE 3: Bison Concrete Lichfield

Input assumptions

Scenario & option

Affordable 20% = split 80% social rented 20% intermediate

Lichfield site viability study

Site details

Site	Lich 03 Bison	
Location	Shortbutts Lane Lichfield	
Area	ha	4.09
	acres	10.11
No dwgs		175
Density dw/ha		42.8

Contingency

allowance	5.00%	£k
		758

Development costs

standard % build	16.00%	2,546
plus abnormals	1.5%	245
Total	18%	

Design fees

on build costs	10.0%	1,592
on dev costs	0%	

Planning gain

£ per dwg	8,300
£ per HOUSE	550
£ per MKT HOUSE	600
Assumed flats %	18%

Dwellings

Dwellings

			ave floor space		build cost	sales value
			gross	net	per sq ft	per sq ft
			sq ft	sq ft		
Market housing	140.0	80.00%	1,019	988	85.00	193.00
Affordable soc rent	28.0	16.00%	1,019	988	85.00	66.00
Affordable sh oship	7.0	4.00%	1,019	988	85.00	103.00
Aff other 1	0.0	0.00%	1,019	988	85.00	0.00
Aff other 2	0.0	0.00%	0	0	85.00	0.00
Total	175.0	100.00%	178,325	172,900	£15,157,625	£29,233,932

Floorspace density = 17,108 net sq ft per acre

Other costs

Planning	496.4	£ per dwelling
Survey	500	£ per dwelling
Marketing	0	£ per dwelling

Interest

% per annum	7.50%
-------------	--------------

Notes

SITE 3 LAND COST & PHASING

Land	Iterate to achieve 20.0% profit		Hectare	
	Affordable	No affordable	Affordable	No affordable
Land purchase price	£ 715,081	£ 2,923,027		
RV per acre	£ 70,755	£ 289,226	£174,836	£714,676
Dev profit	£ 4,671,481	£ 5,567,401		
Total costs	£ 24,564,551	£ 27,804,399		
profit as % of costs	19.02%	20.02%		

Programme	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																													
Market housing			5.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	140.0	
Affordable soc rent			1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	28.0	
Affordable sh oship			0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	7.0	
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0	0	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	175.0	
Units 'built'																													
Market housing			0	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	140	
+2Q			0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	28	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Units completed																													
Market housing			0	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	140	
+3Q			0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	28	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Units purchased																													
Market housing			0	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	140	
+4Q			0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	28	
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

SITE 3 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				TOTALS	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
INCOME																															
Housing sales	<i>Market housing</i>	0	0	0	0	0	0	1,068	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	26,696
	<i>Affordable soc rent</i>	0	0	0	0	0	0	73	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	1,826
	<i>Affordable sh cshp</i>	0	0	0	0	0	0	28	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	712	
	<i>All other 1</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>All other 2</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>Sales fees</i>	0	0	0	0	0	0	-38	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-44	-954	
Total income		0	0	0	0	0	0	1,169	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	1,336	29,234	
COSTS																															
Land	<i>Land acquisition</i>	715																													715
	<i>Stamp duty</i>	29																													29
	<i>Purchase fees</i>	20																													20
	Total																														763
Build costs	<i>Market housing</i>	0	0	0	0	485	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	554	12,128
	<i>Affordable soc rent</i>	0	0	0	0	97	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	2,425
	<i>Affordable sh cshp</i>	0	0	0	0	24	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	606
	<i>All other 1</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>All other 2</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>Build contingency</i>	5.0%	0	0	0	30	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	758	
	Total																														15,916
Dev costs	<i>Upfront</i>	8.0%	318	318	318	318	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	1,273
	<i>Build related</i>	8.0%	0	0	51	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	1,273
	<i>Abnormals</i>	2%	123	123																										245	
	Total																														2,792
Fees	<i>Fees on build costs</i>	10.0%	0	0	0	0	64	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	1,592
	<i>Fees on dev costs</i>	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total																														1,592
PG	<i>Planning gain</i>		64	73		73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	1,600
Other	<i>Planning</i>	£496	29	29	29																										87
	<i>Survey</i>	£500	88																												88
	<i>Marketing</i>	£0																													0
	Total																														174
Sales fees	<i>b/forward from above</i>		0	0	0	0	0	0	38	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	954	
Total costs			1,321	470	462	450	832	932	970	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	23,791	
Net profit/loss from quarter			-1,321	-470	-462	-450	-832	-932	200	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	5,443	
Profit/loss bf from last quarter			0	-1,345	-1,849	-2,355	-2,857	-3,758	-4,777	-4,663	-4,383	-4,097	-3,806	-3,509	-3,207	-2,899	-2,586	-2,266	-1,941	-1,609	-1,271	-927	-577	-220	144	515	892	1,411	1,939	3,293	
Cumulative profit/loss			-1,321	-1,815	-2,311	-2,804	-3,688	-4,689	-4,578	-4,302	-4,022	-3,736	-3,445	-3,148	-2,846	-2,538	-2,225	-1,905	-1,580	-1,248	-910	-566	-216	141	505	876	1,385	1,903	3,232	4,585	
Interest	<i>Charged at</i>	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	
	Total		-25	-34	-43	-53	-69	-88	-86	-81	-75	-70	-65	-59	-53	-48	-42	-36	-30	-23	-17	-11	-4	3	9	16	26	36	61	86	
Cumulative developer profit carried forward to RV calc			-1,345	-1,849	-2,355	-2,857	-3,758	-4,777	-4,663	-4,383	-4,097	-3,806	-3,509	-3,207	-2,899	-2,586	-2,266	-1,941	-1,609	-1,271	-927	-577	-220	144	515	892	1,411	1,939	3,293	4,671	

SITE 4: South Shortbutts Lane Lichfield

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% intermediate					
Lichfield site viability study				Dwellings					
Site details									
Site		Lich 04							
Location		South of Shortbutts Lane Lichfield							
Area	ha	<input type="text" value="2.40"/>							
	acres	<input type="text" value="5.93"/>							
No dwgs		<input type="text" value="100"/>							
Density dw/ha		<input type="text" value="41.7"/>							
				Dwellings					
				<i>ave floor space</i>		<i>build cost</i>		<i>sales value</i>	
				<i>gross</i>		<i>net</i>		<i>per sq ft</i>	
				<i>sq ft</i>		<i>sq ft</i>		<i>per sq ft</i>	
Market housing				80.0	<input type="text" value="80.00%"/>	<input type="text" value="938"/>	<input type="text" value="919"/>	<input type="text" value="83.50"/>	<input type="text" value="192.00"/>
Affordable soc rent				16.0	<input type="text" value="16.00%"/>	<input type="text" value="938"/>	<input type="text" value="919"/>	<input type="text" value="0.0%"/>	<input type="text" value="66.00"/>
Affordable sh oship				4.0	<input type="text" value="4.00%"/>	<input type="text" value="938"/>	<input type="text" value="919"/>	<input type="text" value="83.50"/>	<input type="text" value="103.00"/>
Aff other 1				0.0	<input type="text" value="0.00%"/>	<input type="text" value="938"/>	<input type="text" value="919"/>	<input type="text" value="0.0%"/>	<input type="text" value="0.00"/>
Aff other 2				0.0	<input type="text" value="0.00%"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="83.50"/>	<input type="text" value="0.00"/>
Total				<input type="text" value="100.0"/>	<input type="text" value="100.00%"/>	<input type="text" value="93,800"/>	<input type="text" value="91,900"/>	<input type="text" value="£7,832,300"/>	<input type="text" value="£15,464,932"/>
Floorspace density				= 15,496 net sq ft per acre					
Contingency									
allowance				<input type="text" value="2.50%"/>	<input type="text" value="196"/>				
Development costs									
standard % build				<input type="text" value="16.00%"/>	<input type="text" value="1,284"/>				
plus abnormals				<input type="text" value="0.6%"/>	<input type="text" value="45"/>				
Total				<input type="text" value="17%"/>					
Design fees									
on build costs				<input type="text" value="10.0%"/>	<input type="text" value="803"/>				
on dev costs				<input type="text" value="0%"/>					
Other costs									
Planning				<input type="text" value="422.5"/>	£ per dwelling				
Survey				<input type="text" value="500"/>	£ per dwelling				
Marketing				<input type="text" value="0"/>	£ per dwelling				
Interest									
% per annum				<input type="text" value="7.50%"/>					
Planning gain									
£ per dwg				<input type="text" value="7,300"/>					
£ per HOUSE				<input type="text" value="550"/>					
£ per MKT HOUSE				<input type="text" value="600"/>					
Assumed flats %				<input type="text" value="12%"/>					
Notes				<div style="border: 1px solid black; height: 60px;"></div>					

SITE 4 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit			
		Affordable		No affordable	
		Hectare		Affordable	No affordable
Land purchase price	£	816,381	2,041,258		
RV per acre	£	137,660	344,202	£340,159	£850,524
Dev profit	£	2,473,380	2,948,186		
Total costs	£	12,992,977	14,698,039		
profit as % of costs		19.04%	20.06%		

Programme		Year 1				Year 2				Year 3				Year 4				Year 5				TOTALS
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started	Market housing			3.2	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	0.0	0.0	0.0	0.0	0.0	0.0	80.0
	Affordable soc rent			0.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	16.0
	Affordable sh oship			0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	0	0	4	8	8	8	8	8	8	8	8	8	8	8	0	0	0	0	0	0	100.0
Units 'built'	Market housing			0	0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	80
	+2Q Affordable soc rent			0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
	+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed	Market housing					0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	80
	+3Q Affordable soc rent					0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
	+3Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	+3Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	+3Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased	Market housing					0	0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	80
	+4Q Affordable soc rent					0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
	+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 4 CASH FLOW AFFORDABLE

	rate	Year 1	Q2	Q3	Q4	Year 2	Q2	Q3	Q4	Year 3	Q2	Q3	Q4	Year 4	Q2	Q3	Q4	Year 5	Q2	Q3	Q4	TOTALS	
		Q1				Q1				Q1				Q1				Q1					
INCOME																							
Housing sales	Market housing	0	0	0	0	0	0	565	1,129	1,129	1,129	1,129	1,129	1,129	1,129	1,129	1,129	1,129	1,129	1,129	0	14,116	
	Affordable soc rent	0	0	0	0	0	0	39	78	78	78	78	78	78	78	78	78	78	78	78	0	970	
	Affordable sh oship	0	0	0	0	0	0	15	30	30	30	30	30	30	30	30	30	30	30	30	0	379	
	Aff other 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Aff other 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sales fees	0	0	0	0	0	0	-20	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	0	-505	
Total income		0	0	0	0	0	0	619	1,237	1,237	1,237	1,237	1,237	1,237	1,237	1,237	1,237	1,237	1,237	1,237	0	15,465	
COSTS																							
Land	Land acquisition	816																				816	
	Stamp duty	33																				33	
	Purchase fees	22																				22	
	Total																					871	
Build costs	Market housing	0	0	0	0	251	501	501	501	501	501	501	501	501	501	501	501	501	0	0	0	0	6,266
	Affordable soc rent	0	0	0	0	50	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	1,253
	Affordable sh oship	0	0	0	0	13	25	25	25	25	25	25	25	25	25	25	25	25	0	0	0	0	313
	Aff other 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Aff other 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Build contingency	2.5%	0	0	0	8	16	16	16	16	16	16	16	16	16	16	16	16	0	0	0	0	196
	Total																						8,028
Dev costs	Uprfront	8.0%	161	161	161	161				51	51	51	51	51	51	51	0	0	0	0	0	0	642
	Build related	8.0%	0	0	26	51				51	51	51	51	51	51	51	0	0	0	0	0	0	642
	Abnormals	1%	22	22																			45
	Total																						1,329
Fees	Fees on build costs	10.0%	0	0	0	0	32	64	64	64	64	64	64	64	64	64	64	64	0	0	0	0	803
	Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																						803
PG	Planning gain				33	66	66	66	66	66	66	66	66	66	66	66	0	0	0	0	0	0	821
	Total																						821
Other	Planning	£423	14	14	14																		42
	Survey	£500	50																				50
	Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																						92
Sales fees	b/forward from above		0	0	0	0	0	20	40	40	40	40	40	40	40	40	40	40	40	40	0	0	505
Total costs			1,119	197	233	278	470	824	844	864	864	864	864	864	864	864	864	747	747	40	40	0	12,449
Net profit/loss from quarter																							
			-1,119	-197	-233	-278	-470	-824	-225	373	373	373	373	373	373	373	490	490	1,197	1,197	0	3,016	
Profit/loss bf from last quarter																							
			0	-1,140	-1,362	-1,625	-1,938	-2,453	-3,338	-3,630	-3,317	-2,999	-2,675	-2,345	-2,008	-1,666	-1,317	-961	-479	11	1,231	2,473	
Cumulative profit/loss																							
			-1,119	-1,337	-1,595	-1,902	-2,408	-3,277	-3,563	-3,257	-2,944	-2,626	-2,302	-1,972	-1,635	-1,292	-943	-470	11	1,208	2,428	2,473	
Interest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0	
	Total		-21	-25	-30	-36	-45	-61	-67	-61	-55	-49	-43	-37	-31	-24	-18	-9	0	23	46	0	
Cumulative developer profit carried forward to RV calc			-1,140	-1,362	-1,625	-1,938	-2,453	-3,338	-3,630	-3,317	-2,999	-2,675	-2,345	-2,008	-1,666	-1,317	-961	-479	11	1,231	2,473	2,473	2,472

SITE 5: Off Park Land Mile Oak

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% intermediate					
Lichfield site viability study									
Site details									
Site	Lich 05 Park Lane								
Location	Bone Hill Mileoak								
Area	ha	1.93							
	acres	4.77							
No dwgs		78							
Density dw/ha		40.4							
Contingency									
allowance		2.50%	£k						
			158						
Development costs									
standard % build		15.00%	£k						
			969						
plus abnormals		0.0%	0						
Total		15%							
Design fees									
on build costs		10.0%	£k						
			646						
on dev costs		0%							
Planning gain									
£ per dwg		5,100							
£ per HOUSE		550							
£ per MKT HOUSE		600							
Assumed flats %		12%							
Dwellings									
Dwellings				<i>ave floor space</i>		<i>build cost</i>		<i>sales value</i>	
				<i>gross</i>	<i>net</i>	<i>cost</i>	<i>value</i>		
				<i>sq ft</i>	<i>sq ft</i>	<i>per sq ft</i>	<i>per sq ft</i>		
Market housing	62.4	80.00%		968	948	83.50	192.00		
Affordable soc rent	12.5	16.00%		968	948	83.50	66.00		
Affordable sh oship	3.1	4.00%		968	948	83.50	103.00		
Aff other 1	0.0	0.00%		968	948	83.50	0.00		
Aff other 2	0.0	0.00%		0	0	83.50	0.00		
Total	78.0	100.00%		75,504	73,944	£6,304,584	£12,443,296		
Floorspace density = 15,505 net sq ft per acre									
Other costs									
Planning		373.8		£ per dwelling					
Survey		500		£ per dwelling					
Marketing		0		£ per dwelling					
Interest									
% per annum		7.50%							
Notes									

SITE 5 LAND COST & PHASING

Land	Iterate to achieve 20.0% profit		Hectare	
	Affordable	No affordable	Affordable	No affordable
Land purchase price	£ 909,392	£ 1,916,936	£471,188	£993,231
RV per acre	£ 190,687	£ 401,955		
Dev profit	£ 1,989,785	£ 2,372,663		
Total costs	£ 10,454,711	£ 11,825,785		
profit as % of costs	19.03%	20.06%		

Programme	Year 1				Year 2				Year 3				Year 4				Year 5				TOTALS	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Units started																						
Market housing			4.8	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.4
Affordable soc rent			1.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5
Affordable sh oship			0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	6	8	8	8	8	8	8	8	8	8	0	0	0	0	0	0	0	0	0	78.0
Units 'built'																						
Market housing			0	0	5	6	6	6	6	6	6	6	6	6	0	0	0	0	0	0	0	62
+2Q			0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	12
Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																						
Market housing				0	0	5	6	6	6	6	6	6	6	6	6	0	0	0	0	0	0	62
+3Q				0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	12
Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																						
Market housing					0	0	5	6	6	6	6	6	6	6	6	0	0	0	0	0	0	62
+4Q					0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	12
Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 5 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				Year 5				TOTALS	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
INCOME																							
Housing sales		0	0	0	0	0	0	874	1,165	1,165	1,165	1,165	1,165	1,165	1,165	1,165	1,165	0	0	0	0	11,358	
	Market housing	0	0	0	0	0	0	874	1,165	1,165	1,165	1,165	1,165	1,165	1,165	1,165	1,165	0	0	0	0	11,358	
	Affordable soc rent	0	0	0	0	0	0	60	80	80	80	80	80	80	80	80	80	0	0	0	0	781	
	Affordable sh oship	0	0	0	0	0	0	23	31	31	31	31	31	31	31	31	31	0	0	0	0	305	
	Aff other 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Aff other 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sales fees	0	0	0	0	0	0	-31	-42	-42	-42	-42	-42	-42	-42	-42	-42	0	0	0	0	-406	
Total income																							
		0	0	0	0	0	0	957	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276	0	0	0	0	12,443	
COSTS																							
Land		909																				909	
	Land acquisition	909																				909	
	Stamp duty	36																				36	
	Purchase fees	25																				25	
	Total																					971	
Build costs		0	0	0	0	388	517	517	517	517	517	517	517	517	517	0	0	0	0	0	0	5,044	
	Market housing	0	0	0	0	388	517	517	517	517	517	517	517	517	517	0	0	0	0	0	0	5,044	
	Affordable soc rent	0	0	0	0	78	103	103	103	103	103	103	103	103	103	0	0	0	0	0	0	1,009	
	Affordable sh oship	0	0	0	0	19	26	26	26	26	26	26	26	26	26	0	0	0	0	0	0	252	
	Aff other 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Aff other 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Build contingency	2.5%	0	0	0	12	16	16	16	16	16	16	16	16	16	0	0	0	0	0	0	158	
	Total																					6,462	
Dev costs		121	121	121	121	50	50	50	50	50	50	50	50	0	0	0	0	0	0	0	0	485	
	Upfront	7.5%	121	121	121	50	50	50	50	50	50	50	50	0	0	0	0	0	0	0	0	485	
	Build related	7.5%	0	0	37	50	50	50	50	50	50	50	50	0	0	0	0	0	0	0	0	485	
	Abnormals	0%	0	0																		0	
	Total																					969	
Fees		0	0	0	0	50	66	66	66	66	66	66	66	66	66	0	0	0	0	0	0	646	
	Fees on build costs	10.0%	0	0	0	50	66	66	66	66	66	66	66	66	66	0	0	0	0	0	0	646	
	Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total																					646	
PG				36	48	48	48	48	48	48	48	48	48	0	0	0	0	0	0	0	0	468	
	Planning gain			36	48	48	48	48	48	48	48	48	48	0	0	0	0	0	0	0	0	468	
	Total																					468	
Other		10	10	10																		29	
	Planning	£374	10	10																		29	
	Survey	£500	39																			39	
	Marketing	£0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total																					68	
Sales fees	b/forward from above	0	0	0	0	0	0	31	42	42	42	42	42	42	42	42	42	0	0	0	0	406	
Total costs		1,141	131	204	219	645	827	858	868	868	868	868	868	771	771	42	42	0	0	0	0	9,991	
Net profit/loss from quarter																							
		-1,141	-131	-204	-219	-645	-827	99	408	408	408	408	408	506	506	1,235	1,235	0	0	0	0	2,452	
Profit/loss bf from last quarter		0	-1,162	-1,317	-1,550	-1,802	-2,492	-3,381	-3,343	-2,991	-2,631	-2,265	-1,892	-1,512	-1,025	-529	718	1,990	1,990	1,990	1,990		
Cumulative profit/loss		-1,141	-1,293	-1,521	-1,769	-2,446	-3,319	-3,282	-2,936	-2,583	-2,223	-1,857	-1,484	-1,006	-520	705	1,953	1,990	1,990	1,990	1,990		
Interest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%		
	Total	7.50%	-21	-24	-29	-33	-46	-62	-62	-55	-48	-42	-35	-28	-19	-10	13	37	0	0	0	0	-464
Cumulative developer profit carried forward to RV calc		-1,162	-1,317	-1,550	-1,802	-2,492	-3,381	-3,343	-2,991	-2,631	-2,265	-1,892	-1,512	-1,025	-529	718	1,990	1,990	1,990	1,990	1,990	1,989	

SITE 6: Lynn Lane Shenstone

Input assumptions

Scenario & option

Affordable 20% = split 80% social rented 20% intermediate

Lichfield site viability study

Site details

Site	Lich 06	
Location	Lynn Lane Shenstone	
Area	ha	1.07
	acres	2.64
No dwgs		54
Density dw/ha		50.5

Contingency

allowance £k 175

Development costs

standard % build 495

plus abnormals 120

Total 17%

Design fees

on build costs 367

on dev costs

Planning gain

£ per dwg	5,100
£ per HOUSE	550
£ per MKT HOUSE	600
Assumed flats %	12%

Dwellings

Dwellings

			ave floor space		build	sales
			gross	net	cost	value
			sq ft	sq ft	per sq ft	per sq ft
Market housing	43.2	<input type="text" value="80.00%"/>	775	759	83.50	212.00
Affordable soc rent	8.6	<input type="text" value="16.00%"/>	775	759	83.50	66.00
Affordable sh oship	2.2	<input type="text" value="4.00%"/>	775	759	83.50	103.00
Aff other 1	0.0	<input type="text" value="0.00%"/>	775	759	83.50	0.00
Aff other 2	0.0	<input type="text" value="0.00%"/>	0	0	83.50	0.00
Total	54.0	<input type="text" value="100.00%"/>	41,850	40,986	£3,494,475	£7,552,900

Floorspace density = 15,502 net sq ft per acre

Other costs

Planning £ per dwelling

Survey £ per dwelling

Marketing £ per dwelling

Interest

% per annum

Notes

SITE 6 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	712,529	1,377,471		
RV per acre	£	269,492	520,986	£665,914	£1,287,356
Dev profit	£	1,208,114	1,453,138		
Total costs	£	6,345,836	7,236,944		
profit as % of costs		19.04%	20.08%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			4.0	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	43.2
Affordable soc rent			0.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	8.6
Affordable sh oship			0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	5	7	7	7	7	7	7	7	0	0	0	0	0	0	54.0
Units 'built'																	
Market housing			0	0	4	6	6	6	6	6	6	6	0	0	0	0	43
+2Q Affordable soc rent			0	0	1	1	1	1	1	1	1	1	0	0	0	0	9
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	4	6	6	6	6	6	6	6	0	0	0	43
+3Q Affordable soc rent				0	0	1	1	1	1	1	1	1	1	0	0	0	9
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	2
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	4	6	6	6	6	6	6	6	0	0	43
+4Q Affordable soc rent					0	0	1	1	1	1	1	1	1	1	0	0	9
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	2
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 6 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				TOTALS
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
INCOME																		
Housing sales																		
Market housing		0	0	0	0	0	0	644	901	901	901	901	901	901	901	0	0	6,951
Affordable soc rent		0	0	0	0	0	0	40	56	56	56	56	56	56	0	0	0	433
Affordable sh oship		0	0	0	0	0	0	16	22	22	22	22	22	22	0	0	0	169
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-23	-32	-32	-32	-32	-32	-32	-32	0	0	-248
Total income		0	0	0	0	0	0	699	979	979	979	979	979	979	979	0	0	7,553
COSTS																		
Land																		
Land acquisition		713																713
Stamp duty		29																29
Purchase fees		20																20
Total																		761
Build costs																		
Market housing		0	0	0	0	259	362	362	362	362	362	362	362	0	0	0	0	2,796
Affordable soc rent		0	0	0	0	52	72	72	72	72	72	72	72	0	0	0	0	559
Affordable sh oship		0	0	0	0	13	18	18	18	18	18	18	18	0	0	0	0	140
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	5.0%	0	0	0	0	16	23	23	23	23	23	23	23	0	0	0	0	175
Total																		3,669
Dev costs																		
Upfront	6.8%	62	62	62	62									0	0	0	0	248
Build related	6.8%	0	0	23	32	32	32	32	32	32	0	0	0	0	0	0	0	248
Abnormals	3%	60	60											0	0	0	0	120
Total																		615
Fees																		
Fees on build costs	10.0%	0	0	0	0	34	48	48	48	48	48	48	48	0	0	0	0	367
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		367
PG																		
Planning gain				30	42	42	42	42	42	42	0	0	0	0	0	0	0	324
Total																		324
Other																		
Planning	£276	5	5	5										0	0	0	0	15
Survey	£500	27												0	0	0	0	27
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		42
Sales fees																		
b/forward from above		0	0	0	0	0	0	23	32	32	32	32	32	32	32	0	0	248
Total costs		914	127	120	136	448	597	620	629	629	629	555	555	32	32	0	0	6,026
Net profit/loss from quarter		-914	-127	-120	-136	-448	-597	79	350	350	350	424	424	947	947	0	0	1,527
Profit/loss bf from last quarter		0	-931	-1,078	-1,220	-1,381	-1,864	-2,507	-2,473	-2,164	-1,848	-1,526	-1,123	-713	239	1,208	1,208	
Cumulative profit/loss		-914	-1,058	-1,198	-1,356	-1,829	-2,461	-2,428	-2,124	-1,814	-1,498	-1,103	-699	234	1,186	1,208	1,208	
Interest																		
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	
Total		-17	-20	-22	-25	-34	-46	-46	-40	-34	-28	-21	-13	4	22	0	0	-320
Cumulative developer profit carried forward to RV calc		-931	-1,078	-1,220	-1,381	-1,864	-2,507	-2,473	-2,164	-1,848	-1,526	-1,123	-713	239	1,208	1,208	1,208	1,207

SITE 7: Abattoir Chase Terrace

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% Share Ownership			
Lichfield site viability study							
Site details							
Site	Lich 07						
Location	Eastgate St. Chase Terrace						
Area	ha	0.57					
	acres	1.41					
No dwgs		49					
Density dw/ha		86.0					
Contingency							
allowance	5.00%	150	£k				
Development costs							
standard % build	11.50%	362					
plus abnormals	3.8%	120					
Total	15%						
Design fees							
on build costs	10.0%	315					
on dev costs	0%						
Planning gain							
£ per dwg	5,100						
£ per HOUSE	600						
£ per MKT HOUSE	0						
Assumed flats %	43%						
Dwellings							
				<i>ave floor space</i>	<i>build</i>	<i>sales</i>	
				<i>gross</i>	<i>net</i>	<i>cost</i>	<i>value</i>
				<i>sq ft</i>	<i>sq ft</i>	<i>per sq ft</i>	<i>per sq ft</i>
Market housing	39.2	80.00%		683	635	89.50	164.00
Affordable soc rent	7.8	16.00%		683	635	89.50	67.00
Affordable sh oship	2.0	4.00%		683	635	89.50	105.00
Aff other 1	0.0	0.00%		683	635	89.50	0.00
Aff other 2	0.0	0.00%		0	0	89.50	0.00
Total	49.0	100.00%		33,467	31,115	£2,995,297	£4,546,524
Floorspace density = 22,091 net sq ft per acre							
Other costs							
Planning	515.0		£ per dwelling				
Survey	500		£ per dwelling				
Marketing	0		£ per dwelling				
Interest							
% per annum	7.50%						
Notes							

SITE 7 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit			
		Affordable		No affordable	
		£		Hectare	
				Affordable	No affordable
Land purchase price	£	-605,223	-276,942		
RV per acre	£	-429,703	-196,626	-£1,061,795	-£485,862
Dev profit	£	725,959	851,730		
Total costs	£	3,821,690	4,252,255		
profit as % of costs		19.00%	20.03%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			0.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	39.2
Affordable soc rent				1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	7.8
Affordable sh oship			0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	2.0
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	1	6	6	6	6	6	6	6	6	0	0	0	0	0	49.0
Units 'built'																	
Market housing			0	0	1	5	5	5	5	5	5	5	5	0	0	0	39
+2Q Affordable soc rent			0	0	0	1	1	1	1	1	1	1	1	0	0	0	8
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	1	5	5	5	5	5	5	5	5	0	0	39
+3Q Affordable soc rent				0	0	0	1	1	1	1	1	1	1	1	0	0	8
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	2
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	1	5	5	5	5	5	5	5	5	0	39
+4Q Affordable soc rent					0	0	0	1	1	1	1	1	1	1	1	0	8
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	2
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 7 CASH FLOW AFFORDABLE

		rate	Year 1				Year 2				Year 3				Year 4				TOTALS	
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
INCOME																				
Housing sales	<i>Market housing</i>		0	0	0	0	0	0	83	500	500	500	500	500	500	500	500	0	4,082	
	<i>Affordable soc rent</i>		0	0	0	0	0	0	7	41	41	41	41	41	41	41	41	0	334	
	<i>Affordable sh oship</i>		0	0	0	0	0	0	3	16	16	16	16	16	16	16	16	0	131	
	<i>Aff other 1</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>Aff other 2</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>Sales fees</i>		0	0	0	0	0	0	-3	-18	-18	-18	-18	-18	-18	-18	-18	0	-147	
Total income			0	0	0	0	0	0	93	557	557	557	557	557	557	557	557	0	4,547	
COSTS																				
Land	<i>Land acquisition</i>		-605																-605	
	<i>Stamp duty</i>		0																0	
	<i>Purchase fees</i>		-17																-17	
	Total																		-622	
Build costs	<i>Market housing</i>		0	0	0	0	49	293	293	293	293	293	293	293	293	293	293	0	2,396	
	<i>Affordable soc rent</i>		0	0	0	0	10	59	59	59	59	59	59	59	59	59	59	0	479	
	<i>Affordable sh oship</i>		0	0	0	0	2	15	15	15	15	15	15	15	15	15	15	0	120	
	<i>Aff other 1</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>Aff other 2</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<i>Build contingency</i>	5.0%	0	0	0	0	3	18	18	18	18	18	18	18	18	18	18	0	150	
	Total																		3,145	
Dev costs	<i>Upfront</i>	5.8%	45	45	45	45													181	
	<i>Build related</i>	5.8%	0	0	4	22	22	22	22	22	22	22	0	0	0	0	0	0	181	
	<i>Abnormals</i>	4%	60	60															120	
	Total																		481	
Fees	<i>Fees on build costs</i>	10.0%	0	0	0	0	6	39	39	39	39	39	39	39	39	39	39	0	315	
	<i>Fees on dev costs</i>	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total																		315	
PG	<i>Planning gain</i>				5	33	33	33	33	33	33	33	0	0	0	0	0	0	267	
	Total																		267	
Other	<i>Planning</i>	£515	8	8	8														25	
	<i>Survey</i>	£500	25																25	
	<i>Marketing</i>	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total																		50	
Sales fees	<i>b/forward from above</i>		0	0	0	0	0	0	3	18	18	18	18	18	18	18	18	0	147	
Total costs			-484	113	63	100	125	478	481	496	496	496	442	442	18	18	0		3,782	
Net profit/loss from quarter			484	-113	-63	-100	-125	-478	-389	60	60	60	115	115	539	539	0		765	
Profit/loss bf from last quarter			0	493	387	330	235	111	-374	-777	-730	-682	-633	-583	-477	-368	174	726		
Cumulative profit/loss			484	380	324	230	109	-367	-762	-716	-669	-621	-573	-468	-362	170	713	726		
Interest	<i>Charged at Total</i>	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%			
			9	7	6	4	2	-7	-14	-13	-13	-12	-11	-9	-7	3	13	0	-40	
Cumulative developer profit carried forward to RV calc			493	387	330	235	111	-374	-777	-730	-682	-633	-583	-477	-368	174	726	726		725

SITE 8: Fazeley Saw Mill

Input assumptions

Scenario & option

Affordable 20% = split 80% social rented 20% Share Ownership

Lichfield site viability study

Site details

Site	Lich 08	Sawmill
Location	Fazeley	
Area	ha	0.62
	acres	1.53
No dwgs		25
Density dw/ha		40.3

Contingency allowance 5.00% 100

Development costs standard % build 11.50% 242

plus abnormals 7.1% 150

Total 19%

Design fees on build costs 10.0% 211

on dev costs 0%

Planning gain

£ per dwg	5,100
£ per HOUSE	550
£ per MKT HOUSE	600
Assumed flats %	10%

Dwellings

Dwellings

			ave floor space gross sq ft	net sq ft	build cost per sq ft	sales value per sq ft
Market housing	20.0	80.00%	967	950	83.00	182.00
Affordable soc rent	0.0				0.0%	
	4.0	16.00%	967	950	83.00	66.00
Affordable sh oship	1.0	4.00%	967	950	83.00	103.00
Aff other 1	0.0	0.00%	967	950	83.00	0.00
Aff other 2	0.0	0.00%	0	0	83.00	0.00
Total	25.0	100.00%	24,175	23,750	£2,006,525	£3,806,650

Floorspace density = 15,502 net sq ft per acre

Other costs

Planning	515.0	£ per dwelling
Survey	500	£ per dwelling
Marketing	0	£ per dwelling

Interest % per annum 7.50%

Notes

SITE 8 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	60,186	375,263		
RV per acre	£	39,286	244,947	£97,075	£605,264
Dev profit	£	608,756	721,154		
Total costs	£	3,198,719	3,602,171		
profit as % of costs		19.03%	20.02%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
Affordable soc rent			0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Affordable sh oship			0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	5	5	5	5	5	0	0	0	0	0	0	0	0	0	25.0
Units 'built'																	
Market housing			0	0	4	4	4	4	4	0	0	0	0	0	0	0	20
+2Q Affordable soc rent			0	0	1	1	1	1	1	0	0	0	0	0	0	0	4
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	4	4	4	4	4	0	0	0	0	0	0	20
+3Q Affordable soc rent				0	0	1	1	1	1	1	0	0	0	0	0	0	4
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	1
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	4	4	4	4	4	0	0	0	0	0	20
+4Q Affordable soc rent					0	0	1	1	1	1	1	0	0	0	0	0	4
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	1
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 8 CASH FLOW AFFORDABLE

	rate	Year 1 Q1	Q2	Q3	Q4	Year 2 Q1	Q2	Q3	Q4	Year 3 Q1	Q2	Q3	Q4	Year 4 Q1	Q2	Q3	Q4	TOTALS
INCOME																		
Housing sales																		
Market housing		0	0	0	0	0	0	692	692	692	692	692	0	0	0	0	0	3,458
Affordable soc rent		0	0	0	0	0	0	50	50	50	50	50	0	0	0	0	0	251
Affordable sh oship		0	0	0	0	0	0	20	20	20	20	20	0	0	0	0	0	98
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-25	-25	-25	-25	-25	0	0	0	0	0	-124
Total income		0	0	0	0	0	0	761	761	761	761	761	0	0	0	0	0	3,807
COSTS																		
Land																		
Land acquisition		60																60
Stamp duty		1																1
Purchase fees		2																2
Total																		62
Build costs																		
Market housing		0	0	0	0	321	321	321	321	321	0	0	0	0	0	0	0	1,605
Affordable soc rent		0	0	0	0	64	64	64	64	64	0	0	0	0	0	0	0	321
Affordable sh oship		0	0	0	0	16	16	16	16	16	0	0	0	0	0	0	0	80
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	5.0%	0	0	0	0	20	20	20	20	20	0	0	0	0	0	0	0	100
Total																		2,107
Dev costs																		
Upfront	5.8%	30	30	30	30													121
Build related	5.8%	0	0	24	24	24	24	24	0	0	0	0	0	0	0	0	0	121
Abnormals	7%	75	75															150
Total																		392
Fees																		
Fees on build costs	10.0%	0	0	0	0	42	42	42	42	42	0	0	0	0	0	0	0	211
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		211
PG																		
Planning gain				30	30	30	30	30	0	0	0	0	0	0	0	0	0	151
Total																		151
Other																		
Planning	£515	4	4	4														13
Survey	£500	13																13
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		25
Sales fees	b/forward from above		0	0	0	0	0	25	25	25	25	25	0	0	0	0	0	124
Total costs		184	109	89	85	518	518	543	488	488	25	25	0	0	0	0	0	3,072
Net profit/loss from quarter		-184	-109	-89	-85	-518	-518	219	273	273	737	737	0	0	0	0	0	735
Profit/loss bf from last quarter		0	-188	-303	-399	-492	-1,029	-1,576	-1,383	-1,130	-873	-139	609	609	609	609	609	
Cumulative profit/loss		-184	-297	-392	-483	-1,010	-1,547	-1,357	-1,110	-857	-137	597	609	609	609	609	609	
Interest																		
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		-3	-6	-7	-9	-19	-29	-25	-21	-16	-3	11	0	0	0	0	0	-127
Cumulative developer profit carried forward to RV calc		-188	-303	-399	-492	-1,029	-1,576	-1,383	-1,130	-873	-139	609	609	609	609	609	609	608

SITE 9: Handsacre Service Station

Input assumptions	Scenario & option					
		Affordable 20% = split 80% social rented 20% Share Ownership				
Lichfield site viability study						
Site details						
Site	Lich 09 Service Station					
Location	Handsacre					
Area	ha	0.18				
	acres	0.44				
No dwgs		14				
Density dw/ha		77.8				
Contingency						
			£k			
allowance	5.00%		56			
Development costs						
standard % build	10.00%		118			
plus abnormals	5.1%		60			
Total	15%					
Design fees						
on build costs	10.0%		118			
on dev costs	0%					
Planning gain						
£ per dwg		5,100				
£ per HOUSE		0				
£ per MKT HOUSE		0				
Assumed flats %		57%				
Dwellings						
Dwellings						
				<i>ave floor space</i>	<i>build</i>	<i>sales</i>
				<i>gross</i>	<i>cost</i>	<i>value</i>
				<i>sq ft</i>	<i>per sq ft</i>	<i>per sq ft</i>
Market housing	11.2	80.00%		928	86.50	178.00
				843	0.0%	
Affordable soc rent	2.2	16.00%		928	86.50	68.00
					0.0%	
Affordable sh oship	0.6	4.00%		928	86.50	105.00
					0.0%	
Aff other 1	0.0	0.00%		928	86.50	0.00
					0.0%	
Aff other 2	0.0	0.00%		0	86.50	0.00
Total	14.0	100.00%		12,992	11,802	£1,123,808
						£1,858,579
Floorspace density						
			= 26,534	net sq ft per acre		
Other costs						
Planning		515.0		£ per dwelling		
Survey		500		£ per dwelling		
Marketing		0		£ per dwelling		
Interest						
% per annum		7.50%				
Notes						

SITE 9 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	-102,322	46,851		
RV per acre	£	-230,050	105,334	-£568,455	£260,281
Dev profit	£	296,891	350,275		
Total costs	£	1,562,513	1,751,306		
profit as % of costs		19.00%	20.00%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			1.6	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Affordable soc rent			0.3	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Affordable sh oship			0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	2	3	3	3	3	0	0	0	0	0	0	0	0	0	14.0
Units 'built'																	
Market housing			0	0	2	2	2	2	2	0	0	0	0	0	0	0	11
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	2	2	2	2	2	0	0	0	0	0	0	11
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	2
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	1
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	2	2	2	2	2	0	0	0	0	0	11
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	2
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	1
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 9 CASH FLOW AFFORDABLE

	rate	Year 1	Q2	Q3	Q4	Year 2	Q2	Q3	Q4	Year 3	Q2	Q3	Q4	Year 4	Q2	Q3	Q4	TOTALS
		Q1				Q1				Q1				Q1				
INCOME																		
Housing sales																		
Market housing		0	0	0	0	0	0	240	360	360	360	360	0	0	0	0	0	1,681
Affordable soc rent		0	0	0	0	0	0	18	28	28	28	28	0	0	0	0	0	128
Affordable sh oship		0	0	0	0	0	0	7	11	11	11	11	0	0	0	0	0	50
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-9	-13	-13	-13	-13	0	0	0	0	0	-60
Total income		0	0	0	0	0	0	266	398	398	398	398	0	0	0	0	0	1,859
COSTS																		
Land																		
Land acquisition		-102																
Stamp duty		0																
Purchase fees		-3																
Total																		
Build costs																		
Market housing		0	0	0	0	128	193	193	193	193	0	0	0	0	0	0	0	899
Affordable soc rent		0	0	0	0	26	39	39	39	39	0	0	0	0	0	0	0	180
Affordable sh oship		0	0	0	0	6	10	10	10	10	0	0	0	0	0	0	0	45
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	5.0%	0	0	0	0	8	12	12	12	12	0	0	0	0	0	0	0	56
Total																		1,180
Dev costs																		
Upfront	5.0%	15	15	15	15													59
Build related	5.0%	0	0	8	13	13	13	13	0	0	0	0	0	0	0	0	0	59
Abnormals	5%	30	30															60
Total																		178
Fees																		
Fees on build costs	10.0%	0	0	0	0	17	25	25	25	25	0	0	0	0	0	0	0	118
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		118
PG																		
Planning gain				10	15	15	15	15	0	0	0	0	0	0	0	0	0	71
Total																		71
Other																		
Planning	£515	2	2	2														7
Survey	£500	7																7
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		14
Sales fees																		
b/forward from above		0	0	0	0	0	0	9	13	13	13	13	0	0	0	0	0	60
Total costs		-51	47	36	43	213	306	315	291	291	13	13	0	0	0	0	0	1,517
Net profit/loss from quarter		51	-47	-36	-43	-213	-306	-49	107	107	385	385	0	0	0	0	0	342
Profit/loss bf from last quarter		0	52	5	-31	-75	-294	-611	-673	-576	-478	-94	297	297	297	297	297	
Cumulative profit/loss		51	5	-31	-74	-289	-600	-661	-566	-469	-92	291	297	297	297	297	297	
Interest																		
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		1	0	-1	-1	-5	-11	-12	-11	-9	-2	5	0	0	0	0	0	-46
Cumulative developer profit carried forward to RV calc		52	5	-31	-75	-294	-611	-673	-576	-478	-94	297	297	297	297	297	297	296

SITE 10: Whittington Grange School

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% Share Ownership			
Lichfield site viability study							
Site details		Lich 10					
Site		Whittington Grange Sch.					
Location							
Area	ha	0.32					
	acres	0.79					
No dwgs		12					
Density dw/ha		37.5					
				Dwellings			
				Dwellings		<i>ave floor space</i> <i>gross</i> <i>net</i> <i>sq ft</i> <i>sq ft</i>	
				<i>build</i>		<i>sales</i>	
				<i>cost</i>		<i>value</i>	
				<i>per sq ft</i>		<i>per sq ft</i>	
		Market housing	9.6 80.00%	1,230	1,230	86.00	195.00
		Affordable soc rent	1.9 16.00%	1,230	1,230	86.00	65.00
		Affordable sh oship	0.5 4.00%	1,230	1,230	86.00	102.00
		Aff other 1	0.0 0.00%	1,230	1,230	86.00	0.00
		Aff other 2	0.0 0.00%	0	0	86.00	0.00
		Total	12.0 100.00%	14,760	14,760	£1,269,360	£2,516,285
				Floorspace density = 18,667 net sq ft per acre			
				Other costs			
				Planning 515.0 £ per dwelling			
				Survey 500 £ per dwelling			
				Marketing 0 £ per dwelling			
				Interest			
				% per annum 7.50%			
				Notes			
				Contingency			
				£k			
				allowance 5.00% 63			
				Development costs			
				standard % build 11.00% 147			
				plus abnormals 3.8% 50			
				Total 15%			
				Design fees			
				on build costs 10.0% 133			
				on dev costs 0%			
				Planning gain			
				£ per dwg 5,100			
				£ per HOUSE 0			
				£ per MKT HOUSE 0			
				Assumed flats % 0%			

SITE 10 LAND COST & PHASING




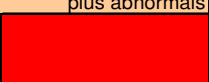



Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	194,433	419,746		
RV per acre	£	245,894	530,840	£607,604	£1,311,705
Dev profit	£	402,087	480,448		
Total costs	£	2,114,948	2,398,502		
profit as % of costs		19.01%	20.03%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Affordable soc rent			0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Affordable sh oship			0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	3	3	3	3	0	0	0	0	0	0	0	0	0	0	12.0
Units 'built'																	
Market housing			0	0	2	2	2	2	0	0	0	0	0	0	0	0	10
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	2	2	2	2	0	0	0	0	0	0	0	10
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	2
Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	2	2	2	2	0	0	0	0	0	0	10
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	2
Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 10 CASH FLOW AFFORDABLE

	rate	Year 1	Q2	Q3	Q4	Year 2	Q2	Q3	Q4	Year 3	Q2	Q3	Q4	Year 4	Q2	Q3	Q4	TOTALS	
		Q1				Q1				Q1				Q1					
INCOME																			
Housing sales																			
Market housing		0	0	0	0	0	0	576	576	576	576	0	0	0	0	0	0	0	2,303
Affordable soc rent		0	0	0	0	0	0	38	38	38	38	0	0	0	0	0	0	0	154
Affordable sh oship		0	0	0	0	0	0	15	15	15	15	0	0	0	0	0	0	0	60
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-21	-21	-21	-21	0	0	0	0	0	0	0	-82
Total income		0	0	0	0	0	0	629	629	629	629	0	0	0	0	0	0	0	2,516
COSTS																			
Land																			
Land acquisition		194																	194
Stamp duty		2																	2
Purchase fees		5																	5
Total																			202
Build costs																			
Market housing		0	0	0	0	254	254	254	254	0	0	0	0	0	0	0	0	0	1,015
Affordable soc rent		0	0	0	0	51	51	51	51	0	0	0	0	0	0	0	0	0	203
Affordable sh oship		0	0	0	0	13	13	13	13	0	0	0	0	0	0	0	0	0	51
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	5.0%	0	0	0	0	16	16	16	16	0	0	0	0	0	0	0	0	0	63
Total																			1,333
Dev costs																			
Upfront	5.5%	18	18	18	18														73
Build related	5.5%	0	0	18	18	18	18	0	0	0	0	0	0	0	0	0	0	0	73
Abnormals	4%	25	25																50
Total																			197
Fees																			
Fees on build costs	10.0%	0	0	0	0	33	33	33	33	0	0	0	0	0	0	0	0	0	133
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																			133
PG																			
Planning gain				15	15	15	15	0	0	0	0	0	0	0	0	0	0	0	61
Total																			61
Other																			
Planning	£515	2	2	2															6
Survey	£500	6																	6
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																			12
Sales fees																			
b/forward from above		0	0	0	0	0	0	21	21	21	21	0	0	0	0	0	0	0	82
Total costs		253	45	54	52	400	400	387	387	21	21	0	0	0	0	0	0	0	2,020
Net profit/loss from quarter		-253	-45	-54	-52	-400	-400	242	242	609	609	0	0	0	0	0	0	0	496
Profit/loss bf from last quarter		0	-258	-309	-369	-429	-845	-1,268	-1,046	-819	-214	402	402	402	402	402	402	402	
Cumulative profit/loss		-253	-303	-363	-421	-829	-1,245	-1,026	-804	-210	395	402	402	402	402	402	402	402	
Interest																			
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		-5	-6	-7	-8	-16	-23	-19	-15	-4	7	0	0	0	0	0	0	0	-95
Cumulative developer profit carried forward to RV calc		-258	-309	-369	-429	-845	-1,268	-1,046	-819	-214	402	402	402	402	402	402	402	402	401

SITE 11: Orchard Farm Hill Ridware

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% Share Ownership					
Lichfield site viability study				Dwellings					
Site details									
Site	Lich 11 Orchard Farm								
Location	Hill Ridware								
Area	ha	0.31							
	acres	0.77							
No dwgs		9							
Density dw/ha		29.0							
				Dwellings					
				<i>ave floor space</i>		<i>build cost</i>		<i>sales value</i>	
				<i>gross sq ft</i>		<i>net sq ft</i>		<i>per sq ft</i>	
				Market housing		7.2		80.00%	
				1,323		1,300		86.00	
								0.0%	
				Affordable soc rent		1.4		16.00%	
				1,323		1,300		86.00	
								0.0%	
				Affordable sh oship		0.4		4.00%	
				1,323		1,300		86.00	
								0.0%	
				Aff other 1		0.0		0.00%	
				1,323		1,300		86.00	
								0.0%	
				Aff other 2		0.0		0.00%	
				0		0		86.00	
								0.00	
				Total		9.0		100.00%	
				11,907		11,700		£1,024,002	
								£2,156,076	
				Floorspace density		= 15,274		net sq ft per acre	
									
Contingency									
				allowance		5.00%		51	
									
Development costs									
				standard % build		11.00%		118	
									
				plus abnormals		2.8%		30	
									
				Total		14%			
Design fees									
				on build costs		10.0%		108	
									
				on dev costs		0%			
Planning gain									
				£ per dwg		5,100			
				£ per HOUSE		0			
				£ per MKT HOUSE		0			
				Assumed flats %		10%			
				Planning		515.0		£ per dwelling	
				Survey		500		£ per dwelling	
									
				Marketing		0		£ per dwelling	
				Interest		7.50%		% per annum	
				Notes					
									

SITE 11 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit			
		Affordable		No affordable	
		£	£	£	£
Land purchase price		375,934	584,679	£2,211,376	£3,439,287
RV per acre		894,932	1,391,861		
Dev profit		307,598	376,460		
Total costs		1,617,689	1,881,415		
profit as % of costs		19.01%	20.01%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			0.8	2.4	2.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
Affordable soc rent			0.2	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Affordable sh oship			0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	1	3	3	2	0	0	0	0	0	0	0	0	0	0	9.0
Units 'built'																	
Market housing			0	0	1	2	2	2	0	0	0	0	0	0	0	0	7
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	1	2	2	2	0	0	0	0	0	0	0	7
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	1
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	1	2	2	2	0	0	0	0	0	0	7
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	1
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 11 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				TOTALS
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
INCOME																		
Housing sales																		
Market housing		0	0	0	0	0	0	220	661	661	441	0	0	0	0	0	0	1,984
Affordable soc rent		0	0	0	0	0	0	14	41	41	27	0	0	0	0	0	0	124
Affordable sh oship		0	0	0	0	0	0	5	16	16	11	0	0	0	0	0	0	48
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-8	-24	-24	-16	0	0	0	0	0	0	-71
Total income		0	0	0	0	0	0	240	719	719	479	0	0	0	0	0	0	2,156
COSTS																		
Land																		
Land acquisition		251																251
Stamp duty		8																8
Purchase fees		7																7
Total																		265
Build costs																		
Market housing		0	0	0	0	91	273	273	182	0	0	0	0	0	0	0	0	819
Affordable soc rent		0	0	0	0	18	55	55	36	0	0	0	0	0	0	0	0	164
Affordable sh oship		0	0	0	0	5	14	14	9	0	0	0	0	0	0	0	0	41
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	5.0%	0	0	0	0	6	17	17	11	0	0	0	0	0	0	0	0	51
Total																		1,075
Dev costs																		
Upfront	5.5%	15	15	15	15													59
Build related	5.5%	0	0	7	20	20	13	0	0	0	0	0	0	0	0	0	0	59
Abnormals	3%	15	15															30
Total																		148
Fees																		
Fees on build costs	10.0%	0	0	0	0	12	36	36	24	0	0	0	0	0	0	0	0	108
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		108
PG																		
Planning gain				5	15	15	10	0	0	0	0	0	0	0	0	0	0	46
Total																		46
Other																		
Planning	£515	2	2	2														5
Survey	£500	5																5
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		9
Sales fees																		
b/forward from above		0	0	0	0	0	0	8	24	24	16	0	0	0	0	0	0	71
Total costs		301	31	28	50	166	418	402	286	24	16	0	0	0	0	0	0	1,722
Net profit/loss from quarter		-301	-31	-28	-50	-166	-418	-163	432	695	463	0	0	0	0	0	0	434
Profit/loss bf from last quarter		0	-307	-344	-379	-437	-615	-1,052	-1,237	-820	-127	343	343	343	343	343	343	
Cumulative profit/loss		-301	-338	-372	-429	-604	-1,032	-1,214	-805	-125	337	343	343	343	343	343	343	
Interest																		
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		-6	-6	-7	-8	-11	-19	-23	-15	-2	6	0	0	0	0	0	0	-92
Cumulative developer profit carried forward to RV calc		-307	-344	-379	-437	-615	-1,052	-1,237	-820	-127	343	343	343	343	343	343	343	342

SITE 12 Central Garage Depot Lichfield

Input assumptions

Scenario & option

Affordable 20% = split 80% social rented 20% Share Ownership

Lichfield site viability study

Site details

Site	Lich 12 Garage Depot	
Location	Queens Street Lichfield	
Area	ha	0.07
	acres	0.17
No dwgs		7
Density dw/ha		100.0

Contingency

allowance 5.00% 24

Development costs

standard % build 10.00% 50

plus abnormals 5.0% 25

Total 15%

Design fees

on build costs 10.0% 50

on dev costs 0%

Planning gain

£ per dwg	5,100
£ per HOUSE	0
£ per MKT HOUSE	0
Assumed flats %	60%

Dwellings

Dwellings

			ave floor space		build cost	sales value
			gross	net	per sq ft	per sq ft
			sq ft	sq ft		
Market housing	5.6	80.00%	697	630	98.50	209.00
Affordable soc rent	1.1	16.00%	697	630	98.50	68.00
Affordable sh oship	0.3	4.00%	697	630	98.50	106.00
Aff other 1	0.0	0.00%	697	630	98.50	0.00
Aff other 2	0.0	0.00%	0	0	98.50	0.00
Total	7.0	100.00%	4,879	4,410	£480,582	£804,031

Floorspace density = 25,496 net sq ft per acre

Other costs

Planning 515.0 £ per dwelling

Survey 500 £ per dwelling

Marketing 0 £ per dwelling

Interest

% per annum 7.50%

Notes

SITE 12 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	-43,775	30,230		
RV per acre	£	-253,081	174,772	-£625,364	£431,863
Dev profit	£	128,763	153,794		
Total costs	£	676,018	768,646		
profit as % of costs		19.05%	20.01%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			0.8	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6
Affordable soc rent			0.2	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Affordable sh oship			0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	7.0
Units 'built'																	
Market housing			0	0	1	2	2	2	0	0	0	0	0	0	0	0	6
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	1	2	2	2	0	0	0	0	0	0	0	6
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	1
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	1	2	2	2	0	0	0	0	0	0	6
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	1
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 12 CASH FLOW AFFORDABLE

		rate	Year 1				Year 2				Year 3				Year 4				TOTALS
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
INCOME																			
Housing sales	<i>Market housing</i>		0	0	0	0	0	0	602	602	602	0	0	0	0	0	0	0	1,806
	<i>Affordable soc rent</i>		0	0	0	0	0	0	28	28	28	0	0	0	0	0	0	0	85
	<i>Affordable sh oship</i>		0	0	0	0	0	0	11	11	11	0	0	0	0	0	0	0	33
	<i>Aff other 1</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Aff other 2</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Sales fees</i>		0	0	0	0	0	0	-21	-21	-21	0	0	0	0	0	0	0	-64
Total income			0	0	0	0	0	0	642	642	642	0	0	0	0	0	0	0	1,925
COSTS																			
Land	<i>Land acquisition</i>		376																376
	<i>Stamp duty</i>		11																11
	<i>Purchase fees</i>		10																10
	Total																		398
Build costs	<i>Market housing</i>		0	0	0	0	200	200	200	0	0	0	0	0	0	0	0	0	601
	<i>Affordable soc rent</i>		0	0	0	0	40	40	40	0	0	0	0	0	0	0	0	0	120
	<i>Affordable sh oship</i>		0	0	0	0	10	10	10	0	0	0	0	0	0	0	0	0	30
	<i>Aff other 1</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Aff other 2</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Build contingency</i>	5.0%	0	0	0	0	13	13	13	0	0	0	0	0	0	0	0	0	38
	Total																		789
Dev costs	<i>Upfront</i>	5.8%	11	11	11	11													45
	<i>Build related</i>	5.8%	0	0	15	15	15	0	0	0	0	0	0	0	0	0	0	0	45
	<i>Abnormals</i>	8%	32	32															65
	Total																		155
Fees	<i>Fees on build costs</i>	10.0%	0	0	0	0	26	26	26	0	0	0	0	0	0	0	0	0	79
	<i>Fees on dev costs</i>	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																		79
PG	<i>Planning gain</i>				10	10	10	0	0	0	0	0	0	0	0	0	0	0	31
	Total																		31
Other	<i>Planning</i>	£515	1	1	1														3
	<i>Survey</i>	£500	3																3
	<i>Marketing</i>	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																		6
Sales fees	<i>b/forward from above</i>		0	0	0	0	0	0	21	21	21	0	0	0	0	0	0	0	64
Total costs			445	45	38	37	314	289	311	21	21	0	0	0	0	0	0	0	1,521
Net profit/loss from quarter			-445	-45	-38	-37	-314	-289	331	620	620	0	0	0	0	0	0	0	403
Profit/loss bf from last quarter			0	-454	-507	-555	-603	-935	-1,247	-933	-318	308	308	308	308	308	308	308	
Cumulative profit/loss			-445	-498	-545	-592	-917	-1,224	-916	-313	302	308	308	308	308	308	308	308	
Interest	<i>Charged at</i>	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	<i>Total</i>		-8	-9	-10	-11	-17	-23	-17	-6	6	0	0	0	0	0	0	0	-97
Cumulative developer profit carried forward to RV calc			-454	-507	-555	-603	-935	-1,247	-933	-318	308	308	308	308	308	308	308	308	307

SITE 13 Mastrom Printers Alrewas

Input assumptions	Scenario & option							
Lichfield site viability study		Affordable 20% = split 80% social rented 20% Share Ownership						
Site details		Dwellings						
Site	Lich 13 ALREWAS	Dwellings		<i>ave floor space</i>	<i>build</i>	<i>sales</i>		
Location	Mastrom Printers	Market housing	4.8	80.00%	<i>gross</i>	<i>net</i>	<i>cost</i>	<i>value</i>
Area	ha 0.17	Affordable soc rent	1.0	16.00%	<i>sq ft</i>	<i>sq ft</i>	<i>per sq ft</i>	<i>per sq ft</i>
	acres 0.42	Affordable sh oship	0.2	4.00%	1,368	1,368	91.50	275.00
No dwgs	6	Aff other 1	0.0	0.00%	1,368	1,368	91.50	65.00
Density dw/ha	35.3	Aff other 2	0.0	0.00%	1,368	1,368	91.50	102.00
		Total	6.0	100.00%	0	0	91.50	0.00
					8,208	8,208	£751,032	£1,924,612
Contingency		Floorspace density = 19,540 net sq ft per acre						
allowance	5.00%							
Development costs		Other costs						
standard % build	11.50%	Planning	515.0		£ per dwelling			
		Survey	500		£ per dwelling			
		Marketing	0		£ per dwelling			
plus abnormals	8.2%	Interest	7.50%		% per annum			
Total	20%							
Design fees		Notes						
on build costs	10.0%							
on dev costs	0%							
Planning gain								
£ per dwg	5,100							
£ per HOUSE	0							
£ per MKT HOUSE	0							
Assumed flats %	20%							

SITE 13 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	375,934	584,679		
RV per acre	£	894,932	1,391,861	£2,211,376	£3,439,287
Dev profit	£	307,598	376,460		
Total costs	£	1,617,689	1,881,415		
profit as % of costs		19.01%	20.01%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Affordable soc rent			0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Affordable sh oship			0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	6.0
Units 'built'																	
Market housing			0	0	2	2	2	0	0	0	0	0	0	0	0	0	5
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	2	2	2	0	0	0	0	0	0	0	0	5
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	1
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	2	2	2	0	0	0	0	0	0	0	5
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	1
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 13 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				TOTALS	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
INCOME																			
Housing sales																			
Market housing		0	0	0	0	0	0	602	602	602	0	0	0	0	0	0	0	0	1,806
Affordable soc rent		0	0	0	0	0	0	28	28	28	0	0	0	0	0	0	0	0	85
Affordable sh oship		0	0	0	0	0	0	11	11	11	0	0	0	0	0	0	0	0	33
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-21	-21	-21	0	0	0	0	0	0	0	0	-64
Total income		0	0	0	0	0	0	642	642	642	0	0	0	0	0	0	0	0	1,925
COSTS																			
Land																			
Land acquisition		376																	376
Stamp duty		11																	11
Purchase fees		10																	10
Total																			398
Build costs																			
Market housing		0	0	0	0	200	200	200	0	0	0	0	0	0	0	0	0	0	601
Affordable soc rent		0	0	0	0	40	40	40	0	0	0	0	0	0	0	0	0	0	120
Affordable sh oship		0	0	0	0	10	10	10	0	0	0	0	0	0	0	0	0	0	30
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	5.0%	0	0	0	0	13	13	13	0	0	0	0	0	0	0	0	0	0	38
Total																			789
Dev costs																			
Upfront	5.8%	11	11	11	11														45
Build related	5.8%	0	0	15	15	15	0	0	0	0	0	0	0	0	0	0	0	0	45
Abnormals	8%	32	32																65
Total																			155
Fees																			
Fees on build costs	10.0%	0	0	0	0	26	26	26	0	0	0	0	0	0	0	0	0	0	79
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																			79
PG																			
Planning gain				10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	31
Total																			31
Other																			
Planning	£515	1	1	1															3
Survey	£500	3																	3
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																			6
Sales fees	b/forward from above	0	0	0	0	0	0	21	21	21	0	0	0	0	0	0	0	0	64
Total costs		445	45	38	37	314	289	311	21	21	0	0	0	0	0	0	0	0	1,521
Net profit/loss from quarter		-445	-45	-38	-37	-314	-289	331	620	620	0	0	0	0	0	0	0	0	403
Profit/loss bf from last quarter		0	-454	-507	-555	-603	-935	-1,247	-933	-318	308	308	308	308	308	308	308	308	
Cumulative profit/loss		-445	-498	-545	-592	-917	-1,224	-916	-313	302	308	308	308	308	308	308	308	308	
Interest																			
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		-8	-9	-10	-11	-17	-23	-17	-6	6	0	0	0	0	0	0	0	0	-97
Cumulative developer profit carried forward to RV calc		-454	-507	-555	-603	-935	-1,247	-933	-318	308	308	308	308	308	308	308	308	308	307

SITE 14: N of Millbrook Drive Shenstone

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% Share Ownership																																																																																																			
Lichfield site viability study				Dwellings																																																																																																			
Site details																																																																																																							
Site	Lich 14 Millbrook																																																																																																						
Location	Shenstone																																																																																																						
Area	ha	0.15																																																																																																					
	acres	0.37																																																																																																					
No dwgs		4																																																																																																					
Density dw/ha		26.7																																																																																																					
Contingency																																																																																																							
allowance		2.50%	16																																																																																																				
Development costs																																																																																																							
standard % build		9.00%	60																																																																																																				
plus abnormals		0.0%	0																																																																																																				
Total		9%																																																																																																					
Design fees																																																																																																							
on build costs		10.0%	66																																																																																																				
on dev costs		0%																																																																																																					
Planning gain																																																																																																							
£ per dwg		5,100																																																																																																					
£ per HOUSE		550																																																																																																					
£ per MKT HOUSE		600																																																																																																					
Assumed flats %		0%																																																																																																					
				<table border="1"> <thead> <tr> <th colspan="2">Dwellings</th> <th colspan="2">ave floor space</th> <th colspan="2">build cost</th> <th colspan="2">sales value</th> </tr> <tr> <th></th> <th></th> <th>gross sq ft</th> <th>net sq ft</th> <th>per sq ft</th> <th>per sq ft</th> <th>per sq ft</th> <th>per sq ft</th> </tr> </thead> <tbody> <tr> <td>Market housing</td> <td>3.2</td> <td>80.00%</td> <td>1,700</td> <td>1,700</td> <td>95.00</td> <td>215.00</td> <td></td> </tr> <tr> <td>Affordable soc rent</td> <td>0.0</td> <td></td> <td></td> <td></td> <td>0.0%</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.6</td> <td>16.00%</td> <td>1,700</td> <td>1,700</td> <td>95.00</td> <td>65.00</td> <td></td> </tr> <tr> <td>Affordable sh oship</td> <td>0.2</td> <td>4.00%</td> <td>1,700</td> <td>1,700</td> <td>95.00</td> <td>102.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.0%</td> <td></td> <td></td> </tr> <tr> <td>Aff other 1</td> <td>0.0</td> <td>0.00%</td> <td>1,700</td> <td>1,700</td> <td>95.00</td> <td>0.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.0%</td> <td></td> <td></td> </tr> <tr> <td>Aff other 2</td> <td>0.0</td> <td>0.00%</td> <td>0</td> <td>0</td> <td>95.00</td> <td>0.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.0%</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>4.0</td> <td>100.00%</td> <td>6,800</td> <td>6,800</td> <td>£646,000</td> <td>£1,268,064</td> <td></td> </tr> </tbody> </table>				Dwellings		ave floor space		build cost		sales value				gross sq ft	net sq ft	per sq ft	per sq ft	per sq ft	per sq ft	Market housing	3.2	80.00%	1,700	1,700	95.00	215.00		Affordable soc rent	0.0				0.0%				0.6	16.00%	1,700	1,700	95.00	65.00		Affordable sh oship	0.2	4.00%	1,700	1,700	95.00	102.00							0.0%			Aff other 1	0.0	0.00%	1,700	1,700	95.00	0.00							0.0%			Aff other 2	0.0	0.00%	0	0	95.00	0.00							0.0%			Total	4.0	100.00%	6,800	6,800	£646,000	£1,268,064	
Dwellings		ave floor space		build cost		sales value																																																																																																	
		gross sq ft	net sq ft	per sq ft	per sq ft	per sq ft	per sq ft																																																																																																
Market housing	3.2	80.00%	1,700	1,700	95.00	215.00																																																																																																	
Affordable soc rent	0.0				0.0%																																																																																																		
	0.6	16.00%	1,700	1,700	95.00	65.00																																																																																																	
Affordable sh oship	0.2	4.00%	1,700	1,700	95.00	102.00																																																																																																	
					0.0%																																																																																																		
Aff other 1	0.0	0.00%	1,700	1,700	95.00	0.00																																																																																																	
					0.0%																																																																																																		
Aff other 2	0.0	0.00%	0	0	95.00	0.00																																																																																																	
					0.0%																																																																																																		
Total	4.0	100.00%	6,800	6,800	£646,000	£1,268,064																																																																																																	
				Floorspace density = 18,346 net sq ft per acre																																																																																																			
				Other costs																																																																																																			
				Planning 515.0 £ per dwelling																																																																																																			
				Survey 500 £ per dwelling																																																																																																			
				Marketing 0 £ per dwelling																																																																																																			
				Interest																																																																																																			
				% per annum 7.50%																																																																																																			
				Notes																																																																																																			

SITE 14 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	151,927	273,249		
RV per acre	£	409,895	737,215	£1,012,850	£1,821,658
Dev profit	£	202,861	244,036		
Total costs	£	1,065,953	1,218,714		
profit as % of costs		19.03%	20.02%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Affordable soc rent			0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Affordable sh oship			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4.0
Units 'built'																	
Market housing			0	0	1	1	1	1	0	0	0	0	0	0	0	0	3
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	1	1	1	1	0	0	0	0	0	0	0	3
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	1
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	1	1	1	1	0	0	0	0	0	0	3
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	1
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 14 CASH FLOW AFFORDABLE

	rate	Year 1				Year 2				Year 3				Year 4				TOTALS
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
INCOME																		
Housing sales																		
Market housing		0	0	0	0	0	0	292	292	292	292	0	0	0	0	0	0	1,170
Affordable soc rent		0	0	0	0	0	0	18	18	18	18	0	0	0	0	0	0	71
Affordable sh oship		0	0	0	0	0	0	7	7	7	7	0	0	0	0	0	0	28
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-10	-10	-10	-10	0	0	0	0	0	0	-42
Total income		0	0	0	0	0	0	317	317	317	317	0	0	0	0	0	0	1,268
COSTS																		
Land		152																
Land acquisition		152																152
Stamp duty		2																2
Purchase fees		4																4
Total		158																158
Build costs																		
Market housing		0	0	0	0	129	129	129	129	0	0	0	0	0	0	0	0	517
Affordable soc rent		0	0	0	0	26	26	26	26	0	0	0	0	0	0	0	0	103
Affordable sh oship		0	0	0	0	6	6	6	6	0	0	0	0	0	0	0	0	26
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	2.5%	0	0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	16
Total		662																662
Dev costs																		
Upfront	4.5%	7	7	7	7													30
Build related	4.5%	0	0	7	7	7	7	0	0	0	0	0	0	0	0	0	0	30
Abnormals	0%	0	0															0
Total		60																60
Fees																		
Fees on build costs	10.0%	0	0	0	0	17	17	17	17	0	0	0	0	0	0	0	0	66
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		66																66
PG																		
Planning gain				6	6	6	6	0	0	0	0	0	0	0	0	0	0	25
Total		25																25
Other																		
Planning	£515	1	1	1														2
Survey	£500	2																2
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		4																4
Sales fees								10	10	10	10	0	0	0	0	0	0	42
b/forward from above																		
Total costs		168	8	22	21	196	196	193	193	10	10	0	0	0	0	0	0	1,016
Net profit/loss from quarter		-168	-8	-22	-21	-196	-196	124	124	307	307	0	0	0	0	0	0	252
Profit/loss bf from last quarter		0	-171	-182	-208	-233	-437	-644	-529	-412	-108	203	203	203	203	203	203	
Cumulative profit/loss		-168	-179	-204	-229	-429	-632	-520	-405	-106	199	203	203	203	203	203	203	
Interest																		
Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		-3	-3	-4	-4	-8	-12	-10	-8	-2	4	0	0	0	0	0	0	-50
Cumulative developer profit carried forward to RV calc		-171	-182	-208	-233	-437	-644	-529	-412	-108	203	203	203	203	203	203	203	202

SITE 15: Pear Tree Cottage Edingale

Input assumptions		Scenario & option		Affordable 20% = split 80% social rented 20% Share Ownership																			
Lichfield site viability study				Dwellings																			
Site details				<table border="1"> <thead> <tr> <th></th> <th>ave floor space</th> <th>gross</th> <th>net</th> <th>build</th> <th>cost</th> <th>sales</th> <th>value</th> </tr> <tr> <th></th> <th>sq ft</th> <th>sq ft</th> <th>sq ft</th> <th>per sq ft</th> <th>per sq ft</th> <th>per sq ft</th> <th>per sq ft</th> </tr> </thead> </table>					ave floor space	gross	net	build	cost	sales	value		sq ft	sq ft	sq ft	per sq ft	per sq ft	per sq ft	per sq ft
	ave floor space	gross	net	build	cost	sales	value																
	sq ft	sq ft	sq ft	per sq ft	per sq ft	per sq ft	per sq ft																
Site	Lich 15																						
Location	Lullington Rd Edingale																						
Area	ha	0.12		Market housing	2.4	80.00%	1,235	1,235	96.50	215.00													
	acres	0.30		Affordable soc rent	0.5	16.00%	1,235	1,235	96.50	65.00													
No dwgs	3			Affordable sh oship	0.1	4.00%	1,235	1,235	96.50	102.00													
Density dw/ha	25.0			Aff other 1	0.0	0.00%	1,235	1,235	96.50	0.00													
				Aff other 2	0.0	0.00%	0	0	96.50	0.00													
				Total	3.0	100.00%	3,705	3,705	£357,533	£690,908													
Contingency				Floorspace density = 12,495 net sq ft per acre																			
allowance	2.50%			[Redacted]																			
	9			Other costs																			
Development costs				Planning	515.0			£ per dwelling															
standard % build	10.00%			Survey	500			£ per dwelling															
	37			Marketing	0			£ per dwelling															
plus abnormals	2.8%			[Redacted]																			
	10			Interest																			
Total	13%			% per annum			7.50%																
Design fees				Notes																			
on build costs	10.0%			[Redacted]																			
	37																						
on dev costs	0%																						
Planning gain																							
£ per dwg	5,100																						
£ per HOUSE	550																						
£ per MKT HOUSE	600																						
Assumed flats %	0%																						

SITE 15 LAND COST & PHASING

Land		Iterate to achieve 20.0% profit		Hectare	
		Affordable	No affordable	Affordable	No affordable
Land purchase price	£	59,117	126,115		
RV per acre	£	199,371	425,316	£492,645	£1,050,957
Dev profit	£	110,528	133,085		
Total costs	£	581,056	664,165		
profit as % of costs		19.02%	20.04%		

Programme	Year 1				Year 2				Year 3				Year 4				TOTALS
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Units started																	
Market housing			0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Affordable soc rent			0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Affordable sh oship			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Aff other 1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aff other 2			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3.0
Units 'built'																	
Market housing			0	0	1	1	1	0	0	0	0	0	0	0	0	0	2
+2Q Affordable soc rent			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Affordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+2Q Aff other 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units completed																	
Market housing				0	0	1	1	1	0	0	0	0	0	0	0	0	2
+3Q Affordable soc rent				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Affordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 1				0	0	0	0	0	0	0	0	0	0	0	0	0	0
+3Q Aff other 2				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Units purchased																	
Market housing					0	0	1	1	1	0	0	0	0	0	0	0	2
+4Q Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Affordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 1					0	0	0	0	0	0	0	0	0	0	0	0	0
+4Q Aff other 2					0	0	0	0	0	0	0	0	0	0	0	0	0

SITE 15 CASH FLOW AFFORDABLE

	rate	Year 1	Q2	Q3	Q4	Year 2	Q2	Q3	Q4	Year 3	Q2	Q3	Q4	Year 4	Q2	Q3	Q4	TOTALS	
		Q1				Q1				Q1				Q1					
INCOME																			
Housing sales																			
Market housing		0	0	0	0	0	0	212	212	212	0	0	0	0	0	0	0	0	637
Affordable soc rent		0	0	0	0	0	0	13	13	13	0	0	0	0	0	0	0	0	39
Affordable sh oship		0	0	0	0	0	0	5	5	5	0	0	0	0	0	0	0	0	15
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees		0	0	0	0	0	0	-8	-8	-8	0	0	0	0	0	0	0	0	-23
Total income		0	0	0	0	0	0	230	230	230	0	0	0	0	0	0	0	0	691
COSTS																			
Land																			
Land acquisition		59																	59
Stamp duty		0																	0
Purchase fees		2																	2
Total																			61
Build costs																			
Market housing		0	0	0	0	95	95	95	0	0	0	0	0	0	0	0	0	0	286
Affordable soc rent		0	0	0	0	19	19	19	0	0	0	0	0	0	0	0	0	0	57
Affordable sh oship		0	0	0	0	5	5	5	0	0	0	0	0	0	0	0	0	0	14
Aff other 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aff other 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build contingency	2.5%	0	0	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	9
Total																			366
Dev costs																			
Upfront	5.0%	5	5	5	5														18
Build related	5.0%	0	0	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	18
Abnormals	3%	5	5																10
Total																			47
Fees																			
Fees on build costs	10.0%	0	0	0	0	12	12	12	0	0	0	0	0	0	0	0	0	0	37
Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																			37
PG																			
Planning gain				6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	18
Total																			18
Other																			
Planning	£515	1	1	1															2
Survey	£500	2																	2
Marketing	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																			3
Sales fees	b/forward from above	0	0	0	0	0	0	8	8	8	0	0	0	0	0	0	0	0	23
Total costs		72	10	17	17	147	134	142	8	8	0	0	0	0	0	0	0	0	555
Net profit/loss from quarter		-72	-10	-17	-17	-147	-134	88	223	223	0	0	0	0	0	0	0	0	136
Profit/loss bf from last quarter		0	-74	-85	-105	-124	-275	-417	-335	-114	111	111	111	111	111	111	111	111	
Cumulative profit/loss		-72	-84	-103	-121	-270	-410	-329	-112	108	111	111	111	111	111	111	111	111	
Interest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total		-1	-2	-2	-2	-5	-8	-6	-2	2	0	0	0	0	0	0	0	0	-26
Cumulative developer profit carried forward to RV calc		-74	-85	-105	-124	-275	-417	-335	-114	111	111	111	111	111	111	111	111	111	110

