

Shropshire Council

April 2010 Final Report



Executive Summary

Introduction

- S1 Fordham Research was commissioned by Shropshire Council to carry out a study of affordable housing viability in Shropshire. The Study was originally commissioned by the five Shropshire Districts and the County Council together. Since then, Local Government reorganisation has replaced the six Authorities with a single Unitary Authority Shropshire Council. The viability study was intended to inform ongoing work on the preparation of Local Development Frameworks, by examining the impact on housing viability of alternative levels of affordable housing requirement.
- S2 The study involved preparing financial appraisals for a number of permitted, proposed or potential housing sites. The appraisals were designed to assess the impact on development viability of alternative requirements for affordable housing provision. Viability would be examined for a range of sites in a variety of development situations. A 'modelling' approach was taken, using bespoke spreadsheet software which allowed alternative scenarios to be tested quickly.
- S3 In order to 'future proof' the study we have used our Dynamic Viability approach, which ensures that at all future times during the plan period the required broad brush target is both deliverable and ensures the reasonable maximum of affordable housing. This procedure works over time to produce the following sort of illustrative profile:



Source: Fordham Research 2010

S4 The Dynamic Viability approach conforms to the Guidance and case law in a way which scenario building, the main alternative, does not. It provides robust targets for all future time periods during the plan.

Meaning of 'target'

- S5 PPS3 (para 29) requires councils to set a 'plan wide target' for the amount of affordable housing they seek, and cautions that it must be deliverable. This study is designed to test that deliverability. But the same paragraph of PPS3 somewhat complicates the target requirement by adding not only that commercial viability must be checked, but also the levels of Government grant available. The latter cannot be known over a plan period or even a few years ahead. Changes in deliverability due to the market are addressed by our Dynamic Viability approach discussed below.
- S6 This dilemma can be addressed by having two elements to the policy:
 - (i) A target that is based upon broad brush deliverability (the focus of this report) and which can therefore be used both in policy and in site negotiations
 - (ii) A strategic target which is set for the plan period and which incorporates the Council's aspirations for future grant levels. It is therefore likely to be higher than the target referred to in (i), to the extent of anticipated grant.
- S7 This structure removes any confusion caused by the combination of economic viability and public funding, while allowing both to be properly expressed. This report does not attempt to forecast public funding, but focussed upon economic viability's

Site selection

- S8 To ensure a representative range of sites for testing the Councils developed a typology of development situations and produced a shortlist of sites in each category. From this a total of twenty sites were selected, with four in each of the former individual District Council areas. The sites ranged in size from 1 to 750 dwellings, although all but four were under 50 dwellings.
- S9 The sites split evenly between sites completed or permitted on the one hand; and sites which were allocated, potential allocations or windfalls on the other. One site was a major urban extension involving mixed development, with commercial uses alongside the main residential component. Five sites were greenfield, and fifteen 'brownfield' being either previously developed commercial land or similar, or historic building or barn conversions.
- S10 In all they provided just under 1,300 dwellings, at an average net density of 44.3 dwellings per ha.

Key assumptions

S11 In devising development proposals to test for each site, we considered the site characteristics and any detailed development proposals, any Development Brief where such proposals had not yet come



forward, and also looked at other recent development proposals across the study area. We also drew on experience from elsewhere to develop appropriate development mixes for each site.

- S12 Any area of this size might be expected to contain a considerable mixture of development types and situations, and that is indeed so. An urban form that has emerged in many parts of the country post PPG3 provides for a mix of flats, two and 2.5 storey houses. In the study area this form typically produces a floorspace density of about 3,550 sq m per ha (15,500 sq ft per acre). There will be higher density schemes in larger urban areas, especially providing apartments in blocks and town centre conversions. There are also rural and urban edge development forms with lower densities, often focusing on larger, mainly detached units.
- S13 Our observation of development forms in those sites with applications, and experience elsewhere, led to the development of a 5 class typology, with floorspace densities ranging from 1,400 to 19,650 sq m per ha (5,750- 67,300 sq ft per acre), to inform development assumptions for the 20 sites.

Analysis

- S14 The sites were tested with no affordable housing, and for options of 20%, 30%, 40% and 50% affordable housing. In each case the affordable housing was assumed to be a combination of 50% social rented and 50% Intermediate affordable housing. The intermediate housing was required to match specified target outgoings, but could be either rented or low cost home ownership housing.
- S15 The affordable housing was to be provided on the basis of zero Social Housing Grant. Advice was sought from the Council's partner RSLs about appropriate selling prices with zero grant. Subsequent feedback from RSLs confirmed that the assumptions we have used were broadly correct. We also considered appropriate levels for the other planning gain contributions which might apply for each of the sites, using a combination of specific guidance on education, and a tariff type approach for the other topics.
- S16 The local market for residential development was examined. There is a fair supply of new build housing across the area as a whole. Prices vary quite widely within the area, being highest in Bridgnorth, Ludlow, and rural areas, and lowest in Oswestry, Wem, and Market Drayton. Prices in the most expensive areas are approaching half again those in the cheapest. Taking into account current selling prices on schemes across the Market Area, we determined price levels for flats and houses on each site.
- S17 We also looked at evidence in respect of land values for likely alternative uses for the sites.
- S18 We considered assumptions in respect of development costs and the other financial and site assumptions required to carry out appraisals. Abnormal costs were expected to arise on some sites. Appropriate assumptions to determine the building programme for each site were determined.

FORDHAM RESEARCH

Appraisal results

- S19 Appraisals for each site were produced in respect of all of the affordable options. They used a bespoke spreadsheet based financial analysis package. The approach was to determine the residual land value, i.e. what value the site would have after taking into account the costs of development, the likely income from sales and/or rents, and an appropriate amount of developer's profit. In order for the proposed development to be viable, the residual value must exceed the value from a valid alternative use.
- S20 The appraisals showed that with no requirement for affordable housing, 90% of the sites delivered positive land values broadly between £100k and £950k per acre (£250k-£2.35m per ha) with the office conversion at Ludlow, on a nominal site area, delivering a higher figure. Two sites produced a small negative land value. These results were somewhat below what the Valuation Office Agency's (VOA) published data, now a little historic, suggested local values for 'oven ready' land would be. The appraisals are therefore felt much more likely to present a 'worst case' than to be unduly optimistic.
- S21 As increasing amounts of affordable housing are introduced, the land value falls away. By 30% affordable, only a minority of sites still achieved a positive land value, and with the highest requirement of 50% only one site was still positive. On some sites, those with highest densities, land value falls away much more quickly as the affordable contribution increases. On such sites the land value, the main source of the affordable contribution, is a much lower proportion of the scheme's total cost. Since land value is the main means of providing 'developer subsidy,' this means that it cannot go as far on high density schemes as with a low density development.
- S22 Whether each individual option produces a viable outcome will depend on the land value from alternative uses. For the identified sites the alternative use was normally either industrial or agricultural. Of these industrial use would have a higher alternative use value, ranging from £500k per ha (£200k per acre) in Shrewsbury down to £370k per ha (£150k per acre) in the smaller centres. Agricultural use was the least valuable at £25k per ha/£10k per acre. The special circumstances of six of the sites meant that specific assessments of value were required, for instance where two upstairs floors of offices over ground floor retail were to be converted to residential apartments.
- S23 This information, adjusted for any abnormal development costs that would still arise in the alternative use, was used to deduce whether the individual sites were viable at different levels of affordable housing provision. The results showed that seven sites were unviable even with 100% market housing. Of the remaining sites, six could produce 25% affordable housing and remain viable, plus two which were classed as marginal because the surplus over alternative use value was insufficiently large to assert that it would come forward. At 30% two additional sites became unviable, and four marginal. By 40%, only one site is not unviable, and that is marginal.



S24 Sites in the two former southern Districts and some parts of Shrewsbury did best, reflecting higher prices, whilst sites with higher alternative use values and in the lower priced towns in the former northern Districts did least well. Schemes of higher density apartments did less well, because the potential subsidy from land value was proportionately much smaller on higher density schemes.

Dynamic Viability analysis

- S25 This is designed to overcome a dilemma created by the economic downturn. During the history of affordable housing targets since their creation in 1991 there had been a broadly rising market.
- S26 The downturn following the Credit Crunch meant that targets 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).
- S27 There has been no practical suggestion for the way in which affordable housing targets should be treated given their fall in the recession. Many alternative scenarios can be generated, but that does not point to a single target. PPS3 is quite clear that there should be a plan-wide target.
- S28 Fordham Research has therefore 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 Examination 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.

Choosing a benchmark site

- S29 In order to generate the data below it is necessary to agree a Benchmark Site. This is necessary to permit a reasonably simple outcome. The requirement in PPS3 is for a 'plan wide' target, and so a single target must be the initial aim.
- S30 In the case of Shropshire, and using the sample of sites used for the basic viability analysis, which was agreed to be reasonably representative, we chose Site 2a in Craven Arms. This was discussed with stakeholders and generally agreed to be as representative of future housing newbuild as is possible for a single site in a very varied county.

FORDHAM RESEARCH

Producing the target arrays

- S31 The mechanism for producing the target ranges is quite complex. It builds on the viability analysis set out in this summary. It then examines the full range of possible cost and price changes and generates a matrix of possible affordable targets.
- S32 As can be seen from the illustration below, 20% (in grey) is the recommended deliverable target for the Borough as a whole. The indexes of cost and price shown in the margins of the table allow future changes in the published indexes to be translated into target changes.

	Figure S2 Fine Matrix output: Base Alternative Use Value											
	Price Change HPI											
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
IS Index	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0	
	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%	
	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%	
BC	0%	290.9	5%	10%	20%	25%	30%	30%	35%	40%	40%	
ange	4%	302.5	0%	5%	10%	15%	25%	25%	30%	35%	40%	
ÿ	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%	
Cost	12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%	
	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%	
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%	

Source: Fordham Research 2010

- S33 Since the market analysis was done a year ago, the Dynamic Viability results show a situation where the 0/0 point is now in the past.
- The full detail of this approach is set out in Chapter 8. It includes both the Coarse Matrix, showing all feasible outcomes, as well as the Fine Matrix, showing the outcomes likely within the next few years.

Retro fitting the Dynamic Viability analysis

- S35 Because the report analysis (Stage 1) was done in early 2009, and then (partly due to the creation of the unitary council) the report finalisation has waited until now, there is the opportunity to apply Dynamic Viability in practice. In effect the one year update can be presented in the same report as the base figure.
- S36 During the past year the cost index has hardly changed, but the HPI price index has moved close to the figure of 550, shown in the Fine Matrix. The alternative use value index did not change enough to alter this situation.



S37 As a consequence, the 20% target judged to be an appropriate broad brush county-wide figure in early 2009, is now changed to:

25%.

- S38 This is the first practical use of Dynamic Viability: simply the result of reading off the indexes to show a higher figure. There is of course no guarantee that the price rise will continue: it is just a matter of how the indexes change in future.
- S39 The Council's draft LDF Core Strategy policy indicates a planned outcome equivalent to 33%. It is impossible to state with certainly what the outcome will be, but 33% is certainly within the range of what could be generated by the future path of the Dynamic Viability.

FORDHAM RESEARCH

Table of Contents

Executive Summary	i
Introduction	i
Meaning of 'target'	ii
Site selection	ii
Key assumptions	ii
Analysis	. iii
Appraisal results	. iv
Dynamic Viability analysis	v
Choosing a benchmark site	v
Producing the target arrays	. vi
Retro fitting the Dynamic Viability analysis	. vi
1. Introduction	1
National guidance	1
Context	2
Reasons for this study	3
What this means for the study	5
Stage 1 viability methodology	5
Stage 2: Dynamic Viability analysis	7
Fordham Research	7
Structure of this report	8
2. Individual Development Sites	9
Introduction	9
An area of diversity	9
Identifying a range of sites	10
The sites	11
Development assumptions	12
3. Affordable Housing and Other Developer Contributions	17
Introduction	17
Affordable housing assumptions	17
Other developer contributions	19



4. Local Market Conditions	23
Introduction	23
Issues to consider	23
The Residential Market	24
Price assumptions for financial appraisals	
Land values	27
Current and Alternative Use Values	28
5. Assumptions for Viability Analysis	33
Introduction	33
Development costs	33
Financial and other appraisal assumptions	38
Site acquisition and disposal costs	40
Alternative use value comparison	41
6. Results of Viability Analysis	43
Introduction	43
Financial appraisal approach and assumptions	43
Appraisal results:	43
Alternative use benchmarks	45
Comparison results	49
History: the last market recession	49
The pattern of future movements	51
Sensitivity: price and cost levels	51
7. Implications of the Stage 1 results	55
Our approach	55
Context for policy making	
8. Stage 2: Dynamic Viability analysis	59
What Dynamic Viability does	59
Benchmark site	60
Details of the outputs	60
Retro-fitting of the Dynamic Viability	62
Relating Coarse and Fine matrices	63
Implementing Dynamic Viability	65
Conclusion	



Appendices	67
Appendix 1 Site Selection: Development Typology	69
Appendix 2 New Build Schemes	71
Appendix 3 House Price Variations	75
Appendix 4 Small Plots For Sale	79
Appendix 5 Dynamic Viability Outputs	81
Appendix 6: Stage 1 Viability Results	89

FORDHAM RESEARCH

1. Introduction

- 1.1 Fordham Research was commissioned by the five Shropshire Districts and the County Council in July 2008, to produce guidance on the financial viability implications of alternative targets and size thresholds for affordable housing provision within the combined area. Since then, Local Government reorganisation has replaced the six Authorities with a single Unitary Authority Shropshire Council.
- 1.2 The study will provide input into ongoing work on preparation of the Shropshire Local Development Framework. It will ensure that the LDF is supported by rigorous analysis showing that the targets can be achieved without undermining site viability and imperilling the delivery of housing provision overall.

National guidance

- 1.3 Guidance on affordable housing policy issues is now provided by PPS3.
- 1.4 Whilst from 2000 onwards the earlier guidance PPG3 recognised the need to take into account the economics of development when setting affordable housing targets and negotiating contributions from developers, PPS3 further reinforces this message. It suggests that Local Development Documents should **set an overall target** for the amount of affordable housing to be provided, which 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)

1.5 LDDs should also set out the range of circumstances in which affordable housing will be required. The national indicative minimum size threshold is to be 15 dwellings However, Local Planning Authorities (LPAs) may:

...'set lower minimum thresholds, where viable and practicable, including in rural areas. This could include setting different proportions of affordable housing to be sought for a series of site-size thresholds over the plan area. LPAs will need to undertake an informed assessment of the economic viability of any thresholds and proportions of affordable housing proposed....' (S29)

1.6 The analysis in the present study is designed to be consistent with the above requirements.

FORDHAM RESEARCH

Context

1.7 The context for this study consists of the Guidance which government has provided for doing such work and the broad principles of viability analysis which has of course existed in some form ever since settled civilisation meant that land was bought and sold.

Guidance

- 1.8 National guidance ((Planning Policy Statement 3) PPS3: Housing 2006) requires Councils to set a target for the proportion of affordable housing to be delivered through new developments. The recently completed Strategic Housing Market Assessment (SHMA) was intended to provide guidance on the levels of affordable housing target that would be justified by the analysis of the area's housing requirements.
- 1.9 This SHMA advice was, essentially, based on an assessment of the balance between the need for market housing and the need for affordable housing. In doing so it did not take into account the commercial factor i.e. what is viable and what it is realistic to ask developers to provide in this area at this time. Whilst a target of, say, 50% may be the appropriate figure to balance the overall housing market over time it may not be the appropriate target now.
- 1.10 The purpose of the present study is to address that issue, enabling the Council to set a robust target in the light of current commercial circumstances in Shropshire. That latter target is just that a target. The actual amount of affordable housing required on any particular site must be assessed for that actual site and take into account the peculiar factors of developing that site at that point of the economic cycle.
- 1.11 The Guidance position has been supplemented by the Homes and Communities Agency (HCA) in a recent Good Practice Note: *Investment and Planning Obligations: responding to the downturn* (July 2009). The range of guidance is reviewed below.
- 1.12 Stage 1 (the traditional viability calculation) is the basis for the target set for the period when the fieldwork was done (late 2007) and Stage 2 (Chapter 8) provides the means for updating the target so that it follows whatever may happen in the housing market over the plan period.

The land market

1.13 The availability and cost of land are matters at the core of the viability for any development of new houses. The format of the typical valuation has been standard for centuries and looks like this:



Gross Development Value (The combined value of the complete development)

LESS

Cost of creating the asset, including a profit margin (construction + fees + finance charges)

=

RESIDUAL VALUE

1.14 The result of the calculation indicates a land value, which acts as the top limit of what a bidder could offer for that site. In this study we use the procedure in reverse:

Given the likely land values, will a development including X% target for affordable housing be viable?

- 1.15 The calculation involves the same basic information but is designed for a different purpose. The 'likely land value' is a difficult topic since clearly a landowner will never be entirely frank about the price that would be acceptable: always seeking a higher one. This is one of the areas where an informed assumption has to be made about the 'cushion': the margin above the 'existing use value' which would make the landowner sell. Landowners and land buyers are surrounded by agents who argue in their clients' interest, so the process of selling and buying development land is not usually simple or quick.
- 1.16 This study does not attempt to assess the specific price that could or should be paid for each site (please see Figure 1.1 below). The appraisal works out what land on a site may be worth if a range of scenarios were to occur, and then compares that amount with its value in some other use to which it could be put. The study does not attempt to predict when a particular landowner may sell a given site, or even if they will sell, since that is a very site specific matter.

Reasons for this study

1.17 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) (Fordham Research's emphasis)

1.18 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.'

- 1.19 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.
- 1.20 The date at which this new duty was legally defined to exist coincided with the economic 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:



Source Fordham Research 2009

- 1.21 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.
- 1.22 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:
 - i) 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.
 - ii) Set the target for a 'normal' market and treat it as flexible
- 1.23 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:



- i) 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 simply flat for some years. 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.
- 1.24 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.
- 1.25 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

1.26 This means that the study is in two stages: the first being the standard viability analysis (in Chapters 2 to 7) and then the second stage containing the Dynamic Viability analysis in Chapter 8.

Stage 1 viability methodology

- 1.27 The Stage 1 viability 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.
- 1.28 The appraisals tested alternative levels of affordable housing provision: in each case a combination of social rented and intermediate housing. We considered the likely purchase prices RSLs 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.



1.29 We surveyed the local housing market, in order to obtain a picture of sales values for the market housing. We also surveyed 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

- 1.30 A number of other technical assumptions were required before appraisals could be produced. The appraisal results were in the form of pounds per acre/ha 'residual' land values, showing the maximum value a developer could pay for the site and still return a target profit level.
- 1.31 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.



Stage 2: Dynamic Viability analysis

- 1.32 Fordham Research has developed a model which enables the Council to establish through the Core Strategy Examination a matrix of possible future affordable targets. These would be automatically changed in accordance with published indexes of the performance of the housing market. In this way the target would always remain deliverable, but at the same time would ensure that windfall gains in land value are translated into increased affordable housing. This is in accordance with Government Guidance. It would also ensure that the landowners and housebuilders margins are not harmed.
- 1.33 The Dynamic Viability approach is set out in Chapter 8 below.

Fordham Research

- 1.34 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.
- 1.35 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.
- 1.36 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

- 1.37 The remainder of the report covers the following topics:
 - Chapter 2 Individual development sites
 - Chapter 3 Affordable housing and other developer contributions
 - Chapter 4 Local market conditions
 - Chapter 5 Assumptions for viability analysis
 - Chapter 6 Results of viability analysis
 - Chapter 7 Implications of the Stage 1 results
 - Chapter 8 Stage 2: Dynamic viability analysis



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.
- 2.2 The individual sites chosen were visited at an early stage in the work.

An area of diversity

- 2.3 Shropshire has an area of approximately 320,000 ha. It is located on the border with Wales, south of Cheshire and north of Herefordshire. It is broadly centred on the town of Shrewsbury, (though the area of Telford and Wrekin, formerly part of Shropshire, constitutes a large 'hole' to the east of Shrewsbury, and as a major employment centre has important links with the area). It represents an area of considerable diversity, in terms of development and housing market conditions. In part these reflect the area's geology, and its history.
- 2.4 Geology in particular has been a strong influence through the topography of the County. A line of strong upland features running NE/SW across the south and western parts of the area demark an area with AONB status. The River Severn runs eastwards in a broad valley area through Shrewsbury, turning south from Ironbridge into a more constricted valley, which borders the east of the area, downstream through Bridgnorth and almost to Bewdley.
- 2.5 Geology also lies behind the range of historic economic activities in the area, and in turn has influenced the choice of building materials. These are together responsible for the many buildings of great interest and character, which are to be found in both urban and rural settings across the County. Buildings of character are a particular feature of several exceptionally attractive towns, which are popular destinations both for tourists and walkers, and also for incomer households, especially those contemplating retirement.
- 2.6 Whilst Bridgnorth and Ludlow are well known as popular calling points for tourists, the central town of Shrewsbury is also of considerable historical character and attractiveness. At the same time, along with Telford it represents the main employment centre. However the eastern reaches of the County are also within easy commuting distance of the West Midlands conurbation.

FORDHAM RESEARCH

- 2.7 Some parts of the area have experienced economic decline as major employment in traditional industries particularly those related to extraction, but also agriculture, has been lost and only partly been replaced with new activities. However the high landscape quality and prevalence of characterful buildings have kept the extent of visible dereliction to a minimum; in locations like the Ironbridge Gorge this has, of course, provided opportunities for creating tourist earning potential.
- 2.8 Across Shropshire there are areas of high house prices and housing pressures, whilst in other areas, especially those which are comparatively remote, prices are more competitive. In order for the present study to address development viability across the combined Councils' area it will need to deal with the variety of built form and density that is currently to be found.

Identifying a range of sites

- 2.9 It became clear that in order for the study to provide the required guidance on viability, a considerable number and range of sites would need to be examined so as to provide useful guidance across the Authority. In discussion with the Council, it was concluded that a total of 20 sites would be sufficient, providing that they were carefully selected in order to cover the full range of development situations.
- 2.10 To ensure this the Council used three parameters to draw up a shortlist of sites:
 - a typology of development situations a total of 13 categories covering both greenfield and previously developed land, new build and conversion (categories set out in Appendix 1)
 - size range five groups from very large (200+ dwgs) to very small (1-5dwgs)
 - location town centre/suburban/edge of town/rural
- 2.11 From an initial shortlist of some 62 sites a final list of twenty sites was determined. These were chosen to give coverage across the three parameters, but with an even distribution across the area.
- 2.12 The final list covered a mixture of settlement sizes, although the majority were in the larger settlements. The sites ranged widely in size, from 1 to 750 dwellings, though only four were of 50 dwellings or larger. One site, the largest, involved a mixture of residential and commercial uses.
- 2.13 The sites were at various stages in the planning process. Ten, half of the total, had received at least outline planning permission; four of those had proceeded to construction stage, one of which was largely completed. One site was notional, involving subdivision of a larger, permitted site to form a small site. The remaining nine were a mixture of potential and actual allocations, and potential windfall sites.
- 2.14 Information available from the various planning applications was acknowledged in considering the appropriate development forms to use in our appraisals. For the sites without an application or consent we took into account other recent schemes currently being developed, in order to formulate appropriate development assumptions.



The sites

- 2.15 Summary details of the sites identified by the Councils are set out in Table 2.1 below. The table shows both total site area, and importantly for the mixed use site with a non residential component, the net residential area. The overall density using this latter measure, is 44.4 dwellings per ha.
- 2.16 The sites fall into four groups of five each, as follows:

(A)	Greenfield sites
(B & C)	Brownfield site redevelopment – commercial buildings cleared or vacant
(D & E)	Brownfield commercial occupied & historic conversion vacant
(F H & I)	Historic conversion occupied/large dwelling subdivision/barn conversion
This means that	t a large majority, fifteen, of the twenty sites are on previously developed land.

- 2.17 The sites accommodate just under 1,300 dwellings in total on 29 ha. There is quite a considerable emphasis on smaller sites; only four are of 50 dwellings or larger, and only three more over 20 dwellings.
- 2.18 Site A1, the SE Oswestry Gateway site, is envisaged as a mixed use development containing B1 business land, and potentially other commercial and open space uses. A major and complex development like this would properly require a bespoke appraisal to ensure any significant infrastructure issues were given full consideration. However at this stage there are no detailed proposals and we only have the broadest information about what would be provided. Furthermore a mixed use site such as this would not provide transferable guidance in respect of residential only schemes because the impact of varying affordable requirements would be diluted by the non residential uses.
- 2.19 Consequently we considered only the residential element of this site in our appraisals, and at an indicative level of detail which was felt sufficient to generate the strategic guidance required for the present study.



	Та	able 2.1	Actual s	ite details	S	
Site	Nama	Area	a ha	No	net	Dianning status
No	Name	Gross	Net	dwgs	(dw/ha)	Planning status
A1	SE Oswestry Gateway	32.06	18.00	750	41.7	Promoted for allocation
A2a	Greenfield Rd Craven Arms	1.32	1.32	50	37.9	Allocation
A3	E of Farcroft Meadows Market Drayton	1.25	1.25	45	36.0	Allocation
A5	Montgomery Way Shrewsbury	0.13	0.13	5	38.5	Notional subdivision of permitted site
A9	Station Rd Ditton Priors	0.14	0.14	7	50.0	Permitted
B2	Gobowen Rd Oswestry	0.55	0.55	31	56.4	Under construction
C2	Royal Shrewsbury Hospital Shrewsbury	3.22	2.90	125	43.1	Allocation
C4	Garage, High St Highley	0.19	0.19	9	47.4	Potential windfall
C4a	Builders Yard New St Wem	0.30	0.30	14	46.7	Outline permission
C5	Burway Rd Church Stretton	0.16	0.16	9	56.3	Allocation
D1	Gay Meadow Shrewsbury	2.68	2.68	156	58.2	Under construction
D2	Arthurs Garage Oswestry	0.29	0.29	16	55.2	Potential windfall
D3	Station Rd Much Wenlock	0.24	0.24	8	33.3	Potential windfall
E3	Castle St Ludlow (upper floors)	0.01	0.01	4	n/a	Permission
E4	Nightingale House Baschurch	0.13	0.13	11	84.6	Under construction
F1	Antiques Centre Mill St Bridgnorth	0.40	0.40	30	75.0	Building at risk
F3	Mardol Shrewsbury (upper floors)	0.01	0.01	2	n/a	Permission
H1	Queens Park School Oswestry	0.14	0.14	12	85.7	Completed
11	Manor Farm Silvington	0.12	0.12	3	25.4	Permission
J2	Bank House Farm Tibberton	0.10	0.10	1	10.0	Permission
	Total	43.3	29.06	1,288	44.3	

Note Site A1 non residential element is excluded from appraisal.

Source: Fordham Research

Development assumptions

2.20 In arriving at appropriate assumptions for residential development on each site, the development form in an approved planning application would have to be an important consideration. For the remaining sites we also assessed the information available on other recent development proposals; considered relevant draft planning policies and Development Briefs; and drew on information on current new build developments from our market survey.



- 2.21 This locally derived information was balanced with our experience from a wide variety of development situations in other parts of the country, in order to develop the most appropriate assumptions in relation to development form, for the identified sites. On sites which were not yet subject to current or approved applications, we also had to bear in mind the number of dwellings which the local planning authority envisaged on the site.
- 2.22 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 in the more prosperous parts of the country at least, 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 2.5/3 storey form, with some rectangular emphasis to the layout. In Shropshire, as in many other areas this would generate a floorspace density of around 3,550 sq m per ha/15,500 sq ft per acre on a substantial site, or sensibly shaped smaller site. Typical dwelling density would be 40-45 dwellings per ha.
- 2.23 Alongside this, 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 3 storeys and often rather higher. These provide floorspace density from around 6,900 sq per ha/30,000 sq ft per acre upwards, at densities of 100 dw/ha plus.
- 2.24 On the other hand, there are of course situations where, for planning reasons, particularly on small sites, in rural, edge of town or more sensitive locations, schemes with densities below the 3,550 sq m per ha/15,500 sq ft/acre 'baseline' will come forward. A typical density might be around 2,850 sq m per ha/12,500 sq ft/acre.
- 2.25 These observations, taken together with the available information we collected on actual development proposals, point to a built form typology for the local development situation, as set out in the Table below. It comprises five categories.
- 2.26 There is a 'base' category to reflect the common urban form referred to at 2.22 above, i.e. giving 3,550 sq m per ha/15,500 sq ft/acre, and one less dense and three 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 should not be taken to imply anything specific about where or when they might apply.



Table 2.2 Typology of development form							
	Densit	'y					
Category title	Floorspace net	Dwellings	- Built form characteristics				
	sq m per ha	(typical	Duilt form characteristics				
	(net sq ft/acre)	dw/ha)					
Pural/odgo	2,875	20-22	Edge of settlement, less pressured location. Mostly 2				
Rulai/euge	(12,500)	20-33	storey largely 3 & 4 bed detached houses with garage				
Basa	3,550	40-45	Mixture of 2 & 2.5/3 storey houses, many terraced;				
Dase	(15,500)	40-43	some (15-25%) flats, limited garaging.				
Urban	4,350	45 60	Mixture of 3 storey flats (c 30-35%) and town houses.				
Orban	(19,000)	40-00	Normally no significant open space.				
Lliab	6,900	00 110	Three storey flats in small blocks, parking appears				
nign	(30,000)	90-110	Thee storey hats in small blocks, parking spaces				
Vonchigh	23,000	150 200	Converted building with no or limited curtilage:				
	(50,000)	100-200	apartment blocks on 4-5 storeys, parking limited				

Source: Fordham Research

- 2.27 The above typology was used to develop model development assumptions for the sites where actual information on planning proposals (or measurements for an existing building) was not available.
- 2.28 The resulting assumptions for residential development for each of the 20 sites are set out in the table below. It can be seen that the sites where 'actual' data was available (shown as P in the table) conform fairly well with the sites using model data informed by the typology (shown as M). It should be noted that there is a sixth group comprising three sites whose floorspace density is intermediate between the base benchmark and the lowest density (Rural/edge) category.
- 2.29 The table also sets out the average dwelling floor area to be assumed in the development appraisals.



Table 2.3 Site development assumptions							
Site ref	Category	Development form (M/P)	Net sq m/ha	Net sq ft/acre	Ave dwg net sq ft (sq m)		
J2	Bank Ho Fm Tibberton	Rural/edge (P)	1,400	5,750	1,420 (132)		
A3	Farcroft Mead Mkt Drayton	Rural/edge (M)	2,850	12,500	858 (80)		
D3	Station Rd Much Wenlock	Rural/edge (M)	3,100	13,400	995 (92)		
C4a	New St Wem	Base minus (P)	3,150	13,700	726 (67)		
A5	Mont Way Shrewsbury	Base minus (M)	3,150	13,750	885 (82)		
A1	SE Oswestry	50/50 Base/edge (M)	3,200	14,000	831 (77)		
11	Manor Farm Silvington	Base (P)	8,350	15,450	1,500 (139)		
A2a	Greenfield Rd Craven Arms	Base (M)	3,550	15,500	1,011 (94)		
C5	Burway Rd Church Stretton	Base (M)	3,550	15,500	681 (63)		
C2	Royal Hospital Shrewsbury	Base (M)	3,550	15,500	889 (83)		
C4	High St Highley	Base (M)	3,550	15,500	809 (75)		
A9	Station Rd Ditton Priors	Base (P)	3,850	16,700	825 (77)		
D2	Arthurs Garage Oswestry	Urban (M)	4,350	19,000	851 (79)		
H1	Queens Park Sch Oswestry	Urban (P)	4,875	21,250	613 (57)		
B2	Gobowen Rd Oswestry	Urban (P)	5,000	21,800	955 (89)		
F1	Mill St Bridgnorth	Urban (P)	5,250	22,800	752 (70)		
E4	Nightingale Ho Baschurch	High (P)	5,800	25,250	737 (68)		
D1	Gay Meadow Shrewsbury	High (P)	6,000	26,050	1,105 (103)		
F3	Mardol Shrewsbury	Very high (P)	12,100	49,600	650 (60)		
E3	Castle St Ludlow	Very high (P)	19,650	67,300	528 (49)		

KEY Development form M = model assumption P = taken from planning proposal or building

Source: Fordham Research

FORDHAM RESEARCH



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.
- 3.3 The approach to seeking affordable housing varied in detail between the individual former Councils, reflecting their historical evolution, local choices and circumstances, and so on. However, in order to reduce the appraisal work (and results) to a manageable task, a single common approach was assumed to apply across the whole of the study area, and for all sites. This common approach permits the study to provide a strategic overview perspective, allowing the results to apply across the whole of the area.

(i) Affordable proportion

- 3.4 Following discussions with the Councils we tested the following options:
 - **NO** affordable housing
 - 20% affordable
 - 30% affordable
 - 40% affordable
 - 50% affordable
 - •
- 3.5 The five former Councils operated policies seeking affordable housing proportions variously between 25% and 50%. However new targets will be proposed in the emerging Local Development Framework Document for Shropshire, in part informed by an ongoing Strategic Housing Market Assessment as well as by the present study.

FORDHAM RESEARCH

(ii)Tenure split

- 3.6 All the former Councils sought a mixture of social rented and intermediate housing to different splits. We were asked to test the affordable target options as a 50/25/25 split between social rented, intermediate and discount market housing.
- 3.7 In principle intermediate tenure could constitute a wide range of different housing propositions. In discussion with the Councils it was agreed that intermediate housing should have to meet specified monthly outgoings as at November 2008, in order to match an income range for local households identified at between £18,000-£24,000 per annum. The target outgoings are set out below. Tenure could be either rented or a low cost ownership option.

Table 3.1 Target outgoings for intermediate housing								
Outgoings £ as at November 2008								
Annual Monthly Weekly								
1 bed flat	4,980	415	96					
2 bed flat	5,640	470	109					
2 bed house	6,120	510	118					
3 bed house	6,720	560	129					
4 bed house	7,380	615	142					

Source: Fordham Research

- 3.8 Discount market housing was assumed to be made available at 65% of open market value.
- 3.9 It is acknowledged that whilst social rented dwellings clearly constitute affordable housing, the extent to which other propositions described above do so, may be open to interpretation; it could be argued for, instance, that shared ownership dwellings might not provide affordable units in perpetuity if staircased to 100%. Nevertheless these are the options we were asked to test.

(iii) Size profile

3.10 We were asked to assume that the mix of affordable housing on each site should broadly follow the market housing, i.e. 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.



(iv) Financial terms

- 3.11 It was agreed that appraisals should be prepared assuming zero availability for Social Housing Grant. This has become a common starting point or default position for exercises of this kind, though by no means a universal one.
- 3.12 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. We sought information from a total of eleven local partner RSLs in respect of social rented housing; and for intermediate housing at the specified outgoings.
- 3.13 We drew on figures from recent previous studies elsewhere to arrive at assumptions for use in appraisals, for an area such as Shropshire. Subsequent feedback from RSLs confirmed that our assumptions were broadly correct.
- 3.14 The average figures then formed a basis for estimating overall £ per sq ft selling price figures for flats and houses in Shropshire under zero SHG as shown in Table 3.2.

Tal	Table 3.2 Selling prices: zero grant basis									
	£ per sq ft (sq m)									
	Social	rented	Interm	Intermediate						
	Flat House Flat House									
price	70 (753)	65 (699)	90 (968)	85 (915)						

Source: Fordham Research

Other developer contributions

- 3.15 Aside from affordable housing, developer contributions could potentially be sought by Shropshire Council under a number of headings.
- 3.16 As with the affordable housing approach, the approaches which the five former Districts operated varied, although a unified approach will need to emerge in due course and of course the former County Council elements are likely to be common. As before a common, strategic approach is desirable in that the appraisal findings apply across the whole area.
- 3.17 Some information was collected in respect of the sites with planning permission. However in order to treat the sites in a consistent and unified way we took a broad 'modelling' approach to determining appropriate assumptions. Many items would, or should, be impact-related and/or site specific. Traffic contributions, for instance, would, in most cases, reflect the unique circumstances of each set of proposals and location; education contributions should normally only arise if there was insufficient spare capacity within existing local schools.

FORDHAM RESEARCH

3.18 We were provided with indicative assessments from the County Council in respect of the educational contributions for individual sites. Following discussion of present practice across the five Councils it was felt appropriate to combine this information with 'standard' transport and open space elements, subject to minimum thresholds of 20 dwellings and one dwelling respectively, to determine an appropriate per dwelling contribution for sites of different sizes as set out below. In doing this we were also able to draw upon the firm's experience from assessing developer contributions requirements for Councils in respect of major residential projects.

Table 3.3 Developer contributions									
rof	oito	no	total cost £k per dwg						
rei	Sile	dwgs	OS	transport	education	other	total		
A1	SE Oswestry	750	2.0	5.0	4.4	2.0	13.4		
A2a	Greenfield Rd Craven Arms	50	2.0	2.0	4.6		8.6		
A3	Farcroft Mead Mkt Drayton	45	2.0	2.0	5.2		9.2		
A5	Mont Way Shrewsbury	5	2.0	0.0	0.0		2.0		
A9	Station Rd Ditton Priors	7	2.0	0.0	0.0		2.0		
B2	Gobowen Rd Oswestry	31	2.0	2.0	0.0		4.0		
C2	Royal Hospital Shrewsbury	125	2.0	2.0	0.0		4.0		
C4	High St Highley	9	2.0	0.0	0.0		2.0		
C4a	New St Wem	14	2.0	2.0	0.0		4.0		
C5	Burway Rd Church Stretton	9	2.0	0.0	0.0		2.0		
D1	Gay Meadow Shrewsbury	156	2.0	2.0	0.0	3.5	7.5		
D2	Arthurs Garage Oswestry	16	2.0	2.0	5.2		9.2		
D3	Station Rd Much Wenlock	8	2.0	0.0	0.0		2.0		
E3	Castle St Ludlow	4	2.0	0.0	0.0		2.0		
E4	Nightingale Ho Baschurch	11	2.0	2.0	0.0		4.0		
F1	Mill St Bridgnorth	30	2.0	2.0	0.0		4.0		
F3	Mardol Shrewsbury	2	2.0	0.0	0.0		2.0		
H1	Queens Park Sch Oswestry	12	2.0	2.0	0.0		4.0		
11	Manor Farm Silvington	3	2.0	0.0	0.0		2.0		
J2	Bank Ho Farm Tibberton	1	2.0	0.0	0.0		2.0		

Note: the figure for 'other' in the case of Gay Meadow is an estimate for flood prevention works

Source: Fordham Research.

3.19 It must be emphasised that this approach is simply intended to treat the 20 sites consistently and equitably across Shropshire, in order to allow financial appraisals to be produced which provide a strategic overview. The figures do not purport to represent 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. Such a charge might well lead to higher costs than those assumed here, and more particularly would bear more heavily on the smaller sites with the removal of size thresholds applied here for the education and transport elements.

FORDHAM RESEARCH


4. Local Market Conditions

Introduction

- 4.1 This chapter sets out an assessment of the local housing market across Shropshire, providing a basis for the assumptions on house prices and costs to be used in financial appraisals for the 20 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/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.

FORDHAM RESEARCH

The Residential Market

- 4.8 The housing market across the Shropshire, to some extent, reflects national trends but there are local factors that underpin the market including;
 - Attractive and often striking landscapes, and attractive and historic towns of considerable character, popular with tourist and recreational visitors, with further tourist attractions nearby across the Welsh border
 - A rural area with pleasant settlements, and many attractive buildings, popular with incoming households and second home purchasers.
 - Redundant buildings often of great character barns in the countryside and structures of varying sizes and roles in the towns – providing considerable potential for conversion and reuse.
 - A major centre at Shrewsbury providing employment with further major employment opportunities just outside the area at Telford
 - Attractive landscape within commuting reach of the West Midlands conurbation
 - Good communications links via M54 & A5 to the national motorway network.
- 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 November 2008, is provided in Appendix 2.
- 4.10 Analysis of these, and other schemes in the study area, shows that prices for new build homes vary quite widely across the area, ranging between approximately £150 and £320 per square foot (£1,610 £3,440 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. However it is clear that the price per sq ft/sq m will vary considerably between the 20 sites in the study. (As in other parts of the country, the smaller units and apartments in particular show a price premium per square foot compared to larger houses).
- 4.11 Land Registry data confirms that there are significant variations in house prices across the area. Table 4.1 shows average prices for the five former Council areas. It suggests that, on average, prices are lowest in Oswestry, just a little higher in North Shropshire, higher again in Shrewsbury & Atcham, and highest in Bridgnorth and in South Shropshire. However overall prices are below national average; only flats in Bridgnorth and semis in South Shropshire creep above 100% of the respective national figures.
- 4.12 Although the Land Registry data covers both second hand and new build prices, the former will predominate. The average prices in the Table are compared to a corresponding England and Wales figure and expressed as indices.



Table 4.1 Average house prices by former Council area Q2 2008						
4.400			Ave price (£	< & % index)		
Area	_	Detached	Semi	Terrace	Flat	
Bridgnorth	£k	£325.6	£202.8	£192.2	£260.6	
	index	88%	84%	100%	169%	
North Shropshire	£k	£289.9	£149.8	£151.2	£119.3	
	index	78%	62%	78%	77%	
Oswestry	£k	£247.4	£148.5	£135.6	£129.3	
	index	67%	62%	70%	84%	
Shrewsbury & Atcham	£k	£307.0	£183.0	£159.6	£143.1	
	index	83%	76%	83%	93%	
South Shropshire	£k	£323.6	£203.9	£203.4	£124.9	
	index	87%	85%	105%	81%	

Source Land Registry data.

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

- 4.13 However it is also clear that within a Council area there can be considerable variations in price, larger often than those between Councils. Land Registry house price data at postcode sector level 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 (Qs2 & 4 2007; Q2 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 3 provides a worked example of the index calculation, and sets out the resulting price index figures for the two quarters examined).
- 4.14 It can be seen from the indices in Appendix 3 that variations between the individual quarters' indices are in many cases relatively slight. They are greater for rural areas and town centres, which are mostly numerically smaller and more diverse, than for urban areas generally, where postcode sectors are larger numerically and can often be more uniform.
- 4.15 The average figures for the three quarters are mapped in Figure 4.1 below. This shows quite clearly that the lowest prices, between 75% and 85% or so of national average, are mainly in Oswestry and North Shropshire. The most expensive, those 15% or more above national average, are predominantly in Bridgnorth and South Shropshire, with one or two in Shrewsbury & Atcham. All five Districts have areas above and below average, although in Oswestry only one locality, Maesbrook, is over 100%.





Figure 4.1 Postcode price indices

Indices compare prices to value for median postcode sector in England & Wales Source Land Registry data.

Price assumptions for financial appraisals

- 4.16 It is necessary to form a view about the appropriate prices for the 20 individual schemes to be appraised in the study. The information suggests that there will be significant variations in selling prices across the area.
- 4.17 It is also clear that we must allow for differences between apartments and houses, particularly in locations where flats are going to be attractive. Finally, in drawing on the new build price data we have to bear in mind that, particularly in the present market conditions, that the prices at which homes are offered may include appreciable discounts, such as deposit paid for first time purchasers, or stamp duty.



4.18 Taking these points into consideration we arrived at a set of sale prices for flats and for houses on each of the 20 sites. The two were then combined on the basis of the proportions of flats and houses in each scheme, to produce a single composite average price. The resulting figures are set out in Table 4.2 below.

Table 4.2 Price bands						
Site/logation	Price	e £ per	Site/logation	Price	£ per	
Site/location	Sq ft	Sq m	Site/location	Sq ft	Sq m	
A1 Oswestry	171.5	1,845	D1 Shrewsby C	238	2,563	
A2a Craven Arms	190.7	2,052	D2 Oswestry	187.5	2,015	
A3 Mkt Drayton	170	1,829	D3 Much Wenlock	230	2,475	
A5 Shrewsby NE	175	1,883	E3 Ludlow	240	2,582	
A9 Ditton Priors	195	2,098	E4 Baschurch	200.3	2,155	
B2 Oswestry	173.6	1,868	F1 Bridgnorth	240	2,582	
C2 Shrewsby W	211.8	2,279	F3 Shrewsby C	240	2,582	
C4 Highley	180	1,937	H1 Oswestry	194.5	2,093	
C4a Wem	175	1,883	I1 Silvington	215	2,313	
C5 Ch Stretton	207.5	2,233	J2 Tibberton	215	2,313	

Source: Fordham Research

- 4.19 The figures cover a range from around £170 per sq ft (£1,894 per sq m) in the northern towns and NE Shrewsbury to £240 (£2,580) in Ludlow, Bridgnorth and Central Shrewsbury. This is not quite so great as the spread of prices we saw in the Land Registry data for second hand prices.
- 4.20 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

- 4.21 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.
- 4.22 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 Midland Region as a whole, and major towns like Stoke on Trent, Shrewsbury and Kidderminster but no information for the smaller towns or rural areas.

FORDHAM RESEARCH

4.23 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 a little higher.

Table 4.3 Residential Land Values half yr to July 2008						
	Land Value £m per acre (hectare)					
Area	Small sites	Bulk sites	l and for apartmente			
	(< 5 dwgs)	(> 2 ha)	Lanu for apartments			
West Midlands Pegion	£0.96m	£0.86m	£0.88m			
West Midianus Region	(£2.36m)	(£2.12m)	(£2.18m)			
Shrowshury	£0.97m	£0.89m	£0.85m			
Sillewsbury	(£2.40m)	(£2.20m)	(£2.10m)			
Stake on Trant	£0.71m	£0.65m	£0.69m			
Sloke on meni	(£1.75m)	(£1.60m)	(£1.70m)			
Kiddorminstor	£1.01m	£0.93m	£0.89m			
Riddenninster	(£2.50m)	(£2.30m)	(£2.20m)			
Walverbarnston	£0.77m	£0.73m	£0.81m			
voivemampion	(£1.90m)	(£1.80m)	(£2.00m)			

Source: VOA Property Market Report July 2008

4.24 It should be noted that values for apartment schemes as reported are no higher in Shrewsbury than land more generally. Even so, it was suspected that all these value figures were still quite high, and might not allow for much of a discount, for affordable or other developer contributions. We therefore sought information about values from residential land currently on sale in the Borough. An examination of small land plots available, in a range of locations (see Appendix 4) at November 2008, points to values in a range of about £1,000-£1,500k per acre (£2.47k-£3.70k per ha) for 'oven ready' land – that is, smaller sites with no requirement for developer and affordable contributions, which can be developed with only the minimum infrastructure costs.

Current and Alternative Use Values

4.25 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.



- 4.26 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.
- 4.27 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.
- 4.28 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 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) Similarly where a converted building's previous use was office space its value will be based on its estimated value in that use.
 - iv) Two sites are occupied by buildings previously in more specialised uses; Nightingale House
 Baschurch was a residential home, and the converted building at Queens Park was a former
 school though more recently used as a private residence.
 - v) One site has been in use as open space (Gay Meadow football ground). Such land is going to have a value to the occupants at least, which is somewhat greater than agricultural, though it has not acquired the significant status it would gain as previously developed land.
- 4.29 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 Telford.

Table 4.4 Industrial Land Values					
Aroo		Land Value per acre (hecta	are)		
Alea	Low	High	Typical		
West Midands Region	£125k (£310k)	£525k (£1,300k)	£235k(£581k)		
Stoke/Stafford	£130k (£325k)	£265k (£650k)	£170k (£425k)		
Wolverhampton	£200k (£500k)	£265k (£650k)	£225k (£550k)		
Telford	£125k (£310k)	£185k (£460k)	£155k (£380k)		

Source: VOA Property Market Report July 2008

FORDHAM RESEARCH

- 4.30 The West Midlands as a whole shows quite a wide range of values. It seems likely that much of Shropshire, rural in nature, might have figures closer to the bottom than to the top of the range. However the data also indicates that Telford, just outside the area but providing a reasonably active market benchmark, has fairly modest values, with a typical figure of around £155k per acre/£380k per ha. The figures for Wolverhampton are rather better but that is a major employment centre.
- 4.31 We have found only very limited evidence of industrial land for sale, with a reported price of £175k/£430k per acre/ha for land at Tern Valley Business Park, Market Drayton. We have evidence of land sales at £110k and £150k per acre (£270k & £370k per ha). For the purposes of the present study, we assumed a benchmark industrial value of £150k throughout except for the major towns of Bridgnorth, Ludlow, Oswestry and Market Drayton, where a figure a little higher, £175K per acre, was felt appropriate; and Shrewsbury, an employment centre, where information suggests a figure of £200k would be appropriate.
- 4.32 Agricultural values have risen lately, after a long 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.
- 4.33 We looked at asking rents for upstairs town centre office space in Ludlow and Shrewsbury. These vary somewhat with location and condition but we felt that £12 per sq ft would be reasonable for Shrewsbury and £10 in Ludlow. Yields for space in moderate condition would not be much below 6%. The two specialised buildings (Queens Park and Nightingale House) were assessed as having values of £500k each.
- 4.34 Consideration was given to an appropriate value for the Gay Meadow football ground. There is of course in reality no 'going rate' for land in this category. Whilst it has not acquired previously developed status, clearly the owners would regard it as having rather more value than agricultural land. In this case we accepted a figure of £125k per acre, somewhat short of the industrial benchmark value for Shrewsbury.
- 4.35 The value basis for each individual site that results from the foregoing analysis is summarised in the table below.



AgriculturalIndustrialUniqueA1B2D1
A1 B2 D1
A2a C2 E3
A3 C4 E4
A5 C4a F3
A9 C5 H1
D2 I1
D3 J2
F1

- 4.36 It was noted earlier that some of the 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 industrial use. The alternative use value would need to be reduced to allow for those costs that would still arise in that situation.
- 4.37 The costs arising from development/redevelopment of the 20 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.

FORDHAM RESEARCH



5. Assumptions for Viability Analysis

Introduction

5.1 This chapter considers the costs and other assumptions required to produce financial appraisals for the 20 sites.

Development costs

Construction 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 new build market housing in Shropshire at a base date of Q4 2008.
- 5.3 The seven sites from E3 onwards all involve conversion, rather than new build. Conversion costs are of course in practice unique to each individual building. Dependent upon condition and the quality of materials and fitments, the cost can vary from 70% of new build costs to 130%; for Listed Buildings requiring specialist skills and fittings the figure could go even higher. Roof condition is a key factor. For the purpose of the present study we should assume that the building and roof are in reasonable condition (since if they were not, that would need to have been reflected in a reduced alternative use value) generally, except for the two barn conversions. This would suggest a factor of 100% of new build cost for conversions of the two office buildings, the Antique Centre, School and Residential Home, and a higher figure, 115%, for the two barns.
- 5.4 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 will be 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. However, the Government indicates that Level 3 will apply to all new build housing (i.e. will be incorporated in Building Regulations) from 2010, with higher levels intended to be triggered from 2013 onwards. On this basis it seems appropriate for the present study to assume that Level 3 applies to both market and affordable housing on the sites being appraised.

FORDHAM RESEARCH

- 5.5 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 new build costs would need to increase by 4.2% to achieve Level 3.
- 5.6 Adjusting our database figures by this 4.2% premium, 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
A1	83.71	(901)	C4	84.11	(905)	E4	85.80	(923)
A2a	83.40	(897)	C4a	81.27	(874)	F1	91.43	(984)
A3	81.59	(878)	C5	92.44	(995)	F3	99.55	(1,071)
A5	82.89	(892)	D1	99.25	(1,068)	H1	95.53	(1,028)
A9	81.27	(874)	D2	92.44	(995)	11	93.46	(1,006)
B2	88.75	(955)	D3	83.30	(896)	J2	93.46	(1,257)
C2	84.44	(909)	E3	99.55	(1.071)			

Source: Fordham Research derived from analysis of BCIS cost data

- 5.7 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 %age requirement would eventually render the development uneconomic. Hence the need for a 'site size threshold', below which the requirement would not be sought.
- 5.8 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.
- 5.9 Even so, half of the sites in our study are of 12 dwellings or less, and it is necessary to make some allowance for the economics of the smallest sites in preparing financial appraisals. Cost premiums have therefore been estimated for these very small sites, and are shown below. The premiums are 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.



Table 5.2 Cost adjustments for small sites						
Site size no of dwgs	Build cost premium	Site size no of dwgs	Build cost premium			
12	(+3%)	5	(+12%)			
11	(+4%)	4	(+14%)			
9	(+6%)	3	(+16%)			
8	(+7.25%)	2	(+20%)			
7	(+8.5%)	1	(+25%)			

- 5.10 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.
- 5.11 Taking all the above into account, we arrived at build costs for all (market & affordable) housing which after rounding were as in the table below.

Table 5.3 Construction costs adjusted and rounded: all housing								
			Build co	st£persq	ft/sq m			
Site	sq ft	sq m	Site	sq ft	sq m	Site	sq ft	sq m
A1	83.50	(898)	C4	89.00	(958)	E4	89.00	(958)
A2a	83.50	(898)	C4a	81.50	(877)	F1	91.50	(985)
A3	81.50	(877)	C5	98.00	(1,054)	F3	119.50	(1,286)
A5	93.00	(1,001)	D1	99.50	(1,071)	H1	98.50	(1,060)
A9	88.00	(947)	D2	92.50	(995)	11	108.50	(1,167)
B2	88.50	(952)	D3	89.50	(963)	J2	117.00	(1,259)
C2	84.50	(909)	E3	113.50	(1,221)			

Source: Fordham Research derived from analysis of BCIS cost data

Other normal development costs

5.12 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/layout for each site.

- 5.13 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 are also more likely to require substantial expenditure on bringing mains services to the site.
- 5.14 In the light of these considerations we have developed a scale of allowances ranging from 30% of build costs for the major urban extension at Oswestry, down to 7.5% for the higher density conversion schemes, E3, E4, and F3. The table below sets out the individual site assumptions.

Т	Fable 5.4 Development cost	allowances
Ref	Site/location	% of build costs
A1	SE Oswestry	30%
A2a	Greenfield Rd Craven Arms	20%
A3	Farcroft Mead Mkt Drayton	20%
A5	Mont Way Shrewsbury	12.5%
A9	Station Rd Ditton Priors	15%
B2	Gobowen Rd Oswestry	13%
C2	Royal Hospital Shrewsbury	14%
C4	High St Highley	12%
C4a	New St Wem	13%
C5	Burway Rd Church Stretton	12%
D1	Gay Meadow Shrewsbury	13%
D2	Arthurs Garage Oswestry	12%
D3	Station Rd Much Wenlock	13%
E3	Castle St Ludlow	7.5%
E4	Nightingale Ho Baschurch	7.5%
F1	Mill St Bridgnorth	9%
F3	Mardol Shrewsbury	7.5%
H1	Queens Park Sch Oswestry	9%
11	Manor Farm Silvington	9%
J2	Bank Ho Farm Tibberton	9%

(iii) Abnormal development costs

5.15 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.



- 5.16 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. As pointed out in the previous chapter (4.40) some abnormal costs would also arise in the event of the site's redevelopment with an alternative use.
- 5.17 The schedule below sets out the abnormal costs considered to apply in each case where they arise.

Table 5.5 Abnormal development costs							
Ne	Site	ltom	Resia	lential	Industrial		
INO	Site	item	Cost £k	Cost £k	£k per acre(ha)		
A2a	Greenfield Rd Craven Arms	Land required to deliver access	£100k	n/app	-		
B2	Gobowen Rd Oswestry	Possible ground contamination	£150k	£75k	£55k (£136k)		
C2	Royal Hospital Shrewsbury	Slab removal	£100k	£100k	£14k (£35k)		
C4	High St Highley	PFS	£50k	£50k	£106k (£260k)		
C5	Burway Rd Church Stretton	Possible ground contamination	£50k	£50k	£126k (£310k)		
D1	Gay Meadow Shrewsbury	Flooding and ground measures	£125k	n/app			
D2	Arthurs Garage Oswestry	Possible ground contamination	£50k	£50k	£70k (£175k)		
D3	Station Rd Much Wenlock	Possible ground contamination	£50k	£0k	-		
F1	Mill St Bridgnorth	Flooding	£100k	£50k	£125k (£308k)		
		Source: Fordham Researc	h				

Further clarification required as to how these figures have been arrived at.

5.18 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.

(iii) Fees

5.19 We have assumed professional fees amount to 10% of build costs, in each case. Fees on infrastructure works use a lower figure of 8%.

FORDHAM RESEARCH

(iv) Contingency

5.20 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. We used 2.5% on the undeveloped sites (A1, A2a, A3, A5, A9), 5% where the land was previously developed (B2, C2, C4, C4a, C5; D1, D2, D3, E3, E4, F1, F3, H1) and an intermediate rate on the two sites which mixed developed and undeveloped land (I1 and J2).

Financial and other appraisal assumptions

(i) VAT

5.21 For simplicity it has been assumed throughout, as with most financial appraisals, that either VAT does not arise, or its effect can be ignored. This assumption is believed accurate for the new build sites, whilst VAT on the conversion elements might not be recoverable unless the building was Listed.

(ii) Interest rate

5.22 Our appraisals assume 7% pa (Three Month LIBOR late November 2008 plus 3.0%) for interest on both outgoings and receipts. The latter would in practice only arise for a short period at the end of the scheme

(iii) Developers profit

- 5.23 We normally assume that the developer requires a return of 20% on Total Costs (equivalent to 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.
- 5.24 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.



Та	ble 5.6 Profit margins
% affordable	Profit % on costs
0%	20%
20%	19%
30%	18.5%
40%	18%
50%	17.5%

(iv) Void

5.25 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. For the purpose of the present study a 3 month void period is assumed for all sites.

(v) Phasing & timetable

- 5.26 The appraisals are assumed to have been prepared using prices and costs at a base date of November 2008, with an immediate start on site. A pre construction period of 6 months is assumed for most sites but it is extended to 9 months to allow for advance infrastructure works on the Oswestry Gateway site. Each dwelling is assumed to be built over a 12 month period.
- 5.27 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.
- 5.28 We have developed a suite of modelled assumptions to reflect site size and development type, as set out in Table 5.7 below.



	Table 5.7 Market pace	assumptions	
Site		No of dwgs	Ceiling level of completions per qtr
A1	SE Oswestry	750	20
D1	Gay Meadow Shrewsbury	156	20
C2	Royal Hospital Shrewsbury	125	12
A2a	Greenfield Rd Craven Arms	50	6
A3	Farcroft Mead Mkt Drayton	45	6
F1	Mill St Bridgnorth	30	5
B2	Gobowen Rd Oswestry	31	5
D2	Arthurs Garage Oswestry	16	4
C4a	New St Wem	14	4
H1	Queens Park Sch Oswestry	12	4
E4	Nightingale Ho Baschurch	11	3
C4	High St Highley	9	3
C5	Burway Rd Church Stretton	9	3
D3	Station Rd Much Wenlock	8	3
A9	Station Rd Ditton Priors	7	2
A5	Mont Way Shrewsbury	5	2
E3	Castle St Ludlow	4	4
11	Manor Farm Silvington	3	2
F3	Mardol Shrewsbury	2	2
J2	Bank Ho Farm Tibberton	1	1

Site acquisition and disposal costs

(i) Site holding costs and receipts

5.29 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

5.30 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

5.31 For the market housing, sales/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, 1.5% for shared ownership and 2.5% for discount market housing.

Alternative use value comparison

5.32 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 some cases to allow for abnormal costs that would arise if the alternative use were implemented. The Chapter 4 values are adjusted to net off these abnormals in the table below.

Table 5.8 Alternative use value figures							
			Alternativ	Alternative use value £k per acre			
No	Site	ltem	Gross	Abnormal cost adj	Net of abnormals		
A1	SE Oswestry	Agricultural	£10k	-	£10k		
A2a	Greenfield Rd Craven Arms	Agricultural	£10k	-	£10k		
A3	Farcroft Mead Mkt Drayton	Agricultural	£10k	-	£10k		
A5	Mont Way Shrewsbury	Agricultural	£10k	-	£10k		
A9	Station Rd Ditton Priors	Agricultural	£10k	-	£10k		
B2	Gobowen Rd Oswestry	Industrial	£175k	£55k-	£120k		
C2	Royal Hospital Shrewsbury	Industrial	£200k	£14k	£186k		
C4	High St Highley	Industrial	£150k	£106k	£44k		
C4a	New St Wem	Industrial	£150k	-	£150k		
C5	Burway Rd Church Stretton	Industrial	£150k	£126k	£24k		
D1	Gay Meadow Shrewsbury	Unique	£125k	-	£125k		
D2	Arthurs Garage Oswestry	Industrial	£175k	£70k	£105k		
D3	Station Rd Much Wenlock	Industrial	£150k	-	£150k		
E3	Castle St Ludlow	Unique	£9,560k	-	£9,560k		
E4	Nightingale Ho Baschurch	Unique	£1,401k	-	£1,401k		
F1	Mill St Bridgnorth	Industrial	£175k	£51k	£124k		
F3	Mardol Shrewsbury	Unique	£9,545k	-	£9,545k		
H1	Queens Park Sch Oswestry	Unique	£1,301k	-	£1,301k		
11	Manor Farm Silvington	Unique	£34k	-	£34k		
J2	Bank Ho Farm Tibberton	Unique	£32k	-	£32k		

Source: Fordham Research





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 hectare (or acre). 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 four 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 five options (four affordable options, plus all-market).
- 6.6 Detailed appraisal printouts for all the sites are provided as Appendix 6 to this report. To keep to a manageable document, only the 20% option has been provided.
- 6.7 The resulting residual land values for the five options are set out in Table 6.1.

FORDHAM RESEARCH

Table 6.1 Appraisal results for five affordable options							
Zero grant:							
Residual value £k per acre for affordable option:							
	No Site		20%	30%	40%	50%	
A1	SE Oswestry	-58	-204	-279	-354	-430	
A2a	Greenfield Rd Craven Arms	296	107	11	-89	-190	
A3	Farcroft Mead Mkt Drayton	112	-19	-85	-153	-221	
A5	Mont Way Shrewsbury	183	24	-57	-138	-220	
A9	Station Rd Ditton Priors	498	273	160	43	-72	
B2	Gobowen Rd Oswestry	87	-175	-310	-445	-580	
C2	Royal Hospital Shrewsbury	558	320	198	78	-47	
C4	High St Highley	184	-1	-97	-194	-289	
C4a	New St Wem	204	51	-29	-109	-190	
C5	Burway Rd Church Stretton	159	-67	-183	-299	-418	
D1	Gay Meadow Shrewsbury	613	176	-46	-277	-511	
D2	Arthurs Garage Oswestry	-34	-273	-394	-517	-640	
D3	Station Rd Much Wenlock	599	377	260	140	19	
E3	Castle St Ludlow	1,684	114	-689	-1,490	-2,302	
E4	Nightingale Ho Baschurch	761	411	231	54	-128	
F1	Mill St Bridgnorth	807	418	225	19	-192	
F3	Mardol Shrewsbury	131	-804	-1,278	-1,761	-2,239	
H1	Queens Park Sch Oswestry	-38	-246	-388	-532	-679	
11	Manor Farm Silvington	963	385	93	-204	-504	
J2	Bank Ho Farm Tibberton	100	7	-40	-87	-135	

- 6.8 Table 6.1 shows that with <u>no</u> requirement for affordable housing the sites deliver a wide range of positive land values, ranging from around £100k per acre (£250k per ha) to about £950k per ha (£2.35m per ha). The Ludlow office conversion, a building with only a nominal site area, produces a higher figure. Three sites produce a land value less than zero; one of these has actually proceeded.
- 6.9 Putting these sites to one side, after adjusting for additional development costs and our planning gain assumptions, prices on the remaining sites are a bit below what the VOA figures indicate for 'oven ready' land, or to 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 falls away. In each case the impact is progressive, but at a broadly linear rate. At the maximum affordable contribution, 50%, only one scheme still delivers a positive land value, albeit very low.



- 6.11 However, it is clear that land value falls away <u>much more quickly</u> for some schemes, than for others. It is the most densely developed sites the two office conversions, and Gay Meadow where affordable housing has the greatest negative impact upon land value. Conversely, the effect is least for the lowest density scheme the barn conversion at Tibberton.
- 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 1 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 Table5.8 in order to form a view about the likely viability of the affordable options for each site.
- 6.15 However it dies 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 both:

(a) to provide an incentive to the landowner to release the site, and any other appropriate cost required to bring the site forward for development

(b) to cover relocation of an existing business in cases where the Council has given policy support for that relocation

- 6.16 We therefore have to consider how large such a 'cushion' should be for our sites.
- 6.17 In practice the size of element (a) 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 eight or ten times that figure. Where (b) arises the cost will also vary, depending on the costs of providing alternative accommodation, removal costs etc.

FORDHAM RESEARCH

- 6.18 After consideration we took the view that a broad average figure of £75k per acre should be used for element (a), to provide an incentive to the landowner, and that specific figures should be calculated for the two sites where element (b) applied D1 Gay Meadow and F1 Mill Street Antiques. For the latter we assumed that purpose built accommodation was not required, and that £25k per acre would be sufficient to cover removal costs.
- 6.19 The former, involving a move to a new purpose built football ground, was more problematic. We have seen a figure of £15m for the cost of the replacement stadium, though it is likely to provide considerably enhanced facilities. In any case it is unreasonable to imagine that the existing site could fund the whole of this sum, even if neither affordable housing nor any other planning gain contribution was required. It is more reasonable to suppose that it would make a significant contribution, not necessarily a majority, to the total of £15m, and that the balance would come from commercial investment. We assumed for the purpose of the exercise that in total the Club might require a total of £4m, or in round terms £600k per acre, to give up their ground. Subtracting the existing use value of £125k per acre and the £75k for element (a) would provide a figure for the relocation element of £400k per acre.
- 6.20 The figures are set out below and combined with the net alternative use values from Table 5.8 to show the resulting benchmark thresholds for viability.



	Table 6.2 Viability c	ushion & thresho	old values			
		£ per acre				
Ref Site		Net alt use value	Cushion (a + b)	Viability threshold value		
A1	SE Oswestry	£10k	£75k	£85k		
A2a	Greenfield Rd Craven Arms	£10k	£75k	£85k		
A3	Farcroft Mead Mkt Drayton	£10k	£75k	£85k		
A5	Mont Way Shrewsbury	£10k	£75k	£85k		
A9	Station Rd Ditton Priors	£10k	£75k	£85k		
B2	Gobowen Rd Oswestry	£120k	£75k	£195k		
C2	Royal Hospital Shrewsbury	£186k	£75k	£261k		
C4	High St Highley	£44k	£75k	£119k		
C4a	New St Wem	£150k	£75k	£225k		
C5	Burway Rd Church Stretton	£24k	£75k	£99k		
D1	Gay Meadow Shrewsbury	£125k	£475k	£600k		
D2	Arthurs Garage Oswestry	£105k	£75k	£180k		
D3	Station Rd Much Wenlock	£150k	£75k	£225k		
E3	Castle St Ludlow	£9,560k	£75k	£9,635k		
E4	Nightingale Ho Baschurch	£1,401k	£75k	£1,476k		
F1	Mill St Bridgnorth	£124k	£125k	£249k		
F3	Mardol Shrewsbury	£9,545k	£75k	£9,620k		
H1	Queens Park Sch Oswestry	£1,301k	£75k	£1,376k		
11	Manor Farm Silvington	£34k	£75k	£109k		
J2	Bank Ho Farm Tibberton	£32k	£75k	£107k		

6.21 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 <u>actually</u> 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							
		Value £k per acre					
No	Site	Alt use value	No affordable	20%	30%	40%	50%
A1	SE Oswestry	10/85	-58 NOT VIAB	-204 NOT VIAB	-279 NOT VIAB	-354 NOT VIAB	-430 NOT VIAB
A2a	Greenfield Rd Craven Arms	10/85	296 VIABLE	107 VIABLE	11 MARGINAL	(-89) NOT VIAB	(-190) NOT VIAB
A3	Farcroft Mead Mkt Drayton	10/85	112 VIABLE	(-19) NOT VIAB	(-85) NOT VIAB	(-153) NOT VIAB	(-221) NOT VIAB
A5	Mont Way Shrewsbury	10/85	183 VIABLE	24 MARGINAL	(-57) NOT VIAB	(-138) NOT VIAB	(-220) NOT VIAB-
A9	Station Rd Ditton Priors	10/85	498 VIABLE	273 VIABLE	160 VIABLE	43 MARGINAL	(-72) NOT VIAB
B2	Gobowen Rd Oswestry	120/195	87 NOT VIAB	(-175) NOT VIAB	(-310) NOT VIAB	(-445) NOT VIAB	(-580) NOT VIAB
C2	Royal Hosp Shrewsbury	186/261	558 VIABLE	320 VIABLE	198 MARGINAL	78 NOT VIAB	(-47) NOT VIAB
C4	High St Highley	44/119	184 VIABLE	(-1) NOT VIAB	(-97) NOT VIAB	(-194) NOT VIAB	(-289) NOT VIAB
C4a	New St Wem	150/225	204 MARGINAL	51 NOT VIAB	(-29) NOT VIAB	(-109) NOT VIAB	(-190) NOT VIAB
C5	Burway Rd Ch Stretton	24/99	159 VIABLE	(-67) NOT VIAB	(-183) NOT VIAB	(-299) NOT VIAB	(-418) NOT VIAB
D1	Gay Meadow Shrewsbury	125/600	613 VIABLE	176 MARGINAL	(-46) NOT VIAB	(-277) NOT VIAB	(-511) NOT VIAB
D2	Arthurs G'ge Oswestry	105/180	(-34) NOT VIAB	(-273) NOT VIAB	(-394) NOT VIAB	(-517) NOT VIAB	(-640) NOT VIAB
D3	Station Rd Much W'lock	150/225	599 VIABLE	377 VIABLE	260 VIABLE	140 NOT VIAB	19 NOT VIAB
E3	Castle St Ludlow	9,560/9,635	1,684 NOT VIAB	114 NOT VIAB	(-689) NOT VIAB	(-1,490) NOT VIAB	(-2,302) NOT VIAB
E4	Nightingale Ho Baschurch	1,401/1,476	761 NOT VIAB	411 NOT VIAB	231 NOT VIAB	54 NOT VIAB	(-128) NOT VIAB
F1	Mill St Bridgnorth	124/249	807 VIABLE	418 VIABLE	225 MARGINAL	19 NOT VIAB	(-192) NOT VIAB
F3	Mardol Shrewsbury	9,545/9,620	131 NOT VIAB	(-804) NOT VIAB	(-1,278) NOT VIAB	(-1,761) NOT VIAB	(-2,239) NOT VIAB
H1	Queens Park Sch Oswestry	1,301/1,376	38 NOT VIAB	(-246) NOT VIAB	(-388) NOT VIAB	(-532) NOT VIAB	(-679) NOT VIAB
11	Manor Farm Silvington	34/109	119 VIABLE	385 VIABLE	93 MARGINAL	(-204) NOT VIAB	(-504) NOT VIAB
J2	Bank Ho Fm Tibberton	32/107	100 MARGINAL	7 NOT VIAB	(-40) NOT VIAB	(-87) NOT VIAB	(-135) NOT VIAB



Comparison results

- 6.22 With zero affordable housing, seven sites are in fact not viable (and two are, narrowly, 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 by around 15% (Halifax November 2008) over the last 12 months, and one suspects new build prices achieved have probably fallen further.
- 6.23 Turning to the various levels of affordable contribution, at 20% 6 sites are viable, and two marginal. At 30% two are viable, and two marginal. By 40% all sites are unviable except for one marginal, and that disappears at 50%.
- 6.24 These results are summarised in tabular form, below. 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 earlier this year underlines that whilst the results represent a 'snapshot' of viability as at November 2008, the immediate prospect is for viability to deteriorate further in the coming months.

Table 6.4 Viability results summary						
	No of sites in category with affordable at:					
No aff 20% 30%				40%	50%	
Viable	11	6	2	0	0	
Marginal	2	1	4	1	0	
Not viable	7	13	14	19	20	
Total	20	20	20	20	20	

Source: Fordham Research

History: the last market recession

6.25 There are many ways in which the current situation differs from the previous housing market recession. Restricted mortgage availability, rather than deficient demand per se, has been the primary factor bringing about the present market conditions. It is possible to argue that the MIRAS tax changes in the 1988 Lawson budget artificially stimulated the housing market at that time, taking prices to an appreciably higher level than would otherwise have occurred, and requiring a greater subsequent correction. Similarly, it is most unlikely that the path out of the present situation will closely resemble what happened as things began to recover in the early 1990's.

FORDHAM RESEARCH

6.26 However it is worth considering what happened then, since it is quite likely that elements of it, though not the overall pattern of things, will recur next time. The following graph shows relative movements in prices, values and costs from Q1 1990 onwards.





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

- 6.27 The graph uses national average prices and values, which behave more gently than they would for any one local authority area. Nevertheless, the figures show values initially dipping sharply, and only recovering to their initial level from mid 1997; shortly thereafter they begin to rise quite sharply. Prices appear to be static from 1990, though this disguises a significant downturn which happened at different times in different places; they begin to take off from 1995, and after slowing in 2005 accelerate again. Costs (an average of indices of build costs, and tenderers' prices) after a short period of stagnation start to move ahead from 1993. However they have grown at a far slower rate than prices, allowing land values in effect the residual between prices and costs to increase even faster than prices.
- 6.28 The graph also shows a hypothetical line illustrating the scale of the affordable housing contribution, considered in terms of financial impact upon the landowner/developer ('affordable take'). The 'take' grows considerably over time with periodic changes to the target proportion, and tightening requirements upon tenure and affordability, and also as Social Housing Grant support falls away. Affordable requirements have risen because the level of need has risen as prices rose. At the same time, the rise in prices relative to costs provided potential scope for landowners/developers to meet the higher requirements, for much of the time at least.



The pattern of future movements

- 6.29 As we have emphasised, the pattern of the last housing market downturn cannot be taken to provide meaningful guidance about the present one. Even so the general course and sequence of events may well be similar. Prices will fall and will eventually begin to recover, although by the time they regain present levels, costs are likely to be somewhat higher than they are now. The underlying demand/supply situation, in which too few homes are being built to meet the need from households, suggests that a recovery <u>will</u> come, and that prices will in due course reach, and exceed, the levels achieved in late 2007.
- 6.30 The prices used in the appraisals are likely to be significantly down on those that obtained at the peak, (October/November 2007 perhaps). However there is no sign that the fall has ceased, and it is likely to continue for a time, though a total price fall from the peak greater than that last time seems improbable. Costs are at present still rising, though they may slow quite a bit, as in the previous recession, especially if there is a more general construction slowdown.
- 6.31 Continued falling prices and rising costs will impact quite significantly upon the results we reported above; viability is likely to deteriorate appreciably in the short term, and it will be some time before the peak degree of viability of last autumn is again reached. A possible policy response to this situation is discussed further in the final Chapter. However it would also be sensible to look at the impact of possible price and cost changes on some of the appraisal results. This 'sensitivity testing' follows below.

Sensitivity: price and cost levels

- 6.32 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.
- 6.33 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:

Prices fall by 10% Prices rise by 10%

6.34 Accordingly the impact of (1) & (2) upon the 20% options for all 20 sites was assessed through variant appraisals. The results are compared to the base appraisal results in Table 6.5 below.

FORDHAM RESEARCH

Table 6.5 Sensitivity tests for 20% appraisals						
		Alt use value	Value £k/acre	Prices +10%	Base	Prices -10%
A1	SE Oswestry	10/85		(-73) NOT VIAB	-204 NOT VIAB	(-335) NOT VIAB
A2a	Greenfield Rd Craven Arms	10/85		262 VIABLE	107 VIABLE	(-51) NOT VIAB
A3	Farcroft Mead Mkt Drayton	10/85		97 VIABLE	(-19) NOT VIAB	(-135) NOT VIAB
A5	Mont Way Shrewsbury	10/85		163 VIABLE	24 MARGINAL	(-114)) NOT VIAB
A9	Station Rd Ditton Priors	10/85		456 VIABLE	273 VIABLE	90 VIABLE
B2	Gobowen Rd Oswestry	120/195		34 NOT VIAB	(-175) NOT VIAB	(-386) NOT VIAB
C2	Royal Hosp Shrewsbury	186/261		490 VIABLE	320 VIABLE	150 NOT VIAB
C4	High St Highley	44/119		158 VIABLE	(-1) NOT VIAB	(-163) NOT VIAB
C4a	New St Wem	150/225		186 MARGINAL	51 NOT VIAB	(-86) NOT VIAB
C5	Burway Rd Ch Stretton	24/99		119 VIABLE	(-67) NOT VIAB	(-253) NOT VIAB
D1	Gay Meadow Shrewsbury	125/600		508 MARGINAL	176 MARGINAL	(-160) NOT VIAB
D2	Arthurs G'ge Oswestry	105/180		(-69) NOT VIAB	(-273) NOT VIAB	(-478) NOT VIAB
D3	Station Rd Much W'lock	150/225		543 VIABLE	377 VIABLE	202 MARGINAL
E3	Castle St Ludlow	9,560/9,635		1,314 NOT VIAB	114 NOT VIAB	(-1,089) NOT VIAB
E4	Nightingale Ho Baschurch	1,401/1,476		696 NOT VIAB	411 NOT VIAB	126 NOT VIAB
F1	Mill St Bridgnorth	124/249		712 VIABLE	418 VIABLE	121 NOT VIAB
F3	Mardol Shrewsbury	9,545/9,620		(-65) NOT VIAB	(-804) NOT VIAB	(-1,544) NOT VIAB
H1	Queens Park Sch Oswestry	1,301/1,376		(-6) NOT VIAB	(-246) NOT VIAB	(-483) NOT VIAB
11	Manor Farm Silvington	34/109		835 VIABLE	385 VIABLE	(-64) NOT VIAB
J2	Bank Ho Fm Tibberton	32/107		80 MARGINAL	7 NOT VIAB	(-65) NOT VIAB
No of afford	sites viable/marginal with 2 lable	20%	9V +3M	5V + 2M	1V+2M	

Source: Shropshire Affordable Housing Viability Study



- 6.35 It can be seen that a price increase of 10% (option 2) would improve the viability situation, as three sites currently unviable and one marginal, all become viable. Two unviable sites become marginal.
- 6.36 Option 1, a fall in price of 10% from our assessed prices, also has a significant impact. Four viable sites become unviable, and one becomes marginal. One site previously marginal is now unviable. Unfortunately, this option could be regarded as a feasible short term scenario.

FORDHAM RESEARCH



7. Implications of the Stage 1 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 the sites for which applications have not yet been 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, over a substantial area like Shropshire, are going to be quite diverse. The appraisal results would produce open market land values which, compared to information about values currently being sought for small sites in the area are on the whole somewhat lower. This suggests that the package of development assumptions is not, in general, 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:
 - the combined effect of a serious restriction on mortgage availability and a consequential, more general business downturn which has become increasingly apparent as the study work has proceeded.
 - the assumption of Level 3 of the Sustainability Code for both market and affordable homes, without any offsetting uplift in values.
- 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. 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.

FORDHAM RESEARCH

- 7.5 There are considerable variations in house prices in different parts of the study area. The bulk of the chosen sites are in towns, rather than rural locations, and whilst the former include some higher priced areas, others are in the lower to medium priced areas. We feel, again, that 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, greenfield sites and previously developed land.
- 7.6 In estimating the values which developers would be likely to achieve from affordable housing, we have made assumptions which have been subsequently confirmed as accurate by locally active RSLs.
- 7.7 Our study has been prepared alongside continuing work on a Strategic Housing Market Assessment for Shropshire and consequently could not take full account of the end results of that study. We have taken a strategic approach, rather than seeking to reflect specific variations in the policy detail, the arrangements and procedures which individual Councils use in negotiating affordable housing (and other S106 matters) site by site, which at this time may in any case be generally subject to review.
- 7.8 Particularly given that context, 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. The use of indicative or average figures for instance, for Developer Contributions is an example of the approach, which in turn makes it possible to derive more general guidance from the results.

Context for policy making

- 7.9 The viability study tested affordable target proportions up to a maximum of 50%, reflecting the highest proportion which is currently being sought within the study area.
- 7.10 The results from the appraisals suggest that at present, under zero grant, 20% is the highest target that could be supported. That is on the basis that:
 - Of the 20 sites selected for evaluation six are unviable even with no affordable housing. Thus only 14 of the 20 sites are currently viable at all. This is despite all the sites having been considered as potentially viable at the beginning of the process.
 - ii) At 20% some eight sites are viable: this is more than half of the sites which have some market potential at present.
- 7.11 As a result we would suggest 20% as a broad brush target proportion of affordable housing for the County. This is the result of analysis based on the date of the data gathering: late 2007. As discussed in Stage 2 in Chapter 8, the housing market has current increased this figure to 25%.



- 7.12 There are of course parts of the area where house prices are significantly cheaper than average for the area, and where consequently a 30% target would not be sensible, in that few or no sites could currently achieve it without grant and remain viable. This applies to much of the two northernmost Districts. The two southern Districts, and parts of Shrewsbury, do much better in comparison.
- 7.13 Viability varies from site to site for other reasons. 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 appraisal results display 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.
- 7.14 Viability is also crucially dependent on the alternative use value. Where there is a valid alternative use for a previously developed site as industrial/warehousing, or some other commercial activity, the value in that use 'sets the bar a little higher' than for a greenfield or otherwise undeveloped site. Whilst undeveloped sites, more especially the larger ones, will face higher development costs, the appraisals suggest that it may be slightly easier to achieve viability on these sites. Small rural sites, without major infrastructure requirements, normally do comparatively well because the 'bar' is so low: they are cheap to develop. As a result, a low site size threshold is feasible in rural areas.
- 7.15 However, a move to a Community Infrastructure Levy would bear disproportionately on such sites if they were then asked to carry a share of a possibly larger overall developer contributions burden, which was in line with that for the bigger sites. More generally, in considering options for the CIL Shropshire Council must recognise the possibility that if the overall burden increases it will impact adversely on the results reported here.
- 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 abnormal development costs associated with the site; particularly onerous development contribution requirements; an exceptionally high alternative use value; low market prices in a particular locality, and so on cannot deliver a full affordable housing requirement and remain viable.
- 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 satisfactory financial evidence, that the due affordable contribution would not produce a viable development. 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.

FORDHAM RESEARCH

- 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 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 more 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.
- 7.20 The practical implications of these results for policy setting are discussed in the next chapter.


8. Stage 2: Dynamic Viability analysis

8.1 This chapter takes the results of the Stage 1 viability analysis 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 Examination, so that its Inspector can consider and decide on the level of target setting for the whole plan period. The target cannot be left to 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 20 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.
- 8.4 The Dynamic Viability approach requires that a single benchmark site, or synthetic site, is identified that currently reflects the affordable target level that is deliverable in that area. This site should be consulted with stakeholders to ensure that so far as possible there is agreement that it is representative.
- 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 Examination, is assessed and approved in whatever form during that Examination, and afterwards is entirely dependent on three published indexes:
 - **Price change**: We use the Halifax Price Index (HPI) 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.

FORDHAM RESEARCH

8.7 The following table, reproduced in Appendix 5 with the full outputs, indicates the sources of the indexes and their values at the time of carrying out this analysis.

Table 8.1	Indices for automatic updating of Dyna	mic Viability				
Variable	Proposed index	Starting Value				
House Price	Halifax House Price IndexFeb 2009 = 529.0					
Source	Halifax House Price Index (free, monthly) http://www.lloydsbankinggroup.com/media1/research/halifax_api.asp					
Build cost	BCIS General Building Cost Index	Feb 2009 = 290.9				
Source	BCIS Review Online (subscription only, monthly) Produced by the Royal Institute of Chartered Surveyors <u>http://www.bcis.co.uk/online</u>					
Alternative use value	Agricultural Land (Equipped Mixed) with vacant possession West Midlands Region.January 2009 = £7,036 acre/£17,379 per ha					
Source	Valuation Office Agency: Property Market Re http://www.voa.gov.uk/publications/index.htm	eports (free, six monthly)				

Sources: As shown in the boxes of the table

Benchmark site

- 8.8 It is necessary to use a single site as the basis for Dynamic Viability, for simplicity in future (annual) reviews of the target. The benchmark site should be as typical as possible of expected future developments in Shropshire over the plan period.
- 8.9 The site chosen was 2a (Greenfield Road Craven Arms). As can be seen from Table 6.3, this site can carry 20% of affordable housing and is marginal at 30%. In order to provide a sound basis for the Dynamic Viability process the site was slightly adjusted so that it can exactly bear 20%.
- 8.10 This ensures that future changes in the housing market can properly show the future movements of a deliverable target. As discussed below, this process has already got under way, due to the lengthy period over which the study was done, and the Dynamic Viability process has changed the target from 20% to 25%.

Details of the outputs

8.11 The model generates the full plausible range of target variations based on the above three indexes. The following illustration is one of a set of 8 (one for each of the values for the Alternative Use values shown in full in Appendix 5). In the example below it is the 'base' alternative use value.



- 8.12 As will be noticed, the table below focussed upon the 20% target discussed as being deliverable in the previous chapter: the zero/zero point when looking at the percentage version of the indexes.
- 8.13 Since the basic viability analysis was carried out in early 2009, this is the base for the analysis and more recent and future situations can be read off the graph accordingly.

	Figure 8.1 Coarse Matrix output: Base Alternative Use Value											
	Price Change HPI											
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%	
	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4	
ydex	-20%	232.7	20%	35%	50%	55%	55%	55%	55%	55%	55%	
ls Ir	-10%	261.8	0%	20%	35%	45%	50%	55%	55%	55%	55%	
BC	0%	290.9	0%	0%	20%	30%	40%	45%	50%	55%	55%	
ange	10%	320.0	0%	0%	0%	15%	30%	35%	45%	50%	50%	
Š	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%	
Cost	30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%	
-	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%	
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%	

Note that the figure shows proposed % target for each cost/price combination, with 0% change in alternative use value. The table also provides, inside the percentages, the actual values of the indexes, so that they can be read off in future Source: Fordham Research

- 8.14 In effect, once the Core Strategy Examination has approved whatever the starting target is, the rest follows automatically from the index changes. There is one further point, which is that since the array of possible index changes is extremely large, when viewed as possibilities over a decade or two, the work is done in two stages:
 - *Coarse Matrix*: This is calculated in 10% intervals of the indexes (all 3). The result provides broad coverage, but the change from one cell to another can produce large changes in targets: e.g. from 20% to 35%. But this stage provides wide coverage.
 - *Fine Matrix*: This takes the area around the chosen target and uses 4% intervals in the indexes (the intervals can be varied). This produces results for the area around the chosen target that yield much smaller target changes: mostly 5% intervals and sometimes 10%.
- 8.15 Figure 8.2 shows the *Fine Matrix* outputs that relate to the Figure 8.1 Coarse Matrix. Again the full set of tables will be found in Appendix 5. As will be seen from Figure 8.2, the intervals in the targets around the base case of 20% are smaller than in Figure 8.1. They permit more sensitive adjustments of the target as the index numbers change in future.

FORDHAM RESEARCH

	Figure 8.2 Fine Matrix output: Base Alternative Use Value										
	Price Change HPI										
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%
IS IL	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%
BC	0%	290.9	5%	10%	20%	25%	30%	30%	35%	40%	40%
ange	4%	302.5	0%	5%	10%	15%	25%	25%	30%	35%	40%
Ch	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
Cost	12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
Ū	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%

Source: Fordham Research

- 8.16 In order to see how the *Fine Matrix* relates to the *Coarse*, the indexes are shown as percentages in the outside rows and columns. It will be noticed that the *Fine Matrix* runs from about -8% to +20%. Compare this with Figure 8.2 and it will be seen that the range is much wider: from -20% to + 50% for the costs. Thus the Fine matrix covers only a fraction of the Coarse matrix, but has the important virtue that the 'steps' in change of target are more manageable: normally about 5% as compared with 10% or more.
- 8.17 -24% of the initial value of the matrices. The *Coarse Matrix* runs from about -20% to +5 60% of the value of the indices. The *Fine Matrix* (outlined on Figure 8.2) covers around a fifth of the total area of the *Coarse Matrix*.
- 8.18 The practical point of the Fine Matrix can be seen in the much smaller intervals between the targets. In the Coarse *Matrix* outputs the intervals may be 10-15% between adjacent cells. But in the *Fine Matrix* the intervals are usually only 5%. Clearly the coverage and fineness of the *Fine Matrix* can be altered by varying the size of the steps, which is 4% of each index in the example. Hence the level of 'close-up' can be varied prior to the Core Strategy Inspector's decision.

Retro-fitting of the Dynamic Viability

8.19 The work on Shropshire's report was mainly completed in early 2009. But due to the issue of the unitary councils (the original work was commissioned for one of the former councils, and extended to the others) the report had not been finalised, and we were aware that the Dynamic Viability process would be available later in 2009. In practice it has taken until early 2010 to finalise the report.



8.20 This is in fact the first case where the publication of a report, and its updating using the Dynamic Viability, is possible. As can be seen from the Fine Matrix above, which is the practical one for year to year purposes, the 0/0 points are set at particular values. These have now changed, as follows:

Table 8.2 Indexes in early 2009 and early 2010						
Index	Value in early 2009 (date of main analysis)	Value in early 2010 at completion of report				
HPI	529.0 (Feb 2009)	547.1 (Dec 2009)				
BCIS	290.9 (Feb 2009)	288.1 (Jan 2010)				
	Courses indexes as nubli	lahad				

Source: indexes as published

- 8.21 As can be seen, the rounded BCIS is still about 290 (rather nearer to either the next higher or lower value shown). On the other hand the price index figure for Dec 2009 is clearly much closer to the 550.2 which is the exact 4% increased value shown in the Fine Matrix. The alternative use value index has not changed by enough to alter this finding.
- 8.22 As a consequence, and reading off from the table, the target should now be 25%, rather than the 20% which was shown in the original analysis. This is a practical example of the operation of Dynamic Viability. It is quite unlikely that the same report should contain both the base analysis and a one year later update, but circumstances have meant that this is the case here.

Relating Coarse and Fine matrices

8.23 The *Fine Matrices* figures are simply a close up of parts of the *Coarse Matrix*. The figures are all available from the initial *Coarse Matrix*. The only issue is the fineness of the intervals and the production of a manageable size of tabulation.





Source: Fordham Research 2009:

8.24 The figure above shows the way in which the *Fine Matrix* can move across the *Coarse* one as time and targets move on. The next figure illustrates the process of checking whether the target has moved, for instance as part of the Annual Monitoring process.



Figure 8.4 Dynamic Viability: How it works in practice

- i) The starting point is the 20% in Figure 8.2. For the purpose of the example assume that this is what the Core Strategy Inspector's report has endorsed.
- ii) In a year, or whatever interval has been set by the Core Strategy Examination, check the values of the three indexes. The first one to check is the Alternative Use Value. This will determine which of the eight pages of Coarse Matrix (Appendix 5) is to be used.
- iii) If the Alternative Use Value has changed by enough to move to one of the other 7 pages,
 that will in itself result in a target change, up or down. If the Alternative Use Value index has
 fallen, the target will have risen, and if it has gone up, the target may have fallen.
- iv) Then look at the BCIS and Halifax indexes and check whether there has been a move from the 0/0 position at which the process started. This may well involved a further change in the target up or down.
- v) Thus the Alternative Use check might show a target increase from 20% to 25%. The relative changes in cost and price might move this up to 30%. For a more precise fix on the resultant target, switch from the Coarse Matrix to the Fine one. The Coarse Matrix will allow a general identification of the change. The Fine Matrix will allow a more precise estimate of the target change.
- vi) These two checking steps will result in a new target. If nothing much has altered in the three indexes, it may remain at 20% or it may have fallen or risen. The result is entirely governed by the movement of the indexes, as read off the tables in Appendix 5.

Source: Fordham Research 2010

Implementing Dynamic Viability

- 8.25 The viability work is part of the preparation of the Core Strategy Affordable Housing Policy. There will then be a delay of months or years until the actual Examination. 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 Examination to ensure that the Dynamic Viability process starts from the period of the Examination.
- 8.26 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 8.5 indicates this process schematically.

FORDHAM RESEARCH

Viability 40% Dynamic Viability Targets % Affordable Housing 25% Target 20% Viability Study (present date) 2007 Core Strategy Enquiry Report Time

Figure 8.5 Implementing Dynamic Viability

8.27 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

- 8.28 The printouts in Appendix 5 provide the detailed background to the two figures (8.1 and 8.2) 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.
- 8.29 The 'broad brush' viability process which leads to the establishment of deliverable targets is, of course, distinct from the site specific issues that may arise at the point of a planning permission. If there are exceptional costs to a particular site, then the 20% policy level of affordable housing may justifiably be reduced. That is the way in which affordable targets have worked since 1991. But the Dynamic Viability results permit the overarching affordable target to be sensitive to market fluctuations while not requiring expensive new Core Strategy consideration.



Source: Fordham Research 2009:

Appendices

FORDHAM RESEARCH



Appendix 1 Site Selection: Development Typology

Definitions - Size

- 1. Very Large = 200+
- 2. Large = 50 to 200
- 3. Medium = 15-49
- 4. Small = 6-14
- 5. Very small = 1-5

Types of Site

A. GREENFIELD SITES WITH NO ABNORMAL CONSTRAINTS

- B. BROWNFIELD SITES WITH NO SUBSTANTIAL EXISTING BUILDINGS OR STRUCTURES ON SITE, BUT POSSIBLE CONTAMINATION, ABNORMAL GROUND CONDITIONS ETC.
- C. BROWNFIELD SITES, WITH <u>VACANT</u> COMMERCIAL BUILDINGS(S) ON SITE. DEMOLITION & REDEVELOPMENT REQUIRED

- D. BROWNFIELD SITES, WITH <u>OCCUPIED</u> COMMERCIAL BUILDINGS(S). RELOCATION OF EXISTING USES REQUIRED, ALONG WITH DEMOLITION & REDEVELOPMENT
- E. <u>UNOCCUPIED</u> COMMERCIAL BUILDING(S) OF HISTORIC INTEREST. PROPOSED CONVERSION

- F. <u>OCCUPIED</u> COMMERCIAL BUILDING(S) OF HISTORIC INTEREST. RELOCATION OF EXISTING USES REQUIRED. PROPOSED CONVERSION
- G. BROWNFIELD SITES OCCUPIED BY LARGE RESIDENTIAL PROPERTY IN LARGE GARDENS. DEMOLITION AND REDEVELOPMENT REQUIRED
- H. EXISTING LARGE DWELLINGS. PROPOSED SUBDIVISION.
- I. MULTI-UNIT BARN CONVERSION SCHEMES
- J. INDIVIDUAL BARN CONVERSION SCHEMES

FORDHAM RESEARCH



Appendix 2 New Build Schemes

A2.1 The schedule overleaf provides details of a number of current new build developments in each of the five Council areas.

Table A2.1 New build schemes									
Site/location	Builder	no of dwgs <i>(incl aff)</i>	Range of dwgs	Prices currently available					
Shrewsbury area									
Ellesmere Grange off Castle Foregate Shrewsbury	Barratt Homes	Na	2 bed flats and 3 bed houses	£123k- £227k					
Porthill Gate, Copthorne Road	Mayfield Developments	14	6 & 7 bed houses	£410k- £750k					
Hawthorne Road, Bell Vue	Shrewsbury Homes	Na	4 bed houses	£399k					
Mousecroft Lane, Shrewsbury	Shropshire Homes	Na	4 & 5 bed houses	£425k- £499k					
The Green, Allexandra Ave, Meole Village	Shropshire Homes	4	4bed houses	£324k- £339k					
The Junction, Sutton Lane	Shropshire Homes	Na	2 bed flats	£139k					
Newport & rural NE									
Islington Grange, Harvest Close, Newport	Kendrick Homes	9	5 bed houses	£389k- £399k					
The Willows, Salters Lane, Newport	Persimmon Homes	Na	2 bed flats & 3 bed houses	£129k- £219k					
Stafford Court, Stafford Road, Newport	Kendrick Homes	Na	4 & 5 bed houses	£299k- £455k					
Manor Green, Childs Ercall	Hawk	Na	34&5 bed houses	£325k- £595k					
Springfields House, Springfields Hinstock	Jardin Homes	Na	4 bed houses	£385k					
High Heath, Hinstock	Seddon Homes	11	3 & 5 bed houses	£325k- £480k					
Alford Gardens, Myddle	Shingler Homes	31	3 4 & 5 bed houses	£195k- £425k					
Church View, Bassa Rd, Baschurch	Fletcher Homes	20	4 bed houses	£334k- £424k					
Noneley Hall Barns, Noneley	Chartland	Na	3 bed houses	£275k- £320k					

Table A2.1 New build schemes									
Site/location	Builder	no of dwgs (incl aff)	Range of dwgs	Prices currently available					
Oswestry									
Heritage Park, Oswestry	Fletcher Homes	Na	2 3 & 4bed houses	£134k- £294k					
Wats Meadow, Gobowen	Fletcher Homes	Na	2 3 & 4bed houses	£138k- £215k					
Woodland Park, Bentley Drive, Oswestry	Barratt	Na	6 bed houses	£414k					
Bramley Court, Morda Rd Oswestry	Oakhurst Hampton	3	4 bed houses	£319k					
Queens Park Gardens, Queens Rd	Kitwe Developments	3	3bed houses	£164k					
Mount Rise, Oswestry	Galliers Homes	Na	4bed houses	£425k					
Market Drayton & Wem									
The Hollies, Market Drayton	Galliers Homes	Na	3 & 4 bed houses	£249k - £285k					
Castleford, Chancel Drive	Wimpey	Na	3 & 4 bed houses	£147k - £249k					
Oakwood Meadows, Market Drayton	Wimpey	Na	4 bed houses	£239k					
Drawwell House Noble St Wem	Na	11	1 bed flats	£169k					
Wem Mill Wem	Na	36	2 bed flats	£162k- £202k					
Saxon Fields	Morris	Na	2 3 & 4 bed houses	£167k- £249k					
Earls Meadow	Wimpey	Na	3 & 4 bed houses	£159k- £264k					
South West									
Priory Gardens, Ludlow	Na	Na	2 bed flats & 4 bed houses	£179k- £289k					
Kinton View, Kinton, Craven Arms	Na	Na	3 bed homes	£189k					
Falcons Court, Much Wenlock	Bennet Homes	Na	2 bed flats, 2 3 & 4 bed houses	£210k- £345k					
Westholme Park, Hazler Rd, Church Stretton	Bennet Homes	Na	5 bed houses	£625k					
Madeira Walk, Church Stretton	Na	Na	5 bed houses	£399k					
Churchway Cottages, Churchway, Church Stretton	Na	Na	2 bed houses	£275k					
Shrewsbury Road, Church Stretton	Na	Na	5 bed detached	£450k					



Table A2.1 New build schemes									
Site/location	Builder	no of dwgs <i>(incl aff)</i>	Range of dwgs	Prices currently available					
Bridgnorth & SE									
Wenlock Grange, Wenlock Road, Bridgnorth	Charles Church	Na	3 4 & 5 bed houses	£149k- £349k					
Woodberry Down Cottage, Bridgnorth	Jardin Homes	Na	3 bed houses	£245k					
New England Lane, Highley, Bridgnorth	Na	Na	4 bed houses	£280k					
Wenlock Rise, Bridgnorth	Na	Na	2 3 & 4 bed houses	£169k- £279k					
Chesterton Farm Barns, Chesterton, Bridgnorth	Na	Na	4 bed houses	£399k					



Appendix 3 House Price Variations

A3.1 The indices in the Table which follows, compare prices in each postcode sector in the four Districts with an England & Wales 'average' figure – actually the median postcode value. 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 A3.1 Price variations by postcode sector						
Postcode sector	LAs	Areas covered in sector	Q2 2007	Q4 2007	Q2 2008	
SY11 3	O/NS	St Martins	77%	73%	67%	
SY11 4	0	Whittington	86%	67%	70%	
SY3 5	SA	Shrewsbury Outer West	76%	81%	71%	
SY13 1	NS	Whitchurch	81%	79%	75%	
SY1 4	SA	Shrewsbury N East	85%	76%	78%	
TF9 3	NS	Market Drayton NW	79%	79%	93%	
CW3 9	NS	Betton	84%	84%	84%	
SY11 2	0	Oswestry South & East	79%	84%	90%	
SY11 1	0	Oswestry North & West	84%	86%	84%	
WV6 7	В	Badger	72%	87%	97%	
SY1 3	SA	Shrewsbury North Outer	81%	86%	90%	
SY12 0	NS	Ellesmere	89%	82%	86%	
TF12 5	В	Broseley	87%	82%	89%	
SY10 7	0	Weston Rhyn	82%	95%	80%	
LD7 1	SS	Quabbs [+ Knighton]	86%	86%	88%	
TF9 1	NS	Market Drayton	80%	103%	77%	
SY13 2	NS	Prees	88%	90%		
SY4 5	NS	Wem	89%	92%	88%	
SY1 2	SA	Shrewsbury North Central	94%	86%	89%	
SY3 6	SA	Shrewsbury SW Central	75%	83%	115%	
SY21 8	SS	Marton [+ Forden etc]	89%	101%	86%	
SY4 1	SA	Ruyton -XI-Towns	90%	84%	103%	
WV16 6	В	Highley, Ditton Priors	90%	96%	90%	
SY10 9	0	Treflach	96%	99%	86%	
WR15 8	SS	Burford	101%	102%	78%	
SY4 4	SA/NS	Shawbury	87%	87%	107%	
SY15 6	SS	Chirbury [+ Montgomery]	82%	80%	121%	
SY7 9	SS	Craven Arms	97%	112%	76%	

Table A3.1 Price variations by postcode sector						
Postcode sector	LAs	Areas covered in sector	Q2 2007	Q4 2007	Q2 2008	
SY13 3	NS	Alkington	105%	77%	104%	
SY5 0	SA/NS	Pontesbury	96%	84%	106%	
SY2 5	SA	Shrewsbury East	94%	100%	95%	
SY3 0	SA	Bayston Hill	95%	106%	94%	
TF9 2	NS	Stoke Heath	105%	87%	104%	
SY8 2	SS	Stanton Lacy	92%	99%	106%	
TF9 4	NS	Betton [+ Ashley Heath]	93%	89%	118%	
SY3 9	SA	Shrewsbury South	102%	110%	92%	
SY5 9	SA/SS	Westbury	102%	102%	102%	
SY2 6	SA	Shrewsbury SE	104%	114%	89%	
SY4 2	NS	Baschurch	109%	100%	99%	
SY6 6	SS/SA	Church Stretton	105%	97%	108%	
SY12 9	NS	Dudleston Heath	94%	94%	124%	
SY5 8	SA	Cruckton	101%	91%	123%	
SY3 8	SA	Shrewsbury Inner West	109%	101%	115%	
TF11 9	В	Kemberton	126%	102%	98%	
DY14 8	SS/B	Cleobury Mortimer	136%	106%	85%	
SY10 8	0	Maesbrook	111%	97%	118%	
TF11 8	В	Shifnal North	92%	110%	128%	
DY14 0	SS	Hopton Waters, Silvington	116%	126%	89%	
SY7 0	SS	Hopton Castle	112%	104%	118%	
TF10 8	NS	Tibberton	104%	116%	114%	
SY8 1	SS	Ludlow	99%	110%	127%	
SY4 3	SA/NS	Bomere Heath	121%	103%	112%	
TF8 7	В	Buildwas	103%	125%	111%	
WV15 6	В	Alveley Bridgnorth Low Town	116%	121%	109%	
SY3 7	SA	Shrewsbury South Central	113%	107%	127%	
WV16 5	В	Bridgnorth SW	112%	121%		
SY13 4	NS	Calverhall	98%	139%		
SY1 1	SA	Shrewsbury Central	117%	112%	137%	
SY5 7	SA	Acton Burnell	118%	87%	162%	
SY8 4	SS	Ashfords	141%	116%	111%	
SY8 3	SS	Knowle	97%	124%	150%	
WV16 4	В	Bridgnorth High Town/North	114%	113%	145%	
SY5 6	SA	Cressage	139%	116%	118%	
WV15 5	В	Worfield Bridgnorth NE	195%	95%	84%	



Table A3.1 Price variations by postcode sector							
Postcode sector	LAs	Areas covered in sector	Q2 2007	Q4 2007	Q2 2008		
SY7 8	SS	Clun	118%	125%	132%		
SY6 7	SS	Ticklerton	160%	117%	112%		
TF13 6	В	Much Wenlock	124%	146%	121%		
WV5 7	В	Claverley	136%	140%	165%		
7		Source: Analysis of Land Registry	data				

Notes

1. Where a postcode sector includes areas inside and outside the Borough, the areas outside are shown in brackets, as [+ Knighton)

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 overleaf.

Table A3.2 Worked example for SY11 1 at Q2 2008									
	Land Registry data Q2 2008								
	Detached	Semi	Terraced	Flat	Total				
England & Wales - median price	£292,500	£178,166	£154,328	£149,795					
England & Wales - no of sales	32,864	46,546	54,092	35,249	168,751				
IP11 0 – ave price	£246,622	£155,750	£121,611	£149,795					
IP11 0 price as % E & W median value	84.3%	87.4%	78.8%	87.2%					
Weighted average index for IP11 0 =	[(32864 x 84.3%)+(46546 x 87.4%)+(54092 x 78.8%)+(35249 x 87.2%)] / 168,751								





Appendix 4 Small Plots For Sale

Table A4.1 Asking prices for building plots:								
	values							
Location	Notes	Value £k per acre						
Shifnal		£1,577						
Market Drayton	Ave of two	£1,460						
Shrewsbury		£1,250						
Waters Upton	Ave of three	£1,012						
Newport		£1,060						
Knighton	Barn	£1,000						
Whitchurch		£938						
Wellington	Ave of three	£1,329						
Oakengates		£1,186k						

Source: Internet listings

FORDHAM RESEARCH



Appendix 5 Dynamic Viability Outputs

- A5.1 As discussed in Chapter 8, the Dynamic Viability appraisals are based on a slightly modified version of Site 2a: Craven Arms. The modification made is simply to ensure that it coincides exactly with the broad brush target of 20%
- A5.2 The base index values are shown below for ease of reference (the same table appears in Chapter 8)

Table A5.	1 Indices for automatic updating of Dyna	amic Viability
Variable	Proposed index	Starting Value
House Price	Halifax House Price Index	Feb 2009 = 529.0
Source	Halifax House Price Index (free, monthly) <u>http://www.lloydsbankinggroup.com/media1/n</u>	research/halifax_api.asp
Build cost	BCIS General Building Cost Index	Feb 2009 = 290.9
Source	BCIS Review Online (subscription only, mont Institute of Chartered Surveyors http://www.bcis.co.uk/online	thly) Produced by the Royal
Alternative use value	Agricultural Land (Equipped Mixed) with vacant possession West Midlands Region.	January 2009 = £7,036 per acre/£17,379 per ha
Source	Valuation Office Agency: Property Market Re http://www.voa.gov.uk/publications/index.htm	eports (free, six monthly) <u>1</u>

Sources: As shown in the boxes of the table

- A5.3 The results from the sequence of appraisals are set out in the following tables.
- A5.4 After values of indices for price/cost/alternative use value have been determined, these would be rounded to 2% intervals (price/cost) and 10% intervals (alternative use value). The tables show what revised percentage target would apply to the particular price/cost/alternative use value combination.
- A5.5 The following are two sets of 8 tabulations of the Coarse and Fine Matrices described in Chapter 8. They provide for the full range of possible targets and also the Alternative Use value check in 8 bands of alternative use value indexes.

FORDHAM RESEARCH

Dynamic Viability outputs

Coarse Matrix

Table C1 Base Alternative Use Value: 0% Change - £10,000 Per Acre											
					Price	e Change	e HPI				
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
ж	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4
Inde	-20%	232.7	20%	35%	50%	55%	55%	55%	55%	55%	55%
SIS	-10%	261.8	0%	20%	35%	45%	50%	55%	55%	55%	55%
ge BCIS	0%	290.9	0%	0%	20%	30%	40%	45%	50%	55%	55%
ange	10%	320.0	0%	0%	0%	15%	30%	35%	45%	50%	50%
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%
ost	30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%
Ű	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	436.4	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%			
ex	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4			
Inde	-20%	232.7	20%	35%	50%	55%	55%	55%	55%	55%	55%			
S S	-10%	261.8	0%	20%	35%	45%	50%	55%	55%	55%	55%			
BC	0%	290.9	0%	0%	20%	30%	40%	45%	50%	55%	55%			
ange B	10%	320.0	0%	0%	5%	20%	30%	35%	45%	50%	50%			
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%			
ost (30%	378.2	0%	0%	0%	0%	5%	15%	25%	35%	40%			
ŭ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%			
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%			



Table C3 Alternative Use Value: - 40% Change - £6,000 Per Acre											
					Pric	e Change	e HPI				
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
ы Кар	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4
Ind	-20%	232.7	20%	35%	50%	55%	55%	55%	55%	55%	55%
SIS	-10%	261.8	0%	20%	35%	45%	50%	55%	55%	55%	55%
BC	0%	290.9	0%	0%	20%	30%	40%	45%	50%	55%	55%
inge	10%	320.0	0%	0%	5%	20%	30%	35%	45%	50%	50%
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%
ost o	30%	378.2	0%	0%	0%	0%	5%	15%	25%	35%	40%
ŭ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	436.4	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%			
ex	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4			
Ind	-20%	232.7	20%	35%	50%	55%	55%	55%	55%	55%	55%			
3CIS I	-10%	261.8	0%	20%	35%	45%	50%	55%	55%	55%	55%			
e B(0%	290.9	0%	0%	20%	30%	40%	45%	50%	55%	55%			
ange	10%	320.0	0%	0%	0%	15%	30%	35%	45%	50%	50%			
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%			
ost	30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%			
ŭ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%			
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%			

	Table C5 Alternative Use Value: + 20% Change - £12,000 Per Acre												
					Pric	e Change	e HPI						
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%		
ex	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4		
Ind	-20%	232.7	20%	35%	45%	55%	55%	55%	55%	55%	55%		
SIS	-10%	261.8	0%	20%	35%	40%	50%	55%	55%	55%	55%		
ge BCIS	0%	290.9	0%	0%	15%	30%	40%	45%	50%	55%	55%		
inge	10%	320.0	0%	0%	0%	15%	30%	35%	45%	50%	50%		
Che	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%		
ost Ch	30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%		
ŭ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%		
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%		



Table C6 Alternative Use Value: + 40% Change - £14,000 Per Acre												
Price Change HPI												
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%	
ка	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4	
lnd	-20%	232.7	20%	35%	45%	55%	55%	55%	55%	55%	55%	
S S	-10%	261.8	0%	20%	30%	40%	50%	55%	55%	55%	55%	
B	0%	290.9	0%	0%	15%	30%	40%	45%	50%	55%	55%	
Inge	10%	320.0	0%	0%	0%	15%	30%	35%	40%	50%	50%	
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%	
ost (30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%	
ŭ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%	
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%	

Table C7 Alternative Use Value: + 60% Change - £16,000 Per Acre											
					Pric	e Change	e HPI				
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
ex	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4
Ind	-20%	232.7	20%	35%	45%	55%	55%	55%	55%	55%	55%
SIS	-10%	261.8	0%	15%	30%	40%	50%	55%	55%	55%	55%
e BCI	0%	290.9	0%	0%	15%	30%	40%	45%	50%	55%	55%
ange	10%	320.0	0%	0%	0%	15%	30%	35%	40%	45%	50%
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%
ost (30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%
ŏ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%

Table C	8 Alternative	Use Value:	+ 80% Change ·	£18,000 Per Acre

			_		Pric	e Change	e HPI				
		%	-20%	-10%	0%	10%	20%	30%	40%	50%	60%
ex	%		423.2	476.1	529.0	581.9	634.8	687.7	740.6	793.5	846.4
Ind	-20%	232.7	15%	35%	45%	55%	55%	55%	55%	55%	55%
SIS	-10%	261.8	0%	15%	30%	40%	50%	55%	55%	55%	55%
B	0%	290.9	0%	0%	15%	30%	40%	45%	50%	55%	55%
inge	10%	320.0	0%	0%	0%	15%	30%	35%	40%	45%	50%
Cha	20%	349.1	0%	0%	0%	5%	15%	25%	35%	40%	45%
ost	30%	378.2	0%	0%	0%	0%	5%	15%	25%	30%	40%
Ŭ	40%	407.3	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	436.4	0%	0%	0%	0%	0%	0%	10%	15%	25%



Dynamic Viability outputs

Fine Matrix

	Table F1 Base Alternative Use Value: 0% Change - £10,000 Per Acre												
					Pric	e Change	e HPI						
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%		
X	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0		
Inde	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%		
SIS	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%		
BC	0%	290.9	5%	10%	20%	25%	30%	30%	35%	40%	40%		
ange BC	4%	302.5	0%	5%	10%	15%	25%	25%	30%	35%	40%		
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%		
ost	12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%		
Ŏ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%		
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%		

Table F2 Alternative Use Value: - 30% Change - £7,000 Per Acre												
					Pric	e Change	e HPI					
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
ка	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0	
Inde	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%	
SIS	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%	
B	0%	290.9	5%	10%	20%	25%	30%	30%	35%	40%	40%	
lnge	4%	302.5	0%	5%	10%	20%	25%	25%	30%	35%	40%	
Cha	8%	314.2	0%	0%	5%	10%	20%	20%	25%	30%	35%	
ost (12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%	
Ŭ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%	
	20%	349.1	0%	0%	0%	0%	0%	5%	15%	15%	20%	

FORDHAM RESEARCH

		Table F	3 Altern	ative Us	se Value	: - 20%	Change	e - £8,00	0 Per Ac	re	
					Pric	e Change	e HPI				
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
к Х	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
lnd	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%
S S	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%
B B B B B B B B B B B B B B B B B B B	0%	290.9	5%	10%	20%	25%	30%	30%	35%	40%	40%
Inge	4%	302.5	0%	5%	10%	20%	25%	25%	30%	35%	40%
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost	12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ŭ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	15%	15%	20%

		Table F4	4 Altern	ative Us	se Value	: - 10%	Change	e - £9,00	0 Per Ac	re	
					Pric	e Change	e HPI				
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
ex	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
Ind	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%
SIS	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%
BC	0%	290.9	5%	10%	20%	25%	30%	30%	35%	40%	40%
inge	4%	302.5	0%	5%	10%	20%	25%	25%	30%	35%	40%
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost (12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ŏ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	15%	15%	20%

Table F5 Alternative Use Value: +10% Change - £11,000 Per Acre

					Pric	e Change	e HPI				
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
ex	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
Ind	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%
SIS	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%
B	0%	290.9	5%	10%	15%	25%	30%	30%	35%	40%	40%
inge	4%	302.5	0%	5%	10%	15%	25%	25%	30%	35%	40%
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost (12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ŭ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%



	٦	Table F6	Alterna	ative Us	e Value:	+ 20%	Change	- £12,00	00 Per A	cre	
					Pric	e Change	e HPI				
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
ex	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
lnd	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	50%	50%
SIS	-4%	279.3	10%	20%	25%	30%	35%	35%	40%	45%	45%
BC	0%	290.9	5%	10%	15%	25%	30%	30%	35%	40%	40%
nge	4%	302.5	0%	5%	10%	15%	20%	25%	30%	35%	40%
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost (12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
Ŭ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%

	T	able F7	Alterna	ative Us	e Value:	+ 30%	Change	- £13,00	00 Per A	cre	
					Pric	e Change	e HPI				
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
ex	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
Ind	-8%	267.6	20%	25%	30%	35%	40%	40%	45%	45%	50%
SIS	-4%	279.3	10%	15%	25%	30%	35%	35%	40%	45%	45%
BC BC	0%	290.9	5%	10%	15%	25%	30%	30%	35%	40%	40%
nge	4%	302.5	0%	5%	10%	15%	20%	25%	30%	35%	40%
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost (12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ŏ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%

					Pric	e Change	HPI				
		%	-8%	-4%	0%	4%	8%	12%	16%	20%	24%
ex	%		486.7	507.8	529.0	550.2	571.3	592.5	613.6	634.8	656.0
lnd	-8%	267.6	15%	25%	30%	35%	40%	40%	45%	45%	50%
SIS	-4%	279.3	10%	15%	25%	30%	35%	35%	40%	45%	45%
BC	0%	290.9	5%	10%	15%	25%	30%	30%	35%	40%	40%
inge	4%	302.5	0%	5%	10%	15%	20%	25%	30%	35%	40%
Cha	8%	314.2	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost o	12%	325.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ŭ	16%	337.4	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	349.1	0%	0%	0%	0%	0%	5%	10%	15%	20%





Appendix 6: Stage 1 Viability Results

A6.1 The development viability **summaries** contained in the following pages set out the assumptions and outputs of the viability appraisals for a 30% affordable 'zero grant' scenario.

FORDHAM RESEARCH



SITE A1: S E Oswestry



								Ē								
		sales value per so fi	171.50	65.50	85.50	111.48	250.00	£95,730,42								
		build cost per sa ft	83.50	0.0% 83.50	0.0% 83.50	0.0% 83.50	0.0% 83.50	£52,792,875								
		space net so ft	831	831	831	831	0	0 623,250	acre		elling	elling	elling			
		ave floor gross so ft	843	843	843	843	0	632,250	net sq ft per a		£ per dwe	£ per dwe	£ per dw			
			0 80.00%	10.00%	5.00%	5.00%	0.00%	0 100.00%	= 14,013		572.0	200	0	7.50%		
			600.	rent 75.0	ship 37.5	at 37.5	0.0	750.0	ısity							
ffordable 20%	wellings	wellings	larket housing	ffordable soc	offordable sh o	Discount marke	other	otal	loorspace der)ther costs Ianning	urvey	larketing	i terest 6 per annum	lotes	
n A	-		2	1		35%		F	ι.					- 01		
enario & optic		stry						¥3 ,	1,320		16,234	0		5,411		10,050
Sc	ty study	A1 SE Oswei Oswestrv	18.00	44.48 750	41.7				%0G.Z		30.00%	%0.0	30%	10.0%	%0	13,400
ssumption	hire viabili	sii	ha	acres	tw/ha			ancy	allowance	ment costs	ndard % build	<mark>us abnormals</mark>		ees on build costs	osts	gain elling
Input a:	Shrops	Site deta Site Location	Area	No dwgs	Density d			Continge		Developr	star	blt	Total	Design fo	on dev co	Planning ב אפר לשפ

FORDHAM RESEARCH

Page 92



SITE A1 CASH FLOW AFFORDABLE

		rate	Year 1 Q1	02	Q3	Q4	Year 2 Q1	02	Q 3	Q4	Year 3 Q1	02	Q3	Q4	Year 4 Q1	Q2	Q3	Q4
INCOME																		
Housing sales	Market housing Affordable soc rent		00	00	00	00	00	0 0	00	3,420 163	3,420 163	3,420 163	3,420 163	3,420 163	3,420 163	3,420 163	3,420 163	3,420 163
	Affordable sh oship Discount market		00	00	00	00	00	00	00	107 139	107 139	107 139	107 139	107 139	107 139	107 139	107 139	107 139
	Aff other Sales fees		00	0 0	00	00	0 0	00	00	-126	-126 -	-126 -	-126 -	-126 -	-126 -126	-126 -126	-126 -126	-126 -126
			,	, ,	, ,	, ,	, ,	, ,	,	2		2			2	-		
Total income			0	0	0	0	0	0	0	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829
COSTS																		
Land	Land acquisition		-9,093															
	Stamp duty Purchase fees		0 -250															
Build costs	I otal Markat housing		C	C	c	c	C	1 680	1 680	1 680	1 680	1 680	1 680	1 680	1 680	1 680	1 680	1 680
	Affordable soc rent		00	00	00	0 0	0 0	211	211	211	211	211	211	211	1, ⁰⁰⁹ 211	1,003 211	1,003 211	1,003 211
	Affordable sh oship		0 0	0 0	0 0	0 0	0 0	106	106	106	106	106	106	106	106	106	106	106
	Discount market		0 0	0 0	0 0	0 0	0 0	106	106	106 ೧	106 0	106 ೧	106 0	106 ೧	106 ೧	106 ೧	106 ೧	106 ೧
	Aff other	, LO,	0 0	0 0	0 0	0 0	0 0	0 {	0 {	0 {	0 8	0 {	0 8	0 [0 {	0	0	0
	Build contingency Total	2.5%	0	0	0	0	0	53	53	23	23	23	S	23	23	23	23	53
Dev costs	Upfront	15.0%	2,029	2,029	2,029	2,029												
	Build related	15.0%	0	0	0	325	325	325	325	325	325	325	325	325	325	325	325	325
	Abnormals Total	%0	0	0														
Fees	Fees on build costs	10.0%	0	0	0	0	0	216	216	216	216	216	216	216	216	216	216	216
	Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PG	Planning gain				0	402	402	402	402	402	402	402	402	402	402	402	402	402
	Total																	
Other	Planning	£572	143	143	143													
	Survey Marketing	£00	150		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caloe fooe	Total		c	c	c	c	c	c	c	176	176	176	176	176	176	106	176	176
Total costs			-7,021	2,172	2,172	2,756	727	3,108	3,108	3,233	3,233	3,233	3,233	3,233	3,233	3,233	3,233	3,233
Net profit/loss	trom quarter		7,021	-2,172	-2,172	-2,756	-727	-3,108	-3,108	596	596	596	596	596	596	596	596	596
Profit/loss bf fro	om last quarter		0	7,152	5,074	2,956	204	-533	-3,708	-6,944	-6,467	-5,981	-5,486	-4,890	-4,294	-3,698	-3,102	-2,506
Cumulative prot	fit/loss		7.021	4.980	2.901	200	-523	-3.640	-6.816	-6.348	-5.871	-5.385	-4.890	-4.294	-3.698	-3.102	-2.506	-1.910
										2								
Interest	Charged at Total	7.50%	7.50% 132	7.50% 93	7.50% 54	7.50% 4	7.50% -10	7.50% -68	7.50% -128	7.50% -119	7.50% -110	7.50% -101	0.00% 0	0.00%	0.00% 0	0.00% 0	0.00% 0	0.00% 0
										-								
Cumulative de carried forwar	eveloper profit d to RV calc		7,152	5,074	2,956	204	-533	-3,708	-6,944	-6,467	-5,981	-5,486	-4,890	-4,294	-3,698	-3,102	-2,506	-1,910

FORDHAM RESEARCH
							110								110				
~		rate	Q1	02	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q 3	Q4	Q1	02	Q3	04	FOTALS
INCOME																			
	1																		
Housing sales	Market housing		3,420 163	85,510 4.082															
	Affordable sh oship		107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	2,664
	Discount market		139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	3,474
	Sales fees		-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	-3,140
Total income			3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	3,829	95,730
COSTS																			
Land	Land acquisition																		-9.093
	Stamp duty																		0
	Purchase fees																		-250 - 0 343
Build costs	Market housing		1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	0	0	42,234
	Affordable soc rent		211	211	211	211	211	211	211	211	211	211	211	211	211	211	0	0	5,279
	Affordable sh oship		106	106	106	106	106	106	106	106	106	106	106	106	106	106	0	0	2,640
	Discount market		106	106	106	106	106	106	106	106	106	106	106	106	106	106	0 0	0 0	2,640 ĵ
	Aff other	, en o	0 {	0 {	0	0 {	0 {	0 {	0	0	0	0 {	0 {	0 6	0	0	0 0	0 0	0,
	Build contingency	2.5%	23	23	23	23	23	23	23	23	53	23	23	23	53	53	0	0	1,320
Dev costs	l Infrant	15.0%																	8 117
	Build related	15.0%	325	325	325	325	325	325	325	325	325	325	325	325	0	0			8,117
	Abnormals	%0																	0
	Total		0	0	0	0	0	0	0	0		0	0	0	0	0	c	(16,234
rees	Fees on build costs	10.0%	216	216	216	216	216	216	216	216	216	216	216	216	216	216	5 0	<u>э</u> (5,411 2
	Fees on dev costs Total	0.0%	Ð	0	Ð	0	Ð	Ð	0	0	0	0	0	0	0	0	Ð	0	0 5.411
PG	Planning gain		402	402	402	402	402	402	402	402	402	402	402	402	0	0	0	0	10,050
	Total																		10,050
Other	Planning	£572																	429
	ourvey Marketing	EO EO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u>6</u> 0
Coloc food	Total		100	901	901	100	901	901	901	1.06	1 76	301	100	4.06	100	301	106	106	579 2.140
Total costs			3.233	3,233	3.233	3.233	3.233	3.233	3.233	3.233	3.233	3.233	3.233	3.233	2.507	2.507	126	126	3, 124 80, 184
Net profit/los	is from quarter		596	596	596	596	596	596	596	596	596	596	596	596	1,323	1,323	3,704	3,704	15,547
Profit/loss bf f	rom last quarter		-1 910	-1 314	-718	-122	474	1 070	1 666	2 262	2 858	3 454	4 050	4646	5 242	6 565	7 887	11 591	
						!								2	!				
Cumulative pr	ofit/loss		-1,314	-718	-122	474	1,070	1,666	2,262	2,858	3,454	4,050	4,646	5,242	6,565	7,887	11,591	15,295	
Interact	Chomod of	7 500/	/0000	/0000	/0000	/0000	/0000	/0000	/0000	/0000	/000/0	/0000	/000/0	/000/0	/000/0	/000/0	/0000	/000 0	
	Unarged at Total	%/DC.1	0.00	0%000	0	%,00.0	0.00	0.00	0.00	%00°0	0.00	°.00%	0.00	%0°0	%00%	0	°.00%	%00.0	-253
Cumulative d	leveloper profit		-1.314	-718	-122	474	1.070	1.666	2.262	2.858	3.454	4.050	4.646	5.242	6.565	7.887	11.591	15.295	15.294
carried forwa	ard to RV calc																J		

SITE A1 CASH FLOW AFFORDABLE (continued)



SITE A2(a): Greenfield Rd Craven Arms



Page 98



									0 000								
	Q1	02	Q3	Q4	Q1	0 2	0 3	Q4	Q1	02	0 3	Q4	Q1	02 02	Q3	Q4	TOTALS
Market housing			1.6	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	40.0
ffordable soc rent			0.2	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	5.0
ffordable sh oship			0.1	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	2.5
scount market			0.1	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	2.5
other			0.0	0.0	0.0	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	9	9	9	9	9	9	9	9	0	0	0	0	0	50.0
Market housing			0	0	N	ß	5	5	IJ	2J	2J	5	£	0	0	0	40
ffordable soc rent			0	0	0	-	-	-	-	-	-	-	-	0	0	0	5
ffordable sh oship			0	0	0	0	0	0	0	0	0	0	0	0	0	0	ю
count market			0	0	0	0	0	0	0	0	0	0	0	0	0	0	с
other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Market housing				0	0	2	5	£	5	5	5	£	5 2	5	0	0	40
ffordable soc rent				0	0	0	-	-	÷	-	-	-	-	-	0	0	5
ffordable sh oship				0	0	0	0	0	0	0	0	0	0	0	0	0	e
scount market				0	0	0	0	0	0	0	0	0	0	0	0	0	e
other				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Market housing					0	0	2	S	5	ъ	ъ	ى ک	5 2	5	5	0	40
ffordable soc rent					0	0	0	-	÷	-	-	-	-	-	-	0	5
ffordable sh oship					0	0	0	0	0	0	0	0	0	0	0	0	ო
count market					0	0	0	0	0	0	0	0	0	0	0	0	ო
other					0	0	0	0	0	0	0	0	0	0	0	0	0
	ffordable soc rent ffordable sh oship ccount market other TOTAL Market housing ffordable sh oship ccunt market Market housing ffordable sh oship count market fordable sh oship count market fordable sh oship count market fordable sh oship count market	ffordable soc rent ffordable sh oship fordable sh oship count market other TOTAL 0 Market housing ffordable sh oship count market Market housing ffordable sh oship count market Market housing fordable sh oship count market fordable sh oship count market fordable sh oship count market	ffordable soc rent ffordable sh oship fordable sh oship count market other TOTAL 0 0 0 Market housing ffordable sh oship count market Market housing ffordable sh oship count market fordable sh oship count market fordable sh oship count market fordable sh oship count market fordable sh oship count market	ffordable soc rent fordable so solip 0.2 fordable sh oship 0.1 count market 0.1 other 0.1 other 0.1 TOTAL 0 0 Market housing 0 0 fordable so rent fordable so ship 0 0 fordable so cent fordable so ship 0 0 Market housing 0 0 Market housing 0 0 fordable so crent fordable so crent	ffordable soc rent fordable so crient fordable sh oship 0.2 0.6 ffordable sh oship 0.1 0.3 count market 0.1 0.3 other 0.1 0.3 TOTAL 0 0 Market housing 0 2 6 Market housing 0 0 0 ffordable soc rent ffordable soc rent fordable soc rent fordable so continarket 0 0 0 Market housing 0 0 0 0 Other 0 0 0 0 Market housing 0 0 0 0 Other 0 0 0 0 </th <th>Ifordable soc rent fordable so ship count market 0.2 0.6 0.6 fordable sh oship count market 0.1 0.3 0.3 0.3 count market 0.1 0.3 0.3 0.3 other TOTAL 0 0 0 0 0 Market housing 0 2 6 6 6 6 Market housing 0</th> <th>Ifordable socrent fordable socrent fordable shoship 0.2 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.0 0</th> <th>Ifordable soc rent fordable so rent fordable sh oship 0.2 0.6 <th< th=""><th>ffordable socrent fordable socrent 0.1 0.3 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 <</th><th>ffordable soc rent fordable soc rent fordable shoship 0.2 0.6 <th< th=""><th></th><th>fordable soc rent fordables soc rent fordables hoship continuation 0.1 0.5 0.6</th></th<><th>ffordable socratit fordable socratit fordable sho ship ordatit market other 0.2 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 fordable sho ship other 0.1 0.3 0</th><th>findable soc rent fordable soc rent for for for for for for for for for for</th><th>findable soc rent for dable soc rent for dable</th><th>findable sortent fordable sortent contranstet other market 0</th><th></th></th></th<></th>	Ifordable soc rent fordable so ship count market 0.2 0.6 0.6 fordable sh oship count market 0.1 0.3 0.3 0.3 count market 0.1 0.3 0.3 0.3 other TOTAL 0 0 0 0 0 Market housing 0 2 6 6 6 6 Market housing 0	Ifordable socrent fordable socrent fordable shoship 0.2 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.0 0	Ifordable soc rent fordable so rent fordable sh oship 0.2 0.6 <th< th=""><th>ffordable socrent fordable socrent 0.1 0.3 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 <</th><th>ffordable soc rent fordable soc rent fordable shoship 0.2 0.6 <th< th=""><th></th><th>fordable soc rent fordables soc rent fordables hoship continuation 0.1 0.5 0.6</th></th<><th>ffordable socratit fordable socratit fordable sho ship ordatit market other 0.2 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 fordable sho ship other 0.1 0.3 0</th><th>findable soc rent fordable soc rent for for for for for for for for for for</th><th>findable soc rent for dable soc rent for dable</th><th>findable sortent fordable sortent contranstet other market 0</th><th></th></th></th<>	ffordable socrent fordable socrent 0.1 0.3 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 <	ffordable soc rent fordable soc rent fordable shoship 0.2 0.6 <th< th=""><th></th><th>fordable soc rent fordables soc rent fordables hoship continuation 0.1 0.5 0.6</th></th<> <th>ffordable socratit fordable socratit fordable sho ship ordatit market other 0.2 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 fordable sho ship other 0.1 0.3 0</th> <th>findable soc rent fordable soc rent for for for for for for for for for for</th> <th>findable soc rent for dable soc rent for dable</th> <th>findable sortent fordable sortent contranstet other market 0</th> <th></th>		fordable soc rent fordables soc rent fordables hoship continuation 0.1 0.5 0.6	ffordable socratit fordable socratit fordable sho ship ordatit market other 0.2 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 fordable sho ship other 0.1 0.3 0	findable soc rent fordable soc rent for for for for for for for for for for	findable soc rent for dable	findable sortent fordable sortent contranstet other market 0	

TOTALS		7,712	331 246	313	0	-283	8,572		350	11	10 370	3,403	425	213	213	0 106	4,361	436	430	972	436	0	430	430 26	10	36	283	6,888	1,684				-315	1,369
Q4		0	0 0		0	0	0					0	0	0 0	0 0		>				0	0	0			0	0	0	0	1,370	1,370	0.00%	0	1,370
Q4		0	2 0		00	0	0					0	0	0 0	0 0	5 0	þ	c	D		0	0	0			0	0	0	0	1,370	1,370	0.00%	0	1,370
03		925	40 26	38 20	0	-34	1,029					0	0	0 0	0 0		þ	c	Э		0	0	0			0	34	34	995	350	1,345	7.50%	25	1,370
62		925	40 26	38	0	-34	1,029					0	0	0 0	0 0		þ	c	D		0	0	0			0	34	34	995	-651	344	7.50%	9	350
Year 4 Q1		925	40	38 20	0	-34	1,029					408	51	26 26	50 50	⊃ ¢	2	c	D		52	0	0			0	34	610	419	-1,058	-639	7.50%	-12	-651
Q4		925	40	38 20	0	-34	1,029					408	51	26 20	56 26	⊃ ¢	2	c	>		52	0	0			0	34	610	419	-1,458	-1,039	7.50%	-19	-1,058
Q 3		925	40 96	38 20	0	-34	1,029					408	51	26 20	56	⊃ ¢	2	ç	70		52	0	52			0	34	713	315	-1,746	-1,431	7.50%	-27	-1,458
Q2		925	40 26	38 20	0	-34	1,029					408	51	26 26	56 26	⊃ ç	2	ç	70		52	0	52			0	34	713	315	-2,029	-1,714	7.50%	-32	-1,746
Year 3 Q1		925	40 26	38 20	0	-34	1,029					408	51	26 26	26 2	⊃ ¢	2	ç	70		52	0	52			0	34	713	315	-2,307	-1,992	7.50%	-37	-2,029
Q4		925	9 %	8 8	0	-34	 1,029					408	51	5 28	8	- ¢	2	Ę	70		52	0	52			0	8	713	 315	-2,580	-2,265	7.50%	-42	-2,307
0 3		308	<u>5</u>	ء 13 م	0	-11	343					408	51	26 26	26 2	⊃ ¢	2	ç	70		52	0	52			0	11	691	-348	-2,185	-2,533	7.50%	-47	-2,580
03		0	0 0		0	0	0					408	51	20 50	28 28	⊃ ¢	2	Ę	20		52	0	52			0	0	680	-680	-1,465	-2,144	7.50%	40	-2,185
Year 2 Q1		0	0 0		0	0	0					136	17	б (თ ი	⊃ ≂	r	ç	70		17	0	52			0	0	296	-296	-1,142	-1,438	7.50%	-27	-1,465
Q4		0	0 0		0 0	0	0					0	0	0 0	0 0		>	109	70		0	0	52			0	0	213	-213	-908	-1,121	7.50%	-21	-1,142
0 3		0	5 0		0	0	0					0	0	0 0	0 0		>	109	11		0	0	17	σ	b	0	0	152	-152	-739	-892	7.50%	-17	806-
62		0	2 0		0 0	0	0					0	0	0 0	0 0	5 0	þ	109	- f	20	0	0		σ	>		0	168	-168	-558	-726	7.50%	-14	-739
Year 1 Q1		0	2 0		0 0	0	0		350	1	10	0	0	0 0	0 0	5 0	þ	109	- 2	20	0	0		σ	10		0	548	-548	0	-548	7.50%	-10	-558
rate																2 E0/2	0/0.3	10.0%	10.U%	2%	10.0%	0.0%		F515	£200	£0						7.50%		
		Market housing	Affordable soc rent	Discount market	Aff other	Sales fees			Land acquisition	Stamp duty	Purchase fees Total	Market housing	Affordable soc rent	Affordable sh oship	Discount market	All Other Build contingency	Total	Upfront	Build related	Abnormals Total	Fees on build costs	Fees on dev costs	Planning gain	l otal Planning	Survey	Marketing Total	b/forward from above		s from quarter	om last quarter	rfit/loss	Charged at	Total	eveloper profit rd to RV calc
	INCOME	Housing sales					Total income	COSTS	Land			Build costs						Dev costs			Fees		PG	Other			Sales fees	Total costs	Net profit/loss	Profit/loss bf fr	Cumulative pro	Interest		Cumulative de carried forwar

SITE A2A CASH FLOW AFFORDABLE

SITE A3: East of Farcroft Meadows Market Drayton



Input assumptions	Scenario & option	Affordable 20% = 10%	social rented 5% inte	ermediate 5% dis	scount mar	ket		
Shropshire viability study		Dwellings						
Site details				ave floor spac	e	build	sales	
Site A3 E of F	arcroft Meadows	Dwellings		gross	net	cost	value	
Area ha 1.25	rayron	Market housing	36.0 80.00%	<i>sq п</i> 858	sq п 858	per sq m 81.50	170.00	
acres 3.09	-	D				0.0%		
No dwgs 45		Affordable soc rent	4.5 10.00%	858	858	81.50	65.00	
Density dw/ha 36.0				-	-	0.0%		
		Affordable sh oship	2.3 5.00%	858	858	81.50 0.0%	85.00	
		35% Discount market	2.3 5.00%	858	858	81.50	110.50	
]			0.0%		
	ā	Aff other	0.0 0.00%	0	0	81.50	250.00	
Contingency	£Κ	Total	45.0 100.00%	38,610	38,610	£3,146,715	£5,879,338	
allowance 2.50%	62	,					-	
	I	Floorspace density	= 12,500 n	et sq ft per acre				
Development costs	ŗ							
standard % build 20.00%	645	Other costs						
		Planning	515.0	£ per dwelling	_			
			Q	Contraction of the second s				
plus abnormals 0.0%	0	Survey	200	£ per dwelling	_			
	,							
		Modiochica		C south the set				
Total 20%		магкештд	Þ	z per awelling	_			
Docion food								
Design rees on build costs 10.0%	323	Interest						
	070	% per annum	7.50%					
on day crosts								
		Notes					ſ	
·······································								
Flanning gain £ per dwelling 9,200	414							
]	

Page 102

																			S
	Lai	pu																	ITE A
							Ĕ	erate to	achiev	e 20.0%	brofit			Loctor					3 LA
								Afforda	able	No	affordab	e A	ffordable		affordat	ble			ND
	Lan	id purchase	e price				£	-58,18	84	5	78,527								со
	RV	per acre					ы	-18,8;	37	0,	90,175	Ŧ	E46,547	сн L	222,82	-			ST 8
	Dev	/ profit					ы	942,5	60	1,0	075,138								& PH/
	Tot	al costs					ے ب	4,937,8	878	2,0	374,748	~[ASIN
	pro	fit as % of	costs					19.09	%	~	%00.02								G
Program	me	Year 1 Q1	02	Q3	Q4	Year 2 Q1	Q2	03	Q4	Year 3 Q1	Q2	Q 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS	
Units	Market housing			2.4	4.8	4.8	4.8	4.8	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	36.0	_
started	Affordable soc rent			0.3	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	4.5	
	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	2.3	
	Aff other			0.0	0.0	0.0	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	•	e	9	9	9	9	9	9	9	0	0	0	0	0	0	45.0	
Units 'built'	Market housing			0	0	2	5	5	5	£	5	S	5	0	0	0	0	36	
+2Q	Affordable soc rent			0	0	0	-	-	-	-	.	Ł	-	0	0	0	0	5	
	Affordable sh oship Discount market			0 0	0 0	0 0	0 0	0 0	0 0	0 0	00	00	0 0	0 0	0 0	0 0	0 0	00	
	Aff other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Units complete	Market housing				0	0	2	5	5	5	Ŋ	5	5	5	0	0	0	36	
+30	Affordable soc rent				0	0	0	~	~	~	-	~	-	~	0	0	0	5	
	Affordable sh oship Discount market				0 0	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 0	
	Aff other				0 0	00	00	00	00	00	00	00	0 0	00	00	00	00	10	
Units	Market housing					0	0	2	5	5	5	5	5	5	5	0	0	36	_
purcnasi +40	Affordable soc rent					0	0	0	÷	÷	Ţ	Ţ	-	.	.	0	0	5	
	Affordable sh oship					0	0	0	. 0	0	. 0	. 0	0	0	0	0	0	5	
	Discount market					00	00	00	00	00	00	00	00	00	00	00	0 0	2 10	

Appendix 6: Stage 1 Viability Results

Year 4	Q1 Q2 Q3 Q4		700 700 0 0	33 33 0 0	22 22 0	28 28 0 0 0 0 0	-26 -26 0 0	784 784 0 0					0 0 0			0 0 0	0 0 0		0 0 0		0 0 0	0 0 0	0 0 0				26 26 0 0 26 26 0 0	758 758 0 0	-594 167 943 943	164 925 943 943	7.50% 7.50% 0.00% 0.00%	3 17 0 0	167 943 943 943
	Q3 Q4		700 700	33 33	22 22	28 28 0 0	-26 -26	784 784					336 336	42 42	21 21 21 21	0	10 10		0		43 43	0	0		c		26 26 499 499	285 285	4 -1,138 -869	7 -853 -584	6 7.50% 7.50%	-16 -11	8 -869 -594
Year 3	Q1 Q2		700 700	33	22	28 0 0	-26 -26	784 784					336 336	42 42	21 21 21	0	10 10		43 43		43 43	0	55 55		6		26 26 26 26 26 26	187 187	7 -1,467 -1,304	0 -1,280 -1,117	% 7.50% 7.50%	-24 -21	1,304 -1,136
	03 Q4		350 700	17 33	11 22	14 28 0 0	-13 -26	392 784					5 336 336	42 42	21 21 21	0	10 10		43 43		43 43	0	55 55		c	5	1 584 597	1 -192 187	8 -1,405 -1,62	79 -1,597 -1,44	% 7.50% 7.50%	3 -30 -27	05 -1,627 -1,46
Year 2	01 02		0	0	0 0		0	0					168 336	21 42	10 21	0	5 10		43 43		22 43	0	55 55		0	5	0 0 335 571	9 -335 -57	-458 -80	793 -1,37	% 7.50% 7.50	-15 -26	8 -808 -1,40
	Q3 Q4		0	0	0 0		0	0 0					0			0	0	81 81	22 43		0	0	28 55	œ	c		0 0 137 179	-137 -17	-129 -27'	-266 -450	2.50% 7.50	-5	-271 -45
Year 1	Q1 Q2		0	0	0 0		0	0		-58	0 (7-	0	0 0		0	0	81 81	0	0	0 0 %	0		8	6		0 0 38 88	-38 -88	0 -38	-38 -127	% 7.50% 7.50%	-1 -2	-38 -129
	rate		arket housing	fordable soc rent	fordable sh oship	scount market tother	les fees			nd acquisition	amp duty	tal	arket housing	fordable soc rent	scount market	fother	ild contingency 2.5%	front 10.0%	ild related 10.0%	normals 0% tal	es on build costs 10.0%	es on dev costs 0.0%	anning gain	anning £515	rvey £200	tal	orward from above	om quarter	last quarter	oss	arged at 7.50%	ital	loper profit
		INCOME	Housing sales Ma	Aff	Aff	Aff	Sak	Total income	COSTS	Land Lar	Sta	Tot	Build costs Ma	Atte	Dis	Aff	Bui	Dev costs Upi	Bui	Abi	Fees Fee	Fee	PG Pla	Other Pla	Sur	Tot	Total costs b/t	Net profit/loss fro	Profit/loss bf from I	Cumulative profit/lo	Interest Chi	Tot	Cumulative develo

SITE A3 CASH FLOW AFFORDABLE

SITE A5: Montgomery Way Shrewsbury



		sales value per sq ft	175.00	65.00	85.00	113.75	250.00	£692,236									
		build cost per sq ft	93.00 0.0%	93.00 0.0%	93.00 93.00	0.0% 93.00	0.0% 93.00	£411,525									
		space net sq ft	885	885	885	885	0	4,425	e		ling	ling	guil				
		ave floor s gross sq ft	885	885	885	885	0	4,425	et sq ft per ac		£ per dwel	£ per dwel	£ per dwel				
			80.00%	10.00%	5.00%	5.00%	%00.0	100.00%	13,775 ne		515.0	200	0	7.50%			
			4.0	0.5	0.3	0.3	0.0	5.0	"			_	•				
Affordable 20%	Dwellings	Dwellings	Market housing	Affordable soc rent	Affordable sh oship	Discount market	Aff other	Total	Floorspace density		Other costs Planning	Survey	Marketing	Interest % per annum	Notes		
rio & option		Way				35%	;	XH Y	5		53	0		42		10	
ons Scena	ility study	A5 Montgomery Shrewsbury	0.13 0.32	38 F					%009.27 200		ld 12.50%	ls 0.0%	13%	ts 10.0%	%0	2,000	
Input assumptic	Shropshire viab	Site details Site Location	Area ha acre	No dwgs Density dw/ha				Contingency	allowanc	Development costs	standard % bui	plus abnorma	Total	Design fees on build cos	on dev costs	Planning gain £ per dwelling	

Page 106

SITE A	5 LA	ND	СО	ST 8	k PHA	SIN	١G																	
								TOTALS	4.0	0.5	0.3	0.0	5.0	4	-	0 0	00	4		00	04	÷	00	00
								Q4	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	c		00
		able		34				Q3	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	C		00
	-	re lo afford		£377,4				8	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	C		00
		hecta le N						Year 4 Q1	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	C		00
		Affordat		£59,75				Q4	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	c		00
		able		ى ما	G	<u>س</u>		Q3	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	c		00
	% profit	afforda	49,066	152,74	127,40	634,09	20.09%	02	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	00	C		00
	/e 20.0	No			•			Year 3 Q1	0.0	0.0	0.0	0.0	0	0	0	0 0	00	0	0	00	0 0	C		00
	o achiev	able	38	81	360	251	1%	Q4	0.0	0.0	0.0	0.0	0	0	0	0 0	00	2	0	00	0 0	C		00
	erate to	Afford	7,76	24,1	110,6	582,2	19.0	Q3	0.0	0.0	0.0	0.0	0	2	0	0 0	00	2	0	00	⊃ -	c		00
			£	ы	ъ	ы		Q2	0.0	0.0	0.0	0.0	0	2	0	0 0	00	٢	0	00	00	C		00
								Year 2 Q1	1.6	0.2	0.1	0.0	2	-	0	0 0	00	0	0	00	00	C		00
								Q4	1.6	0.2	0.1	0.0	2	0	0	0 0	00	0	0	00	D			
								Q3	0.8	0.1	0.1	0.0	-	0	0	0 0	00							
			ase price				of costs	Q2					0											
pc			d purche	per acre	r profit	al costs	fit as %	Year 1 Q1					0											
Lar			Lan	RV	Dev	Tot	pro		Market housing	Affordable soc rent	Attordable sh oship Discount market	Aff other	TOTAL	Market housing	Affordable soc rent	Affordable sh oship	Aff other	Market housing	Affordable soc rent	Affordable sh oship Discount market	Arr other Market housing	Affordable socrent	Affordable sh oship	Aff other
								Programme	Units started			. ~		Units 'huilt'	+20		- X	Units completed	+30		Units	purchased	5	14

		rate	Year 1	6	03	D4	Year 2	02	0.3	70	Year 3 01	0	03	04	Year 4 01	0	03	70	04	TOTALS
		Jaio	ÿ	ž	3	ţ	ž	Y X	C X	5	ž	ş	3	t X	ÿ	ž	Ş	ţ	ţ	
INCOME																				
Housing sales	Market housing		C	C	C	c	C	C	124	248	248	C	C	c	C	C	C	c	c	620
	Affordable soc rent		0 0	0 0	0 0	0 0	0 0	0 0	9	12	12	0 0	0 0	0 0	0 0	0 0	0 0	0	0	29
	Affordable sh oship		0	0	0	0	0	0	4	80	ω	0	0	0	0	0	0	0	0	19
	Discount market		00	00	00	00	00	00	ъ с	2 c	9 0	00	00	0 0	00	00	00	00	00	55
	Sales fees		0					00	- P	- 6-	o 6	0	0		00		0			-23
																	•	•	•	
Total income			0	0	0	0	0	0	138	277	277	0	0	0	0	0	0	0	0	692
COSTS																				
Land	Land acavisition		œ																	8
	Stamp duty		0 0																	0 0
	Purchase fees		0																	00
Build costs	Market housing		C	C	C	c	99	132	132	c	C	C	C	C	C	C	C	c	c	329
	Affordable soc rent		00	00	00	0 0	3∞	16	16	0 0	0 0	00	00	0 0	0 0	00	00	0	0	41
	Affordable sh oship		0	0	0	0	4	80	80	0	0	0	0	0	0	0	0	0	0	21
	Discount market		0	0	0	0	4	ω,	∞ ,	0	0	0	0	0	0	0	0	0	0	21
	Aff other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 !
	Build contingency Total	2.5%	0	0	0	0	2	4	4	0	0	0	0	0	0	0	0	0	0	10 422
Dev costs	Upfront	6.3%	7	7	7	7														26
	Build related	6.3%	0	0	5	11	11	0	0	0	0	0	0	0	0	0	0	0		26
	Abnormals	%0	0	0																0
Fees	Fees on huild costs	10.0%	C	C	C	c	α	17	17	c	C	C	C	c	C	C	C	c	c	53
	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 0	0 0	0 0	0	0
0	Total																			42
5 D	Planning gain Total				N	4	4	0	0	0	0	0	0	0	0	0	0	0	0	10 10
Other	Planning	£515	÷	.	÷															2 m
	Survey	£200	-																	-
	Marketing Total	£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	04
Sales fees	b/forward from above		0	0	0	0	0	0	5	ი	6	0	0	0	0	0	0	0	0	23
Total costs			16	7	15	21	107	186	190	6	6	0	0	0	0	0	0	0	0	561
Net profit/los:	s from quarter		-16	-7	-15	-21	-107	-186	-52	268	268	0	0	0	0	0	0	0	0	131
Profit/loss bf fr	om last quarter		0	-17	-24	-40	-62	-173	-365	-424	-159	111	111	111	111	111	111	111	111	
Cumulative pro	ofit/loss		-16	-24	-39	-61	-169	-358	-416	-156	109	111	111	111	111	111	111	111	111	
			2	i	3	;	2	3		2										
Interest	Charged at Total	7.50%	7.50% 0	7.50% 0	7.50% -1	7.50% -1	7.50% -3	7.50% -7	7.50% -8	7.50%	7.50% (2	0 0	0.00%	0.00% 0	0.00%	0.00% 0	0.00% 0	0.00%	0.00%	-21
Cumulative d	eveloper profit		-17	-24	-40	-62	-173	-365	-424	-159	111	111	111	111	111	111	111	111	111	110
carried forwa	rd to RV calc																	<u> </u>		

SITE A5 CASH FLOW AFFORDABLE

SITE A9: Station Rd Ditton Priors



Input assumptions	Scenario & option	Affordable 20						
Shronshira viahility stu		Duallinas						
	(h)	Dweilings						
Site details				ave floor sp	ace	build	sales	
Site A9 Sta	ation Rd	Dwellings		gross	net	cost	value	
Location Ditton	Priors)000 000 1	sq ft	sq ft	per sq ft	per sq ft	
Area na <u>0.1</u> .	4	Market nousing	%00.08 9.c	CZ8	GZ8	88.00	00.681	
No dwds 7		Affordable soc rent	0.7 10.00%	825	825	88.00	65.00	
Density dw/ha]_			270	050	0.0%	2000	
		Affordable sh oship	0.4 5.00%	825	825	88.00	85.00	
]			0.0%		
		35% Discount market	0.4 5.00%	825	825	88.00	126.75	
					,	0.0%		
	ć	Aff other	0.0 0.0%	0	0	88.00	250.00	
Contingency	YI	Total	7.0 100.00%	5,775	5,775	£508,200	£999,580	
allowance 2.50	13				-			
		Floorspace density	= 16,694 ne	et sq ft per acre	0			
Development costs	f							
standard % build 15.00	78	Other costs						
		Dianning Planning	515.0	f ner dwellir	D			
		0			ņ			
		Survey	200	£ per dwellir	Ъ			
plus abnormals 0.05	0							
		Marketing	C	f ner dwellir	D			
Total 15%	0	0	, _		ņ			
Design tees	2	Interact						
	70	% ner annim	7 50%					
on dev costs 0%								
		Notes						
Planning gain								
£ per dwelling 2,00	14							



4 TOTALS		901	38	25	37	- 22	6	1.000	2001		94	-	ო წ	98	0 1	25	25	0	13	2 7	30.00	0	78	52	22 0	14	4	r - -	01	33 9	801	199	0	0	3% -40	0 159	
ŏ		0	0	0	00			C	'					C				0	0					0	0	0			0	0	0	0	16	16(% 0.00 0	16	
Q4		0	0	0	00		>	c	,					c		0 0	0	0	0		0	•		0	0	0			0	0	0	0	160	160	0.00%	160	
Q3		0	0	0	00		5	c	,					c		00	00	0	0		0	,		0	0	0			0	0	0	0	160	160	0.00% 0	160	
Q2		0	0	0	00		5	c	,					c		0 0	0	0	0		0	•		0	0	0			0	0	0	0	160	160	0.00% 0	160	
Year 4 Q1		0	0	0	00		5	c	,					c		00	00	0	0		0	,		0	0	0			0	0	0	0	160	160	0.00% 0	160	
Q4		0	0	0	00	5 0	>	C	,					c		0 0	0	0	0		0	,		0	0	0			0	0	0	0	160	160	0.00% 0	160	
0 3		0	0	0	00		5	c	,					c		00	00	0	0		0	,		0	0	0			0	0	0	0	160	160	0.00% 0	160	
Q2		257	11	7	90	0 9	D	286	2024					c		00	0 0	0	0		0	,		0	0	0			0	თ	6	276	-119	157	7.50% 3	160	
Year 3 Q1		257	1	7	9 0	- q	ņ	286	224					c		00	00	0	0		0	,		0	0	0			0	6	6	276	-394	-117	7.50% -2	-119	
Q4		257	1	7	9 0	- q	ה י	286	3					110	2 ¥	2 ~	. ~	0	4		0)		15	0	0			0	6	173	112	-499	-386	7.50% -7	-394	
Q3		129	5	4	ю с	ъч	ç	143	2					446	0 1 1	2	. ~	0	4		0	,		15	0	0			0	5	168	-26	-464	-490	7.50% -9	-499	
02		0	0	0	00		5	c	,					110	150	2	. ~	0	4		11			15	0	4			0	0	179	-179	-277	-456	7.50% -9	-464	
Year 2 Q1		0	0	0	00		þ	c	,					01	96 P	- 4	4	0	0		11			7	0	4			0	0	97	-97	-175	-272	7.50% -5	-277	
Q4		0	0	0	00		5	c	,					c			0	0	0	10	2 5	:		0	0	4			0	0	25	-25	-147	-172	7.50% -3	-175	
Q3		0	0	0	00		5	c	,					c		0 0	0	0	0	0	<u>2</u> 9	,		0	0	2	Ŧ	-	0	0	19	-19	-125	-144	7.50% -3	-147	
02		0	0	0	00	5 0	5	c	,					c		- c	0 0	0	0	10	2 0	0 0		0	0		Ţ	-		0	11	-11	-112	-123	7.50% -2	-125	
Year 1 Q1		0	0	0	00		5	c	,		94	-	ო	c		0 0	0 0	0	0	10	2 0	0 0		0	0		Ţ			0	110	-110	0	-110	7.50% -2	-112	
rate																			2.5%	7 60/	7.5%	%0		10.0%	0.0%		FE1E	500 5700	£0						7.50%		
		Market housing	Affordable soc rent	Affordable sh oship	Discount market	All Other Salas faas	Cales lees				Land acquisition	Stamp duty	Purchase fees	I otal Markat housing	Affordable sor rant	Affordable sh oship	Discount market	Aff other	Build contingency	I otal	Build related	Abnormals	Total	Fees on build costs	Fees on dev costs Total	Planning gain	l otal Dianning	Survey	Marketing	b/forward from above		s from quarter	om last quarter	fit/loss	Charged at Total	sveloper profit	ם נט הע כמוט
	INCOME	Housing sales						Total income		COSTS	Land			Duild conto						Dov coete				Fees		РС	Other			Sales fees	Total costs	Net profit/loss	Profit/loss bf fro	Cumulative prot	Interest	Cumulative de	Calilieu IU wai

SITE A9 CASH FLOW AFFORDABLE

SITE C2: Royal Shrewsbury Hospital Shrewsbury



Scenario & option
ð
Mark
Affor
Affor
35% Disc
Aff o
Tota
Floor
_
Other
Plannic
Survey
Marketi
Interes % per a
Notes
l

SITE C2 LAND COST & PHASING									_				_		
	TOTALS	100.0	12.5 6.3	6.3 0.0	125.0	100	13	<u>ں</u> م	0 0	100	13 6	90	100	ი ი ე	0
	Q4	0.0	0.0	0.0	0	0	0	0 0	0	10		- 0	10		0
	Q 3	0.0	0.0	0.0	0	10	. .	~ ~	0	10		- 0	10		0
affordab 237,94	02	0.0	0.0	0.0 0.0	0	10	 .	~ ~	0	10		- 0	10		0
ectare No 8 £1,	Year 4 Q1	9.6	1.2 0.6	0.6 0.0	12	10	. .	~ ~	0	10		- 0	10		0
ordable 89,995	Q4	9.6	1.2 0.6	0.6 0.0	12	10	ر -	~ ~	. 0	10		- 0	10		0
	Q 3	9.6	1.2 0.6	0.6 0.0	12	10	. .	~ ~	0	10		- 0	10		0
profit fordable 0,988 68,018 557,573	Q2	9.6	1.2 0.6	0.0 0.0	12	10	. .	~ ~	. 0	10		- 0	10		0
20.0% No a; 50 3,8 19,2	Year 3 Q1	9.6	1.2 0.6	0.0 0.0	12	10	 .	~ ~	. 0	10		- 0	10		0
achieve N17 86 86 86 86 86 86 86 86 86 86 86 86 86	Q4	9.6	1.2 0.6	0.6 0.0	12	10	. .	~ ~	0	10		- 0	10		0
Affordat 2,290,9 319,70 3,323,4 7,476,3 19.02%	0 3	9.6	1.2 0.6	0.6 0.0	12	10		~ ~	. 0	10		- 0	4	-00	0
ын нн Б	Q2	9.6	1.2	0.0 0.0	12	10	 .	~ ~	0	4	- 0	00	0	000	0
	Year 2 Q1	9.6	1.2 0.6	0.6 0.0	12	4	 (0 0	0	0	00	00	0	000	0
	Q4	9.6	1.2 0.6	0.6 0.0	12	0	0	0 0	0	0	00	00			
	Q 3	4.0	0.5	0.3 0.0	5	0	0	0 0	0						
se price f costs	Q2				0										
d 1 purchas Der acre profit I costs it as % o	Year 1 Q1				0										
Lanc Lanc RV p Dev Total	6	Market housing	Affordable soc rent Affordable sh oship	Discount market Aff other	TOTAL	Market housing	Affordable soc rent	Affordable sh oship Discount market	Aff other	Market housing	Affordable soc rent Affordable sh oship	Discount market Aff other	Market housing	Affordable soc rent Affordable sh oship Discount market	Aff other
	Programme	Units started				Units 'built'	+2Q			Units completed	+30		Units	purchased +4Q	
$\bigcap \cap$															

TOTALS		18,829	729	4/0 765	0	-689	20,799		2,291	92 63	2,446	7,647	956	470 622	0	485	713 713	713	100	1,526	0	1,019	200	57	63	120	689	16,488	1 311	4,01			1	686-	3,322
Q4		0	00	00	0	0	0					0 0	0 0	00	0 0	0				C	00	c	þ		c	>	0	•	-	-	3,323	3,323	0.00%	0	3,323
Q4		1,808	20	40 73	0	-66	1,997					0 0	0 0	0 0	0	0		0		c	00	c	5		c	5	66	99	1 021	1,301	-563	1,367	7.50%	26	1,393
Q 3		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		0		9,0	30	c	2		c	5	66	1,142	<u> 966</u>	000	-1,408	-553	7.50%	-10	-563
8		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		0		Вр	30	c	þ		c	2	99	1,142	BEE	600	-2,236	-1,382	7.50%	-26	-1,408
Year 4 Q1		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		68		80	30	07	f		c	>	99	1,259	738	1.30	-2,934	-2,195	7.50%	-41	-2,236
Q4		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		68		80	30	10	f		c	>	99	1,259	738	000	-3,618	-2,880	7.50%	-54	-2,934
Q3		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		68		80	30	10	f		c	5	66	1,259	738	1.30	-4,289	-3,551	7.50%	-67	-3,618
02		1,808	20	40 73	0	-66	1,997					734	92 46	60	0	47		68		98	30	90	P		c	5	99	1,259	728	002	-4,949	-4,211	7.50%	62-	-4,289
Year 3 Q1		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		68		98	30	10	ç		c	5	66	1,259	738	1.30	-5,596	-4,858	7.50%	-91	-4,949
Q4		1,808	20	40 73	0	-66	1,997					734	92 46	60 60	0	47		68		80	30	10	f		c	>	99	1,259	738	000	-6,231	-5,493	7.50%	-103	-5,596
0 3		753	59	31	0	-28	832					734	92 4	9 9 09	0	47		68		go	30	9	?		c	5	28	1,220	188	00?-	-5,728	-6,116	7.50%	-115	-6,231
62		0	0 0	00	0	0	0					734	92 46	60 60	0	47		68		98	30	40	ç		c	5	0	1,192	-1 102	-1,132	-4,431	-5,623	7.50%	-105	-5,728
Year 2 Q1		0	0 0	00	0	0	0					306	38	25	0	19		68		41	0	01	P		c	5	0	565	-REF	COC-	-3,785	-4,349	7.50%	-82	-4,431
Q4		0	0 0	00	0	0	0					0 0	0 0	0 0	0 0	0	178	68		c	0 0	10	ç		c	>	0	295	-205	067-	-3,420	-3,715	7.50%	-20	-3,785
Q 3		0	0 0	00	0	0	0					0 0	0 0	00	0 0	0	178	29		c	00	00	204	19	c	5	0	246	346-	047-	-3,111	-3,357	7.50%	-63	-3,420
02		0	0 0	00	0	0	0					0 0	0 0	00	00	0	178	0	50	c	00			19			0	247	746-	1+7-	-2,807	-3,054	7.50%	-57	-3,111
Year 1 Q1		0	0 0	00	0	0	0		2,291	92 63	3	0 0	0 0	0 0	0 0	0	178	0	50	c	00			19	63		0	2,755	-0 766	cc1'7-	0	-2,755	7.50%	-52	-2,807
rate																5.0%	2.0%	7.0%	1%	10.0%	0.0%			£457	£500 £0	22							7.50%		
		Market housing	Affordable soc rent	Discount market	Aff other	Sales fees			Land acquisition	Stamp duty Purchase fees	Total	Market housing	Affordable soc rent	Discount market	Aff other	Build contingency	Linfront	Build related	Abnormals	Total Fees on build costs	Fees on dev costs	Total	Total	Planning	Survey	Total	b/forward from above		e from auerter	s ir oill quarter	rom last quarter	ofit/loss	Charged at	Total	leveloper profit Ird to RV calc
	INCOME	Housing sales					Total income	COSTS	Land			Build costs					Dev costs			Fees		C	0	Other			Sales fees	Total costs	Not profit/loc		Profit/loss bf fi	Cumulative pre	Interest		Cumulative d carried forwa

SITE C2 CASH FLOW AFFORDABLE

SITE A2(a): High St Garage Highley



Imptions Scenario & option	Affordable 20%					
lity study	Dwellings					
C4 High St Garage Himbler	Dwellings		ave floor s gross	bace net	build cost	sales value
0.19	Market housing	7.2 80.00%	809 809	809 809	89.00	180.00
6	Affordable soc rent	0.9 10.00%	809	809	89.00	65.00
+ - -	Affordable sh oship	0.5 5.00%	809	809	89.00	85.00
	35% Discount market	0.5 5.00%	809	809	0.0% 89.00	117.00
	Aff other	0.0 0.00%	0	0	0.0% 89.00	250.00
Ϋ́G	Total	9.0 100.00%	7,281	7,281	£648,009	£1,169,329
9.00%	Floorspace density	= 15,508 n	let sq ft per aci	ø		
_						
1 1 2 .00% 8 2	Other costs Planning	515.0	£ per dwell	ing		
50	Survey	500	£ per dwell	ing		
19%	Marketing	0	£ per dwell	ņg		
s 10.0% 68	Interest % per annum	7.50%				
%0	Notes					
2,000						
]

Shropshire Council Affordable Housing Site Viability Study

Page 118

	Lar	pu					Ite	erate to	achieve	20.0%	orofit	_						
								Affordat	ele	No a	fordable	¥¥ ₹	H. ordable	ectare No a	ffordable			
	Lan	id purchase	e price				ъ	-560			2,290			5				
	RV	per acre					ε	-1,192		15	3,976	မု 1	2,946	£3	80,474			
	Dev	/ profit					ы	186,57	, -	21	4,049							
	Tota	al costs fit as % of	costs				ц ц	983,43 18.97 [°]	<u>ر</u>	1,0	74,271							
Program	Ime	Year 1 01	6	50	PO	Year 2 01	6	60	PO	Year 3	6	6	70	Year 4	60	1 8	70	TOTALS
Units	Market housing	i	ł	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	0.0	7.2
started	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	0.9
	Affordable sh oship Discount market			0.2 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	0.0	0.0	0.5 0.5
	Aff other		L	0.0	0.0	0.0	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	e	m	e	0	0	0	0	0	0	0	0	0	0	0	9.0
Units built'	Market housing			0	0	2	2	2	0	0	0	0	0	0	0	0	0	7
+20	Affordable soc rent			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 0	0 0	0 0	0 0
	Discount market Aff other			00	00	00	00	00	00	00	00	00	0 0	00	00	00	00	00
Units	Market housing				0	0	2	5	2	0	0	0	0	0	0	0	0	7
+30	Affordable soc rent				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 0	0 0	0 0
	Discount market Aff other				00	00	00	00	0 0	00	00	00	00	00	00	00	0 0	00
Units	Market housing					0	0	2	7	7	0	0	0	0	0	0	0	7
+4Q	Affordable soc rent					0	0	0	0	0	0	0	0	0	0	0	0	~
	Affordable sh oship Discount market					0 0	00	0 0	0 0	00	00	00	00	0 0	00	0 0	0 0	00
	Aff other					0	0	0	0	0	0	0	0	0	· c			0

TOTALS	1,048 47 31 43 0	-38 1,169	7007	518 65 32 32 32 8 80	41 50 68 0 88	ვლიიი ი ვლიიიი ი	38 945	224	-38	186
Q4	00000	° °		000000	00	0 0	- -	0 187	187 0.00% 0	187
Q4	00000	• •		000000	0 00	0 0	° °	0 187	187 0.00% 0	187
0 3	00000	• •		000000	0 00	0 0	0 0	0 187	187 0.00% 0	187
03	00000	• •		000000	0 00	0 0	0 0	0 187	187 0.00% 0	187
Year 4 Q1	00000	• •		000000	0 00	0 0	0 0	0 187	187 0.00% 0	187
Q4	00000	o o		000000	0 00	0 0	• •	0 187	187 0.00% 0	187
Q3	00000	0 0		000000	0 00	0 0	• •	0 187	187 0.00% 0	187
62	00000	• •		000000	0 00	0 0	• •	0 187	187 0.00% 0	187
Year 3 Q1	349 16 14 0	-13 390		000000	0 00	0 0	13 13	377 -194	183 7.50% 3	187
Q4	349 16 14 0	-13 390		000000	0 00	0 0	13 13	377 -567	-190 7.50% -4	-194
Q3	349 16 14	-13 390		173 22 11 0 11	0 33 0	0 0	13 262	127 -684	-557 7.50% -10	-567
02	00000	o o		173 22 11 10	0 ²³ 0	0 0	0 249	-249 -422	-672 7.50% -13	-684
Year 2 Q1	00000	o o		173 22 11 0 11	0 23 14	9 O	0 269	-269 -146	-415 7.50% -8	-422
Q4	00000	• •		000000	0 0 4 0 0	9 O	- 8	-113	-143 7.50% -3	-146
Q 3	00000	o o			0 t 0 0	0 7 0	31 0	-80 -80	-111 7.50% -2	-113
62	00000	• •		000000	00 25 00 25	2	0 37	-37 -42	-78 7.50% -1	-80
Year 1 Q1	00000	0 0	<u>-</u> 00	000000	0 0 ² 5 0 0	2 2	0 1	- 41	-41 7.50% -1	-42
rate				5.0%	6.0% 6.0% 7% 10.0%	£515 £500 £0			7.50%	
	Market housing Affordable soc rent Affordable sh oship Discount market Aff other	Sales fees	Land acquisition Stamp duty Purchase fees Total	Market housing Affordable soc rent Affordable sho ship Discount market Aff other Buld contingency Total	Upfront Build related Abnormals Fees on build costs Fees on dev costs	Planning gain Total Survey Marketing Total	b/forward from above	from quarter m last quarter	fit/loss Charged at Total	veloper profit d to RV calc
	INCOME Housing sales	Total income	COSTS Land	Build costs	Dev costs Fees	PG Other	Sales fees Total costs	Net profit/loss Profit/loss bf fro	Cumulative prof Interest	Cumulative de carried forward

SITE C4 CASH FLOW AFFORDABLE

SITE D1: Gay Meadow Shrewsbury



Scenario & option Affordable 20% = 10% social rented 5% intermediate 5% discount market	1y Dwellings	ave floor space build sales Meadow Dwellings gross net cost value bury saft saft per saft per saft	Market housing 124.8 80.00% 1,282 1,105 99.50 238.20	Affordable soc rent 15.6 10.00% 1,282 1,105 99.50 69.60	Affordable sh oship 7.8 5.00% 1,282 1,105 99.50 89.60	35% Discount market 7.8 5.00% 1,282 1,105 99.50 154.83	Aff other 0.0 0.00% 0 0 99.50 250.00	Ek Total Total 156.0 100.00% 199,992 172,380 £19,899,204 £36,155,240	Floorspace density = 26,030 net sq ft per acre		6 2,685 Other costs Planning 484.4 £ per dwelling	125 Survey 350 £ per dwelling	Marketing 0 £ per dwelling	2,066 Interest % per annum 7.50%	Notes	1,170
Scenario & option		eadow				359	i	EX	00 /		2,685	125		2,066		1,170
Input assumptions	Shropshire viability study	Site details Site D1 Gay M Location Shrewsbu	Area ha 2.68	No dwgs 156 156 E8 2				Contingency	allowance 3.80%	Development costs	standard % build 13.00%	plus abnormals 0.6%	Total 14%	Design fees on build costs 10.0%	on dev costs 0%	Planning gain £ per dwelling

	Га	put																
							<u> </u>	erate to	achieve	20.0%	profit		I	octare				
	- -	nd purché	ase price				ۍ ۲	Afforda	ble	No a 3.6	ffordable 17.666	e Aff	ordable	No	affordab	le		
	R	/ per acre					н Ц	176,01	1	54	6,287	54 	34,922	£1,	349,87	9		
	De	v profit					ы	5,781,2	69	6,7	05,188							
	To	tal costs ofit as %	of costs	(0			ц ц	30,375, 19.03	021	33,6	538,212) .93%	- - -						
Program	ше	Year 1 Q1	02	<u>0</u> 3	Q4	Year 2 Q1	Q2	Q3	Q4	Year 3 Q1	02	Q3	Q4	Year 4 Q1	Q2	03	Q4	TOTALS
Units	Market housing			12.8	16.0	16.0	16.0	16.0	16.0	16.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	124.8
started	Affordable soc rent			1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
	Affordable sh oship Discount market			0.8 0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8 7.8
	Aff other	c	c	0.0	0.0	0.0	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	07	27	2	04	2	07	74			>	>		S	0.00
Units 'built'	Market housing			0	0	13	16	16	16	16	16	16	16	0	0	0	0	125
+2Q	Affordable soc rent			0	0	7	0	7	7	7	7	2	7	0	0	0	0	16
	Affordable sh oship Discount market			0 0	0 0	~ ~	~ ~		~ ~	~ ~		~ ~		0 0	0 0	0 0	0 0	αα
	Aff other			0	0	0	0	. 0	0	. 0	. 0	. 0	. 0	0	0	0 0	0	0 0
Units	Market housing				0	0	13	16	16	16	16	16	16	16	0	0	0	125
+30	Affordable soc rent				0	0	2	7	2	7	2	2	2	2	0	0	0	16
	Affordable sh oship				0	0	-	-	-	-	-	-	-	-	0	0	0	ω
	Discount market Aff other				0 0	00	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0	00	00	00	∞ ⊂
Units	Market housing					0	0	13	16	16	16	16	16	16	16	0	0	125
+40	Affordable soc rent					0	0	0	7	7	2	2	0	0	0	0	0	16
	Affordable sh oship Discount market					00	00		~ ~			~ ~			~ ~	00	00	∞∞
	Aff other					0	0	0	0	0	0	0	0	0	0	0	0	0

		rate	Year 1 Q1	8	Q3	Q4	Year 2 Q1	60	Q3	Q4	Year 3 Q1	Q2	Q3	04	Year 4 Q1	02	Q3	Q4	Q4	TOTALS
INCOME																				
Housing sales	Marbat housing		c	c	c	c	c	c	360	101	1 244	1 211	101	101	1 211	1 211	c	c	c	37 8/10
	Affordable soc rent		00	00	00	0	00	00	123	154	154	154	154	154	154	154	0 0	0	0	1,200
	Affordable sh oship		0 0	0 0	0 0	0 0	0 0	0 0	62	66	66	66	66	66	66	66	0 0	0 0	0 0	772
	Ulscount market Aff other		00	00	00	00	00	00	13/	0	50	0	0	0	50	0	0 0	0 0	00	1,334 0
	Sales fees		0	0	0	0	0	0	-123	-154	-154	-154	-154	-154	-154	-154	0	0	0	-1,201
Total income			0	0	0	0	0	0	3,708	4,635	4,635	4,635	4,635	4,635	4,635	4,635	0	0	0	36,155
COSTS																				
Land	Land acquisition		1,166																	1,166
	Stamp duty		47																	47
	Purchase rees		32																	32 1,244
Build costs	Market housing		0	0	0	0	1,633	2,041	2,041	2,041	2,041	2,041	2,041	2,041	0	0	0	0	0	15,919
	Affordable soc rent		0 0	0 0	0 0	0 0	204	255	255	255	255	255	255	255	0 0	0 0	0 0	0 0	0 0	1,990
	Attordable sh oship		0 0	0 0	00	0 0	102	128	128	128	128	128	128 128	128 128	0 0	0 0	0 0	0 0	0 0	995 005
	Aff other						70 C	07 0	07 0	07 0	<u>8</u> c	07 0	0 <u>7</u> C	07 0						0
	Build contingency	3.8%	00	00	00	00	78	97	97	97	97	97	97	97	00	00	00	00	00	756
	Total																			20,655
Dev costs	Upfront	6.5%	336 2	336	336	336							c		¢	c	c	¢		1,343
	Build related	6.5%	0 8	0 8	138	172	172	172	172	172	172	172	0	0	0	0	0	0		1,343 405
	Abnormals Total	1%	29	29																125 2,810
Fees	Fees on build costs	10.0%	0	0	0	0	212	265	265	265	265	265	265	265	0	0	0	0	0	2,066
	Fees on dev costs	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 2 066
PG	Planning gain				120	150	150	150	150	150	150	150	0	0	0	0	0	0	0	1,170
	Total																			1,170
Other	Planning	£484 £260	25 66	25	25															76 66
	Marketing	£0	3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Color ford	Total		c	c	c	c	c	c	100	T L T			1	1			c	c	c	130
Total costs	b/iorward irorn above		1.722	423	619	658	2.652	3.235	3.358	3.389	3.389	3.389	3.067	3.067	154	154	- -	- -	- c	29.276
							Î											·	·	
Net profit/loss	s from quarter		-1,722	-423	-619	-658	-2,652	3,235	350	1,246	1,246	1,246	1,568	1,568	4,481	4,481	0	•	0	6,879
Profit/loss bf fr	om last quarter		0	-1,754	-2,218	-2,890	-3,614	-6,384	-9,800	-9,627	-8,537	-7,428	6,297	4,818	-3,310	1,193	5,781	5,781	5,781	
Cumulative pro	ofit/loss		-1,722	-2,178	-2,837	-3,548	-6,267	-9,619	-9,450	-8,380	-7,291	-6,182	4,729	-3,249	1,171	5,675	5,781	5,781	5,781	
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%	0.00%	1 000
	1 Utal		70-	Ŧ	ç	<i>i</i> p	0	001-	171-	101-	101-	0	0 0	- P	7	001	5	5	>	een'i-
Cumulative d	eveloper profit rd to RV calc		-1,754	-2,218	-2,890	-3,614	-6,384	-9,800	-9,627	-8,537	-7,428	6,297	4,818 -	3,310	1,193	5,781	5,781	5,781	5,781	5,780

SITE D1 CASH FLOW AFFORDABLE

FORDHAM RESEARCH