

Bradford Affordable Housing Economic Viability  
Assessment

For The City of Bradford Metropolitan District  
Council

FINAL REPORT

By  
Level

October 2010



## Executive Summary

### The Brief

Level has been appointed by the City of Bradford Metropolitan District Council (CBMDC) to complete an Affordable Housing Economic Viability Assessment to inform the development of affordable housing policy through the Local Development Framework (LDF). The Council's brief issued in May 2010 was to:

- Develop a robust, transparent and effective means of determining appropriate and justifiable affordable housing targets in the Bradford LDF;
- Test the viability of the findings from the Bradford Strategic Housing Market Assessment (SHMA) and provide evidence to develop and support future planning policies in the LDF;
- Produce recommendations on the viability of the proportion of affordable housing, site thresholds and tenure splits in different locations and on a range of different site types across the District.

The brief requires an assessment of the relevant costs and financial implications relating to house building across the District, including consideration of the Council's requirements for S106 and other planning gain requirements.

### Policy Background

The requirement to undertake viability assessments is derived from national policy guidance set out in PPS3 Housing<sup>1</sup> and the Government's housing policy statement 'Delivering Affordable Housing'<sup>2</sup>.

Paragraph 29 of PPS3 sets out the requirements for the development of affordable housing policy. It requires that affordable housing targets should reflect an assessment of the likely economic viability of land within an area, taking account of risks to delivery and drawing upon informed assessments of the likely levels of finance available for affordable housing and the level of developer contributions that can reasonably be secured.

The Yorkshire and Humber Plan 2008 was revoked by the Secretary of State for Communities and Local Government in July 2010. In this Plan, Policy H1 stated that approximately 50,000 new homes were required in Bradford between 2008 and 2026 to meet the need of the growing population and the increase in household formation. Policy H4 stated that the Region needed to increase the provision of affordable housing and required Local Development Frameworks to set targets for the amount of affordable housing to be provided.

CBMDC's current saved policy regarding affordable housing is contained within Policy H9 of the Replacement Unitary Development Plan 2005 and the Bradford City Centre Affordable Housing Supplementary Planning Document (SPD) 2008.

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<sup>1</sup> Planning Policy Statement 3: Housing, DCLG, November 2006

<sup>2</sup> Delivering Affordable Housing, DCLG, November 2006



## Methodology

In undertaking this affordable housing viability assessment, we have assessed the viability of a range of housing developments across the District using a residual valuation appraisal tool of the kind recommended in the Government's Delivering Affordable Housing statement. This is then used as the base for testing future cost and value scenarios using upside, middle and downside housing market growth scenarios during the Local Development Framework period. These future assessments take account of changes to property values, inflation, construction, rent and land values over the same timescale.

Our assessment is based on the viability of delivering affordable housing across a range of notional sites. These notional sites were selected in consultation with the Council and with reference to the work undertaken to inform the emerging Strategic Housing Land Availability Assessment. The following table outlines the range of notional sites and net densities assessed within this study.

	Net density (dwellings per hectare)					
<b>5 units</b>	20	35	50			
<b>10 units</b>	20	35	50	75		
<b>15 units</b>	20	35	50	75	120	
<b>50 units</b>	20	35	50	75	120	250
<b>150 units</b>		35	50	75	120	250
<b>500 units</b>		35	50	75		

The study considered affordable housing thresholds of 15, 10 and 5 units.

An assessment of the nature and extent of Value Areas within the District was undertaken. This involved desk top research using Land Registry data on achieved sales values in Bradford at a Postcode Sector level for each type of property (detached, semi detached, terraced and flats and maisonettes). In addition, this information was compared to other data sources (Rightmove, Find a Property and Mouseprice) to thoroughly check and confirm the values between areas and dwelling type. Nine Value Areas were identified, based on the distinctions in values that are achieved between Postcode Sectors that exist within the District.

In all cases, notional sites were assessed as coming forward in each of the nine value areas identified.

A 30% affordable housing target was initially assessed in all value areas. In cases where positive results were achieved a 40% affordable housing target was then tested. In cases where a non viable or marginally viable outcome was achieved with 30% affordable housing, 20% and if necessary 10%, affordable housing requirements were then assessed. An affordable housing tenure split of 70:30 social rented:intermediate has been assessed and, following consultation with the Council, intermediate housing was assumed to be shared ownership. On some occasions a 50:50 social rent:intermediate affordable housing tenure



mix and a tenure mix containing all intermediate or all social rented units has also been assessed.

Average build costs have been derived from the Royal Institute of Chartered Surveyors (RICS) Build Cost Information Service for Bradford at 17 July 2010. Section 106 costs have been applied to each unit (dependent upon scheme size, form of development e.g. flat/house) and are detailed in Section 3 of the report. These amounts are applied to each notional development as the baseline position.

For schemes of 500 units, S106/infrastructure costs have been assumed to be 150% of the baseline position to reflect the potential higher S106/infrastructure burden on sites of this size. Sensitivity testing on sites of this size has been undertaken at levels of 100% and 200% of this baseline level.

Actual S106 and infrastructure costs will vary from site to site depending upon location, proximity to existing services and the capacity of existing provision. Without modelling specific schemes, our policy based approach can therefore only provide guidance on the impact of higher levels of costs should these prove to be necessary.

The impact upon viability of all new housing achieving the relevant Code for Sustainable Homes at the relevant date of introduction has been assessed as detailed in Section 3 of this report. Further additional costs have also been assumed in relation to the delivery of developments to Lifetime Homes Standards as well as potential additional on site renewable energy requirements that the Council may seek at a future date. These costs are set out in detail in Section 3 of this report.

Schemes have been assessed using nil Social Housing Grant (SHG) as the default. When sensitivity testing, in certain circumstances, we have assumed SHG is available at three potential amounts per unit based on the form of affordable tenure. The grant per unit amounts that have been applied for some of the sensitivity testing is set out in section 3 of the main report.

### Land Value Assumptions

It is essential to establish a baseline to determine at which point land will come forward for development. In order for this to happen residual land values must exceed existing or alternative uses of the site.

All schemes have been tested against two key assessments of viability. The first is data regarding land values in the area, and takes into account an uplift in respect of 'hope' value.

In order to inform the land values that will be used as our first assessment of viability Level has:

- had regard to Valuation Office Agency Data regarding land values;
- sought feedback from stakeholders through the stakeholder engagement process;
- engaged Thornes Chartered Surveyors and Estate Agents to provide information on land values and recent land transactions undertaken in the District.



Our second test of viability examines the relationship between residual land value and gross development value. This assists in 'future proofing' this assessment and reflecting land owners differing expectations

Based on our assessments, we have taken a figure of between 18% and 30% Gross Development Value (dependent upon density and site size) as a test for the level at which Residual Land Value may need to reach in order to incentivise the landowner sufficiently to bring forward his parcel of land.

Using these two tests of viability simultaneously (benchmark land values and the RLV:GDV ratio), it is possible to inform a policy position that has flexibility and is relevant throughout the Core Strategy period to ensure deliverability.

Full details on the two tests of viability that have been used can be found in section 3 of the main report.

### Stakeholder engagement

A stakeholder questionnaire was forwarded to a list of over 120 key stakeholders identified by the Council. This included housebuilders, land owners, RSLs, agents and developers. In addition all stakeholders were invited to a stakeholder event held in July 2010.

Section 4 of the main report details the stakeholder engagement process whilst Appendix 4 outlines how the views and local knowledge of stakeholders helped to inform and shape this study.

As would be expected a range of responses were received from stakeholders. All of these responses have been considered and our report has attempted to test variables taking the views of respondents into account.

### Key Findings

Comprehensive analysis of the results of all notional schemes assessed can be found in sections 5-8 of the main report.

#### **General development sites in excess of 15 units**

A variety of notional development sites were assessed. The ability to deliver affordable housing varies dependent upon a number of factors including value area, level of S106 contribution, existing or alternative land values of the sites, market conditions, the Code for Sustainable Homes Level, scheme density and the availability of public subsidy.

The table shows the likely maximum amount of affordable housing that could be achieved over the life of the Core Strategy based upon the baseline position assessed within the results section. The percentages within this table are not based upon results of testing that have shown viability in very limited periods (one or two years) however it should be recognised that these affordable housing percentages will not apply to every site that is likely to come forward within each Value Area.



<b>Value Area</b>	<b>Baseline Position</b>  (Nil grant, S106 contributions at 100% of the baseline level, Code for Sustainable Homes Requirements as mandatory timescale, 70:30 social rent:intermediate affordable housing mix, Lifetime Homes allowance £600 per unit and additional sustainability requirement of £1,200 per unit)
<b>1</b>	40% affordable housing is the likely maximum amount that could be achieved
<b>2</b>	40% affordable housing is the likely maximum amount that could be achieved
<b>3</b>	30% affordable housing is the likely maximum amount that could be achieved
<b>4</b>	30% affordable housing is the likely maximum amount that could be achieved
<b>5</b>	30% affordable housing is the likely maximum amount that could be achieved
<b>6</b>	20% affordable housing is the likely maximum amount that could be achieved
<b>7</b>	Between 10-20% affordable housing is the likely maximum amount that could be achieved
<b>8</b>	Between 0-10% affordable housing is the likely maximum amount that could be achieved
<b>9</b>	Between 0-10% affordable housing is the likely maximum amount that could be achieved

### Large sites (500 units)

A notional 500 unit site has been tested at three different development densities in all value areas.

Testing has demonstrated that the amount of affordable housing that could be delivered over the life of the Core Strategy varies significantly dependent upon value area and development density. The higher levels of S106 requirements assumed for sites of this nature also has an adverse impact upon the proportion of affordable housing that may be delivered.

Given the scale and phased nature of developments of this type, the Council may wish to negotiate affordable housing on a phased basis to take advantage of improvements to the viability position which may occur over time and/or in periods of market buoyancy.



### **Sites below 15 units**

We considered the ability of schemes of 5-14 units to deliver affordable housing. Our analysis found that it was possible to deliver affordable housing below the current PPS3 threshold, but that the proportion of affordable housing that could be viable differed dependent upon the location of development, its current or existing use, development density, the gross development value of the scheme and the form of affordable housing to be delivered (social rented or intermediate).

A site size threshold of 5 units on sites in higher value areas can produce developable, deliverable sites with affordable housing however the exact level will have to be determined at the point of application having due regard to the value area and the potential alternative/existing uses of the site. Within lower value areas, testing demonstrates that the majority of sites below 15 units are not capable of delivering affordable housing.

It should be considered that schemes of this size are also more sensitive than larger sites to assumptions about overall values and tenure mixes, thus relatively small scale increases/decreases in costs and values will have an impact upon sites of this size delivering affordable housing either on site or by commutation.

### **Commuted sum Methodology**

Any methodology for assessing commuted sum payments should be based on the equivalence principle supported by Circular 05/05, PPS3 and Delivering Affordable Housing. The commuted sum should be equivalent to the contribution that would have been made if the affordable housing had been provided on site and the scale of the developer subsidy should equate to the difference in residual value between a scheme unencumbered by affordable housing and a scheme with affordable housing, having regard to the established existing or alternative use value. This is set out in detail in section 10 of the main report.

### **Recommendations**

It is essential that any district wide affordable housing policy is not unduly rigid and can be applied flexibly and pragmatically allowing development to come forward whilst meeting the needs of the community. It will be necessary to consider sites on an individual basis having due regard to the planning benefits of granting permission. The framework for enabling such decisions to be made including those of viability could be set out within a Supplementary Planning Document.

A site size threshold of 5 units on sites located in higher value areas area can produce developable, deliverable sites with affordable housing. However, the exact level will have to be determined at the point of application having due regard to the value area and the potential alternative/existing uses of the site.

Regarding strategic development locations (500 unit sites), we recommend that more detailed analysis is undertaken in order to clarify the Council's requirements on sites of this nature and identify the approach to viability. This is particularly pertinent as development on such sites may account for a very significant proportion of new development within Bradford over the life of the Core Strategy. Such work could be set out in a Supplementary Planning Document or Area Action Plan.

Conclusions and recommendations are set out in section 11 of the main report.



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## 1.0 Introduction

- 1.1 Levvel Ltd has been appointed to complete an Affordable Housing Economic Viability Assessment on behalf of The City of Bradford Metropolitan District Council (CBMDC).
- 1.2 CBMDC is currently in the process of producing the Local Development Framework (LDF) Core Strategy and has already commissioned a Strategic Housing Market Assessment (SHMA) that is due for completion imminently. The aim of this study is to:
- Develop a robust, transparent and effective means of determining appropriate and justifiable affordable housing targets in the Bradford LDF;
  - Test the viability of the findings from the Bradford SHMA and provide evidence to develop and support future planning policies in the LDF;
  - Produce recommendations on the viability of the proportion of affordable housing, site thresholds and tenure splits in different locations and on a range of different site types across the District.
- 1.3 That is to say, to ensure that the Council's policy approach to affordable housing is deliverable in the context of economic viability and thus in accordance with PPS3.<sup>3</sup>
- 1.4 CBMDC invited qualified companies to submit tenders in May 2010. Key extracts from the invitation to tender and tender brief are included at Appendix 1. This study will form part of the evidence base for the affordable housing planning policy covering the CBMDC area. In this regard, Levvel has approached the project in accordance with the requirements in PPS12.<sup>4</sup>
- 1.5 Given the scope of the tender brief and the variations across the District in respect of land values and property values, it has been essential to develop a methodology that measures viability on a consistent basis, but that is flexible enough to allow for these variables.
- 1.6 Furthermore, given that the CBMDC Core Strategy when adopted will prevail until 2026, we have also ensured that our methodology includes an element of "future proofing" to give the Council the confidence that the policy can be applied now and in years to come.
- 1.7 The study has been carried out against a backdrop of a global recession and generally unfavourable and uncertain conditions in the housing market. In a rising land and property market where values are increasing and where costs do not rise to the same extent, it can be assumed that if a development scheme is appraised and a viable position achieved, then viability will be achieved in the future, (all other variables remaining the same). Recently, the property market has not

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<sup>3</sup> Planning Policy Statement 3 (PPS3): Housing, Communities and Local Government November 2006

<sup>4</sup> Planning Policy Statement 12: creating strong safe and prosperous communities through Local Spatial Planning, Communities and Local Government 2008



behaved in this manner and therefore the future is uncertain. Given this uncertainty in the market, it has been necessary to provide a “future proofed” methodology that makes a range of predictions about where the housing market may go in the future, ranging from pessimistic to optimistic scenarios, but based on past market trends. With this range set, the results of the development appraisals can be properly contextualised and CBMDC can set their policy accordingly.

- 1.8 This paper sets out the policy background of the study to place it in its proper context. A commentary on the past and present national, regional and local housing market experience and wider economic factors is given to inform the future proofing scenarios. Our methodology and assumptions are then explained, and a description of the nature and extent of local stakeholder engagement is undertaken. This is followed by an analysis of the results. A policy compliant commuted sum methodology and the principles behind it are then set out. Finally, conclusions and recommendations for policy are outlined.



## 2.0 Wider Context of the Study

2.1 Key national, regional and local policy information is contained in this section. Appendix 2 contains greater detail on policy and housing need information relevant to Bradford and this study.

### National Policy and Guidance

2.2 Affordable housing policy is set out at national level in PPS3. The PPS identifies a number of specific requirements, but emphasises that policy should be applied flexibly.<sup>5</sup>

2.3 Paragraph 29 of PPS3 also refers to viability being important for the setting of overall affordable housing targets. This involves looking at the risks to delivery and the likely level of finance available including public funding and developer subsidy.

2.4 A companion document to PPS3, Delivering Affordable Housing, expands upon these principles of flexibility and outlines the necessity for 'ambitious but realistic affordable housing targets'.<sup>6</sup>

2.5 The approach is therefore to identify the level of need and its nature, to consider the types of affordable housing that might best meet this need and then to consider the economics of delivery and how sources of uncertainty (such as the availability of public funds and economic changes over the lifetime of the development) can best be managed.

2.6 The Blyth Valley appeal decision outlines the need for affordable housing policy to be supported by an up to date affordable housing viability study, in line with the requirements of PPS3. The ruling indicates that such a study "is not peripheral, optional or cosmetic. It is patently a crucial requirement of the policy."<sup>7</sup>

2.7 Small changes to PPS3 were implemented by the coalition government in June 2010 regarding the following:

- The national indicative minimum density of 30 dwellings per hectare is deleted from paragraph 47;
- Private residential gardens are now excluded from the definition of previously developed land in Annex B.

2.8 These changes are unlikely to have a significant effect on the considerations of our study and no changes were proposed to the definition of affordable housing.

2.9 PPS12 considers deliverability and flexibility of core strategies in paragraphs 4-44 to 4-46. This is within the context of overall infrastructure requirements but it is clear that if the infrastructure is to be delivered then the viability of policies,

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<sup>5</sup> Planning Policy Statement 3 (PPS3): Housing, Communities and Local Government November 2006 paragraph 29

<sup>6</sup> Delivering Affordable Housing, Communities and Local Government 2006, paragraph 10

<sup>7</sup> Case number C1/2008/1319 Blyth Valley Borough Council and Persimmon Homes (North East) Limited/Barratt Homes Limited/Millhouse Developments Limited, July 2008



including affordable housing policies, are viable within this context. PPS12 goes on (paragraph 4-46) to suggest a minimum 15 year consideration of the impact of policy and to consider how contingencies should be dealt with so that constraints and challenges to policy can be considered over the longer time frame.

- 2.10 A Good Practice Note (July 2009) has been produced by the Homes and Communities Agency entitled, "Investment and Planning Obligations, Responding to the Downturn".<sup>8</sup> Regard has also been had to the guidance contained therein as it relates to the preparation of affordable housing evidence base documents to inform the Local Development Framework.

## Regional Policy

### Regional Spatial Strategy – The Yorkshire and Humber Plan 2008

- 2.11 The Yorkshire and Humber Plan is the Regional Spatial Strategy for the Yorkshire and Humber Region. On 6th July 2010 the Secretary of State for Communities and Local Government, Eric Pickles announced the revocation of Regional Spatial Strategies in a letter sent to Chief Local Authority Planning Officers. The letter includes guidance which reads: "In the longer term the legal basis for Regional Strategies will be abolished through the 'Localism Bill' that we are introducing in the current Parliamentary session. New ways for local authorities to address strategic planning and infrastructure issues based on cooperation will be introduced".
- 2.12 The guidance states that the revocation of RSSs is "not a signal for local authorities to stop making plans for their area. It advises local planning authorities to continue to develop LDF core strategies and other DPDs, "reflecting local people's aspirations and decisions on important issues such as climate change, housing and economic development."
- 2.13 On housing targets the guidance says: "Local planning authorities will be responsible for establishing the right level of local housing provision in their area, and identifying a long term supply of housing land without the burden of regional housing targets. Some authorities may decide to retain their existing housing targets that were set out in the revoked Regional Strategies. Others may decide to review their housing targets".
- 2.14 The housing requirement in the RSS states that approximately 50,000 new homes will have to be built in the Bradford district between 2008 and 2026, to meet the need of the growing population and the increase in household formation.
- 2.15 Policy H1 (Provision and Distribution of Housing) states that Bradford should ensure the average annual net additions to the housing stock of 1,560 from 2004 to 2008 and 2,700 from 2008 to 2026.
- 2.16 Policy H4 states that LDFs should set targets for the amount of affordable housing to be provided. It also states that the Region needs to increase its provision of affordable housing. Provisional estimates of the proportion of new housing that may need to be affordable are set out for different parts of the region. It is estimated that the following rates of provision are required across the district:

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<sup>8</sup> Investment and Planning Obligations, Responding to the Downturn, Homes and Community Agency, July 2009



- Over 40% in North Yorkshire districts and the East Riding of Yorkshire;
- 30-40% in Kirklees, Leeds, Wakefield and Sheffield;
- Up to 30% in other parts of South and West Yorkshire, Hull, North Lincolnshire and North East Lincolnshire.

2.17 Bradford forms part of the Leeds City Region under policy LCR1 and the aim is to transform the Regional City of Bradford with significantly increased growth in economic development, jobs and homes through the renaissance of the city centre, and regeneration elsewhere.

### Local Policy

#### Replacement Unitary Development Plan (RUDP)

2.18 The Replacement Unitary Development Plan (RUDP) adopted in October 2005 is the District's present development plan.

2.19 The Council's affordable housing policy is outlined in Policy H9 of the RUDP. Provision of affordable housing will be sought for residential developments, depending on the need, suitability of the site and economics of provision.

2.20 Paragraph 6.27 of the Replacement UDP details the percentage of affordable housing which is required when an application is submitted for fifteen units or above. The percentage varies across the District:

- Wharfedale – 40%
- Airedale – 30%
- The Villages – 25%
- Bradford and Keighley Inner and Suburbs – 15%

2.21 The percentage figures above are a starting point for negotiation which will be undertaken on a case by case basis, and will take into account current need and the economic viability of the proposed development.

2.22 Policy H9 sets out the principles of providing affordable housing. Policy H9 states:

'On planning applications for substantial residential development the Council will negotiate for a proportion of affordable housing based on the extent and type of need, the suitability of the site or building in the case of conversions, and the economics of provision'.

### Local Development Framework Core Strategy

2.23 The Council are currently finalising the evidence base which comprises a number of research reports and studies which will inform policy choices in the Core Strategy. In addition to this Affordable Housing Economic Viability Assessment other reports which will influence housing policy include the Strategic Housing Market Assessment, the Strategic Housing Land Availability Assessment, the Strategic Flood Risk Assessment, a Transport Study, a Settlement Study, an Infrastructure



Plan and Sustainability Appraisal. This research together with responses to earlier consultation exercises will lead to the production of a 'Preferred Approaches' document in the new year.

#### Bradford City Centre Affordable Housing Supplementary Planning Document (SPD) – October 2008

- 2.24 The SPD was adopted in October 2008 and sets out the City of Bradford Metropolitan District Council's affordable housing policy for the City Centre. The SPD and its policy provisions apply until such time as it is superseded by the provision of the Bradford City Centre Area Action Plan. The SPD elaborates on the replacement UDP in relation to all developments in the city centre which require an affordable housing contribution.
- 2.25 The following requirements for affordable housing delivery on development schemes will be sought by the Council:
- Schemes of less than 15 units = 0%
  - Schemes of 15-49 units = 10%
  - Schemes of 50 units or more = 15%<sup>9</sup>
- 2.26 The Council has considered the balance of delivery between open market and affordable accommodation. The SPD states that, "the unique characteristics of Bradford City Centre lend themselves to a bespoke, targeted and focused affordable housing policy which is considerate to the needs of inner city residents and is aware of the influence the City Centre residential market has on surrounding areas."<sup>10</sup>

#### Annual Monitoring Report 2008/09

- 2.27 The Council's Annual Monitoring report indicates that there were 1,440 net additional dwellings during the monitoring year and the following table outlines housing delivery from 2004/05 to 2008/09:

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<sup>9</sup> Bradford City Centre Affordable Housing Supplementary Planning Document (SPD), City of Bradford Metropolitan District Council, October 2008, P.1

<sup>10</sup> Ibid, P.3



Year	Net Additional Dwellings
2004-2005	1361
2005-2006	1369
2006-2007	1578
2007-2008	2156
2008-2009	1440

Table 1: Net Additional Dwellings 2004/05 to 2008/09<sup>11</sup>

2.28 The Annual Monitoring Report also states that outstanding planning permissions total 10,459 comprising 6990 on previously developed land, 2087 through conversion/change of use and 1382 on greenfield land, agricultural land and agricultural buildings. In addition, remaining allocations in the Replacement UDP total 4,451 (959 on previously developed land and 4,492 on greenfield land). The Annual Monitoring Report states that, "based solely on planning status, the total of the current supply of outstanding planning permissions and the remaining allocations in the RUDP 15910, will last for 5.89 years against the net annual requirement of 2,700 dwellings."<sup>12</sup>

2.29 During the monitoring year of 2008/09 a total of 259 affordable homes were provided, including 155 social rented and 104 intermediate properties.

#### Bradford Strategic Housing Market Assessment Arc4 – June 2010

2.30 Arc4 have been commissioned by the Council to undertake a Strategic Housing Market Assessment (SHMA) for the City of Bradford Metropolitan District which is due to be published imminently.

2.31 The SHMA found that median house prices across Bradford District have increased by 163% over the ten year period 1999 to 2009, with median prices peaking at £129,950 in Quarter 4 2007. During 2009, average prices in Bradford District fell by 7.2% compared to a fall of 2.7% regionally.<sup>13</sup>

2.32 The SHMA demonstrates that there are considerable variations in house prices across Bradford District. The highest house prices are in Wharfedale, whilst the lowest prices are in the City Central and City South areas.<sup>14</sup>

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<sup>11</sup> Ibid, P.29

<sup>12</sup> Annual Monitoring Report 2008/2009, City of Bradford Metropolitan District Council, December 2008, P.32

<sup>13</sup> Ibid, P.40

<sup>14</sup> Bradford Strategic Housing Market Assessment, Arc4, December 2009, P.37



- 2.33 The affordability of open market dwellings in Bradford District is compared with 21 other local authorities in Yorkshire and Humber. Bradford ranked as the 8<sup>th</sup> most affordable local authority. However, the study also indicates that average house prices fail to illustrate that areas such as Wharfedale are amongst the least affordable in the region.
- 2.34 The SHMA also studies sub-markets within the local authority area. A number of sub-areas were studied by considering ward level data. The urban area of Bradford was split into four localities, including: City West, City South, City Central and City North East. The remainder of the District divided into: Bingley and Shipley; Keighley and Worth Valley; and Wharfedale.<sup>15</sup>
- 2.35 The tenure profile of Bradford district is as follows: 70.1% of occupied dwellings are owner occupied, 15.1% are social rented, 14.1% are private rented and 0.3% are intermediate. Proportions of social rented properties were found to be highest in City Central, City South and Keighley & Worth Valley. The proportion of households who are owner-occupiers exceeds 80% in Wharfedale and Bingley and Shipley.
- 2.36 The SHMA calculated that there is a net need for 749 affordable homes per annum from 2008/09 to 2012/13. Net and Gross requirements are broken down by number of bed spaces in the following table:

Designation	No. Beds	Gross	Net
<b>General Needs</b>	One	8	-375
	Two	502	351
	Three	741	604
	Four +	119	108
<b>Older Person</b>	One/Two	160	61
<b>Total</b>		1530	749

Table 2: Annual Affordable Housing Requirement 2008/09 to 2012/13.<sup>16</sup>

- 2.37 The SHMA conclusions indicate an overall district-wide target of 25% to 30% on the basis of a net shortfall of 749 properties per annum and RSS targets. The SHMA states that, "assuming a 25-30% District-Wide target, it would be appropriate to split this between a target for urban areas (25%-30%) and a rural target for Wharfedale (35%-40%)."<sup>17</sup>
- 2.38 SHMA analysis suggests that there is a role for intermediate products in Bradford and it is estimated that a proportion of those in need (23.6%) could afford equity shares in intermediate products of up to £60,000. It is also stated that the

<sup>15</sup> Bradford Strategic Housing Market Assessment, Arc4, June 2010 P.44

<sup>16</sup> Bradford Strategic Housing Market Assessment, Arc4, June 2010 P.78

<sup>17</sup> Bradford Strategic Housing Market Assessment, Arc4, June 2010 P.102





proportion of intermediate dwellings to be delivered needs to be reconciled with the economic viability of delivering affordable housing.

2.39 Across Bradford District, demand for open market accommodation exceeds supply, particularly in City Central, City West, City South, Bingley & Shipley and Keighley/Worth Valley sub-areas. Specific shortfalls include larger three and four bedroom properties and detached and semi-detached properties. An analysis of property type preferences of households in need and newly-forming households would suggest the following profile of property types:

- 42.3% houses;
- 31.5% flats;
- 26.2% bungalows.

2.40 Provision of affordable housing on smaller sites is also dealt with in the SHMA. Paragraph 6.19 of the SHMA states that, 'development in the smaller settlements and even in larger ones such as Ilkley is more weighted to small sites and windfalls (below 0.4ha) and there is a need for these small sites to make affordable housing contribution either on site or via commuted sum payments'.

### The Wider Economic Picture – Informing the Scenarios

2.41 For our analysis of viability to be dynamic it is important to understand past trends in order to assess how the housing market may perform in the future. While recent history shows specific characteristics which may be peculiar to the period in question, there are still fundamental principles that suggest medium and long term cyclical trends. This will not inform a single assessment of how the market will perform but will give us the main parameters within which we can test possible scenarios.

2.42 Included at Appendix 3 is a consideration of the housing market over the past 25 years, including the wider economic context. This Appendix also outlines the evidence which has informed our dynamic assessment of the three potential future market scenarios against which all viability assessments have been undertaken.

2.43 Our analysis would suggest that there is a strong causal link between affordability and housing market prices. Other market conditions and particularly the cost and availability of finance are also an important factor in driving house price inflation. This range of factors has affected the housing market and the affordability of housing. These have included macro-economic influences and the worldwide recession. However, this analysis is useful in setting the context for our housing market scenarios. It is important to realise that we are assuming a structurally recurring cycle, intrinsic to the UK housing market. Responses to this structural cycle were aimed at controlling it. However, our housing market scenarios are founded on the basis that the patterns of the past will likely be repeated in the future. Our various scenarios attempt to ensure we cover all possible magnitudes of this cycle.



### 3.0 Methodology and Assumptions

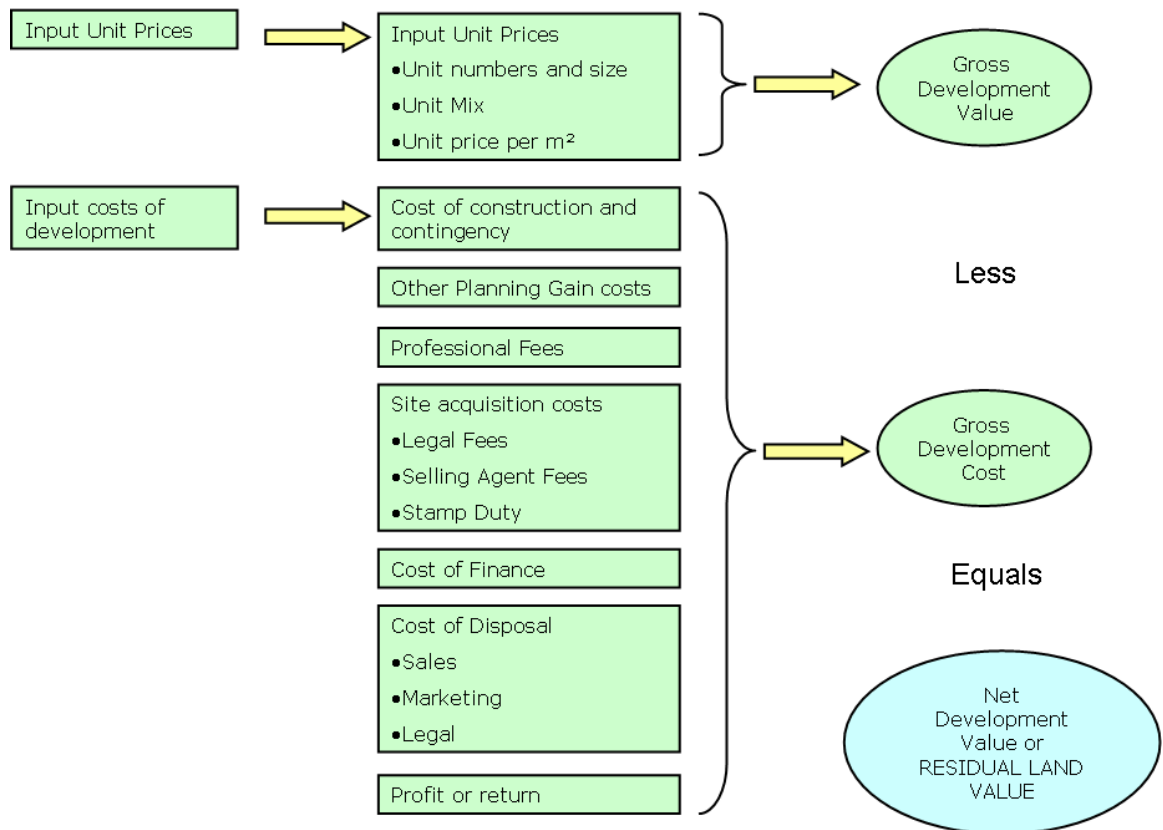
#### Level Development Viability Model

3.1 Residual land value assessment is a recognised practice within the development industry for evaluating costs and incomes associated with the development. In essence, such appraisals consider the income from a development in terms of sales or rental returns and compare this with the costs associated with developing that scheme. The amount left over, or residual, is what is left for land acquisition, i.e. the residual land value.

3.2 The residual amount contained within the appraisal is assessed using the formula:

$$\text{Gross Development Value LESS Gross Development Cost} = \text{Residual Land Value.}$$

This is represented by the following figure:





- 3.3 Delivering Affordable Housing supports the use of a viability tool such as that advocated by the Greater London Authority (GLA), or that used by the Homes and Communities Agency for the assessment of whether schemes should be supported by Social Housing Grant. This tool is a residual land value assessment model as described above, which suggests that a site will only come forward with an affordable housing contribution where the resulting overall residual site value exceeds the existing or alternative use of that site.
- 3.4 Levvel has developed a dynamic model to determine the residual land value that has been used in negotiation with over 200 local authorities and used at appeal on numerous occasions. From this, a toolkit to assess viability on a district wide level has been developed, this is known as the Levvel Development Viability Model (DVM).
- 3.5 Robust assumptions are then required to be inputted into this model. Costs to development such as build costs, planning gain requirements, profit and development finance are arrived at through our experience and through consultation with the development industry and Council Officers. Sensitivity testing of variables such as affordable housing percentage, tenure requirements, increased/decreased levels of planning obligations and the availability of public subsidy will ensure the validity of the study outputs and demonstrate the impact upon viability across the range of study scenarios.
- 3.6 For a policy to be robust and reliable throughout the plan period, we believe it is necessary to assess with a methodology that is “future proofed” as far as possible. As viability is reliant on the interaction between changing costs and revenues of housing over time, it follows that this relationship must be accounted for by future proof testing. It is simply not good enough to assess current costs against a range of property values as this provides only a “snapshot” view. The relationship between values and costs over time is not taken into account.
- 3.7 Levvel has therefore addressed this issue by applying inflation rates for cost inputs throughout the study period. For values, it is difficult to predict where the housing market may be in even 1 year’s time, so long range predictions based on popular commentary are of little use. However, we have assessed value changes based on the historic performance of the housing market as described previously. This gives us a view of where values may be in the future if the past housing market cycle was typical. However, this does not give us the necessary comfort or margin for error should the cycle vary. We have therefore reasoned that by choosing scenarios, based on an upside, middle and downside view of the housing market, we will have covered the range of positions to which the housing market may go. A detailed analysis of these scenarios is included at Appendix 3, to this document.
- 3.8 By then reporting on the viability of schemes where they delivered at different points within this range, we have come to a view of how this will affect the deliverability and effectiveness of proposed policy. For instance, should the housing market perform below past trends for the next five years before picking up again, we can assess whether the proposed policy might adversely affect the viability of schemes and therefore their delivery. Similar principles apply to a more optimistic view of where values may end up.



- 3.9 Levvel's methodology enables the effect of a range of delivery timescales to be examined, thus all development scenarios selected are tested assuming development start dates of the date of modelling, date of modelling plus 1 year, plus 2 years, plus 3 years, and so on until 2026.
- 3.10 The use of the Levvel methodology allows for variations in land value over time to be accounted for, again ensuring 'future proofing' of the viability study. Any affordable housing policy seeks to capture an element of the land value for the community benefit. We know that there is a minimum land value which schemes need to achieve in order to be brought forward, otherwise it becomes more economic for the site to continue in its existing (or alternative) use.
- 3.11 Given the previous and future profile of the existing land use of housing sites within the District<sup>18</sup> it is not sufficient to assess the existing or alternative use value of a site against one indicator.
- 3.12 In order to inform the land values that will be used as our first assessment of viability Levvel has:
- had regard to Valuation Office Agency Data regarding land values;
  - sought feedback from stakeholders through the stakeholder engagement process (see Appendix 4);
  - engaged Thornes Chartered Surveyors and Estate Agents to provide information on land values and recent land transactions undertaken in the District (see Appendix 5).
- 3.13 The Valuation Office Agency (VOA) provides data on agricultural land and property values. It is unrealistic however to assume that Greenfield development land would be traded for residential use at these rates. For example the average value of unequipped arable land with vacant possession in Yorkshire and Humberside as at July 2009 was £12,555 per ha. Stakeholder engagement (see Appendix 4) has confirmed this view.
- 3.14 Thus in respect of development occurring on greenfield land, again we have had regard to the advice received from Thornes Chartered Surveyors and Estate Agents, feedback from stakeholders as well as VOA information. A figure of £750,000 per hectare has been used. This includes an element of 'hope' value uplift of 20%.
- 3.15 In respect of development occurring on industrial sites, we have had regard to the advice received from Thornes Chartered Surveyors and Estate Agents, feedback from stakeholders as well as VOA information. In order to reflect the range of values of industrial land within the District two figures have been used. Firstly, a figure of £430,000 per hectare has been used (this is referred to as industrial 1 in the main report) and secondly a figure of £560,000 per hectare has been used (this is referred to as industrial 2 in the main report). Both of these figures include a 20% uplift to reflect hope value.

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<sup>18</sup> CBMDC Annual Monitoring Report 2008/9, Section 3 Housing provides information on previous land use profiles of residential sites



- 3.16 In respect of development occurring on previously developed residential land, again we have had regard to the advice received from Thornes Chartered Surveyors and Estate Agents, feedback from stakeholders as well as VOA information. A figure of £1,200,000 per hectare has been used. This includes an element of 'hope' value (20%).
- 3.17 Therefore we have taken a wide range of land values as we recognise the wide range of alternative and existing uses within the District.
- 3.18 All of these values will be linked to the future growth assessments as outlined in Appendix 3 to this report to reflect the relationship between land and property values and ensure effective 'future proofing' of the assessment.
- 3.19 Whilst we will use these values outlined above as one test of viability, we recognise that VOA data can be as much as six months out of date and not available at a sufficiently local level to enable local variations in land values to be assessed. Furthermore, the imposition of affordable housing planning policy will necessarily reduce land values in certain schemes. We have therefore developed a methodology that assesses how much landowners have been willing to accept for their land in the past, and expressed it in terms of the ratio between Gross Development Value and Residual Land Value (GDV:RLV). That is to say how much of the revenue from a scheme can be used to pay for the land. This allows for variations due to locality to be accounted for. It is our belief that this more readily accounts for local variations in land values and represents a more robust and credible evidence base. The relationship between Gross Development Value and Residual Land Value will thus be used as our second test of viability.
- 3.20 The ratio between RLV and GDV has thus been assessed and advice sought from Thornes Chartered Surveyors. The effect can be seen that in a rising and somewhat overheated market, landowner expectations rise and the price that developers are willing to pay also increases (often based on future expectations of property values). However, in a falling and "normal" market landowner expectations may fall to more "reasonable" levels. Supply of land may also be a factor that impacts upon land values. Thus the relationship between GDV and RLV as a check provides a further degree of future proofing as if housing market values increase, the land value will also increase. Conversely, if values fall, then land value can also be expected to fall.
- 3.21 On sites ranging in density from 20 dph to 75 dph we have, based on assessments of the ratio of RLV to GDV and information from our valuer, taken a figure of 23% of Gross Development Value with a tolerance of 3% (thus 20% to 26%) as a test for the level at which the Residual Land Value may need to reach in order to incentivise the landowner sufficiently to bring forward his or her parcel of land.
- 3.22 On sites ranging in density from 120dph to 250 dph, we have, based on assessments of the ratio of RLV to GDV and information from our valuer, taken a figure of 18% of Gross Development Value with a tolerance of 3% (thus 15% to 21%) as a test for the level at which the Residual Land Value may need to reach in order to incentivise the landowner sufficiently to bring forward his or her parcel of land.



- 3.23 In respect of all sites tested of 500 units, regardless of density, a figure of 18% of Gross Development Value has been used as a test for the level which may need to be reached in order to incentivise the landowner sufficiently to bring forward his/her parcel of land.
- 3.24 In respect of all sites of 10 units and below regardless of density, a figure of 30% of Gross Development Value has been used as a test for the level which may need to be reached in order to incentivise the landowner sufficiently to bring forward his/her parcel of land.
- 3.25 Using these two tests of viability simultaneously (benchmark land values and the RLV:GDV ratio), it is possible to inform a policy position that has flexibility and is relevant throughout the life of the plan to ensure deliverability.

### Site Identification Methodology

- 3.26 Using the work undertaken to date to inform the emerging Strategic Housing Land Availability Assessment as a basis, and in conjunction with the Council, a range of notional development sites likely to represent development over the life of the Core Strategy (in respect of site size, density and unit numbers) were identified.
- 3.27 Stakeholder consultation was also undertaken on the initial range of site typologies and densities and the feedback from stakeholders informed the selection of the notional sites.
- 3.28 Outlined below are the final notional sites identified. A detailed breakdown of unit composition for each notional development site can be found in Appendix 6.

	Net density (dph)					
<b>5 units</b>	20	35	50			
<b>10 units</b>	20	35	50	75		
<b>15 units</b>	20	35	50	75	120	
<b>50 units</b>	20	35	50	75	120	250
<b>150 units</b>		35	50	75	120	250
<b>500 units</b>		35	50	75		

Table 3: Notional sites and net densities tested



- 3.29 In order to reflect the relationship between gross and net site density the following ratios have been assumed. These reflect the assumptions made in the Council's emerging SHLAA.

<b>Site gross to net ratio</b>	
Less than 0.4 ha	100%
0.4 - 2 ha	90%
> 2 ha	75%

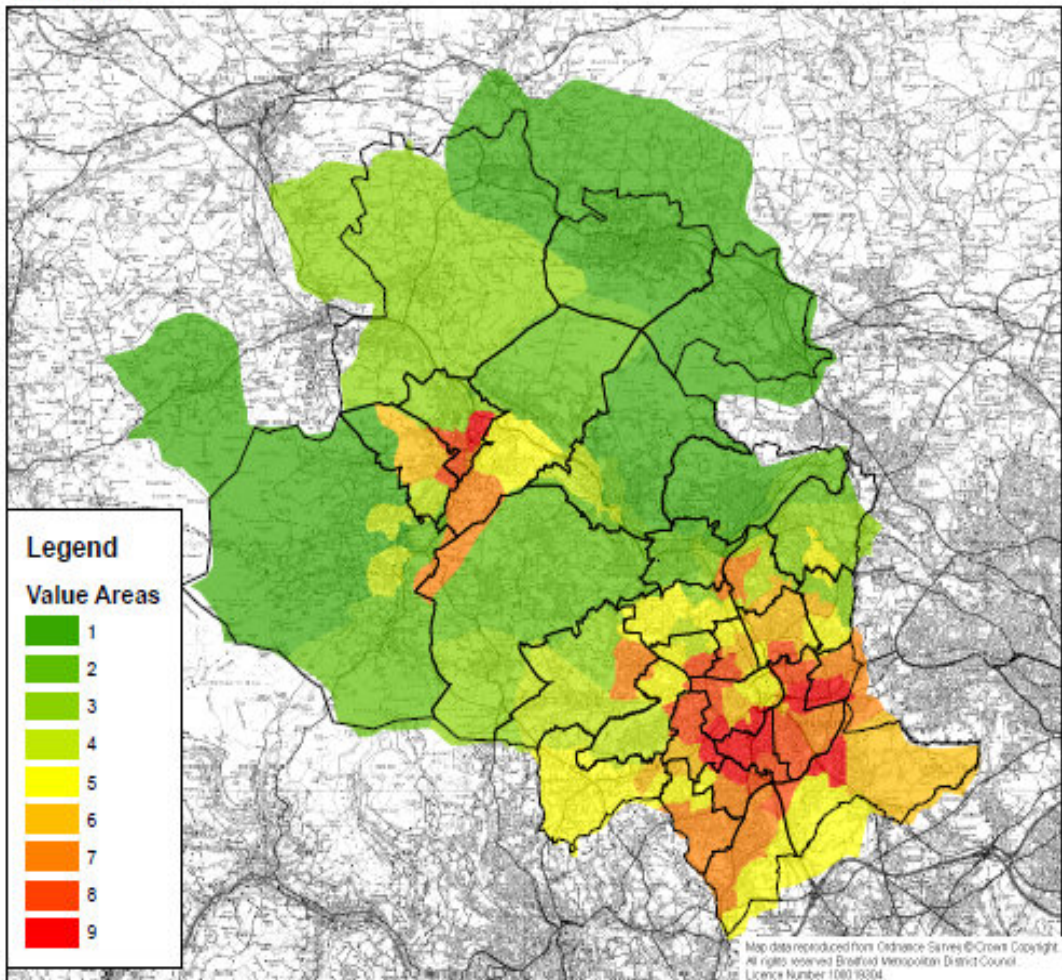
Table 4: Site gross to net ratio

### Value Areas

- 3.30 It is reasonable to assume that within a Local Authority boundary there will be a range of 'value areas', that is locations where property values are likely to be lower or higher than the average for the District as a whole. This view has been confirmed in the SHMA. Detailed research on achieved sales values across the District has been undertaken using Land Registry data at a Postcode Sector level (e.g. BD13 5) for each type of property (detached, semi detached, terraced and flats and maisonettes). In depth analysis of other information sources regarding asking prices and achieved sales values in Bradford such as property websites including Rightmove, Find a Property and Mouseprice has also been undertaken. This analysis resulted in the formation of sales values on a per square metre basis for detached, semi detached, terraces and flats and maisonettes for nine different value areas across Bradford. Appendix 7 to this report outlines in detail the value area methodology and the sales values for each property type and each value area that have been used within this study.
- 3.31 It should be noted that the results of this exercise found that there were in some cases marked differences in likely sales values that could be achieved dependent upon Value Area. The map below shows the value areas on a map of CBMDC area. The map is also overlaid with ward boundaries in order that the District boundary can be clearly seen.



Value Areas



- 3.32 On all flatted development it has been assumed that ground rent would be charged at the figure of £200.00 per annum. This income stream has been capitalised assuming a yield of 7%.
- 3.33 We are confident that the range of sales values used for the purposes of this assessment cover the range of sales values that could be achieved from new build development in the District. There may however be certain, high profile luxury developments where sales values may be in excess of those tested within the study and therefore any approach to considerations of viability in respect of schemes such as this should be carefully considered.
- 3.34 We also recognise that even within the same Value Area there is likely to be pockets where sales values may be higher or lower than the average values assessed for the purposes of this study. The Council may find it appropriate and beneficial to look more closely at the range of sales values used rather than focus specifically upon the Value Area(s) they represent.





- 3.35 All notional sites have been assessed in each Value Area outlined in this section unless explicitly stated within the results section.

### Study Variables

- 3.36 30% affordable housing was initially assessed in all value areas. In cases where positive results were achieved a 40% affordable housing target was then tested. In cases where a non viable or marginally viable outcome was achieved with 30% affordable housing, 20% and if necessary 10%, affordable housing requirements were then assessed.
- 3.37 Following consultation with the Council, and with regard to the SHMA findings a tenure mix of 70: 30 social rented:intermediate has been assessed. Following consultation with the Council, intermediate housing was assumed to be shared ownership. On some occasions a 50: 50 social rent:intermediate affordable housing tenure mix has also been assessed.
- 3.38 It was agreed with the Council to test notional 5 and 10 unit developments in order to assess if a site threshold below 15 units was “viable and practicable”<sup>19</sup> as required by PPS3.

### Section 106 Contributions

- 3.39 Through discussion with the CBMDC, a well reasoned per unit contribution in respect of Section 106 contributions has been established. In all cases sensitivity testing has also been undertaken assuming contributions at 50% and 150% of this ‘baseline’ level to establish the impact upon viability. For notional schemes of 500 units the S106 ‘baseline’ level has been assumed at 150% of the per unit contribution (with additional sensitivity testing being undertaken at 100% and 200% of this) to reflect the potential larger contributions required for developments of this scale. All results tables clearly identify the level of S106 contribution that has been assessed.
- 3.40 All of the different S106 requirements and costs that together form the ‘baseline position’ as detailed in the previous paragraph are outlined below.

### Transport

- 3.41 A charge of £1,250 for all units in respect of a transport contribution regardless of size and type (flat or house) has been assumed.

### Public Open Space and Recreation

- 3.42 The following charges per development have been applied:

- 5 unit notional site – £0 (nil);
- 10 -15 unit notional site - £12,470
- 50 unit notional site - £91,541;

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<sup>19</sup> Planning Policy Statement 3 (PPS3): Housing, Communities and Local Government November 2006 paragraph 29



- 150 unit notional site - £144,973;
- 500 unit notional site - £183,030.

### **Education**

- 3.43 Primary school places (14 places per 100 dwellings) at £11,648 per place have been applied on a pro rata basis to schemes of over 10 units on dwellings with more than one bedroom.
- 3.44 Secondary school places (12 places per 100 dwellings) at £12,688 per place have been applied on a pro rata basis to schemes of over 10 units on dwellings with more than one bedroom.
- 3.45 For flatted development the contributions outlined above have been reduced by 50%.
- 3.46 In all cases it is assumed that Section 106 costs are payable at initial occupation.

### **Lifetime Homes Requirements**

- 3.47 It is understood that the Council are considering a number of policy options in respect of achieving housing that will meet the needs of older people and those with disabilities. In order to reflect this within the parameters of this study it was agreed that it would be appropriate to include an additional allowance.
- 3.48 A dedicated website providing information on Lifetime Homes standards and costs has been created by Habinteg Housing Association ([lifetimehomes.org.uk](http://lifetimehomes.org.uk)), which reports that the costs of meeting Lifetime Homes standards is currently estimated to be up to £545 per dwelling, subject to the size, layout and specification of the property. For the purposes of our study we have assumed that Lifetime Homes costs will be at approximately this level and we have included a figure of £600 per unit in our modelling. It should be noted that a cost significantly in excess of £600 per unit may impact on the overall viability of a scheme and its ability to deliver affordable housing.
- 3.49 In addition to this financial allowance the unit sizes of smaller units (one and two bedroom flats and 2 bedroom houses) have been increased slightly to reflect the additional space requirements that may be required to meet the needs of older people or those with certain disabilities. Appendix 6 contains detail on the unit sizes assumed for the purposes of this study.



## Specific Costs of Development – Model Inputs

### Build Costs

- 3.50 Base build costs have been assessed with reference to the Build Cost Information Service at the levels set out below which are adjusted to reflect the Bradford Local Authority indices. These are per metre square costs for gross internal floor area.

	£/sqm
<b>Estate Housing</b>	666
<b>Estate Housing Detached</b>	693
<b>Estate Housing Semi-detached</b>	659
<b>Estate Housing Terraced</b>	681
<b>Flats (apartments)</b>	832
<b>Housing Mixed Developments</b>	705
<b>Sheltered Housing</b>	828

- 3.51 In respect of flats a gross to net ratio of 85% to account for communal and circulatory space has been applied.
- 3.52 Build costs have then been uplifted by 15% to account for external works.
- 3.53 To these figures a further uplift was applied to account for the relevant Code for Sustainable Homes Standards in the relevant year of implementation. The source used to provide information on the relevant cost uplifts to be used was “Code for Sustainable Homes: A Cost Review March 2010”.<sup>20</sup> Page 12 of this report provides a table of extra over costs that are likely to be incurred to achieve the different Code for Sustainable Homes Levels and range dependent upon unit type. An average percentage increase (based upon an average of the extra over costs shown in this table) has been assessed for each different Code Level (3, 4, and 6) and we have applied this percentage increase to all units in each notional development in the year that this Code Level is planned to become a mandatory requirement. We have noted and taken account of, the different timetables of introduction of the Code for Sustainable Homes in respect of market and affordable dwellings.
- 3.54 Finally build cost contingency of 5% of total build costs was added.
- 3.55 We understand CBMDC may seek to reduce the impact of new development on the District’s energy demand and may require the on site provision of decentralised and renewable or low carbon sources of energy unless it can be shown that it is not feasible or viable to achieve.
- 3.56 In order to reflect these potential requirements we have allowed an additional sum per unit in the build cost calculations of £1,200 on all notional sites. Whilst we recognise the cost per unit of achieving such requirements is likely to differ on a site by site basis we feel it prudent to allow some additional development cost in respect of this.

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<sup>20</sup> March 2010 Communities and Local Government Publications



3.57 Sensitivity testing has been also undertaken assuming a £0 (nil) contribution in respect of this potential requirement. The results figures clearly set out the sustainability assumptions used in the title section.

#### **Other costs of development**

- Charged Interest Rate - 6.50%

This is the long term cost of development finance. Whilst the Bank of England Base Rate is currently at 0.5%, developers are not able to access finance at this level. Therefore a 6.5% figure has been used.

- Earned Interest Rate – 0.5%

Again, a long term view of the earned interest rate has been taken.

- Professional Fees – 10% of Build Costs

Covering architects, consultants engineers fees etc. This is assessed as being 10% of the total build costs. This has been used for all development scenarios with the exception of 10 and 5 unit notional developments where professional fees have been assumed at 12% of build costs to reflect the baseline fee level which professional consultants attract.

- Site Investigation - £10,000 per hectare
- Agents Acquisition Fees – 1.0% of Residual Land Value
- Site Acquisition Legal Fees – 0.75% of Residual Land Value
- Marketing and Sales Fees – 3.0% of Gross Development Value
- Legal Fees on sales - £350 per unit
- Finance Arrangement Fee – 1.0% of build cost
- Planning Fees – as Communities and Local Government defined rates as set out at [www.communities.gov.uk](http://www.communities.gov.uk)
- Developer Profit – 20% of Gross Development Value

In line with other appraisals of this nature we have taken a long term assumption as to the necessary profit to encourage development. We have however, also assessed developer profit at 17% and 25% of Gross Development Value. The results section clearly shows the level of profit that has been assumed for each assessment.

For affordable housing, developer profit is 6% of construction costs to reflect the contractor's return.

- Stamp Duty Land Tax – ranges between 0% and 4.0% depending on residual land value



### **Affordable housing assumptions**

3.58 Social rents used assumed are as follows, based upon target rents for Bradford:

- 1 bed - £54.03;
- 2 bed - £61.59;
- 3 bed - £67.70;
- 4 bed - £83.70;
- 5 bed - £94.24.

3.59 A yield of 6% is assumed on social rents. A management cost of £450 per annum, a maintenance cost of £450 per annum, a void allowance of 2.5% and a major repairs allowance of 0.8% is also assumed.

3.60 Shared ownership is assumed as a 35% initial equity purchase with rent charged at 2.75% on the unsold equity. A management cost of £100 per annum has also been assumed.

3.61 In one instance a scheme has been modelled assuming all affordable housing comprises shared equity. A 65% equity purchase is assumed. This has been undertaken to reflect the existing custom and practice within Bradford to calculate the price of affordable housing through a discount of 35% from open market values. However this is not general practice in the other areas that we have studied and we have modelled this one scheme in this fashion to highlight any potential effects that this method may have upon development viability.

### **Grant/public subsidy assumptions**

3.62 Baseline assessments assumed nil public subsidy however in a number of circumstances sensitivity testing assuming grant availability was undertaken. With reference to the Yorkshire and Humber Investment Statements available from the Homes and Communities Agency and feedback from the stakeholder engagement process three sensitivities in respect of grant availability have been assumed. These are as follows:

- Grant at £48,500 per unit for social rented units and grant at £26,000 per unit in respect of shared ownership units. This reflects the average allocation per unit for West Yorkshire in the period 2008/11;
- Grant at £25,000 per unit for social rented units and grant at £22,000 per unit in respect of shared ownership units. This reflects the regional average in respect of S106 additionality for new Continuous Market Engagement allocations;
- Grant at £36,000 per unit for social rented units and grant at £24,000 per unit in respect of shared equity units. This represents an average of the above two levels.



3.63 In the current economic and political climate it is very difficult to make any specific assumptions in respect of grant availability, and it should be noted that the above are based broadly on past rates and may not be relevant in the future.

3.64 The results figures clearly identify the public subsidy assumptions that have been made and the majority of schemes presented in the main report have been tested on a nil-grant basis.

#### **Absorption rates**

3.65 A range of absorption rates have been assessed against each notional development site. For notional developments of 5-150 units absorption rates of 30 sales per annum, 50 sales per annum and 70 sales per annum have been assessed. On notional developments of 500 units absorption rates of 50 sales per annum, 70 sales per annum and 90 sales per annum have been assessed.

3.66 In all cases the development timetables assume periods for:

- enabling phases (for large scale developments);
- planning application;
- site acquisition;
- construction period;
- sales period.

#### **Static value modelling**

3.67 As a result of requests from some stakeholders (see Appendix 4) we have assessed one scheme on the basis that sales values remain constant throughout the timetable of the development whilst costs adjust according to the upside, middle and downside assumptions.



## **4.0 Stakeholder Engagement**

- 4.1 This study has been overseen by a Steering Group comprising CBMDC planning and housing officers, an RSL representative and a local developer nominated by Bradford Housing Partnership.
- 4.2 A stakeholder questionnaire (see Appendix 4) was forwarded to a circulation list of over 120 key stakeholders forwarded to Levvel by the CBMDC. This also included an invitation to a stakeholder workshop held on 20 July 2010. Stakeholders included housebuilders, land owners, RSLs, agents, developers, and representatives from relevant local and regional bodies.
- 4.3 Six responses to the stakeholder questionnaire were received and a breakdown of the responses are outlined in Appendix 4.
- 4.4 In addition there were 18 attendees at the stakeholder event which set out the purpose of the study, outlined the key parameters and sought feedback on a number of assumptions. Stakeholders at the meeting asked for further detail/clarification regarding some of the assumptions that would be used within the study. A follow up paper (see Appendix 4) was thus circulated to workshop attendees, those who had expressed a desire to attend the meeting but were unable to do so, and those who had returned a stakeholder questionnaire.
- 4.5 As would be expected a range of responses were received from stakeholders. All of these responses have been considered and our report has attempted to test variables taking the views of respondents into account. Appendix 4 outlines how the views and local knowledge of stakeholders helped to shape the viability study. It is an integral part of our business to ensure that we are up to date on market conditions in the project area. Planning for affordable housing on the basis of viability requires a credible and robust evidence base. Stakeholder engagement has thus allowed Levvel to consider relevant local data.



## 5.0 Results Analysis

- 5.1 This section sets out the results from each notional development scheme assessed in accordance with the assumptions outlined within this report. Full details of the unit composition for each notional development type can be found in Appendix 6.
- 5.2 Our assessment for viability involves a cross reference of the absolute land value (industrial/greenfield or previously developed residential land) and the RLV:GDV position. Within each test we have assumed a level of 'tolerance' so that a scheme that falls within 10% either way of the alternative or existing use value is deemed to be marginally viable against that test. The two tests are then assessed in parallel rather than sequentially but weighted so that residual against existing/alternative use values is given 50% more weight than the RLV to GDV test. This is represented in the results page as follows:

	NOT VIABLE	▼▼
	MARGINAL / NOT VIABLE	◀▼
	MARGINAL	◀▶
	MARGINAL / VIABLE	▶▶
	VIABLE	▲▲

- 5.3 The results tables set out the three market scenarios, downside, middle and upside and then record whether the notional schemes assessed are likely to be viable, marginal or not viable. The dates in the left hand column refer to the start dates for development.
- 5.4 The results are set out in the following sections as general development sites (sites of 15 – 150 units), large sites (500 units) and small sites (5 and 10 units). Results of each notional site assessed will be addressed in Value Area order.
- 5.5 Due to the volume of information we have shown key results within the main report and, for completeness, Annex A to this report includes the results of a wider range of sensitivities assessed in each value area.
- 5.6 In some cases we have shown in the results tables the effect of the imposition of affordable housing on the same scheme unencumbered by affordable housing. That is the percentage reduction in residual land value of the unencumbered scheme that occurs when affordable housing at the percentage shown is applied.
- 5.7 Following commentary on the results, the principles of a commuted sum methodology are set out in Section 10 of this report. This is followed by conclusions that can be drawn from the assessments, including any recommendations for policy.





## 6.0 Results – General Development Sites

- 6.1 This section of the report sets out the results of the assessments undertaken on notional general development sites of 15 – 150 units across the District in value area order. Results at each of the development densities tested are outlined. We have assessed viability initially against what we have termed the 'baseline assumptions'. These have been determined following consultation with CBMDC. We have then undertaken further analysis to assess the wider impact of a wider variety of sensitivities upon development viability.
- 6.2 Bearing this in mind, we report here on the following baseline assumptions, (the details of which have been outlined previously within this report):
- 30% affordable housing target;
  - Nil grant;
  - 70:30 social rent:shared ownership affordable housing mix;
  - Section 106 contributions at 100% of the baseline level;
  - Gross profit at 20%;
  - A £600 per unit allowance in respect of achieving Lifetime Homes requirements;
  - Code for Sustainable Homes Levels introduced in accordance with mandatory timetable plus an additional allowance of £1,200 per unit in respect of achieving some degree of on site renewable energy.
- 6.3 Absorption rates assumed are clearly marked on the results table.
- 6.4 Value areas range from the highest overall values for each different property type (detached, semi detached, terraced and flats) in value area one, to the lowest overall values in value area nine. As stated previously, the Council may find it appropriate to look more closely at the range of sales values used for each sales area rather than focus specifically upon the locations they represent. Therefore we have assessed all scheme types in all areas regardless of whether it may be appropriate to bring schemes of a certain type forward in that area. It should also be recognised that even within the same Value Area there is likely to be pockets where sales values may be higher or lower than the values assessed for the purposes of this study.



## Value Area One

### Density – 20 dph

- 6.5 We have been asked to assess development at 20 dph. It should be considered that a 50 unit development built at 20 dph may not be appropriate for all locations.
- 6.6 Baseline position: Affordable housing at 30% was found to be viable against all existing/alternative use values in middle and upside market conditions on 15 and 50 unit schemes thus 40% affordable housing was tested. **Figure 1** shows the viability position of 40% affordable housing using our baseline assumptions on a 15 unit notional site. Against, previously developed residential land values, a marginal/viable outcome can be achieved throughout most of the period assessed in middle and upside market conditions however the impact of the higher costs associated with the introduction of Code for Sustainable Homes Level 6 can be clearly be seen in the period circa 2015-2018.

Value Area: One 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (over) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: One 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (over) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: One 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (over) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: One 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (over) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: One 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (over) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)							
TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1							
2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

Figure 1



Density – 35 dph

6.7 Baseline position: Again 30% affordable housing was found to be viable against all existing/alternative use values at the majority of start dates in middle and upside market conditions thus 40% affordable housing was tested. **Figure 2** shows the viability position of 40% affordable housing on a 50 unit notional site at the baseline position against all existing/alternative land uses.

Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD			TEST 1 SHEET 1 INDUSTRIAL1			TEST 1 SHEET 1 INDUSTRIAL2			TEST 1 SHEET 1 PDL						
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP				
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2013	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2014	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2015	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2016	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2017	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2018	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				

Figure 2

6.8 Sensitivity analysis: As a result of stakeholder engagement we were asked to test at sales rates lower than those initially proposed. We have therefore undertaken sensitivity testing and **Figure 3** shows the same baseline assumptions as those in Figure 2 however a lower sales rate of 30 units per annum has been applied. The marginal impact this has the viability of this notional site can be seen when comparing these two figures.

Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 30 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 30 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 30 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 30 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 2 SHEET 1 GREENFIELD			TEST 2 SHEET 1 INDUSTRIAL1			TEST 2 SHEET 1 INDUSTRIAL2			TEST 2 SHEET 1 PDL						
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP				
2010	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2012	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2013	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2014	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2015	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2016	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2017	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2018	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▼▼	▲▲	▲▲				
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲				

Figure 3



Density – 50 dph

6.9 Baseline position: Again 30% affordable housing was found to be viable against all existing/alternative use values at the majority of start dates in middle and upside market conditions thus 40% affordable housing was tested. **Figure 4** shows the viability position of 40% affordable housing on a 50 unit notional site at the baseline position against all existing/alternative land uses.

Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2013	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2014	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2015	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2016	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2017	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2018	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	

Figure 4

6.10 Sensitivity analysis: We have assessed the same scheme against higher profit levels (25% Gross Profit) and the impact upon viability of applying this higher profit level is shown in **Figure 5**.

Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (25%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (25%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (25%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (25%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 16 SHEET 1				TEST 16 SHEET 1				TEST 16 SHEET 1				TEST 16 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2013	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2014	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2015	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2016	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2017	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2018	▼▼	▲▲	▲▲	▲▲	▲▲	▲▲		▼▼	▲▲	▲▲		▼▼	▲▲	▲▲	
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▼▼	▲▲	▲▲	
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	

Figure 5



Density – 75 dph

6.11 Baseline position: As density increases it has an adverse impact upon development viability albeit 40% affordable housing is still likely to be achievable in many circumstances in this value area. **Figures 6 and 7** show the viability of 40% affordable housing for 15 and 150 unit notional schemes (all other parameters in line with the baseline position) and show a marginal/viable outcome in certain periods in the Core Strategy in middle and upside market conditions.

Value Area: One 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2011	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2012	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2013	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2014	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2015	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2016	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2017	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2018	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2019	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2020	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2021	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2022	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2023	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2024	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2025	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2026	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	

Figure 6

Value Area: One 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2011	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2012	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2013	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2014	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2015	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2016	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2017	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2018	▼	▲	▲	▼	▲	▲		▼	▲	▲		▼	▲	▲	
2019	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2020	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2021	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2022	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2023	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2024	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2025	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	
2026	▲	▲	▲	▲	▲	▲		▲	▲	▲		▲	▲	▲	

Figure 7



6.12 Sensitivity analysis: Increasing the proportion of intermediate affordable units at the expense of social rented units can ease viability if required and **Figure 8** shows the same assessment as Figure 6 yet with a 50:50 social rented:intermediate tenure mix.

Value Area: One 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 50:50 (Social Rent to Intermediate)				Value Area: One dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 50:50 (Social Rent to Intermediate)				Value Area: One dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 50:50 (Social Rent to Intermediate)				Value Area: One dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 50:50 (Social Rent to Intermediate)			
TEST 13 SHEET 1				TEST 13 SHEET 1				TEST 13 SHEET 1				TEST 13 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2013	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2014	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2015	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2016	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2017	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2018	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	

Figure 8  
Density – 120 dph

6.13 Baseline position: **Figure 9** shows the results of a 50 unit development at the baseline position at 120 dph demonstrating a viable outcome in the majority of the Core Strategy period assuming at least middle market conditions are achieved. Again the impact upon viability of the higher costs associated with the introduction of Code for Sustainable Homes Level 6 can be seen.

Value Area: One 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2013	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2014	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2015	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2016	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2017	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2018	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲		▲▲	▲▲	▲▲		▲▲	▲▲	▲▲	

Figure 9



6.14 Sensitivity analysis: We have assessed the same scheme at 40% affordable housing and although viability at this percentage is compromised at some periods in middle market conditions it may be possible to achieve this percentage at other times in the Core Strategy and/or if upside market conditions prevail. This is shown in **Figure 10**.

Value Area: One 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL 1				INDUSTRIAL 2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↘	↗		↘	↗	↗		↘	↗	↗		↘	↗	↗	
2011	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2012	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2013	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2014	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2015	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2016	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2017	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2018	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2019	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2020	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2021	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2022	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2023	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2024	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2025	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	
2026	↘	↗	↗	↘	↗	↗		↘	↗	↗		↘	↗	↗	

Figure 10

Density – 250 dph

6.15 Baseline position: Testing at the baseline position of a 50 unit notional scheme is shown in **Figure 11** showing that a marginal or marginal/viable outcome is likely assuming at least middle market conditions are achieved. The outcome when assessing the baseline position for the 150 unit scheme at this density is very similar.

Value Area: One 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL 1				INDUSTRIAL 2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↗	↗		↗	↗	↗		↗	↗	↗		↗	↗	↗	
2011	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2012	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2013	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2014	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2015	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2016	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2017	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2018	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2019	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2020	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2021	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2022	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2023	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2024	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2025	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	
2026	↗	↗	↗	↗	↗	↗		↗	↗	↗		↗	↗	↗	

Figure 11



## Conclusion

- 6.16 Up to 40% affordable housing may be achieved in this value area assuming at least middle market conditions are achieved. As density increases over 75 dph, viability is adversely affected however it is likely that 30% affordable housing may be achieved at 120 dph and 250 dph, again assuming at least middle market conditions are achieved. Furthermore, in positive market conditions up to 40% affordable housing may be deliverable in this value area on these higher density schemes.





## Value Area 2

### Density – 20 dph

6.17 Baseline position: **Figure 12** shows the baseline position of a 50 unit notional site against all land values. The results show a viable outcome in most periods in upside and middle market conditions with the exception of the test against previously developed residential land values where a marginal/viable or viable outcome is more likely to be achievable in upside market conditions or later in the period assessed in middle market conditions.

Value Area: Two 50 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	

Figure 12

6.18 Sensitivity analysis: 30% affordable housing, assuming a 50:50 social rent:intermediate tenure mix, has been assessed (all other assumptions as the baseline position) against previously developed residential land values and the results are shown in **Figure 13**. The positive impact on viability of increasing the proportion of intermediate affordable units at the expense of social rented units can be seen.



<b>Value Area: Two</b> 2 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 50:50 (Social Rent to Intermediate)			
TEST 13 SHEET 1			
	PDL		
	DOWN	MIDDLE	UP
2010	↘↘	↗↗	↕↕
2011	↘↘	↗↗	↕↕
2012	↘↘	↗↗	↕↕
2013	↘↘	↗↗	↕↕
2014	↘↘	↗↗	↕↕
2015	↘↘	↗↗	↕↕
2016	↘↘	↗↗	↕↕
2017	↘↘	↗↗	↕↕
2018	↘↘	↗↗	↕↕
2019	↘↘	↗↗	↕↕
2020	↘↘	↗↗	↕↕
2021	↘↘	↗↗	↕↕
2022	↘↘	↗↗	↕↕
2023	↕↕	↕↕	↕↕
2024	↕↕	↕↕	↕↕
2025	↕↕	↕↕	↕↕
2026	↕↕	↕↕	↕↕

Figure 13

6.19 40% affordable housing has also been assessed (all other variables in line with the baseline position) and the results of the 15 unit notional scheme are shown in **Figure 14**. With the exception of the highest alternative/existing land use tested, delivery at this percentage may be achievable for the majority of the Core Strategy period assuming the market performs to at least the middle scenario.

<b>Value Area: Two</b> 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				<b>Value Area: Two</b> 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				<b>Value Area: Two</b> 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				<b>Value Area: Two</b> 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
	DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP
2010	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2011	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2012	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2013	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2014	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2015	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2016	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2017	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2018	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2019	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2020	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2021	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2022	↘↘	↗↗	↕↕	↕↕	↕↕	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕	↘↘	↗↗	↕↕	↕↕
2023	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕
2024	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕
2025	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕
2026	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕	↕↕

Figure 14



## Density – 35 dph

Baseline position: **Figure 15** and **Figure 16** show the viability position of 30% affordable housing on the 150 unit and 15 unit notional scheme respectively. The impact upon viability due partly to differing site gross to net assumptions and absorption rates can be seen in certain periods.

Value Area: Two 150 dwellings (150 Houses ) 5.71 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 150 dwellings (150 Houses ) 5.71 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 150 dwellings (150 Houses ) 5.71 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 150 dwellings (150 Houses ) 5.71 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
	DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 15

Value Area: Two 15 dwellings (15 Houses ) 0.48 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (15 Houses ) 0.48 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (15 Houses ) 0.48 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (15 Houses ) 0.48 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
	DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 16



Sensitivity analysis: Testing at 40% affordable housing (all other assumptions in line with the baseline position) has also been tested and the results of the 50 unit scheme are shown in **Figure 17** demonstrating that delivery at this percentage may be achieved in some periods of the Core Strategy assuming market conditions achieve at least the middle scenario.

Value Area: Two 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	

Figure 17

Density – 50 dph

6.20

Baseline position: We have assessed the baseline position and **Figures 18 and 19** show the viability position of a 15 unit and 50 unit notional developments. Should the market perform to at least middle conditions, delivery at this percentage may be achievable with the exception of sites coming forward at previously developed residential land values where achieving 30% affordable housing may be challenging in some periods unless the market performs to the upside scenario.

Value Area: Two 15 dwellings (15 Houses ) 0.3 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (15 Houses ) 0.3 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (15 Houses ) 0.3 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (15 Houses ) 0.3 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	

Figure 18

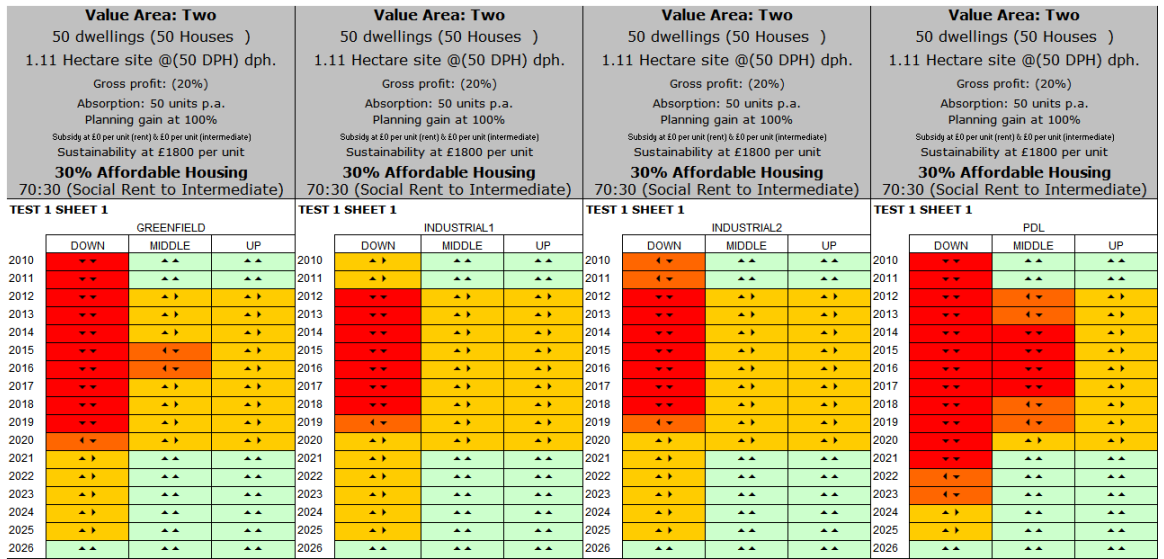


Figure 19

6.21 Sensitivity analysis: Testing at 40% affordable housing (all other assumptions in line with the baseline position) has also been tested and the results of the 15 unit scheme are shown in **Figure 20**. It can be seen that a viable or marginal/viable position may be achieved in upside market conditions and in certain periods should middle market conditions endure although viability at this percentage is more challenging on sites coming forward at previously developed residential land values.

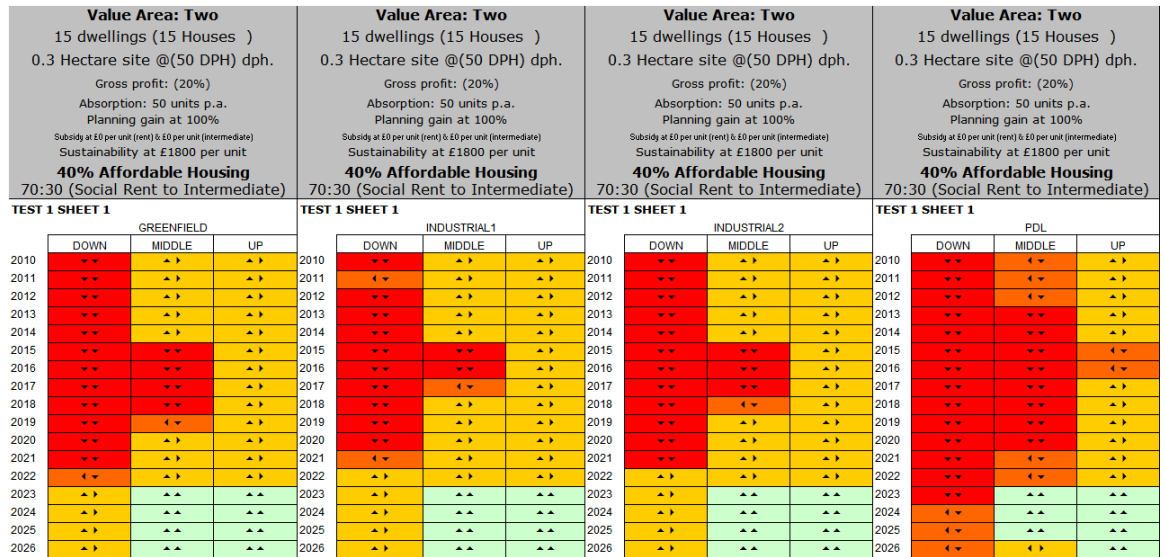


Figure 20



### Density – 75 dph

6.22 Baseline position: **Figure 21** shows the viability position of the baseline position on a 50 unit notional scheme, the profile of the 15 unit and 150 unit schemes in this area, at this density are similar. Achieving viable delivery of this percentage is unlikely in some of the period assessed in middle market conditions although a marginal/viable result can be achieved, particularly if the market performs to the upside scenario.

Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD			TEST 1 SHEET 1 INDUSTRIAL1			TEST 1 SHEET 1 INDUSTRIAL2			TEST 1 SHEET 1 PDL			TEST 1 SHEET 1 PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		

Figure 21

6.23 Sensitivity analysis: We have assessed 20% affordable housing (all other parameters in line with the baseline position) and the results are shown in **Figure 22**. Delivery at this percentage is more likely in middle market conditions around the time costs associated with achieving higher Code for Sustainable Homes requirements may increase.

Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD			TEST 1 SHEET 1 INDUSTRIAL1			TEST 1 SHEET 1 INDUSTRIAL2			TEST 1 SHEET 1 PDL			TEST 1 SHEET 1 PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		

Figure 22



6.24 We have also undertaken further sensitivity testing at 30% affordable housing and **Figure 23** shows a 15 unit notional development that assumes all affordable units are intermediate. The positive impact upon development viability of increasing the proportion of intermediate affordable units at the expense of social rented units can be seen.

Value Area: Two 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 14 SHEET 1 GREENFIELD				TEST 14 SHEET 1 INDUSTRIAL1				TEST 14 SHEET 1 INDUSTRIAL2				TEST 14 SHEET 1 PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	2010	▲▲	▲▲	▲▲	2010	▲▲	▲▲	▲▲	2010	▼▼	▲▲	▲▲
2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲	2011	▼▼	▲▲	▲▲
2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲
2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲
2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲
2015	▼▼	▲▲	▲▲	2015	▼▼	▲▲	▲▲	2015	▼▼	▲▲	▲▲	2015	▼▼	▼▼	▲▲
2016	▼▼	▲▲	▲▲	2016	▼▼	▲▲	▲▲	2016	▼▼	▲▲	▲▲	2016	▼▼	▼▼	▲▲
2017	▼▼	▲▲	▲▲	2017	▼▼	▲▲	▲▲	2017	▼▼	▲▲	▲▲	2017	▼▼	▼▼	▲▲
2018	▼▼	▲▲	▲▲	2018	▼▼	▲▲	▲▲	2018	▼▼	▲▲	▲▲	2018	▼▼	▲▲	▲▲
2019	▼▼	▲▲	▲▲	2019	▼▼	▲▲	▲▲	2019	▼▼	▲▲	▲▲	2019	▼▼	▲▲	▲▲
2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲	2020	▼▼	▲▲	▲▲
2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲
2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲
2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲
2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲
2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲
2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲

Figure 23

Density – 120 dph

6.25 Baseline position: As density increases, achieving a viable position at the baseline level becomes more challenging. **Figure 24** and **Figure 25** show the baseline position for a 15 unit and 50 unit development. It may be possible to achieve delivery at this percentage in upside market conditions, or in certain periods should middle market conditions prevail.

Value Area: Two 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 15 dwellings ( 15 Flats) 0.13 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD				TEST 1 SHEET 1 INDUSTRIAL1				TEST 1 SHEET 1 INDUSTRIAL2				TEST 1 SHEET 1 PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▼▼	▲▲	▲▲	2010	▼▼	▲▲	▲▲	2010	▼▼	▲▲	▲▲	2010	▼▼	▲▲	▲▲
2011	▼▼	▲▲	▲▲	2011	▼▼	▲▲	▲▲	2011	▼▼	▲▲	▲▲	2011	▼▼	▲▲	▲▲
2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲	2012	▼▼	▼▼	▲▲
2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲	2013	▼▼	▼▼	▲▲
2014	▼▼	▼▼	▲▲	2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲	2014	▼▼	▼▼	▲▲
2015	▼▼	▼▼	▲▲	2015	▼▼	▼▼	▲▲	2015	▼▼	▼▼	▲▲	2015	▼▼	▼▼	▲▲
2016	▼▼	▼▼	▲▲	2016	▼▼	▼▼	▲▲	2016	▼▼	▼▼	▲▲	2016	▼▼	▼▼	▲▲
2017	▼▼	▼▼	▲▲	2017	▼▼	▼▼	▲▲	2017	▼▼	▼▼	▲▲	2017	▼▼	▼▼	▲▲
2018	▼▼	▼▼	▲▲	2018	▼▼	▼▼	▲▲	2018	▼▼	▼▼	▲▲	2018	▼▼	▼▼	▲▲
2019	▼▼	▼▼	▲▲	2019	▼▼	▼▼	▲▲	2019	▼▼	▼▼	▲▲	2019	▼▼	▼▼	▲▲
2020	▼▼	▲▲	▲▲	2020	▼▼	▲▲	▲▲	2020	▼▼	▼▼	▲▲	2020	▼▼	▼▼	▲▲
2021	▼▼	▲▲	▲▲	2021	▼▼	▲▲	▲▲	2021	▼▼	▲▲	▲▲	2021	▼▼	▼▼	▲▲
2022	▼▼	▲▲	▲▲	2022	▼▼	▲▲	▲▲	2022	▼▼	▲▲	▲▲	2022	▼▼	▲▲	▲▲
2023	▼▼	▲▲	▲▲	2023	▼▼	▲▲	▲▲	2023	▼▼	▲▲	▲▲	2023	▼▼	▲▲	▲▲
2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▼▼	▲▲	▲▲
2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲
2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲

Figure 24



Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2011	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2012	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2013	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2014	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2015	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2016	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2017	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2018	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2019	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2020	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2021	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2022	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2023	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2024	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2025	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2026	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		

Figure 25

6.26 Sensitivity analysis: **Figure 26** shows the position of 20% affordable housing on a 50 unit scheme (all other parameters in line with the baseline position). Again, delivery at this percentage is more likely in middle market conditions around the time costs associated with achieving higher Code for Sustainable Homes requirements may increase.

Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2011	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2012	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2013	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2014	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2015	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2016	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2017	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2018	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2019	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2020	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2021	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2022	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2023	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2024	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2025	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		
2026	↘	↗	↘	↗	↗	↘	↗	↗	↘	↗	↘	↗	↗		

Figure 26





6.27 We have also assessed the impact of reducing S106 costs to 50% of the baseline as shown in **Figure 27**, (all other parameters remaining the same). This has a positive impact upon viability although it is marginal in this instance as can be seen if **Figure 27** and **Figure 25** are compared.

Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 4 SHEET 1				TEST 4 SHEET 1				TEST 4 SHEET 1				TEST 4 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	

Figure 27  
Density - 250 dph

6.28 Baseline position: The baseline position for a 50 unit notional development is shown in **Figure 28** and shows a similar profile to the 120 dph scheme.

Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	

Figure 28



6.29 Sensitivity analysis: Reducing the affordable housing requirement to 20% affordable housing eases viability, as does increasing the proportion of intermediate affordable units to 50% of the overall affordable housing offer. This position is shown in **Figure 29**.

Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% <small>Subsidy at £0 per unit (rent) &amp; £0 per unit (intermediate)</small> Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% <small>Subsidy at £0 per unit (rent) &amp; £0 per unit (intermediate)</small> Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% <small>Subsidy at £0 per unit (rent) &amp; £0 per unit (intermediate)</small> Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)				Value Area: Two 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% <small>Subsidy at £0 per unit (rent) &amp; £0 per unit (intermediate)</small> Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)			
TEST 13 SHEET 1 GREENFIELD				TEST 13 SHEET 1 INDUSTRIAL1				TEST 13 SHEET 1 INDUSTRIAL2				TEST 13 SHEET 1 PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2011	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2012	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2013	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2014	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2015	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2016	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2017	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2018	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2019	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2020	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2021	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2022	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2023	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2024	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2025	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	
2026	↘	↗	↗	↘	↗	↗	↗	↘	↗	↗	↗	↘	↗	↗	

Figure 29

Conclusion

- 6.30 Achieving 30% affordable housing in this area is likely to be achievable should at least middle market conditions be achieved. On higher density schemes (120 dph and above) and on sites coming forward at previously developed residential land values, delivering this percentage may be more difficult and one of the mechanisms that may ease viability if required is to increase the proportion of intermediate units at the expense of social rented units within the affordable housing mix.
- 6.31 Up to 40% affordable housing may be deliverable, particularly on the lower density schemes (50 dph and below) and where market conditions achieve at least middle market conditions.



### Value Area 3

Density – 20 dph

6.32 Baseline position: The results of a 15 unit notional development scheme assuming 30% affordable housing are shown in **Figure 30**. Against industrial and greenfield land values delivery at this percentage may be achievable in some periods of the Core Strategy period assuming the market does not perform to the downside scenario.

Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 30

6.33 Sensitivity analysis: Reducing the S106 costs to 50% of the baseline level (all other variables in line with the baseline position) eases viability as is shown in **Figure 31** although this is not sufficient to achieve a viable position in middle market conditions against previously developed residential land values.

Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 4 SHEET 1				TEST 4 SHEET 1				TEST 4 SHEET 1				TEST 4 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 31



Density – 35 dph

6.34 Baseline position: **Figure 32** shows the position of a 50 unit notional development and demonstrates that against greenfield and previously developed residential land values there are some periods in middle market conditions when achieving this percentage is unlikely to be achievable. In upside market conditions however, (and assuming middle market conditions at industrial land values), delivery at this percentage may be achieved in large periods over the life of the Core Strategy.

Value Area: Three 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔		↔	↔	↔		↔	↔	↔	

Figure 32

6.35 Sensitivity analysis: We have tested down to 20% affordable housing (all other parameters in line with the baseline position) and the results of the same 50 unit scheme are shown in **Figure 33**. Assuming middle market conditions are achieved, this percentage may be achievable against greenfield land values throughout the Core Strategy (except perhaps with the exception of the period circa 2015-2017) and possibly for the early and later period of the Core Strategy assuming previously developed residential land values.

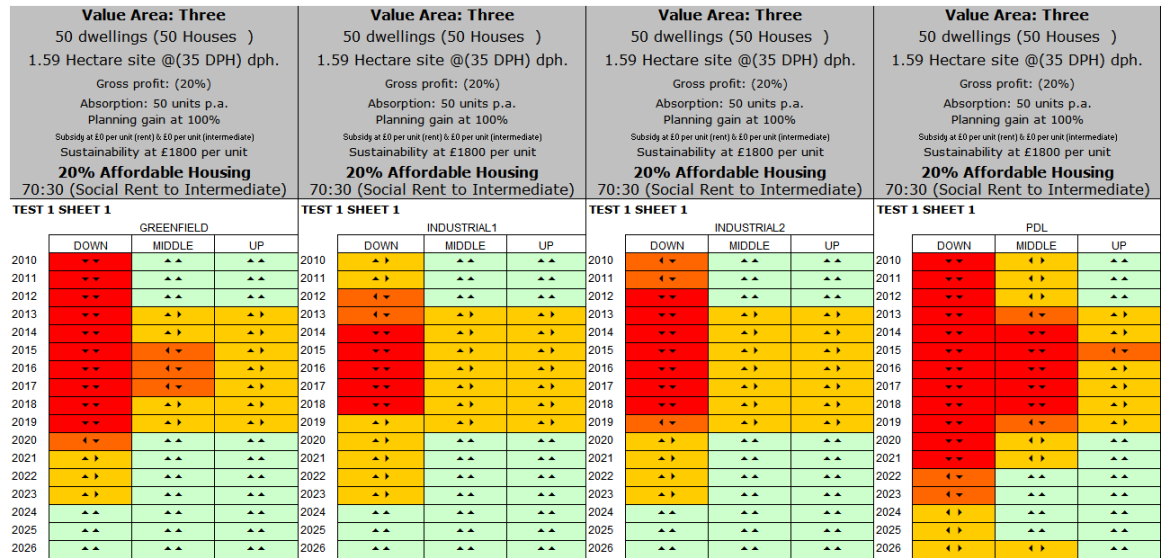


Figure 33

Density – 50 dph

6.36

Baseline position: **Figure 34** shows the baseline position for a 15 unit development and demonstrates in upside market conditions, and in certain periods of the Core Strategy in middle market conditions, delivery of this percentage may be possible. The viability position for the larger 50 unit scheme is shown in **Figure 35** demonstrating a slightly less positive outcome is likely in part to be due to differing site gross to net assumptions and absorption rates.

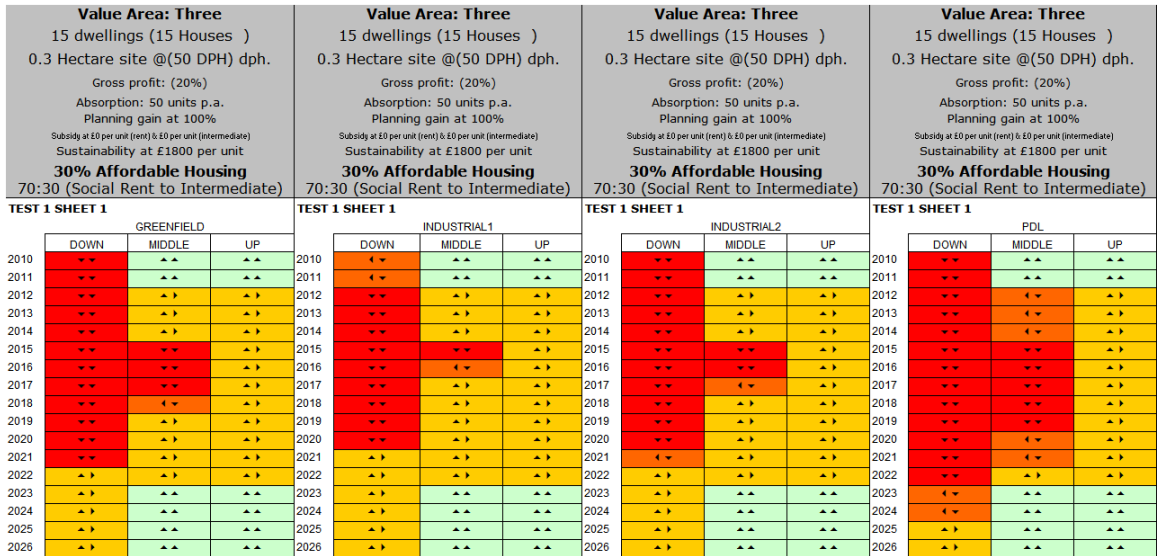


Figure 34

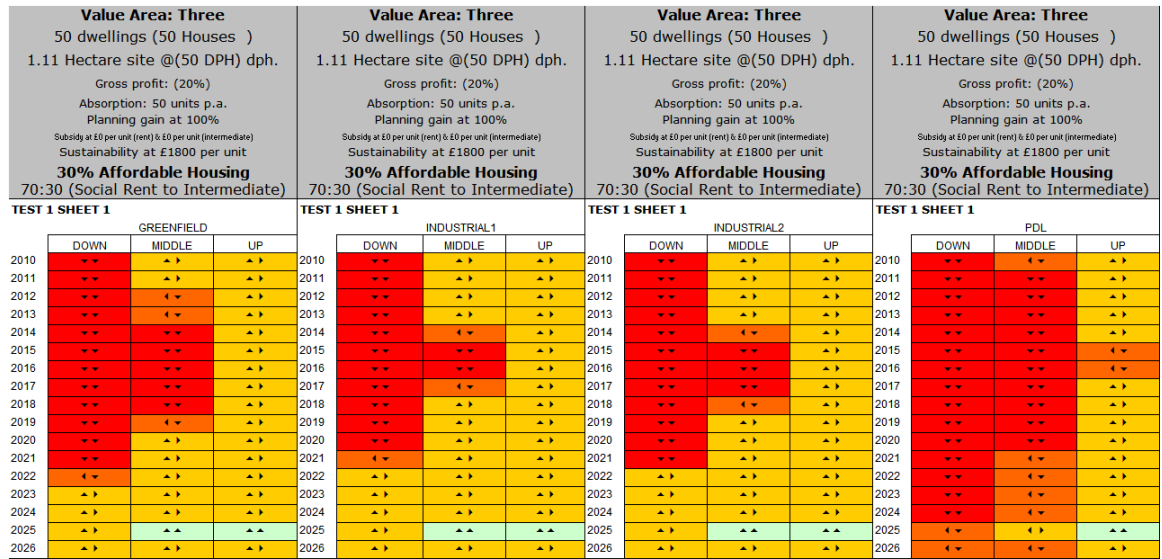


Figure 35

6.37 Sensitivity analysis: We have assessed 20% affordable housing and the results of the 50 unit scheme are shown in **Figure 36** (all other parameters in line with the baseline position). Delivery at this percentage is more likely to be achievable although may still be compromised in middle market conditions in the first half of the Core Strategy where sites coming forward with a previously developed residential land use.

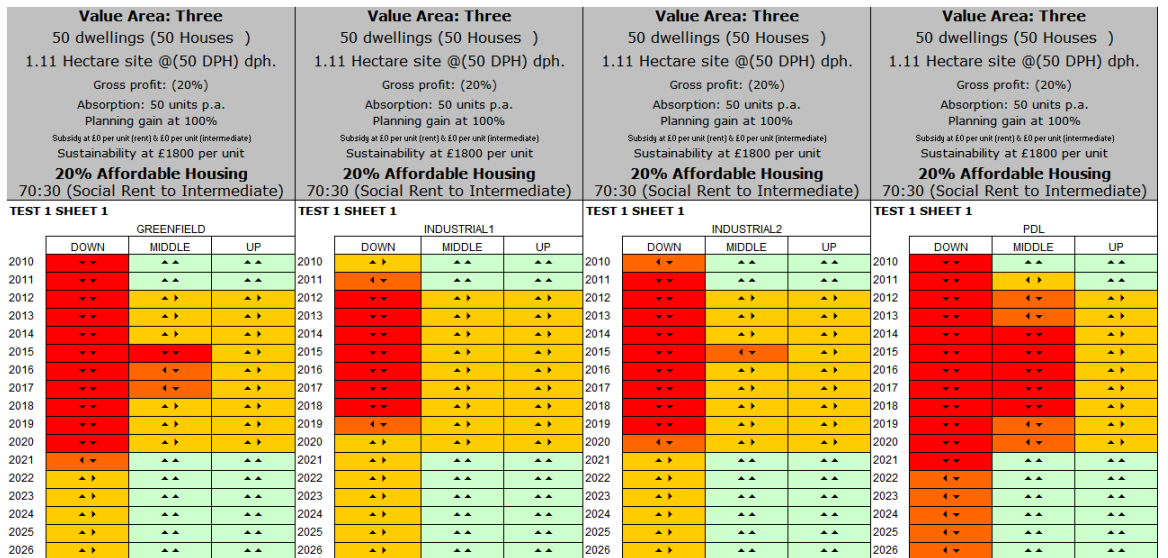


Figure 36



Density – 75 dph

- 6.38 Baseline position: We have tested 30% affordable housing and it is likely that delivery at this percentage, at this higher density, may only be possible in upside market conditions.
- 6.39 Sensitivity analysis: 20% affordable housing has been assessed and the results of the 15 unit development are shown in **Figure 37**. There are periods in middle market conditions where delivery at this percentage remains unviable although the addition of public subsidy, as shown in **Figure 38**, can reduce these.

Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1						
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL						
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP				
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				

Figure 37

Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £49500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £49500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £49500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 15 dwellings (7 Houses 8 Flats) 0.2 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £49500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 6 SHEET 1			TEST 6 SHEET 1			TEST 6 SHEET 1			TEST 6 SHEET 1						
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL						
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP				
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘				

Figure 38



### Density – 120 dph

- 6.40 Baseline position: We have tested 30% affordable housing and it is likely that delivery at this percentage, at this density, may only be possible in upside market conditions late in the Core Strategy period on schemes coming forward at industrial land values.
- 6.41 Sensitivity analysis: 20% affordable housing has thus been tested, (all other parameters in line with the baseline position), and on a 50 unit scheme delivery at this percentage is only likely to be achieved in upside market conditions, and even then remains unlikely around the time the higher costs associated with achieving Code for Sustainable Homes level 6 are achieved. Changing the tenure of all affordable units to intermediate can ease this position as is shown in **Figure 39**, however it may be that a lower percentage (up to 10%) of affordable housing in certain periods/market conditions is required to achieve a viable outcome.

Value Area: Three 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Three 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Three 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Three 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 14 SHEET 1 GREENFIELD			TEST 14 SHEET 1 INDUSTRIAL1			TEST 14 SHEET 1 INDUSTRIAL2			TEST 14 SHEET 1 PDL						
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP				
2010	↘	↗	2010	↘	↗	2010	↘	↗	2010	↘	↗				
2011	↘	↗	2011	↘	↗	2011	↘	↗	2011	↘	↗				
2012	↘	↗	2012	↘	↗	2012	↘	↗	2012	↘	↗				
2013	↘	↗	2013	↘	↗	2013	↘	↗	2013	↘	↗				
2014	↘	↗	2014	↘	↗	2014	↘	↗	2014	↘	↗				
2015	↘	↗	2015	↘	↗	2015	↘	↗	2015	↘	↗				
2016	↘	↗	2016	↘	↗	2016	↘	↗	2016	↘	↗				
2017	↘	↗	2017	↘	↗	2017	↘	↗	2017	↘	↗				
2018	↘	↗	2018	↘	↗	2018	↘	↗	2018	↘	↗				
2019	↘	↗	2019	↘	↗	2019	↘	↗	2019	↘	↗				
2020	↘	↗	2020	↘	↗	2020	↘	↗	2020	↘	↗				
2021	↘	↗	2021	↘	↗	2021	↘	↗	2021	↘	↗				
2022	↘	↗	2022	↘	↗	2022	↘	↗	2022	↘	↗				
2023	↘	↗	2023	↘	↗	2023	↘	↗	2023	↘	↗				
2024	↘	↗	2024	↘	↗	2024	↘	↗	2024	↘	↗				
2025	↘	↗	2025	↘	↗	2025	↘	↗	2025	↘	↗				
2026	↘	↗	2026	↘	↗	2026	↘	↗	2026	↘	↗				

Figure 39

### Density – 250 dph

- 6.42 Baseline position: At this density achieving a viable outcome at the baseline position in this value area is very unlikely.
- 6.43 Sensitivity analysis: 20% affordable housing has been assessed and as shown in **Figure 40** may only be achievable in upside market conditions or very late in the Core Strategy period. Although the addition of public subsidy (at £48,500 per unit social rent and £26,000 per unit intermediate) may ease this, it is not sufficient to achieve a viable position for large periods of the Core Strategy should only middle market conditions be achieved. In these periods/market conditions a viable outcome is more likely to be achieved with up to 10% affordable housing.





Value Area: Three 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Three 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	2010	↔	↔	↔	2010	↔	↔	↔	2010	↔	↔	↔
2011	↔	↔	↔	2011	↔	↔	↔	2011	↔	↔	↔	2011	↔	↔	↔
2012	↔	↔	↔	2012	↔	↔	↔	2012	↔	↔	↔	2012	↔	↔	↔
2013	↔	↔	↔	2013	↔	↔	↔	2013	↔	↔	↔	2013	↔	↔	↔
2014	↔	↔	↔	2014	↔	↔	↔	2014	↔	↔	↔	2014	↔	↔	↔
2015	↔	↔	↔	2015	↔	↔	↔	2015	↔	↔	↔	2015	↔	↔	↔
2016	↔	↔	↔	2016	↔	↔	↔	2016	↔	↔	↔	2016	↔	↔	↔
2017	↔	↔	↔	2017	↔	↔	↔	2017	↔	↔	↔	2017	↔	↔	↔
2018	↔	↔	↔	2018	↔	↔	↔	2018	↔	↔	↔	2018	↔	↔	↔
2019	↔	↔	↔	2019	↔	↔	↔	2019	↔	↔	↔	2019	↔	↔	↔
2020	↔	↔	↔	2020	↔	↔	↔	2020	↔	↔	↔	2020	↔	↔	↔
2021	↔	↔	↔	2021	↔	↔	↔	2021	↔	↔	↔	2021	↔	↔	↔
2022	↔	↔	↔	2022	↔	↔	↔	2022	↔	↔	↔	2022	↔	↔	↔
2023	↔	↔	↔	2023	↔	↔	↔	2023	↔	↔	↔	2023	↔	↔	↔
2024	↔	↔	↔	2024	↔	↔	↔	2024	↔	↔	↔	2024	↔	↔	↔
2025	↔	↔	↔	2025	↔	↔	↔	2025	↔	↔	↔	2025	↔	↔	↔

Figure 40

### Conclusion

- 6.44 Although 30% affordable housing may be achievable in some circumstances on lower density development (50 dph and below) at this areas values, there may be instances where some consideration of tenure mix and/or s106 requirements is required to achieve a viable outcome at this percentage. In all cases should downside conditions apply delivery of 30% affordable housing is unlikely in those periods.
- 6.45 On sites coming forward at a higher density (75 dph and above) it is much more challenging to achieve 30% affordable housing and it is more likely that a viable outcome can be achieved with up to 20% affordable housing. In downside market conditions and in the period around the time higher Code for Sustainable Homes requirements come into force, up to 10% affordable housing may be the likely maximum that is achievable on these higher density schemes.



## Value Area 4

### Density – 20 dph

- 6.46 Baseline position: Achieving a viable position at 30% affordable housing may be achievable at the baseline position on sites with a previous industrial use throughout most of the Core Strategy period in upside market conditions and in the last 4 years or thereabouts, in middle market conditions.
- 6.47 Sensitivity analysis: 20% affordable housing has been tested (all other parameters in line with the baseline position) and the results are shown in **Figure 41**. Public subsidy equivalent to £48,500 per unit social rent and £26,000 per unit intermediate further eases viability at this percentage. **Figure 42**

Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)		
TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1		
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 41

Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £48500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £48500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £48500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 15 dwellings (15 Houses ) 0.83 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £48500 per unit (rent) & £26000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)		
TEST 6 SHEET 1			TEST 6 SHEET 1			TEST 6 SHEET 1			TEST 6 SHEET 1		
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 42



### Density – 35 dph

- 6.48 Baseline position: We have tested 30% affordable housing and it is likely that delivery at this percentage, at this density, may be possible (a marginal/viable outcome is indicated) in upside market conditions or in certain periods of the Core Strategy in middle market conditions.
- 6.49 Sensitivity analysis: 20% affordable housing has been assessed (all other parameters in line with the baseline position) and the results of the 50 unit scheme are shown in **Figure 43**. At industrial land values, delivery of 20% affordable housing may be achievable in most periods assuming at least middle market conditions are achieved. Viability at this percentage could be further eased by the addition of public subsidy and the consideration of tenure mix and S106 requirements.

Value Area: Four 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings (50 Houses ) 1.59 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD			TEST 1 SHEET 1 INDUSTRIAL1			TEST 1 SHEET 1 INDUSTRIAL2			TEST 1 SHEET 1 PDL						
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP				
2010	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2011	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2012	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2013	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2014	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2015	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2016	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2017	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2018	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2019	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2020	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2021	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2022	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2023	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2024	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2025	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			
2026	↘	↔	↗	↘	↔	↗	↘	↔	↗	↘	↔	↗			

Figure 43



Density – 50 dph

6.50 Baseline position: We have tested 30% affordable housing and the viability position of a 15 unit scheme is shown in **Figure 44**.

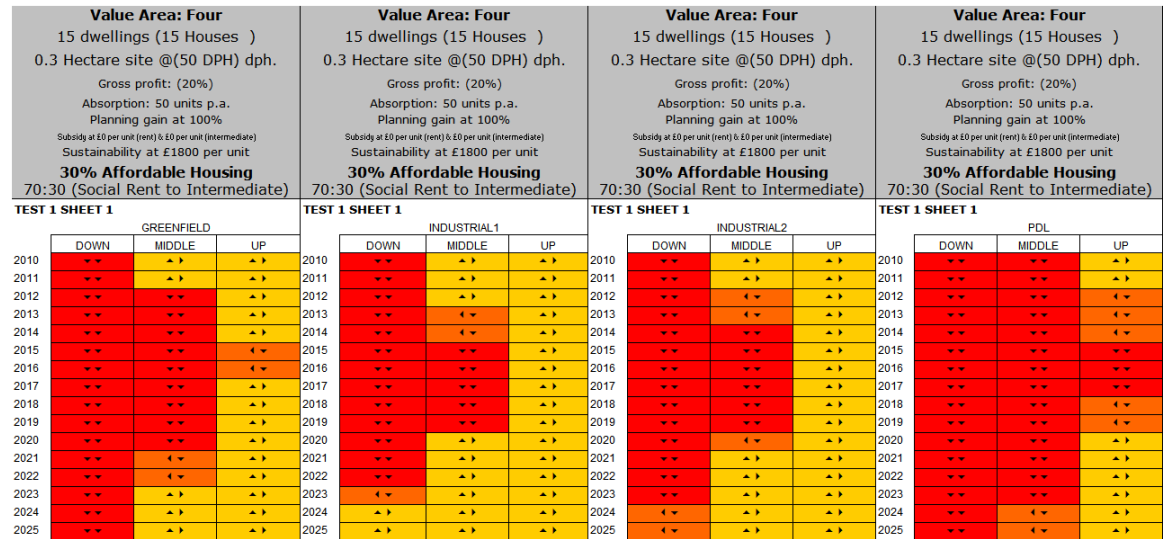


Figure 44

6.51 Sensitivity analysis: Reducing the affordable housing requirement to 20% affordable housing (all other parameters in line with the baseline position) increases the periods where a viable position may be achieved assuming only middle market conditions are achieved. This is shown in **Figure 45**.

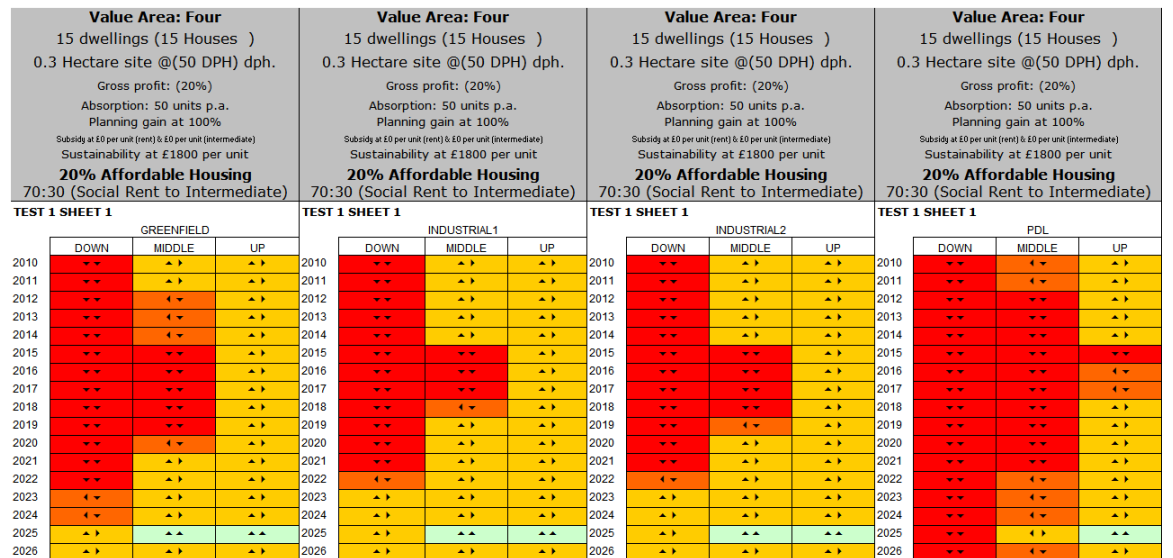


Figure 45



### Density – 75 dph

- 6.52 Baseline position: Achieving a viable position at 30% affordable housing may be achievable at the baseline position on sites with a previous industrial/greenfield use throughout most of the Core Strategy period in upside market conditions.
- 6.53 Sensitivity analysis: 20% affordable housing has been assessed (all other parameters in line with the baseline position) and as **Figure 46** demonstrates, could be achieved in large periods of the Core Strategy should only middle market conditions be achieved. This is with the exception of sites coming forward at previously

Value Area: Four 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings (22 Houses 28 Flats) 0.74 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2011	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2012	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2013	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2014	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2015	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2016	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2017	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2018	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2019	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2020	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2021	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2022	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2023	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2024	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2025	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	
2026	↘	↗	↘	↗	↗	↘	↗	↗	↘	↘	↗	↘	↘	↗	

Figure 46

### Density – 120 dph

- 6.54 Baseline position: Achieving 30% affordable housing at this density at the baseline position is likely to be achievable only in certain periods of the Core Strategy should upside market conditions prevail.
- 6.55 Sensitivity analysis: **Figure 47** shows the viability position of 20% affordable housing (all other parameters in line with the baseline position). Viability may be further eased at this percentage either by the addition of public subsidy (£36,000 per social rent unit and £24,000 per intermediate unit), **Figure 48**, or, through the application of a 50:50 social rent:intermediate tenure mix, **Figure 49**.



Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

Figure 47

Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £36000 per unit (rent) & £24000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £36000 per unit (rent) & £24000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £36000 per unit (rent) & £24000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £36000 per unit (rent) & £24000 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 8 SHEET 1				TEST 8 SHEET 1				TEST 8 SHEET 1				TEST 8 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

Figure 48



Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)			Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)			Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)			Value Area: Four 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 50:50 (Social Rent to Intermediate)		
TEST 13 SHEET 1			TEST 13 SHEET 1			TEST 13 SHEET 1			TEST 13 SHEET 1		
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 49

Density – 250 dph

6.56

Baseline position: Achieving 30% affordable housing at this density at the baseline position may only be achievable only in certain periods of the Core Strategy should upside market conditions prevail. This is shown in **Figure 50**.

Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)		
TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1		
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 50



6.57 Sensitivity analysis: Applying a 20% affordable housing requirement eases viability as shown in **Figure 51** although delivery at this percentage remains unlikely around 2012-2020 in middle market conditions. This is likely to be due to the increase in costs associated with higher Code for Sustainable Homes levels (Levels 4 and 6). In downside market conditions delivery of 20% affordable is unlikely and up to 10% affordable housing may be more likely.

Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Four 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

Figure 51

Conclusion

6.58 30% affordable housing may be achievable in upside market conditions and in certain periods of the Core Strategy period in middle market conditions. There are circumstances however where achieving 30% affordable housing is unlikely to be viable. 20% affordable housing may therefore be more likely to be deliverable in some periods should middle market conditions prevail, although in some cases (particularly when the potential increased costs associated with achieving higher Code for Sustainable Homes requirements apply) considerations of tenure, S106 requirements and public subsidy may be relevant.

6.59 Should downside market conditions apply, delivery of 20% affordable housing is likely to be challenging in those periods.





## Value Area 5

Density – 20 dph

6.60 Baseline position: In this value area 30% affordable housing may be achievable (marginal/viable) in upside market conditions, or later in the Core Strategy period in middle market conditions, against industrial land values. This is shown in **Figure 52** which relates to a 15 unit scheme.

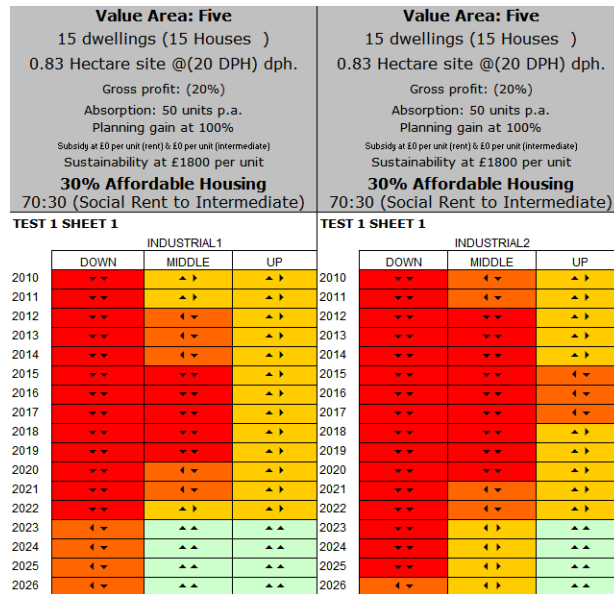


Figure 52

6.61 Sensitivity analysis: We have assessed 20% affordable housing (all other parameters in line with the baseline position) and the results of a 15 and 50 unit scheme are shown in **Figures 53 and 54**. As the figures demonstrate, there are likely to be some circumstances where it is not viable to achieve this percentage. In these cases, 10% affordable housing is likely to be achievable assuming downside market conditions are not experienced.

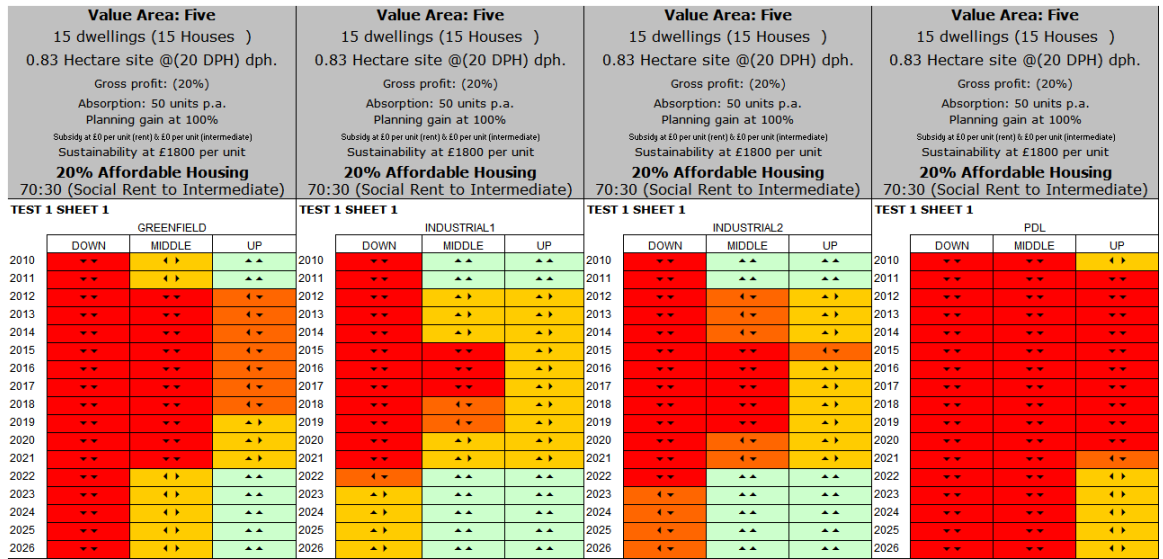


Figure 53

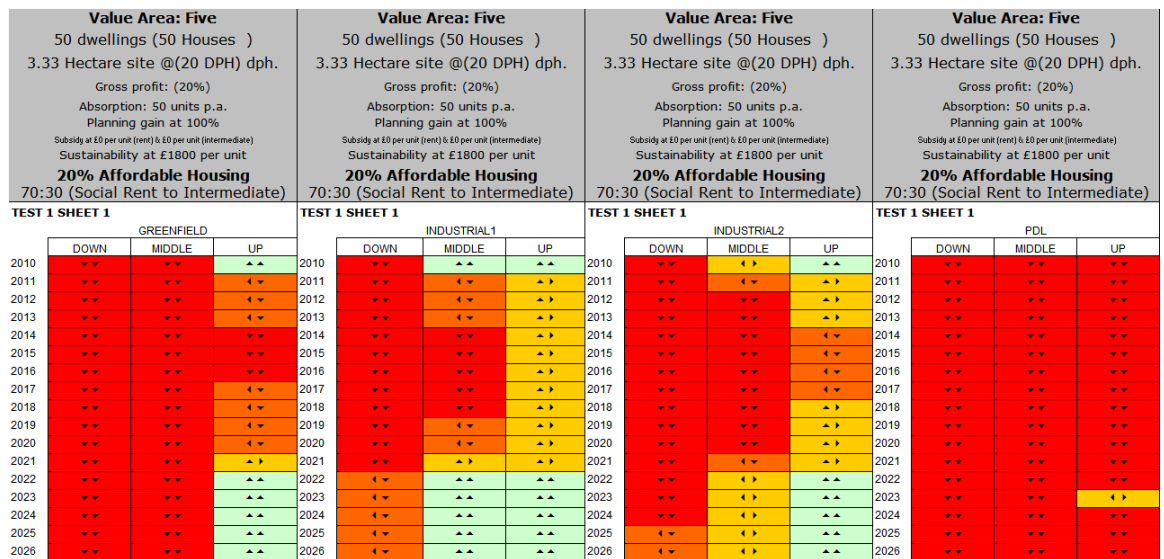


Figure 54

Density – 35 dph

- 6.62 Baseline position: 30% affordable housing at the baseline position may be achievable in upside market conditions, or later (post circa 2020), in the Core Strategy period in middle market conditions, against industrial land values. It may also be achievable assuming greenfield land values should the market perform to upside market conditions.
- 6.63 Sensitivity analysis: 20% affordable housing and 10% affordable housing have been assessed (all other assumptions in line with the baseline position) and show the impact upon overall scheme viability of reducing the affordable housing percentage to these levels on a 15 unit scheme. **Figure 55 and Figure 56**

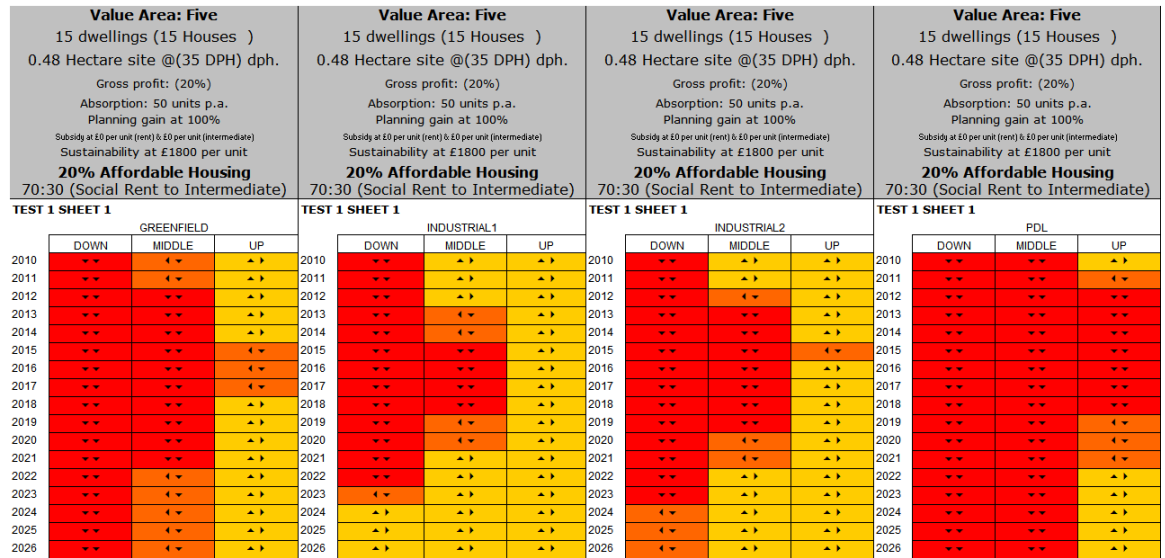


Figure 55

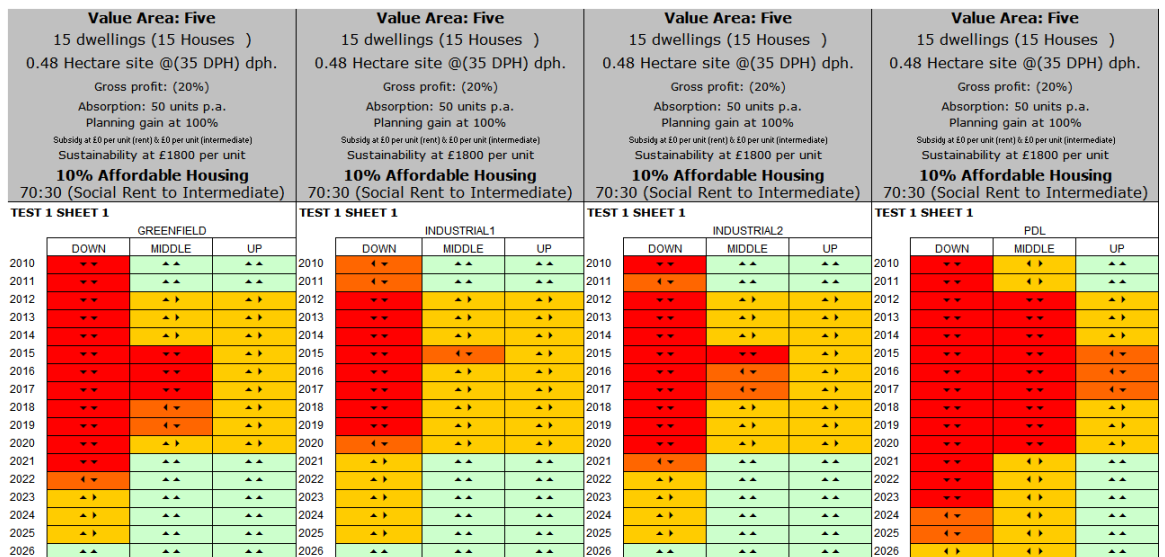


Figure 56

Density – 50 dph

- 6.64 Baseline position: It is likely to be challenging to achieve 30% affordable housing except for when market conditions reflect the upside scenario, and then, may only be possible on schemes coming forward at industrial land values in certain periods within the Core Strategy.
- 6.65 Sensitivity analysis: 20% affordable housing has been assessed on a 50 unit development and although this may be achievable in upside market conditions it is likely to remain challenging until late in the Core Strategy period should the market perform to the middle scenario. We have assessed the impact of public subsidy on viability at this percentage (£48,500 per unit social rent and £26,000 per unit intermediate) and this is shown in **Figure 57**. It is likely that in certain periods in



middle market conditions up to 10% affordable housing may be more likely to be achievable.

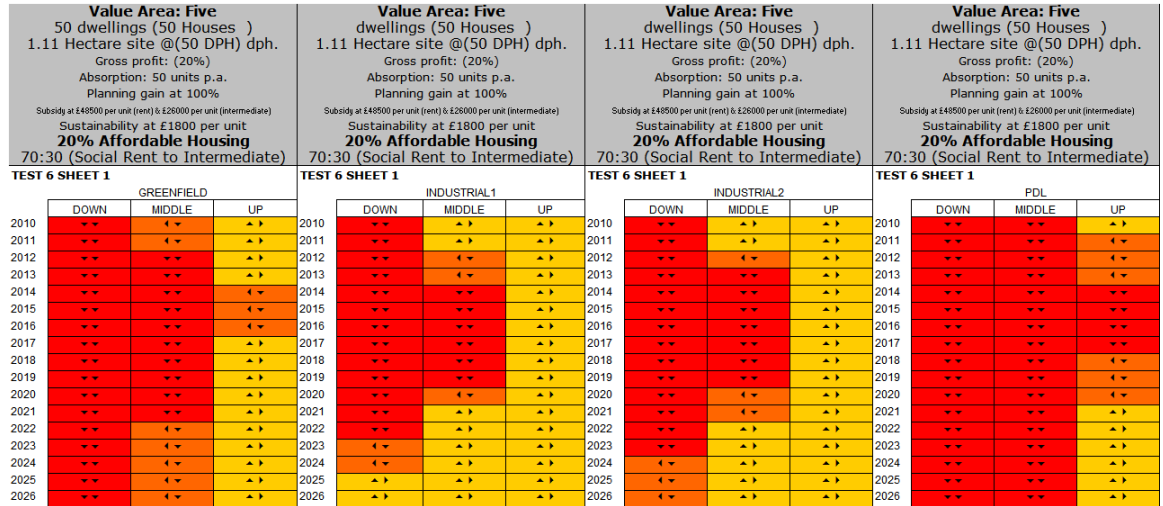


Figure 57

### Density – 75 dph

- 6.66 Baseline position: It is unlikely that 30% affordable housing at the baseline position could be achieved at this density.
- 6.67 Sensitivity analysis: 20% affordable housing is marginal/viable for some periods of the Core Strategy in upside market conditions only, although this position can be eased by the availability of public subsidy as is shown in **Figure 58**. Should public subsidy not be available, 10% affordable housing is the likely maximum that may be achieved in middle market conditions, and this may reduce to 0% (nil) in some periods where increased development costs are experienced.

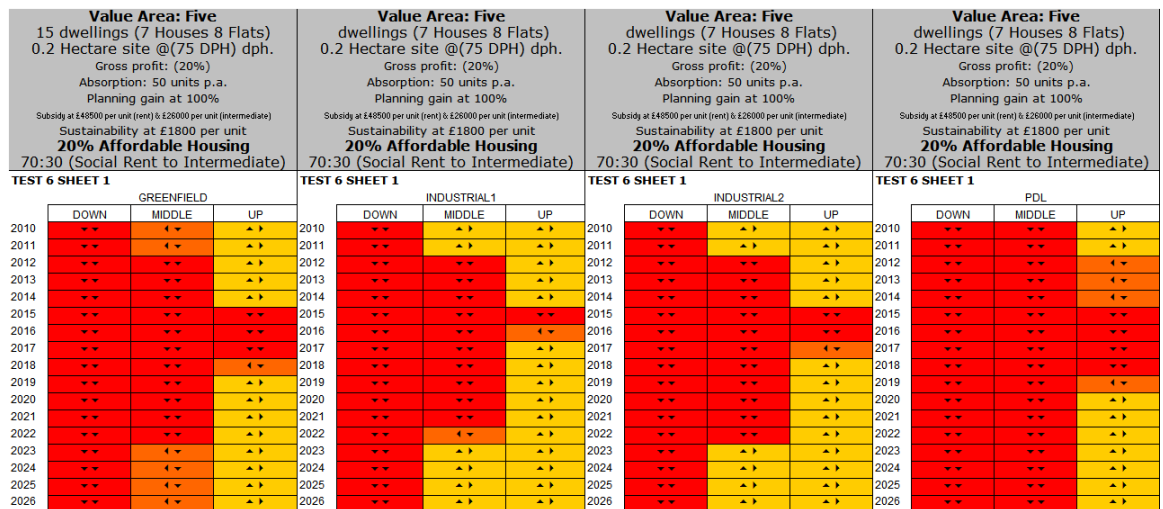


Figure 58



### Density – 120 dph and 250 dph

- 6.68 The results profiles for schemes at these densities in this area are similar thus the results are discussed in one section.
- 6.69 Baseline position: It is unlikely that 30% affordable housing at the baseline position could be achieved on schemes of these densities coming forward at these values.
- 6.70 Sensitivity analysis: Testing at 20% affordable housing has demonstrated it is likely to be challenging to achieve this percentage on these higher density schemes and it may only be achievable in certain periods in upside market conditions. We have thus tested 10% affordable housing and the results of the 250 dph, 50 unit scheme are shown in **Figure 59**. Further testing has shown that even with the addition of public subsidy there remain periods where a viable outcome is unlikely at 10% affordable housing in middle market conditions.

Value Area: Five 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Five 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Five 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Five 50 dwellings ( 50 Flats) 0.2 Hectare site @(250 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	2010	↔	↔	↔	2010	↔	↔	↔	2010	↔	↔	↔
2011	↔	↔	↔	2011	↔	↔	↔	2011	↔	↔	↔	2011	↔	↔	↔
2012	↔	↔	↔	2012	↔	↔	↔	2012	↔	↔	↔	2012	↔	↔	↔
2013	↔	↔	↔	2013	↔	↔	↔	2013	↔	↔	↔	2013	↔	↔	↔
2014	↔	↔	↔	2014	↔	↔	↔	2014	↔	↔	↔	2014	↔	↔	↔
2015	↔	↔	↔	2015	↔	↔	↔	2015	↔	↔	↔	2015	↔	↔	↔
2016	↔	↔	↔	2016	↔	↔	↔	2016	↔	↔	↔	2016	↔	↔	↔
2017	↔	↔	↔	2017	↔	↔	↔	2017	↔	↔	↔	2017	↔	↔	↔
2018	↔	↔	↔	2018	↔	↔	↔	2018	↔	↔	↔	2018	↔	↔	↔
2019	↔	↔	↔	2019	↔	↔	↔	2019	↔	↔	↔	2019	↔	↔	↔
2020	↔	↔	↔	2020	↔	↔	↔	2020	↔	↔	↔	2020	↔	↔	↔
2021	↔	↔	↔	2021	↔	↔	↔	2021	↔	↔	↔	2021	↔	↔	↔
2022	↔	↔	↔	2022	↔	↔	↔	2022	↔	↔	↔	2022	↔	↔	↔
2023	↔	↔	↔	2023	↔	↔	↔	2023	↔	↔	↔	2023	↔	↔	↔
2024	↔	↔	↔	2024	↔	↔	↔	2024	↔	↔	↔	2024	↔	↔	↔
2025	↔	↔	↔	2025	↔	↔	↔	2025	↔	↔	↔	2025	↔	↔	↔
2026	↔	↔	↔	2026	↔	↔	↔	2026	↔	↔	↔	2026	↔	↔	↔

Figure 59

### Conclusion

- 6.71 It is more challenging, albeit possible in certain circumstances, to achieve 30% affordable housing at these values. In many cases around 10-20% affordable housing is more likely to be achievable, and on high density schemes (120 dph – 250 dph) 10% is more likely to be viably delivered.



## Value Area 6

### Density – 20 dph

- 6.72 Baseline position: It is unlikely that 30% affordable housing at the baseline position could be achieved on schemes at 20 dph coming forward at these values.
- 6.73 Sensitivity analysis: 20% affordable housing (all other variables in line with the baseline position) is marginal/viable for some periods in upside market conditions assuming industrial land values. Increasing the proportion of intermediate affordable units, the addition of public subsidy and reducing S106 requirements are all mechanisms that can be employed to ease viability at this percentage). The viability position of 10% affordable housing has also been tested (again all other variables in line with the baseline position) and the results are shown in **Figure 60**.

Value Area: Six 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 15 dwellings (15 Houses ) 0.83 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

Figure 60

### Density – 35 dph

- 6.74 Baseline position: It is likely to be very challenging to achieve 30% affordable housing except for when market conditions reflect the upside scenario, and then, may only be possible on schemes coming forward at industrial land values in certain periods within the Core Strategy.
- 6.75 Sensitivity analysis: The viability position of a 50 unit scheme tested with 20% affordable housing (all other variables as the baseline position) is shown in **Figure 61**. Again, increasing the proportion of intermediate affordable units, grant input and reducing S106 requirements can all have a positive impact upon development viability, although it is likely that even if such measures are applied there will be periods in middle market conditions where 10% affordable housing may not be achieved. If downside market conditions are experienced, this is much more likely to be the case.

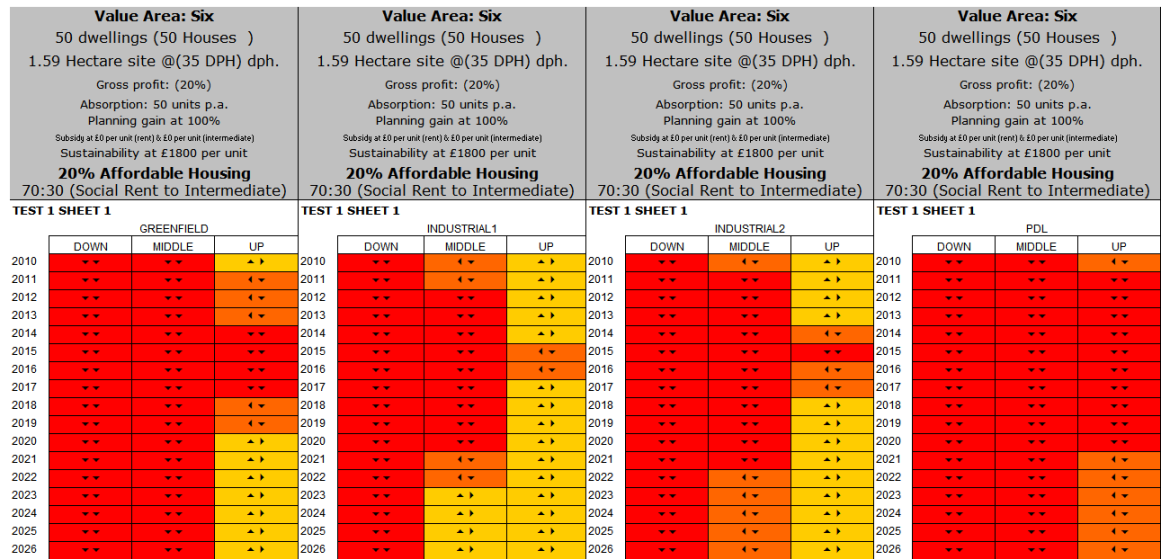


Figure 61

Density – 50 dph

- 6.76 Baseline position: It is unlikely that 30% affordable housing at the baseline position could be achieved on schemes at 50 dph coming forward at these values. There may be some periods in upside market conditions only where this may be possible but these are likely to be in the later half of the Core Strategy period only.
- 6.77 Sensitivity analysis: 20% affordable housing (assuming a 50:50 social rent:intermediate tenure mix) has been assessed and as **Figure 62** demonstrates, achieving a viable at this percentage in anything other than upside market conditions is extremely challenging. Finally, 10% affordable housing (all other variables as the baseline position) has been tested and the results shown in **Figure 63**.

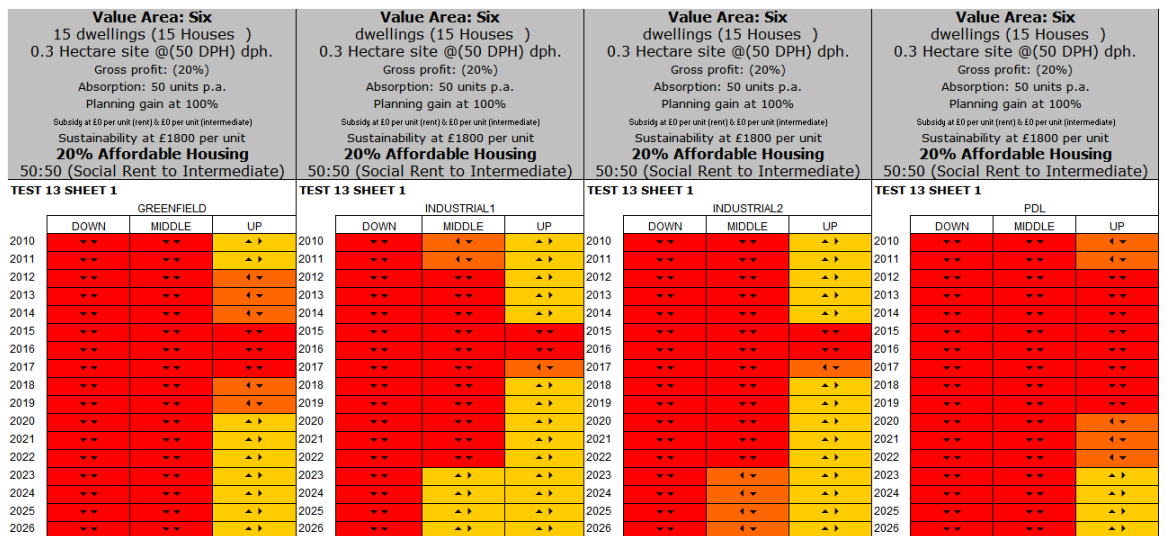


Figure 62

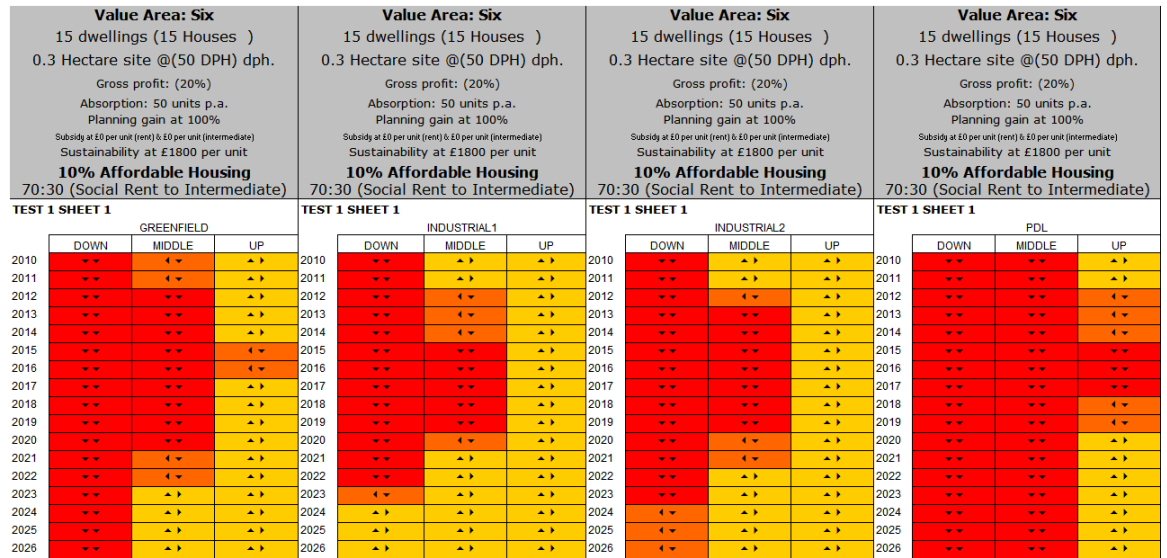


Figure 63

Density – 75 dph

- 6.78 Baseline position: It is unlikely that 30% affordable housing at the baseline position could be achieved on schemes at this density coming forward at these values.
- 6.79 Sensitivity analysis: Although 20% affordable housing may be achievable assuming all other baseline assumptions in some periods in upside market conditions (**Figure 64**) viability at this percentage is unlikely in middle market conditions unless sensitivities around public subsidy and tenure are applied. 10% affordable housing has therefore been assessed (**Figure 65**) and is likely to remain challenging to achieve in some periods in middle market conditions.

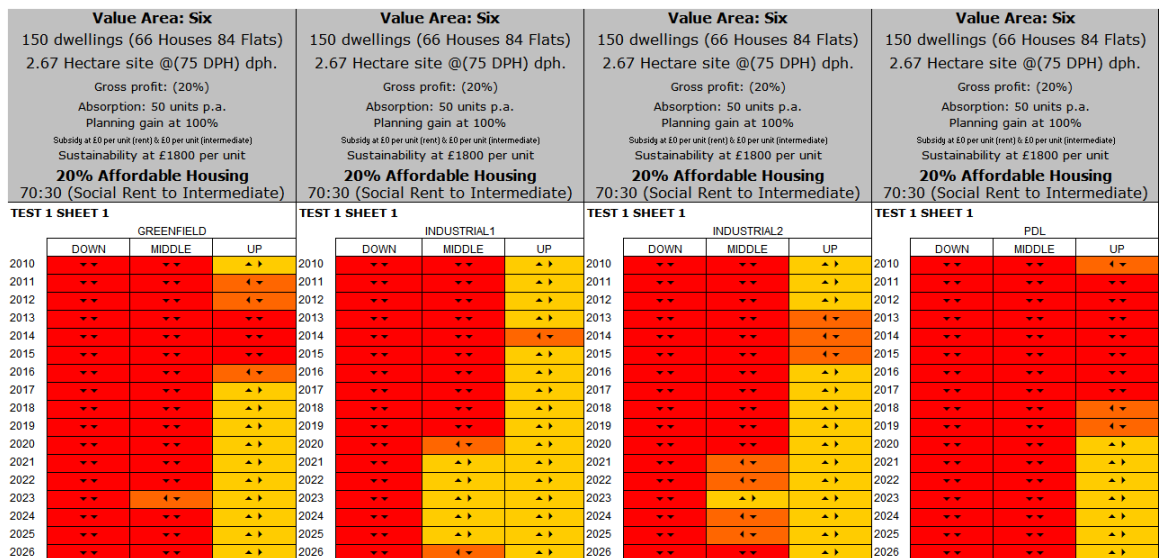


Figure 64





Value Area: Six 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 150 dwellings (66 Houses 84 Flats) 2.67 Hectare site @(75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		

Figure 65

Density – 120 dph and 250 dph

- 6.80 The results profiles for schemes at these densities in this area are similar thus the results are discussed in one section.
- 6.81 Baseline position: Sales values for flats in this value area are proportionately higher than those achieved for houses therefore the viability profile of schemes at this density is more positive than for the lower density schemes assessed. A marginal/viable outcome at the baseline position may therefore be achieved, albeit in upside market conditions only or in some cases, later in the Core Strategy should middle market conditions prevail. **Figure 66.**

Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2011	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2012	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2013	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2014	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2015	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2016	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2017	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2018	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2019	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2020	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2021	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2022	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2023	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2024	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2025	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		
2026	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘		

Figure 66



6.82 Sensitivity analysis: We have tested 20% affordable housing (all other parameters in line with the baseline position), **Figure 67**. Viability at this percentage can be eased in middle market conditions through the application of a 50:50 social rent:intermediate tenure mix.

Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Six 50 dwellings ( 50 Flats) 0.46 Hectare site @(120 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>20% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	↘↘	↗↗	↔↔	2010	↘↘	↗↗	↔↔	2010	↘↘	↗↗	↔↔	2010	↘↘	↗↗	↔↔
2011	↘↘	↗↗	↔↔	2011	↘↘	↗↗	↔↔	2011	↘↘	↗↗	↔↔	2011	↘↘	↗↗	↔↔
2012	↘↘	↗↗	↔↔	2012	↘↘	↗↗	↔↔	2012	↘↘	↗↗	↔↔	2012	↘↘	↗↗	↔↔
2013	↘↘	↗↗	↔↔	2013	↘↘	↗↗	↔↔	2013	↘↘	↗↗	↔↔	2013	↘↘	↗↗	↔↔
2014	↘↘	↗↗	↔↔	2014	↘↘	↗↗	↔↔	2014	↘↘	↗↗	↔↔	2014	↘↘	↗↗	↔↔
2015	↘↘	↗↗	↔↔	2015	↘↘	↗↗	↔↔	2015	↘↘	↗↗	↔↔	2015	↘↘	↗↗	↔↔
2016	↘↘	↗↗	↔↔	2016	↘↘	↗↗	↔↔	2016	↘↘	↗↗	↔↔	2016	↘↘	↗↗	↔↔
2017	↘↘	↗↗	↔↔	2017	↘↘	↗↗	↔↔	2017	↘↘	↗↗	↔↔	2017	↘↘	↗↗	↔↔
2018	↘↘	↗↗	↔↔	2018	↘↘	↗↗	↔↔	2018	↘↘	↗↗	↔↔	2018	↘↘	↗↗	↔↔
2019	↘↘	↗↗	↔↔	2019	↘↘	↗↗	↔↔	2019	↘↘	↗↗	↔↔	2019	↘↘	↗↗	↔↔
2020	↘↘	↗↗	↔↔	2020	↘↘	↗↗	↔↔	2020	↘↘	↗↗	↔↔	2020	↘↘	↗↗	↔↔
2021	↘↘	↗↗	↔↔	2021	↘↘	↗↗	↔↔	2021	↘↘	↗↗	↔↔	2021	↘↘	↗↗	↔↔
2022	↘↘	↗↗	↔↔	2022	↘↘	↗↗	↔↔	2022	↘↘	↗↗	↔↔	2022	↘↘	↗↗	↔↔
2023	↘↘	↗↗	↔↔	2023	↘↘	↗↗	↔↔	2023	↘↘	↗↗	↔↔	2023	↘↘	↗↗	↔↔
2024	↘↘	↗↗	↔↔	2024	↘↘	↗↗	↔↔	2024	↘↘	↗↗	↔↔	2024	↘↘	↗↗	↔↔
2025	↘↘	↗↗	↔↔	2025	↘↘	↗↗	↔↔	2025	↘↘	↗↗	↔↔	2025	↘↘	↗↗	↔↔

Figure 67

### Conclusion

6.83 Aside from schemes coming forward at higher densities (120 dph and 250 dph) where 30% affordable housing may be achievable in positive market conditions, achieving this percentage is very challenging in this value area. Up to 20% affordable housing is more likely to be achievable on lower density schemes at these values, particularly on sites coming forward at industrial land values. Up to 10% affordable housing may be a more appropriate expectation in certain market conditions and should the market perform to the downside scenario, delivery of any amount of affordable housing is likely to be extremely difficult in these periods.



## Value Areas 7, 8 and 9

6.84 The results profiles for schemes at in these value areas are similar thus the results are discussed in one section.

### Density – 20 dph

6.85 Baseline position: 30% affordable housing is not likely to be achievable regardless of market conditions in any of these 3 value areas.

6.86 Sensitivity analysis: 20% is not likely to be achievable regardless of market conditions in any of these 3 value areas at the values tested. 10% affordable housing has been assessed (all other parameters as the baseline) and although a marginal/viable outcome may be achievable in value area 7 in upside conditions in limited periods of the Core Strategy, (**Figure 68**) such a position is less likely to be achieved in value areas 8 and 9.

Value Area: Seven 50 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Seven 50 dwellings (50 Houses ) 3.33 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1			
INDUSTRIAL1			INDUSTRIAL2				
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP		
2010	↔	↔	↔	↔	↔		
2011	↔	↔	↔	↔	↔		
2012	↔	↔	↔	↔	↔		
2013	↔	↔	↔	↔	↔		
2014	↔	↔	↔	↔	↔		
2015	↔	↔	↔	↔	↔		
2016	↔	↔	↔	↔	↔		
2017	↔	↔	↔	↔	↔		
2018	↔	↔	↔	↔	↔		
2019	↔	↔	↔	↔	↔		
2020	↔	↔	↔	↔	↔		
2021	↔	↔	↔	↔	↔		
2022	↔	↔	↔	↔	↔		
2023	↔	↔	↔	↔	↔		
2024	↔	↔	↔	↔	↔		
2025	↔	↔	↔	↔	↔		
2026	↔	↔	↔	↔	↔		

Figure 68

### Density – 35 dph

6.87 Baseline position: Baseline position: 30% affordable housing is not likely to be achievable regardless of market conditions in any of these 3 value areas.

6.88 Sensitivity analysis: 20% affordable housing has been assessed and is only likely to be achievable in value area 7 in limited periods of the Core Strategy period in upside market conditions. The position assuming 10% affordable housing and a relaxation of S106 requirements in value area 7 to 50% of the baseline level is shown in **Figure 69** against industrial land values. In value areas 8 and 9, it is more challenging to achieve 10% affordable housing and this percentage may only be deliverable in upside market conditions in value area 8, and potentially not at all in value area 9.



Value Area: Seven dwellings (15 Houses ) 0.48 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Seven dwellings (15 Houses ) 0.48 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 50% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)		
TEST 4 SHEET 1			TEST 4 SHEET 1		
INDUSTRIAL1			INDUSTRIAL2		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	↘	↗	2010	↘	↗
2011	↘	↗	2011	↘	↗
2012	↘	↗	2012	↘	↗
2013	↘	↗	2013	↘	↗
2014	↘	↗	2014	↘	↗
2015	↘	↗	2015	↘	↗
2016	↘	↗	2016	↘	↗
2017	↘	↗	2017	↘	↗
2018	↘	↗	2018	↘	↗
2019	↘	↗	2019	↘	↗
2020	↘	↗	2020	↘	↗
2021	↘	↗	2021	↘	↗
2022	↘	↗	2022	↘	↗
2023	↘	↗	2023	↘	↗
2024	↘	↗	2024	↘	↗
2025	↘	↗	2025	↘	↗
2026	↘	↗	2026	↘	↗

Figure 69

Density – 50 dph

- 6.89 Baseline position: 30% affordable housing is not likely to be achievable regardless of market conditions in any of these 3 value areas.
- 6.90 Sensitivity analysis: Again, 20% affordable housing has been assessed and is only likely to be achievable in value area 7 in limited periods of the Core Strategy period in upside market conditions. **Figure 70** shows the viability of 10% affordable housing assuming area 7 values. The position for value areas 8 and 9 becomes progressively less viable with value area 8 sustaining a marginal/viable outcome in the latter half of the Core Strategy.

Value Area: Seven 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Seven 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			Value Area: Seven 50 dwellings (50 Houses ) 1.11 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>10% Affordable Housing</b> 70:30 (Social Rent to Intermediate)		
TEST 1 SHEET 1			TEST 1 SHEET 1			TEST 1 SHEET 1		
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	↘	↗	2010	↘	↗	2010	↘	↗
2011	↘	↗	2011	↘	↗	2011	↘	↗
2012	↘	↗	2012	↘	↗	2012	↘	↗
2013	↘	↗	2013	↘	↗	2013	↘	↗
2014	↘	↗	2014	↘	↗	2014	↘	↗
2015	↘	↗	2015	↘	↗	2015	↘	↗
2016	↘	↗	2016	↘	↗	2016	↘	↗
2017	↘	↗	2017	↘	↗	2017	↘	↗
2018	↘	↗	2018	↘	↗	2018	↘	↗
2019	↘	↗	2019	↘	↗	2019	↘	↗
2020	↘	↗	2020	↘	↗	2020	↘	↗
2021	↘	↗	2021	↘	↗	2021	↘	↗
2022	↘	↗	2022	↘	↗	2022	↘	↗
2023	↘	↗	2023	↘	↗	2023	↘	↗
2024	↘	↗	2024	↘	↗	2024	↘	↗
2025	↘	↗	2025	↘	↗	2025	↘	↗
2026	↘	↗	2026	↘	↗	2026	↘	↗

Figure 70



### Density – 75 dph

- 6.91 Baseline position: At this increased density, 30% affordable housing is not likely to be achievable regardless of market conditions in any of these 3 value areas.
- 6.92 Sensitivity analysis: Although 20% affordable housing may be achieved in value area 7 this is only likely in very limited periods of the Core Strategy in upside market conditions. 10% affordable housing has been assessed and this may be deliverable in upside conditions in most of the years to 2026 in upside conditions in value area 7 assuming industrial land values. In value areas 8 and 9, delivery of 10% is likely to be very difficult and unlikely to be achieved at values equivalent to those in area 9.

### Density – 120 dph and 250 dph

- 6.93 Baseline position: 30% affordable housing is not likely to be achievable regardless of market conditions in any of these 3 value areas at either of these densities.
- 6.94 Sensitivity analysis: 20% is not likely to be achievable regardless of density in any of these 3 value areas at the values tested. 10% affordable housing has been assessed (all other parameters as the baseline) and is only likely to be achievable at area 7 value in limited periods in upside market conditions.

### Conclusion

- 6.95 It is very challenging to achieve a viable outcome with any amount of affordable housing on sites coming forward with values similar to those in areas 8 and 9. There is some limited capacity in value area 7 to achieve up to a maximum of 20% affordable housing although viability is compromised in a number of scenarios.
- 6.96 At these value levels the ability of a scheme unencumbered by affordable housing to achieve a positive residual land value is compromised in many cases, particularly so in value areas 8 and 9 and therefore it may be that if significant new build development is to be promoted in this area/or at these values it may be necessary in certain cases/periods to give consideration towards gap funding and other regeneration initiatives.



## 7.0 Results – Large Sites (500 units)

- 7.1 Following consultation with the Council we have been asked to assess a notional 500 unit scheme coming forward at 35 dph, 50 dph and 75 dph. This may represent development schemes that will come forward during the Core Strategy and deliver significant numbers of housing. We do not, at present, know where such sites may be specifically located and therefore we have assessed them against every value area within the local authority.
- 7.2 Following discussions with officers, we have considered viability based on different tenure breakdowns, absorption rates, with and without Social Housing Grant, and a range of different S106/infrastructure contributions – at 100%, 150% and 200% of the baseline level assumed for general development sites. We have assumed this contribution is timetabled to occur at initial occupation. We have assumed a gross land take that takes account of other site uses. The site gross to net ratio on all 500 unit schemes has been assumed at 75%. We have also assumed that the site will come forward in a single phase.
- 7.3 We have assessed the resulting residual value for the whole development against Gross Development Value (the RLV:GDV test). This allows us to consider the relative land value rather than an absolute one. Rather than assessing what particular land value might be acceptable to a landowner this assesses the true value of the development and whether the land value generated may be reasonable for both the developer and the landowner.
- 7.4 It is clear from our stakeholder consultation that assessing large schemes of this nature on a generic basis (as we must here) is fraught with issues as there are likely to be many factors that will affect land coming forward. These will include land assembly issues (land may not be in one ownership and may come forward on a phased basis) as well as infrastructure issues. Also, there may be other uses on the site that will affect overall viability. It has not been possible to incorporate all of these variables in what must be seen as a generic study to inform general policy positions. Rather, our assessment of larger sites such as this must be seen as a preliminary part of the process that establishes the general starting point for negotiations and that establishes the likely potential for these sites.
- 7.5 Further care must be taken when assessing large scale developments of this sort as the site assembly issues, large infrastructure requirements and timing of development can all have a significant effect on development economics. Developer appraisals on these large sites are unlikely to take the form of a policy assessment model such as this as different factors and their timing will have to be carefully considered. However, in our experience the long term sales profiles of these sites can help viability somewhat especially in a rising market and where short term losses to pay for infrastructure requirements can be offset later in the development period by rising sales values. The assessment we have done of these large sites must be seen in this light; it is not a case of extrapolating the results of a small site (up to 150 units for example) and using these to assess the viability of large strategic sites.
- 7.6 It should also be remembered that new value areas may be created over the long term by the development of large schemes. This may mean that these sites may have their own unique ‘value area’ and may not necessarily reflect the value areas assessed here.



## Value Area 1

Density – 35 dph

7.7 **Figure 71** shows the results of 40% affordable housing demonstrating that post circa 2016, a viable position may be achieved at this percentage should at least middle market conditions be achieved. We have also assessed 30% affordable housing and the results are shown in **Figure 72**.

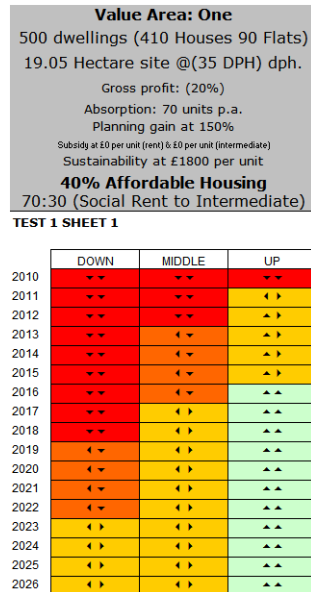


Figure 71

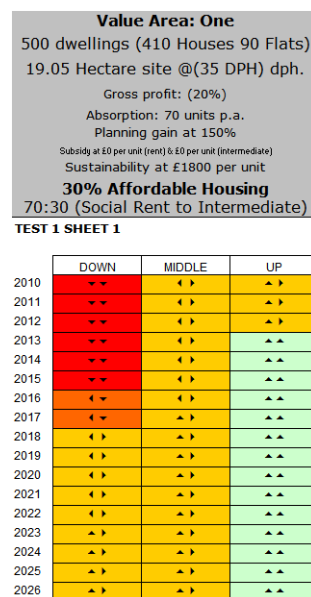


Figure 72



### Density – 50 dph

- 7.8 40% affordable housing at this density is marginally less viable than at 35 dph, nevertheless possible post circa 2018 assuming the market performs to the middle scenario. This of course assumes that S106 costs are not in excess of those assumed. 30% affordable housing has also been tested and the results are shown in **Figure 73**.

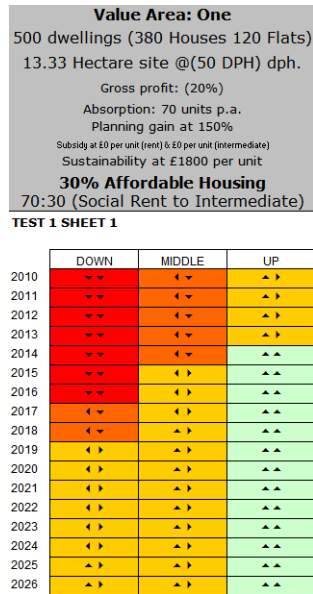


Figure 73

### Density – 75 dph

- 7.9 As density increases it has an adverse impact upon viability in this area and achieving 40% affordable housing is unlikely to be achieved without either consideration of tenure, S106/infrastructure requirements or the addition of public subsidy unless upside market conditions are achieved. **Figure 74** shows the position at 30% affordable housing with a sales rate of 90 units per annum and nil grant.



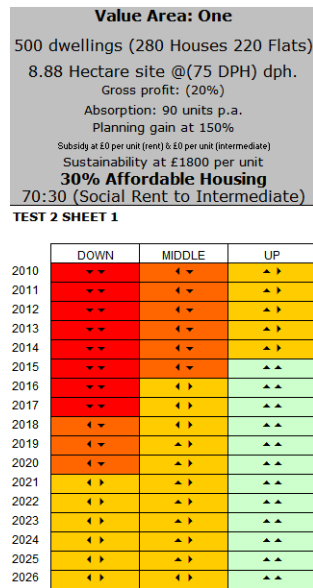


Figure 74

## Value Area 2

Density – 35 dph

7.10 Achieving a viable position at 40% affordable housing at these values is more challenging and may require grant and a consideration of tenure mix. Market conditions will also have a large impact on achieving this percentage. We have assessed 30% affordable housing without grant and assuming a 70:30 social rent:intermediate tenure mix and the results are shown in **Figure 75**. A viable position may be achievable in upside market conditions, or later in the Core Strategy should middle market conditions prevail.

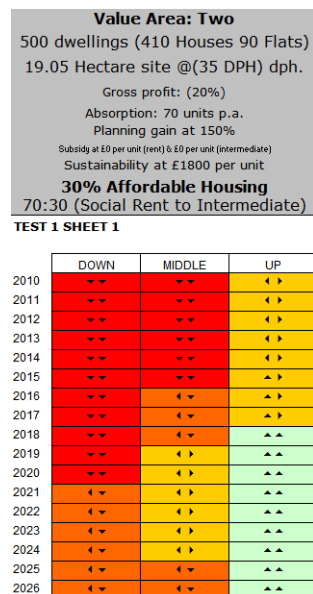


Figure 75



Density – 50 dph

7.11 At this density achieving a viable position assuming 40% affordable housing is challenging. **Figure 76** shows the viability position at 30% affordable housing, whilst **Figure 77** shows the same position with public subsidy. It can be seen that although the addition of public subsidy has a positive impact upon viability, achieving 30% affordable may be more difficult unless positive economic conditions are experienced.

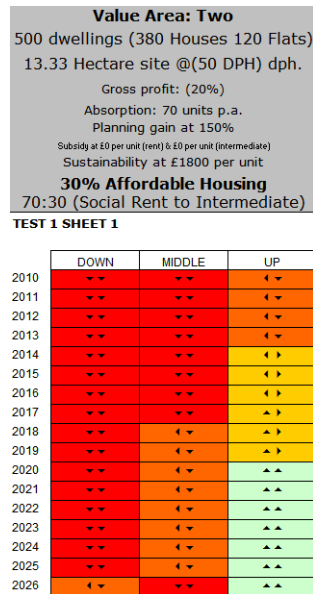


Figure 76

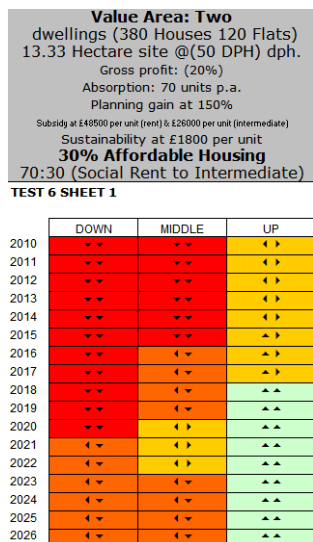


Figure 77



### Density – 75 dph

7.12 Again, as density increases it has an adverse effect upon viability. At this density delivery of 40% affordable housing is unlikely to be achieved unless upside market conditions prevail and even then public subsidy is likely to be required. 30% affordable housing has been tested without public subsidy (**Figure 78**) and unless positive market conditions are experienced achieving this level of affordable housing is unlikely within these parameters.

Value Area: Two			
500 dwellings (280 Houses 220 Flats)			
8.88 Hectare site @(75 DPH) dph.			
Gross profit: (20%)			
Absorption: 70 units p.a.			
Planning gain at 150%			
Subsidy at £0 per unit (rent) & £0 per unit (intermediate)			
Sustainability at £1800 per unit			
<b>30% Affordable Housing</b>			
70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1			
	DOWN	MIDDLE	UP
2010	▼▼	▼▼	◀▼
2011	▼▼	▼▼	◀▼
2012	▼▼	▼▼	◀▼
2013	▼▼	▼▼	◀▶
2014	▼▼	▼▼	◀▶
2015	▼▼	▼▼	◀▶
2016	▼▼	▼▼	▶▶
2017	▼▼	▼▼	▶▶
2018	▼▼	▼▼	▶▶
2019	▼▼	▼▼	▶▶
2020	▼▼	▼▼	▶▶
2021	▼▼	▼▼	▶▶
2022	▼▼	▼▼	▶▶
2023	▼▼	▼▼	▶▶
2024	▼▼	▼▼	▶▶
2025	▼▼	▼▼	▶▶
2026	▼▼	▼▼	▶▶

Figure 78

### Value Area 3

#### Density – 35 dph

7.13 It is unlikely that 40% affordable housing could be achieved at these values. **Figure 79** shows 30% affordable housing may be achievable in upside market conditions, obviously grant and considerations of tenure and planning gain will ease viability at this percentage. We have tested 20% affordable housing without and with public subsidy and the results are shown in **Figures 80** and **81**.

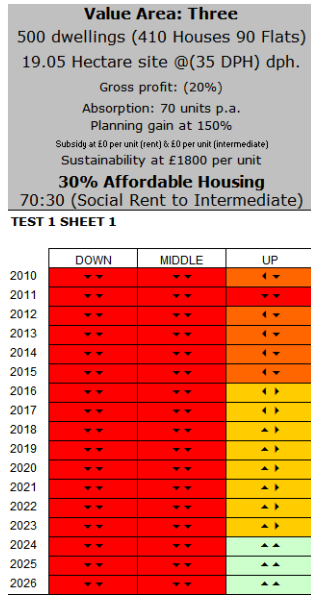


Figure 79

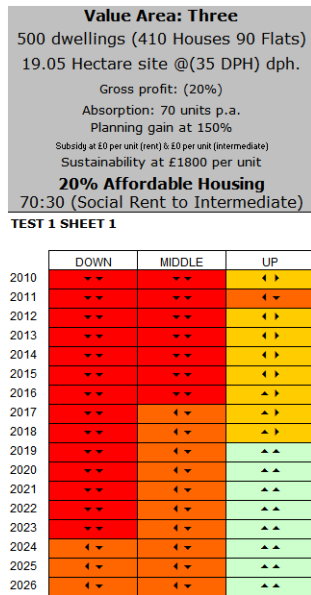


Figure 80

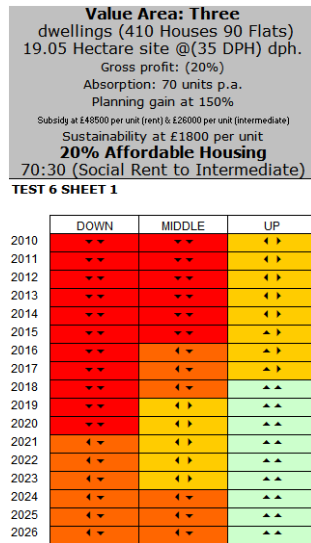


Figure 81

Density – 50 dph

7.14 Delivery of 40% and even 30% affordable housing is likely to be difficult to achieve at these values therefore 20% affordable housing has been assessed assuming nil public subsidy (**Figure 82**) and with public subsidy (**Figure 83**).

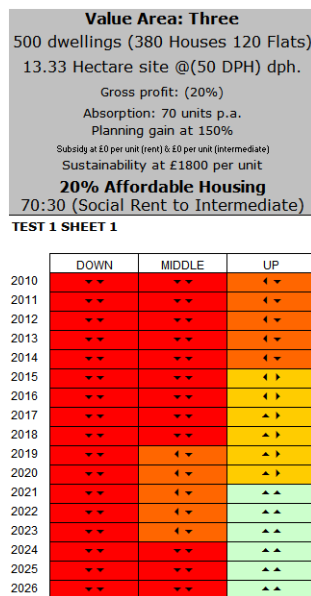


Figure 82

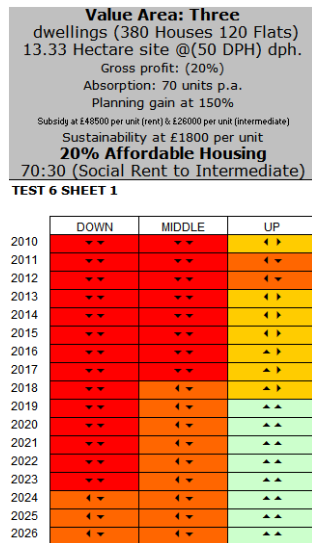


Figure 83

Density – 75 dph

- 7.15 At this density achieving higher proportions of affordable housing is very difficult. We have tested as low as 10% affordable housing (assuming nil subsidy and planning gain at 150% of the baseline) and delivery of this percentage may be achievable in positive market conditions.

**Value Area 4**

Density – 35 dph

- 7.16 At these values, it may be challenging to achieve in excess of 10% affordable housing. **Figure 84** shows the position of 10% affordable housing with a sales rate of 70 units per annum with the addition of public subsidy.

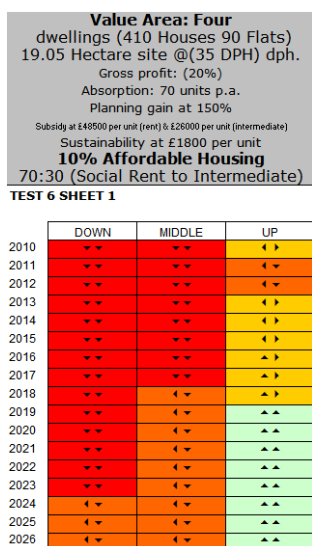


Figure 84



### Density – 50 dph

- 7.17 Results at this density show a similar profile to the 35 dph scheme. 10% affordable housing without grant may be achieved in upside market conditions. If market conditions do not perform to this level, grant and other considerations to ease viability are likely to be required.

### Density – 75 dph

- 7.18 10% affordable housing is likely to be achievable in upside market conditions in certain periods of the Core Strategy without grant and assuming sales rates of 70 units per month and a 70:30 social rent:intermediate tenure mix.

### Value Areas 5-9

- 7.19 Achieving a viable position assuming any more than 10% affordable housing in any of these value areas is challenging. Public subsidy, sales rates at levels higher than those assessed, considerations of tenure mix and planning gain will ease viability although in some areas these measure are unlikely to be sufficient to increase the percentage at which a viable position could be achieved to much more than 10%. Value area 6 may be able to support slightly higher percentages on higher density development due to the values used for flats and maisonettes however this is an exception. Schemes of this size coming forward at values equivalent to those in value areas 7, 8 and 9 may be unable to viably deliver any amount of affordable housing.



## 8.0 Results – Sites Below 15 Units

- 8.1 Following consultation with the Council, it was agreed to assess the viability of sites below the current threshold of 15 units to ascertain their potential to deliver affordable housing on site or as a commuted sum in lieu of on site delivery and to test whether a lower minimum threshold was 'viable and practicable'<sup>21</sup>. In all scenarios of 10 units or less professional fees were assessed to total 12% of build costs. Furthermore in all cases a nil grant position has been assumed.
- 8.2 It was also agreed that on schemes of this size (particularly schemes of 5 units) affordable housing may also be assessed as being either 100% social rented or 100% intermediate as the likely number of units that could be delivered is so low as to make mixing of tenures impractical.
- 8.3 We have assessed notional schemes of 5 units at 20 dph, 35 dph and 50 dph and 10 unit schemes at 20dph, 35dph, 50 dph and 75dph. All 5 and 10 unit schemes have been assessed in all value areas.

### Value Area 1

#### Density – 20 dph

- 8.4 Up to 40% affordable housing may be achievable on 5 and 10 unit developments however the impact of the tenure of these units upon viability is marked. **Figures 85 and 86** show the viability position of 40% affordable housing on a 10 unit scheme assuming the provision of all intermediate units and the provision of all social rented units. If all units sought were provided as social rented then delivery at this percentage is unlikely in some circumstances. The viability profile for 5 units is similar to that of 10 units and is shown in **Figures 87 and 88**.

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<sup>21</sup> Planning Policy Statement 3: Housing paragraph 29 Communities and Local Government 2006







Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	2010	▲▲	▲▲	▲▲	2010	▲▲	▲▲	▲▲	2010	▲▲	▲▲	▲▲
2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲
2012	▲▲	▲▲	▲▲	2012	▲▲	▲▲	▲▲	2012	▲▲	▲▲	▲▲	2012	▲▲	▲▲	▲▲
2013	▲▲	▲▲	▲▲	2013	▲▲	▲▲	▲▲	2013	▲▲	▲▲	▲▲	2013	▲▲	▲▲	▲▲
2014	▲▲	▲▲	▲▲	2014	▲▲	▲▲	▲▲	2014	▲▲	▲▲	▲▲	2014	▲▲	▲▲	▲▲
2015	▲▲	▲▲	▲▲	2015	▲▲	▲▲	▲▲	2015	▲▲	▲▲	▲▲	2015	▲▲	▲▲	▲▲
2016	▲▲	▲▲	▲▲	2016	▲▲	▲▲	▲▲	2016	▲▲	▲▲	▲▲	2016	▲▲	▲▲	▲▲
2017	▲▲	▲▲	▲▲	2017	▲▲	▲▲	▲▲	2017	▲▲	▲▲	▲▲	2017	▲▲	▲▲	▲▲
2018	▲▲	▲▲	▲▲	2018	▲▲	▲▲	▲▲	2018	▲▲	▲▲	▲▲	2018	▲▲	▲▲	▲▲
2019	▲▲	▲▲	▲▲	2019	▲▲	▲▲	▲▲	2019	▲▲	▲▲	▲▲	2019	▲▲	▲▲	▲▲
2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲
2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲
2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲
2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲
2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲
2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲
2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲

Figure 87

Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 100:0 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 100:0 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 100:0 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.25 Hectare site @(20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 100:0 (Social Rent to Intermediate)			
TEST 13 SHEET 1				TEST 13 SHEET 1				TEST 13 SHEET 1				TEST 13 SHEET 1			
GREENFIELD				INDUSTRIAL 1				INDUSTRIAL 2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▼▼	▲▲	▲▲	2010	▼▼	▲▲	▲▲	2010	▼▼	▲▲	▲▲	2010	▼▼	▲▲	▲▲
2011	▼▼	▲▲	▲▲	2011	▼▼	▲▲	▲▲	2011	▼▼	▲▲	▲▲	2011	▼▼	▲▲	▲▲
2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲	2012	▼▼	▲▲	▲▲
2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲	2013	▼▼	▲▲	▲▲
2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲	2014	▼▼	▲▲	▲▲
2015	▼▼	▲▲	▲▲	2015	▼▼	▲▲	▲▲	2015	▼▼	▲▲	▲▲	2015	▼▼	▲▲	▲▲
2016	▼▼	▲▲	▲▲	2016	▼▼	▲▲	▲▲	2016	▼▼	▲▲	▲▲	2016	▼▼	▲▲	▲▲
2017	▼▼	▲▲	▲▲	2017	▼▼	▲▲	▲▲	2017	▼▼	▲▲	▲▲	2017	▼▼	▲▲	▲▲
2018	▼▼	▲▲	▲▲	2018	▼▼	▲▲	▲▲	2018	▼▼	▲▲	▲▲	2018	▼▼	▲▲	▲▲
2019	▼▼	▲▲	▲▲	2019	▼▼	▲▲	▲▲	2019	▼▼	▲▲	▲▲	2019	▼▼	▲▲	▲▲
2020	▼▼	▲▲	▲▲	2020	▼▼	▲▲	▲▲	2020	▼▼	▲▲	▲▲	2020	▼▼	▲▲	▲▲
2021	▼▼	▲▲	▲▲	2021	▼▼	▲▲	▲▲	2021	▼▼	▲▲	▲▲	2021	▼▼	▲▲	▲▲
2022	▼▼	▲▲	▲▲	2022	▼▼	▲▲	▲▲	2022	▼▼	▲▲	▲▲	2022	▼▼	▲▲	▲▲
2023	▼▼	▲▲	▲▲	2023	▼▼	▲▲	▲▲	2023	▼▼	▲▲	▲▲	2023	▼▼	▲▲	▲▲
2024	▼▼	▲▲	▲▲	2024	▼▼	▲▲	▲▲	2024	▼▼	▲▲	▲▲	2024	▼▼	▲▲	▲▲
2025	▼▼	▲▲	▲▲	2025	▼▼	▲▲	▲▲	2025	▼▼	▲▲	▲▲	2025	▼▼	▲▲	▲▲
2026	▼▼	▲▲	▲▲	2026	▼▼	▲▲	▲▲	2026	▼▼	▲▲	▲▲	2026	▼▼	▲▲	▲▲

Figure 88

Density – 35 dph

8.5 The viability position is very similar to that of 20dph and again 40% affordable housing may be achievable although dependent again upon tenure mix with the provision of all social rented units at this percentage being far more challenging to achieve. **Figure 89** shows the position with 40% affordable housing (all intermediate) on a 5 unit scheme.



Value Area: One 5 dwellings (5 Houses ) 0.14 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.14 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.14 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: One 5 dwellings (5 Houses ) 0.14 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 14 SHEET 1 GREENFIELD				TEST 14 SHEET 1 INDUSTRIAL 1				TEST 14 SHEET 1 INDUSTRIAL 2				TEST 14 SHEET 1 PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2013	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2014	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2015	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2016	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2017	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2018	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	

Figure 89

Density – 50 dph

8.6

**Figure 90** shows the position of a 10 unit scheme at this density assuming 40% affordable housing and a 70:30 social rent:intermediate tenure mix demonstrating it may be possible to achieve this percentage on schemes of this size.

Value Area: One 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD				TEST 1 SHEET 1 INDUSTRIAL 1				TEST 1 SHEET 1 INDUSTRIAL 2				TEST 1 SHEET 1 PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2011	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2012	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2013	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2014	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2015	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2016	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2017	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2018	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2019	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2020	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2021	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2022	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2023	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2024	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2025	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	
2026	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	▲▲	

Figure 90

Density – 75 dph

8.7

We have only tested a 10 unit scheme at this density. At this higher density achieving a viable position is more challenging. **Figure 91** shows the outcome of testing a 10 unit scheme assuming a 70:30 social rent:intermediate tenure mix and although a marginal/viable outcome can be achieved, the relationship of RLV:GDV in many cases does not achieve the 30% RLV:GDV 'benchmark' we have assessed for schemes of this size.



Value Area: One 10 dwellings (4 Houses 6 Flats) 0.13 Hectare site @ (75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 10 dwellings (4 Houses 6 Flats) 0.13 Hectare site @ (75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 10 dwellings (4 Houses 6 Flats) 0.13 Hectare site @ (75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 10 dwellings (4 Houses 6 Flats) 0.13 Hectare site @ (75 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2011	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2012	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2013	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2014	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2015	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2016	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2017	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2018	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2019	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2020	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2021	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2022	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2023	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2024	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2025	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2026	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	

Figure 91

## Value Area 2

### Density – 20 dph

8.8 Although up to 40% affordable housing may be deliverable on smaller schemes, at these values the contrast in viability between provision of intermediate and social rented units is more apparent than in value area 1. **Figures 92 and 93** show the results of testing a 5 unit scheme assuming firstly, all units are intermediate, and secondly all units are social rent.

Value Area: Two 5 dwellings (5 Houses ) 0.25 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 5 dwellings (5 Houses ) 0.25 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 5 dwellings (5 Houses ) 0.25 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 5 dwellings (5 Houses ) 0.25 Hectare site @ (20 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD				INDUSTRIAL1				INDUSTRIAL2				PDL			
DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP		DOWN	MIDDLE	UP	
2010	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2011	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2012	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2013	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2014	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2015	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2016	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2017	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2018	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2019	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2020	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2021	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2022	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2023	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2024	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
2025	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	

Figure 92

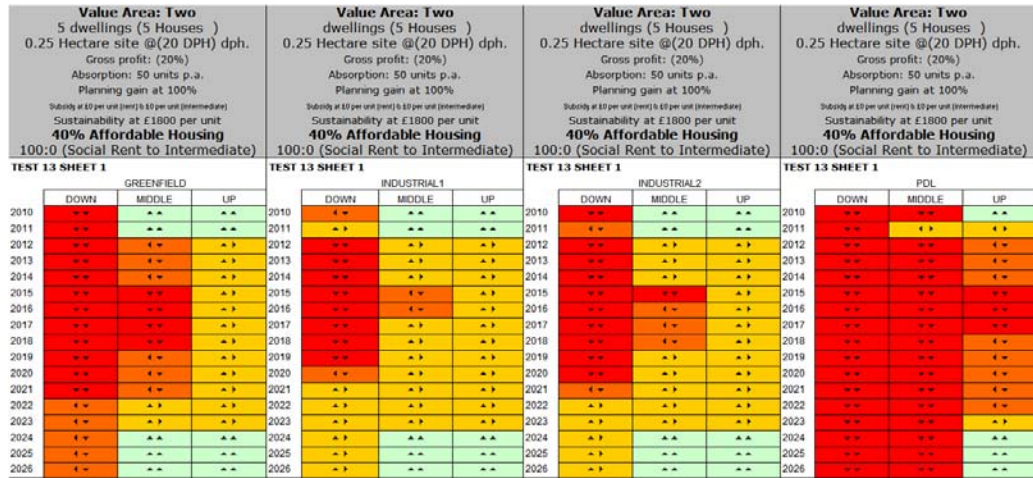


Figure 93

Density – 35 dph

8.9 **Figure 94** demonstrates the results of testing 30% affordable housing on a 10 unit scheme with a 70:30 social rent:intermediate tenure mix. Although this may be achievable in some circumstances, viability at this percentage could be eased through the application of a tenure mix favouring greater proportions of intermediate affordable units.

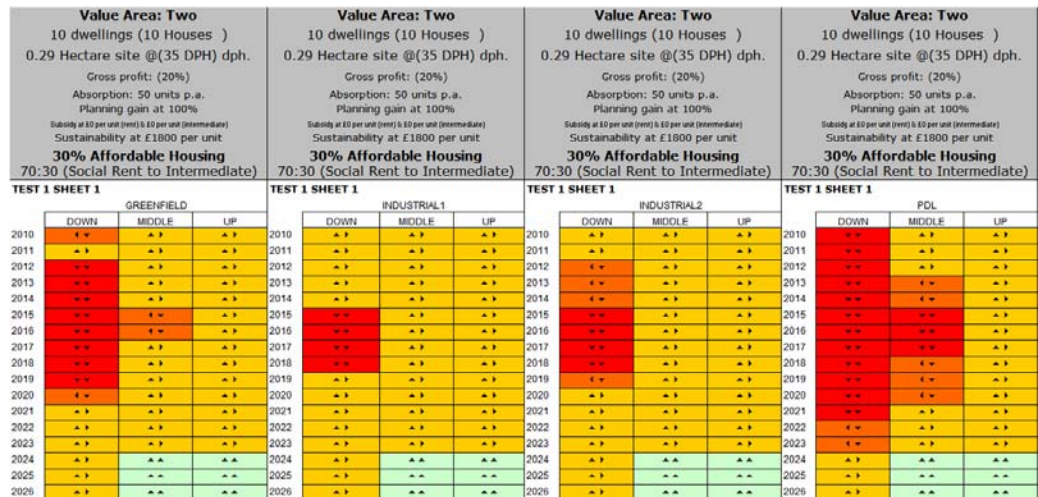


Figure 94

Density – 50 dph

8.10 At these values at 50 dph it is more challenging to achieve 40% affordable housing. We have tested 30% affordable housing and the results at this percentage of a 10 unit scheme assuming a 70:30 and a 0:100 social rent:intermediate tenure mix are shown in **Figures 95 and 96**.



Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1				TEST 1 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	£	£	£	£	£	£	£	£	£	£	£	£	£		
2011	£	£	£	£	£	£	£	£	£	£	£	£	£		
2012	£	£	£	£	£	£	£	£	£	£	£	£	£		
2013	£	£	£	£	£	£	£	£	£	£	£	£	£		
2014	£	£	£	£	£	£	£	£	£	£	£	£	£		
2015	£	£	£	£	£	£	£	£	£	£	£	£	£		
2016	£	£	£	£	£	£	£	£	£	£	£	£	£		
2017	£	£	£	£	£	£	£	£	£	£	£	£	£		
2018	£	£	£	£	£	£	£	£	£	£	£	£	£		
2019	£	£	£	£	£	£	£	£	£	£	£	£	£		
2020	£	£	£	£	£	£	£	£	£	£	£	£	£		
2021	£	£	£	£	£	£	£	£	£	£	£	£	£		
2022	£	£	£	£	£	£	£	£	£	£	£	£	£		
2023	£	£	£	£	£	£	£	£	£	£	£	£	£		
2024	£	£	£	£	£	£	£	£	£	£	£	£	£		
2025	£	£	£	£	£	£	£	£	£	£	£	£	£		
2026	£	£	£	£	£	£	£	£	£	£	£	£	£		

Figure 95

Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Two 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>30% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 14 SHEET 1				TEST 14 SHEET 1				TEST 14 SHEET 1				TEST 14 SHEET 1			
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			PDL			PDL			
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	
2010	£	£	£	£	£	£	£	£	£	£	£	£	£		
2011	£	£	£	£	£	£	£	£	£	£	£	£	£		
2012	£	£	£	£	£	£	£	£	£	£	£	£	£		
2013	£	£	£	£	£	£	£	£	£	£	£	£	£		
2014	£	£	£	£	£	£	£	£	£	£	£	£	£		
2015	£	£	£	£	£	£	£	£	£	£	£	£	£		
2016	£	£	£	£	£	£	£	£	£	£	£	£	£		
2017	£	£	£	£	£	£	£	£	£	£	£	£	£		
2018	£	£	£	£	£	£	£	£	£	£	£	£	£		
2019	£	£	£	£	£	£	£	£	£	£	£	£	£		
2020	£	£	£	£	£	£	£	£	£	£	£	£	£		
2021	£	£	£	£	£	£	£	£	£	£	£	£	£		
2022	£	£	£	£	£	£	£	£	£	£	£	£	£		
2023	£	£	£	£	£	£	£	£	£	£	£	£	£		
2024	£	£	£	£	£	£	£	£	£	£	£	£	£		
2025	£	£	£	£	£	£	£	£	£	£	£	£	£		
2026	£	£	£	£	£	£	£	£	£	£	£	£	£		

Figure 96

Density – 75 dph

8.11 As was the case with value area 1, as density increases to 75 dph achieving a viable outcome on 10 unit schemes is more difficult. **Figure 97** shows the results of testing 30% affordable housing with a 70:30 social rent:intermediate tenure mix and demonstrates that delivery in this scenario could be challenging.

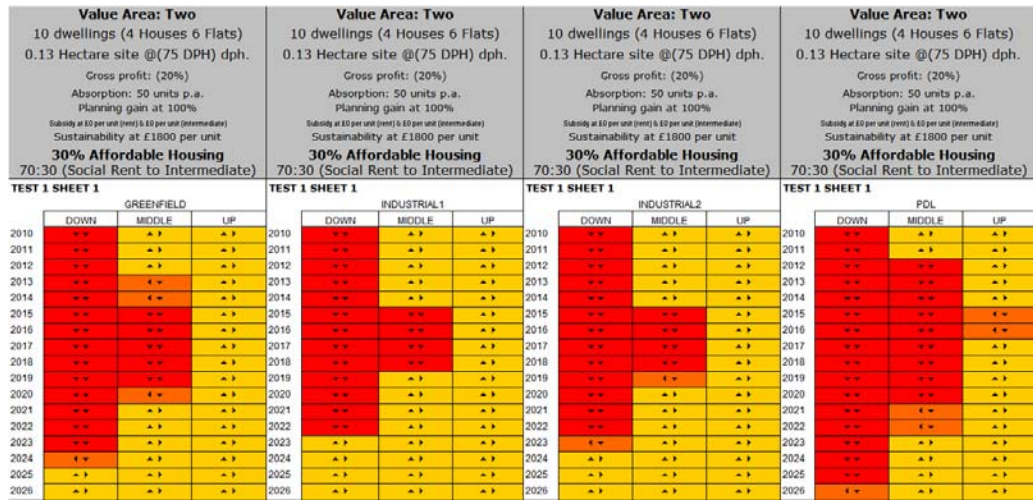


Figure 97

### Value Area 3

Density – 20 dph

8.12

Although it may be possible to achieve 20% affordable housing at these values on schemes at this density the existing or alternative use of the site will have a significant effect with delivery. **Figure 98** demonstrates this and assumes all units delivered are intermediate.

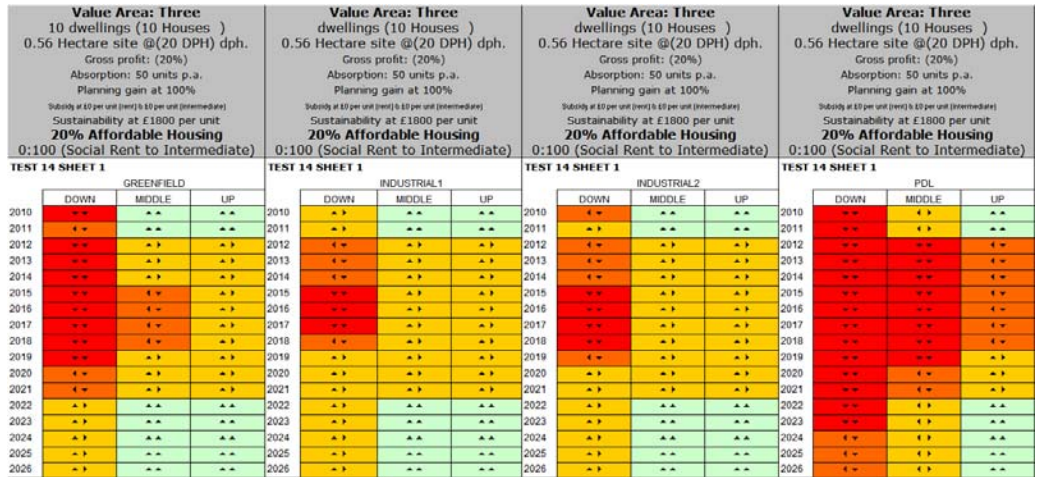


Figure 98



Density – 35 dph

8.13 Again 20% affordable housing, and in some circumstances up to 30% affordable housing, may be deliverable in some circumstances although this assumes all affordable units are intermediate. This position is shown in **Figure 99**.

Value Area: Three 10 dwellings (10 Houses ) 0.29 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100%				Value Area: Three 10 dwellings (10 Houses ) 0.29 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100%				Value Area: Three 10 dwellings (10 Houses ) 0.29 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100%				Value Area: Three 10 dwellings (10 Houses ) 0.29 Hectare site @(35 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100%								
Subsidy at £0 per unit (rent) to £0 per unit (intermediate) Sustainability at £18000 per unit				Subsidy at £0 per unit (rent) to £0 per unit (intermediate) Sustainability at £18000 per unit				Subsidy at £0 per unit (rent) to £0 per unit (intermediate) Sustainability at £18000 per unit				Subsidy at £0 per unit (rent) to £0 per unit (intermediate) Sustainability at £18000 per unit								
<b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				<b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				<b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				<b>20% Affordable Housing</b> 0:100 (Social Rent to Intermediate)								
TEST 14 SHEET 1				TEST 14 SHEET 1				TEST 14 SHEET 1				TEST 14 SHEET 1								
GREENFIELD			INDUSTRIAL1			INDUSTRIAL2			POL			INDUSTRIAL1			INDUSTRIAL2			POL		
DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP	DOWN	MIDDLE	UP
2010	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2011	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2012	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2013	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2014	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2015	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2016	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2017	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2018	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2019	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2020	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2021	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2022	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2023	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2024	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2025	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
2026	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→

Figure 99





### Density – 50 dph

- 8.14 The outcome at this density is similar to lower densities in that up to 20% affordable housing may be achievable although the tenure of the affordable units provided will have a significant impact upon viability.

### Density – 75 dph

- 8.15 Delivery of 20% affordable housing is likely to be very marginal at these values at densities of 75 dph and above. It is more likely that up to 10% affordable housing may be achieved although in some cases it may not be possible to viably deliver any amount of affordable housing.

## Value Area 4

### Density – 20 dph

- 8.16 We have assessed 10% affordable housing (one intermediate unit on a 10 dwelling scheme) and the results are shown in **Figure 100**. Delivery of affordable housing in excess of this amount is likely to be very challenging, and potentially only achievable in sites coming forward at industrial land values.

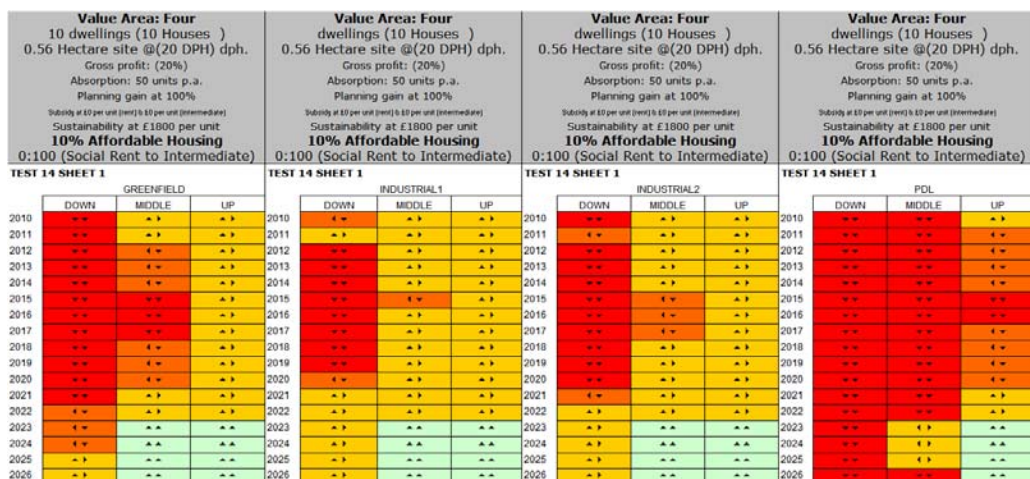


Figure 100

### Density – 35 dph

- 8.17 Again 10% affordable housing has been assessed and the results are similar to the 20 dph scheme (albeit marginally more adverse), demonstrating that schemes coming forward at these values and this density may be able to deliver up to 10% affordable housing.

### Density – 50 dph

- 8.18 Again 10% affordable housing has been assessed and the results demonstrate that schemes coming forward at these values and this density may be able to deliver up to a maximum of 10% affordable housing. **Figure 101**.



Value Area: Four 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Sustainability at £1800 per unit <b>10% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Four 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Sustainability at £1800 per unit <b>10% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Four 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Sustainability at £1800 per unit <b>10% Affordable Housing</b> 0:100 (Social Rent to Intermediate)				Value Area: Four 10 dwellings (10 Houses ) 0.2 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Sustainability at £1800 per unit <b>10% Affordable Housing</b> 0:100 (Social Rent to Intermediate)			
TEST 14 SHEET 1 GREENFIELD				TEST 14 SHEET 1 INDUSTRIAL 1				TEST 14 SHEET 1 INDUSTRIAL 2				TEST 14 SHEET 1 FDL			
2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP
2010	+	+	+	2010	+	+	+	2010	+	+	+	2010	+	+	+
2011	+	+	+	2011	+	+	+	2011	+	+	+	2011	+	+	+
2012	+	+	+	2012	+	+	+	2012	+	+	+	2012	+	+	+
2013	+	+	+	2013	+	+	+	2013	+	+	+	2013	+	+	+
2014	+	+	+	2014	+	+	+	2014	+	+	+	2014	+	+	+
2015	+	+	+	2015	+	+	+	2015	+	+	+	2015	+	+	+
2016	+	+	+	2016	+	+	+	2016	+	+	+	2016	+	+	+
2017	+	+	+	2017	+	+	+	2017	+	+	+	2017	+	+	+
2018	+	+	+	2018	+	+	+	2018	+	+	+	2018	+	+	+
2019	+	+	+	2019	+	+	+	2019	+	+	+	2019	+	+	+
2020	+	+	+	2020	+	+	+	2020	+	+	+	2020	+	+	+
2021	+	+	+	2021	+	+	+	2021	+	+	+	2021	+	+	+
2022	+	+	+	2022	+	+	+	2022	+	+	+	2022	+	+	+
2023	+	+	+	2023	+	+	+	2023	+	+	+	2023	+	+	+
2024	+	+	+	2024	+	+	+	2024	+	+	+	2024	+	+	+
2025	+	+	+	2025	+	+	+	2025	+	+	+	2025	+	+	+
2026	+	+	+	2026	+	+	+	2026	+	+	+	2026	+	+	+

Figure 101

Density – 75 dph

- 8.19 Testing has demonstrated that schemes at this density and are likely to be unable to viably deliver any amount of affordable housing.

**Value Areas 5, 6, 7, 8 and 9**

- 8.20 In all of these value areas it is unlikely that schemes of 10 units coming forward at 75 dph and above would be able to viably deliver any amount of affordable housing.
- 8.21 In value area 5 only, low density schemes (20 dph – 35 dph) may be able to deliver up to 10% affordable housing assuming the any units provided are intermediate rather than social rented.
- 8.22 In all other scenarios that we have assessed it is very unlikely that schemes of 5 or 10 units would be able to viably deliver any amount of affordable housing at the values that we have used.



## 9.0 Variable Testing

### Static Value Modelling

- 9.1 As a result of requests from some stakeholders we have assessed a 150 unit scheme at 50 dph on the basis that sales values remain constant throughout the timetable of the development whilst costs adjust according to the upside, middle and downside assumptions. To be clear, if the total development period runs in excess of 12 months (which this 150 unit scheme does) we have not adjusted sales values in accordance with the upside, middle and downside scenarios and they remain static at the same level as they are at the start date of the development timetable. Costs to development however do adjust over the development period according to the three market scenarios.
- 9.2 To highlight any differences in this method of modelling we have compared the results of modelling exactly the same scheme using static value modelling assuming a 40% affordable housing requirement at the baseline position as set out in Section 6 of this report in Area 1. A 150 unit scheme was chosen to assess the impact of this method as it has the longest development period of all the general development sites.

#### Area 1 - 150 units at 50 dph

- 9.3 **Figure 102** shows the results of this scheme modelled using the static value approach, whilst **Figure 103** uses the approach where both costs and values adjust according to the upside, middle and downside scenarios. The differences using the static value approach are apparent, particularly in the downside scenario but the impact is marginal assuming middle and upside market conditions.

Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @ (50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @ (50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @ (50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @ (50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)			
TEST 1 SHEET 1 GREENFIELD				TEST 1 SHEET 1 INDUSTRIAL1				TEST 1 SHEET 1 INDUSTRIAL2				TEST 1 SHEET 1 PDL			
2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP	2010	DOWN	MIDDLE	UP
2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲	2011	▲▲	▲▲	▲▲
2012	▲▲	▲▲	▲▲	2012	▲▲	▲▲	▲▲	2012	▲▲	▲▲	▲▲	2012	▲▲	▲▲	▲▲
2013	▲▲	▲▲	▲▲	2013	▲▲	▲▲	▲▲	2013	▲▲	▲▲	▲▲	2013	▲▲	▲▲	▲▲
2014	▲▲	▲▲	▲▲	2014	▲▲	▲▲	▲▲	2014	▲▲	▲▲	▲▲	2014	▲▲	▲▲	▲▲
2015	▲▲	▲▲	▲▲	2015	▲▲	▲▲	▲▲	2015	▲▲	▲▲	▲▲	2015	▲▲	▲▲	▲▲
2016	▲▲	▲▲	▲▲	2016	▲▲	▲▲	▲▲	2016	▲▲	▲▲	▲▲	2016	▲▲	▲▲	▲▲
2017	▲▲	▲▲	▲▲	2017	▲▲	▲▲	▲▲	2017	▲▲	▲▲	▲▲	2017	▲▲	▲▲	▲▲
2018	▲▲	▲▲	▲▲	2018	▲▲	▲▲	▲▲	2018	▲▲	▲▲	▲▲	2018	▲▲	▲▲	▲▲
2019	▲▲	▲▲	▲▲	2019	▲▲	▲▲	▲▲	2019	▲▲	▲▲	▲▲	2019	▲▲	▲▲	▲▲
2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲	2020	▲▲	▲▲	▲▲
2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲	2021	▲▲	▲▲	▲▲
2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲	2022	▲▲	▲▲	▲▲
2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲	2023	▲▲	▲▲	▲▲
2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲	2024	▲▲	▲▲	▲▲
2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲	2025	▲▲	▲▲	▲▲
2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲	2026	▲▲	▲▲	▲▲

Figure 102



Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)				Value Area: One 150 dwellings (150 Houses ) 4 Hectare site @(50 DPH) dph. Gross profit: (20%) Absorption: 50 units p.a. Planning gain at 100% Subsidy at £0 per unit (rent) & £0 per unit (intermediate) Sustainability at £1800 per unit <b>40% Affordable Housing</b> 70:30 (Social Rent to Intermediate)					
TEST 1 SHEET 1 GREENFIELD				TEST 1 SHEET 1 INDUSTRIAL1				TEST 1 SHEET 1 INDUSTRIAL2				TEST 1 SHEET 1 PDL					
DOWN		MIDDLE		UP		DOWN		MIDDLE		UP		DOWN		MIDDLE		UP	
2010	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2011	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2012	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2013	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2014	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2015	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2016	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2017	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2018	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2019	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2020	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2021	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2022	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2023	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2024	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2025	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
2026	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Figure 103

## Summary

- 9.4 Static value modelling is a method of assessing viability that may be used by certain developers when assessing an individual scheme. It should also be considered that it is likely that developers may also assess individual schemes using a different methodology than the one used in this study, that is a residual land value methodology. As the purpose of this study is not to assess viability for individual schemes but rather to assess viability generally over typical sites we have taken into account the impact of economic conditions upon both costs and values.

## Discounted Open Market Values

- 9.5 We have assessed the impact of the CBMDC's existing custom and practice to calculate the price of affordable housing through a discount of 35% from open market values. However this is not general practice in other local authority areas that we have studied and we have modelled one scheme in this way to highlight any potential effects that this method may have upon development viability. We are aware from stakeholder engagement that the current method used by the Council to assess the value of the affordable housing units is not favoured by some RSLs operating in the area as it overestimates the actual value that may be generated by the affordable housing units.
- 9.6 We have used a 50 unit 50 dph scheme at 30% affordable housing assuming area 3 values. **Figure 104** shows the viability position using the methodology used within this study to assess the value of the affordable units as set out in paragraphs 3.57 to 3.59 of this report.

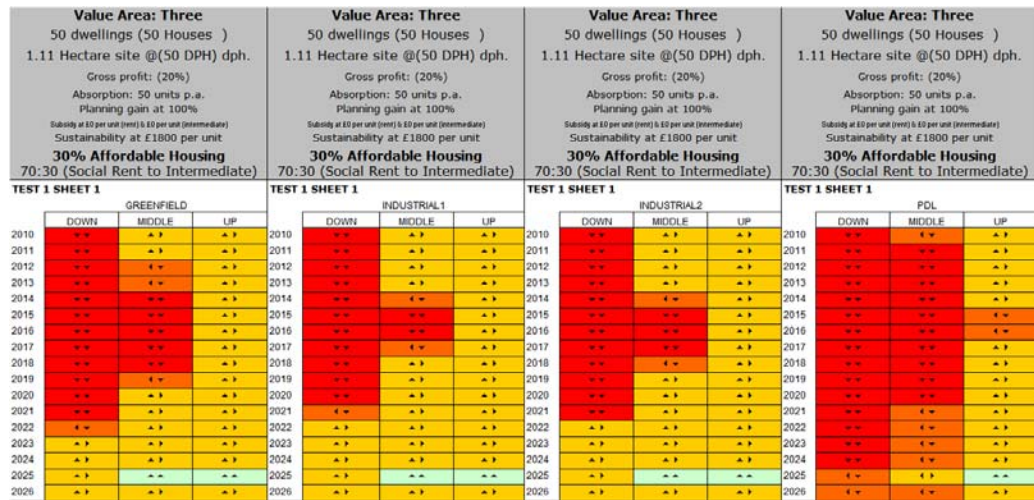


Figure 104

9.7 **Figure 105** shows the viability position of the same scheme using the methodology used currently by CBMDC to assess the value of the affordable units.

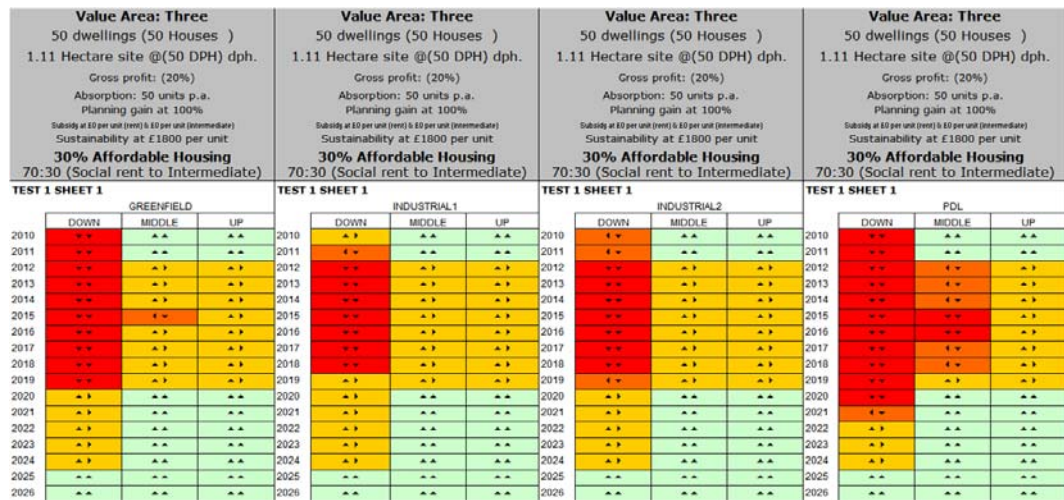


Figure 105

9.8 It is clear that the method used by CBMDC to assess the value of affordable housing units results in a much higher value being attributable to those units than the value assumed by applying the methodology used in this study. In the past we understand the Council has addressed this where required, by increasing the percentage discount applied to the affordable housing and/or providing additional funding toward achieving provision of affordable housing. This additional funding has historically been derived from commuted sum payments in lieu of on site affordable housing received by the Council. In other cases we understand that RSLs have used money from their reserves to meet any shortfall. Given the current economic circumstances there is no guarantee that such additional monies will be made available either from RSL reserves, commuted payments or public funding.



- 9.9 If additional funding through any source is made available to a development it is likely to improve viability however for the purpose of this study we feel it is important that the value of the affordable housing units is assessed as detailed within paragraphs 3.57 – 3.59 of this report not in the way that is currently custom and practice within CBMDC. This is to ensure that the value of affordable housing units is not overstated and thus policy is informed by a realistic assessment of the likely 'value' of the affordable housing units.



## 10.0 Commuted Sums

### Commuted Sum Principles

- 10.1 The principles outlined in ODPM Circular 05/2005 confirm that planning “obligations created run with the land”<sup>22</sup> and that “planning obligations should never be used as a means of securing for the local community a share in the profits of development i.e. as a means of securing a betterment levy.”<sup>23</sup> The Circular considers that the use of planning obligations may include securing “the inclusion of an element of affordable housing in a residential or mixed use development where there is a residential component.”<sup>24</sup> In addition, the Circular confirms that the obligations should be “fairly and reasonably related in scale and kind to the proposed development, as well as being reasonable in other respects.”<sup>25</sup>
- 10.2 Paragraph B14 of Circular 05/2005 states that affordable housing is provided through a presumption of being “in kind and on site,” however “there may be certain circumstances where provision on another site or a financial contribution may represent a more appropriate option.”
- 10.3 PPS3 was published in November 2006 together with the guidance document Delivering Affordable Housing. It sets out the Government’s strategic housing policy objectives, which include achieving a wide choice of high quality homes, widening opportunities for home ownership, improving affordability across the market by increasing supply, and the creation of sustainable, inclusive and mixed communities in all areas. PPS3 confirms the Government’s commitment to the provision of high quality housing for those unable to access or afford market housing and also helping people make the step from social-rented housing to home-ownership.
- 10.4 PPS3 states that where it can be robustly justified, off site provision or a financial contribution in lieu of on-site provision (of a “broadly equivalent value”<sup>26</sup>) may be accepted as long as the agreed approach contributes to the creation of mixed communities in the local authority area.
- “Decisions on alternative options should be made with regard to what is economically viable and realistic on that site and local housing needs as well as taking into account the mix of tenures on the site (...) the level of developer contribution should be at least maintained, but it should not be assumed the developer can meet the whole cost of the shortfall.”<sup>27</sup>
- 10.5 Thus, although national policy suggests that on site provision of affordable housing is the preferred approach, there may be some instances where an off site contribution is acceptable. National policy is predicated on the basis that some forms of affordable housing in some locations require public subsidy and planning

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<sup>22</sup> Paragraph A3 Circular 05/05

<sup>23</sup> Paragraph B7 Circular 05/05

<sup>24</sup> Paragraph B12 Circular 05/05

<sup>25</sup> Paragraph B5 Circular 05/05

<sup>26</sup> PPS3 paragraph 29 Department of Communities and Local Government November 2006

<sup>27</sup> Delivering Affordable Housing paragraph 95 Department of Communities and Local Government November 2006



agreements therefore need to maintain flexibility to deal with the eventuality that the subsidy may not be available at the time of delivery. These principles should apply whether the affordable housing is achieved on site or whether it is achieved through a contribution.

- 10.6 The Community Infrastructure Levy (CIL) regulations came into force on 6th April 2010. CIL is calculated at granting of permission and is paid on implementation. The level of payment is determined by the local charging schedule. Local Authorities prepare a charging schedule, adopted through a forward plan and charges are made against net increases in floor area. CIL affects all development sites and care is needed in assessing the level of infrastructure necessary to enable development, but this should not be so great a burden as to prevent sites coming forward.
- 10.7 The regulations make it clear that there will be no duplication of the demands made under CIL and Section 106 agreements. Part 11 sets out a number of limitations on the use of planning obligations. It is now unlawful for a planning obligation to be taken into account when determining a planning application for a development, or any part of a development, that is capable of being charged CIL, whether there is a local CIL in operation or not, if the obligation does not meet all of the following tests:
- (a) necessary to make the development acceptable in planning terms;
  - (b) directly related to the development; and
  - (c) fairly and reasonably related in scale and kind to the development.
- 10.8 Regulation 123 of the CIL regulations also sets out further limitations on the use of planning obligations and states that, 'this regulation applies where a relevant determination is made which results in planning permission being granted for development'.
- 10.9 Care is needed over timing of permission and interaction of CIL Regulation 123, especially in relation to trigger dates and pooling of section 106 contributions. Regulation 123 also needs to be considered by local authorities when deciding what infrastructure to include in their charging schedules. Once a charging schedule is in place this regulation prevents double charging by CIL and a section 106 agreement.
- 10.10 It is important to note that a 'relevant determination' in relation to Regulation 123 (3) refers to a determination made on or after 6<sup>th</sup> April 2014 or the date when the charging authority's first charging schedule takes effect and will apply to whichever is earlier. Therefore, there are limitations on the level of infrastructure which can be provided utilising s106. These include limitations on the number of separate planning obligations that relate to planning permissions granted for development within the area of the charging authority. This means that the cumulative impacts of development must be assessed to determine whether any other types of infrastructure should be included within the CIL.

#### Principle of Equivalence – Practical Methodology

- 10.11 This report on the viability of affordable housing has shown that it is important to understand the economics of development when seeking to achieve affordable housing. This involves looking at all costs and values and assessing whether the





residual is sufficient, generally, to bring sites forward. There may be instances where it is not possible or desirable to achieve the affordable housing on site and these same principles of applying the economics of development must apply. Therefore, when considering a particular site the principle of “broad equivalence” must apply.

- 10.12 Bearing in mind the complexities of assessing the economic implications of affordable housing, a simple formula for developer subsidy can be derived. However, this simple formula has a number of complex inputs that are used to assess individual sites and which maintain a contribution to affordable housing that is broadly equivalent in amount of affordable housing that is achieved and which has a broadly equivalent contribution from the developer thereby ensuring a neutral effect on the economics of provision. In line with PPS3, the presumption should be that the affordable housing is provided on site, but where an off site contribution is proposed, the developer should be neither advantaged nor disadvantaged by agreeing to or proposing an off site contribution.
- 10.13 Our view is that the economic assessment of a development should be site and scheme specific (it should include all costs and values related to the particular use) but that these costs should be generic (they should be able to be applied to any developer and not be specific to an individual). This will maintain the planning principle that permission runs with the land and not with an individual.
- 10.14 If a scheme is viable the practical methodology of assessing how much a development can afford involves establishing the developer subsidy. When this is an on site contribution this will be an exercise to establish how much and what type of affordable housing can be achieved on site. When an off site contribution is to be applied it is establishing the amount of developer “subsidy” which is involved to meet the Council’s objectives.
- 10.15 We have pointed out that the developer subsidy relates to the implications for the land use of a particular site. The developer subsidy is established by looking at the difference in residual land value between the development without an encumbrance (in this case the encumbrance is the imposition of affordable housing) and the residual land value with the encumbrance. The simple formula for developer subsidy is thus:

$$\begin{aligned} & \text{DEVELOPER SUBSIDY FOR AFFORDABLE HOUSING} \\ & = \\ & \text{RESIDUAL VALUE OF DEVELOPMENT UNENCUMBERED BY AFFORDABLE} \\ & \text{HOUSING} \\ & \text{LESS} \\ & \text{RESIDUAL VALUE OF DEVELOPMENT ENCUMBERED BY AFFORDABLE} \\ & \text{HOUSING} \end{aligned}$$



- 10.16 Thus the formula involves two discrete calculations and we would suggest a simple matrix that enables these two calculations to be assessed. This is as follows with example figures input.<sup>28</sup>

<b>Scheme</b>	<b>A 100% Market</b>	<b>B Mixed Scheme (Affordable &amp; Market)</b>
<b>Gross Development Value (GDV)</b>	£10,000,000	£6,500,000
<b>Values/ Receipts</b>		£2,000,000
<b>Grant Provided</b>		NIL
<b>Total Build Costs</b>	£4,750,000	£4,750,000
<b>Total On Costs</b>	£475,000	£475,000
<b>Total other s106 Costs</b>	£100,000	£100,000
<b>Total Sales Costs</b>	£650,000	£450,000
<b>Total Finance Costs</b>	£1,000,000	£700,000
<b>Total Acquisition Costs</b>	£100,000	£70,000
<b>Developer Profit @17% GDV</b>	£1,700,000	£1,225,000
<b>Residual (Values/Receipts Less costs)</b>	£1,225,000	£730,000
<b>Developer Subsidy Required (A-B)</b>	<b>£495,000</b>	

- 10.17 In this example we have assumed the following:

Gross Development Value = Current market value of units proposed on site;

Values/Receipts = receipts from affordable housing provider and/or for any intermediate dwellings;

Grant provided = if policy assumes a certain level of public subsidy;

Total build Costs = generic assessment of construction costs (BCIS or QS assessed);

On costs = usually at a set percentage;

Other S106 costs = where known;

Sales costs = marketing and legals on market sales and LCHO;

Finance costs = net interest charged/earned during the development period;

<sup>28</sup> Please note that these figures are for illustrative purposes only



Acquisition costs = costs associated with acquisition of the site (Stamp Duty, legal fees etc.);

Developer Profit = at an agreed percentage.<sup>29</sup>

### Alternative and Existing Use Values

- 10.18 In the example above it can be seen that the residual site value of the scheme unencumbered by affordable housing would be £495,000 higher than the site value with affordable housing assuming that the Council's target percentage and tenure split is being met. Different tenure splits and target percentages will have different effects on site residuals and, therefore, on developer subsidy.
- 10.19 The next stage in the assessment is to ensure that this level of developer subsidy would be sufficient to ensure that this site comes forward. We would need to assess both the alternative or existing uses of the site. If, for example, an existing use on the site generates a value of £900,000 then the residual value of the site with affordable housing is insufficient to bring this site forward and the developer subsidy would have to decrease in order to ensure that the residual site value is greater than the alternative use value. In this case the developer subsidy would have to decrease by at least £170,000 in order to bring this site forward.
- 10.20 The same principle applies to alternative uses of the site. In this example, it may be possible to provide a different mix of residential use that establishes an alternative use perhaps without having to provide affordable housing (the number of units would be below the threshold for affordable housing, for example). A similar exercise should be undertaken in order to establish residual values. This will use comparable assumptions as in the main assessment.

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<sup>29</sup> It must be remembered that developer profit should be considered as a fixed cost of development and not as a variable to be increased or decreased in order to ensure a scheme "works".



10.21 Therefore the simple formula can be further modified thus:

$$\begin{aligned} & \text{DEVELOPER SUBSIDY} \\ & = \\ & \text{RESIDUAL VALUE OF DEVELOPMENT UNENCUMBERED BY AFFORDABLE} \\ & \quad \text{HOUSING} \\ & \quad \text{LESS} \\ & \quad \text{RESIDUAL VALUE OF DEVELOPMENT ENCUMBERED BY AFFORDABLE} \\ & \quad \text{HOUSING (TAKING INTO ACCOUNT ANY REALISTICALLY ACHIEVABLE} \\ & \quad \text{ESTABLISHED ALTERNATIVE OR EXISTING USE)} \end{aligned}$$

#### Practical Assessment

10.22 It is important that individual site and scheme assessments are undertaken using a set of agreed principles between developer and planning authority. It is for this reason that we propose using generic values and percentages wherever possible and for these to be agreed and audited by one or more third parties to ensure impartiality and legitimacy. Our experience has shown that agreeing these parameters should not be a difficult process and the Local Authority should make it clear and consult upon the parameters to be used. It is also incumbent upon the developer to provide the necessary information to undertake the assessment outlined above but this is not the same as proposing an “open book” approach. If an agreement can be arrived at using generic figures (and we have experience of agreeing developer subsidy where this has been achieved) then it is incumbent on the developer to ensure that the necessary information is provided as soon as possible. However, it may be that the principal input from the developer is for exceptional and abnormal costs associated with the development to be provided.

10.23 Using generic methods to generate the other inputs into the assessment will ensure that two important principles are maintained;

- the planning permission does not become personal to a particular developer (it can be transferred to another developer without having to undergo a complete re-assessment of the site); and
- the planning permission does not rely upon commercially sensitive information that would benefit a developer’s competitors.

#### Recommendation

10.24 We therefore recommend that any commutation for affordable housing should be based on the equivalence principle supported through Circular 05/05, PPS3 and associated documents. The developer subsidy for this off site contribution should equate to the developer subsidy that would have been provided had the affordable housing been achieved on site. The developer subsidy equates to the difference in residual values between an unencumbered scheme and the scheme encumbered by affordable housing to meet the Council’s target percentage and tenure mix. This will need to take into account any established alternative or existing use value



supported by evidence if necessary. This methodology can be used without recourse to cost and value tables and is able to be used for the lifetime of the affordable housing policy without further amendment to take into account revised tables or cost yardsticks of any sort.



## 11.0 Conclusions and Recommendations

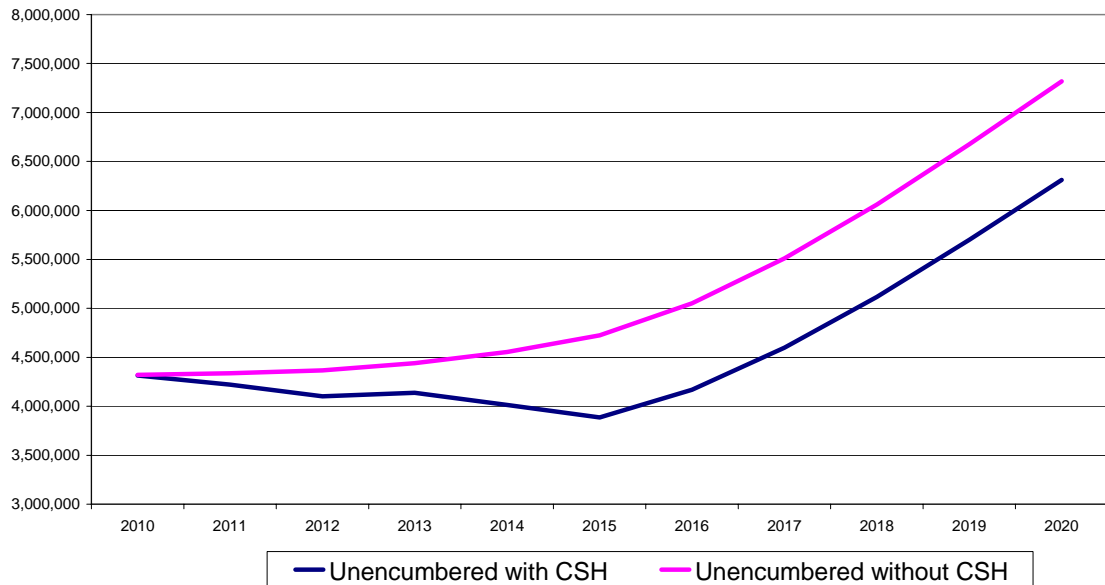
- 11.1 Prior to examining the specific results we have undertaken analysis which demonstrates the effect of certain criteria upon overall development viability. These are specifically, Code for Sustainable Homes requirements and developer profit. We have undertaken analysis of these factors within the modelling parameters however the effect is consistent across all schemes.

### Effect of Code for Sustainable Homes Requirements

- 11.2 The current timetable for the introduction of increased Code Levels for the Code for Sustainable Homes was incorporated into our future scenario testing. Effectively this took the form of additional uplifts to construction cost requirements based upon studies of the potential impact of these requirements. The base requirement set market housing requirements at Code Level 3 and affordable housing based on the need to achieve Code Level 4. Uplifts in construction cost inflation were modelled to take effect in 2013 (uplift to Code Level 6 for affordable housing and Code Level 4 for market housing) and 2016 (uplift to Code Level 6 for market housing).
- 11.3 It is clear that the imposition of the forecast increase in construction costs has generally had an effect on the viability of schemes during the period 2013 to 2019 or thereabouts. This is especially clear where schemes are marginally viable in the first one or two years. In some cases, the desired level of contribution to affordable housing may not be achievable during this period.
- 11.4 The cost assumptions we have used within this report are based on estimates current at the time of preparing our report. Technological advances in building techniques and general acquaintance with the requirements may bring these costs down and reduce the overall impact. At this stage, it may be that the allowance we have made for code level costs is a "worst case" position. In that case it may ease the pressure at the time that the higher code levels come into force.
- 11.5 The figure below shows the impact of the effect of the costs associated with the Code for Sustainable Homes on the residual value of a 50 unit 50 dph scheme unencumbered with affordable housing.



### Effect of Code for Sustainable Homes on residual values



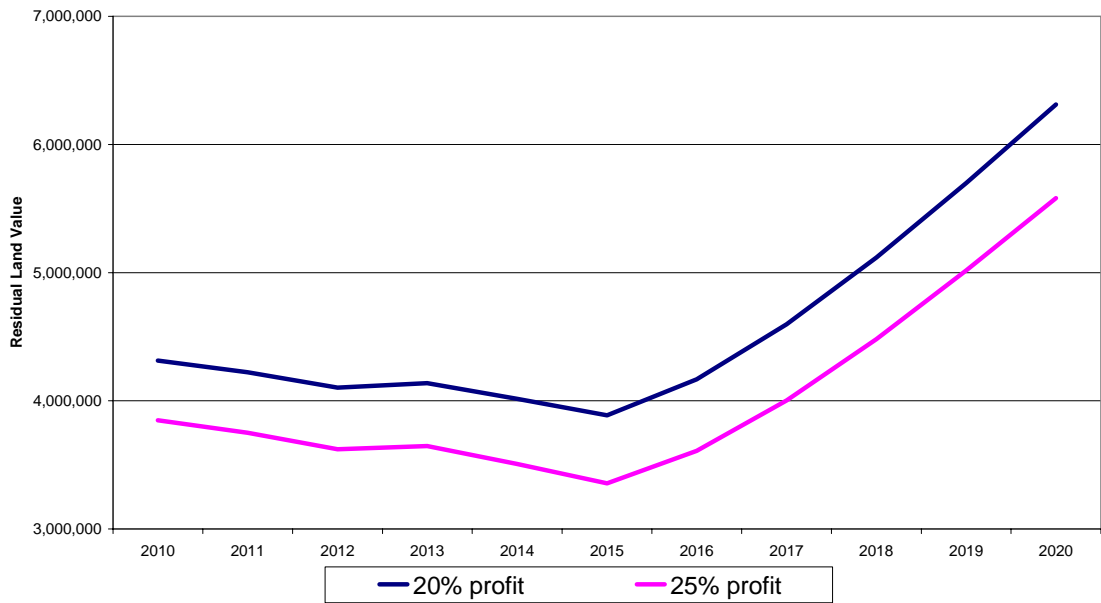
### Effect of Different Profit Assumptions

- 11.6 We have undertaken our testing mainly on the basis of 20% profit on GDV. In some cases 25% profit on GDV has been used to reflect schemes where there is a justifiable higher level of developer risk.
- 11.7 Our reporting has mainly been on the basis of 20% gross profit because this is the level of profit that has been accepted by custom both in many affordable housing viability studies of this type and in negotiations on sites (and supported at appeal). Indeed, in many studies profit levels of between 15% and 17% of GDV have been used and therefore we feel it is appropriate to have drawn our main conclusions based on gross profit of 20%. Furthermore, the Homes and Communities Agency (HCA) Economic Appraisal Toolkit suggests currently a developers return for open market housing could be typically 17.5 – 20%.
- 11.8 We should also be mindful that current pressures to increase the allowance for profit are in response to the specific market conditions that we are currently experiencing. This is in response to the perceived risk of development in an uncertain market and reflects, also, the difficulties many developers are finding accessing finance at reasonable rates. Therefore, basing our assessment on higher levels of profit for a policy that must last the life of the Core Strategy might not be appropriate.
- 11.9 However, it should be noted that the results of our testing at 25% gross profit against GDV may have a significant effect on the viability of schemes. In this case, where specific site constraints and market conditions allow, the Council may consider the case for higher profit levels to be taken into account. It is our view that, where development viability is a particular issue, the applicant must make a reasonable case for taking into account a higher than normal profit level.



11.10 As an example the consideration of higher profit levels can be seen in the following graph which shows the effect on residual value of a higher profit level, again assuming a 50 unit, 50 dph notional scheme. It can be seen that profit affects the residual value that this scheme can achieve.

**Effect of different profit levels on residual land value**

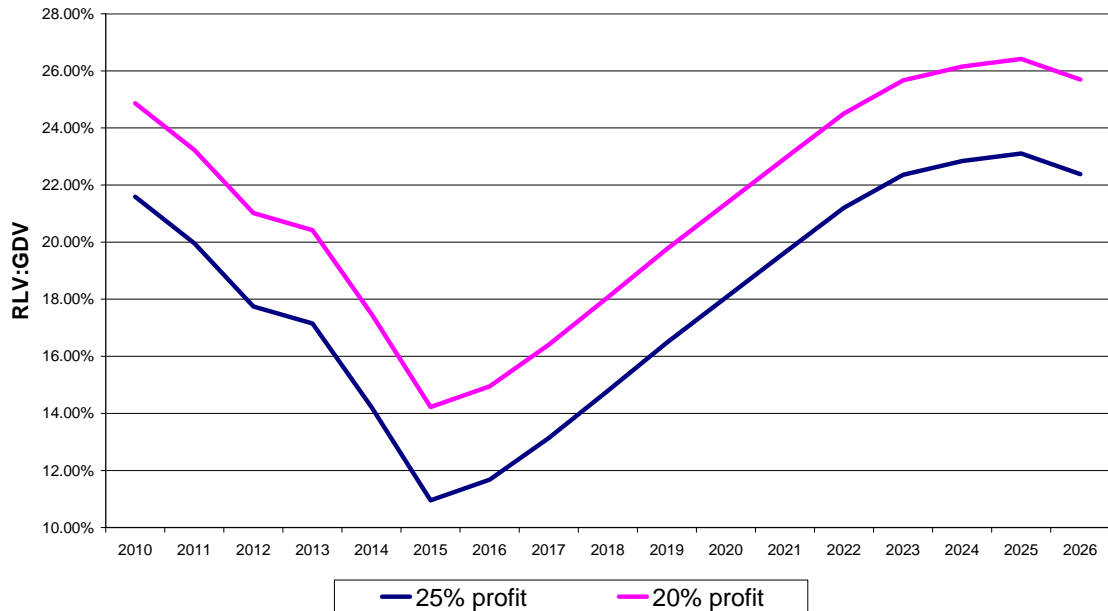






This is not the entire story, however. To understand the effect that this has on the viability of schemes, we have used the same scheme to show how higher and lower profit levels impact upon the RLV:GDV position to 2026.

**Effect of different profit levels on RLV:GDV position**



### Small sites (less than 15 units)

- 11.11 We appreciate that development on small sites in the current economic climate may be more challenging than on larger sites. This is a function of a number of factors including the baseline levels of professional fees, potential for increased risk resulting in higher return, potential higher overheads, and potential increased per unit construction costs and land owners expectations.
- 11.12 Whilst there maybe potential to achieve affordable housing on some of these sites it is important to be aware of the above issues when requiring an affordable housing contribution. Furthermore consideration should be given to the most appropriate mechanism of delivery and include consideration of commutation where appropriate. Of course any contribution should have regard to National Policy and Guidance as set out previously within this report.
- 11.13 Small sites are also more sensitive than larger sites to changes in costs and values and therefore it is very important to have regard to the prevailing economic conditions on these sites, particularly in relatively lower value areas.
- 11.14 It is essential to recognise the impact of affordable housing tenure on smaller sites. In all areas the amount of affordable housing that could be deliverable varies dependent on the tenure mix of the affordable units. Higher percentages of affordable housing are likely to be achievable if all units are provided as intermediate, rather than social rented. Any policy on schemes of this size needs to recognise this point, notwithstanding the housing need profile within the District.



### Value Area One

- 11.15 Up to 40% affordable housing may be achievable assuming a site size threshold of 5 units. Achieving 40% affordable housing on higher density schemes (75dph and above) is more challenging than on lower density schemes (20dph – 50 dph).

### Value Area Two

- 11.16 Up to 40% affordable housing may be achievable assuming a site size threshold of 5 units. Achieving 40% affordable housing on higher density schemes (75dph and above) is more challenging than on lower density schemes (20dph – 50 dph).

### Value Area Three

- 11.17 Up to 30% affordable housing may be achievable assuming a site size threshold of 5 units on low density (20dph – 50 dph) schemes. Up to 10% affordable housing may be achievable on higher density schemes (75dph and above).

### Value Area Four

- 11.18 Up to 10% affordable housing may be achievable assuming a site size threshold of 5 units on low density (20dph – 50 dph) schemes.

### Value Area Five, Six, Seven, Eight and Nine

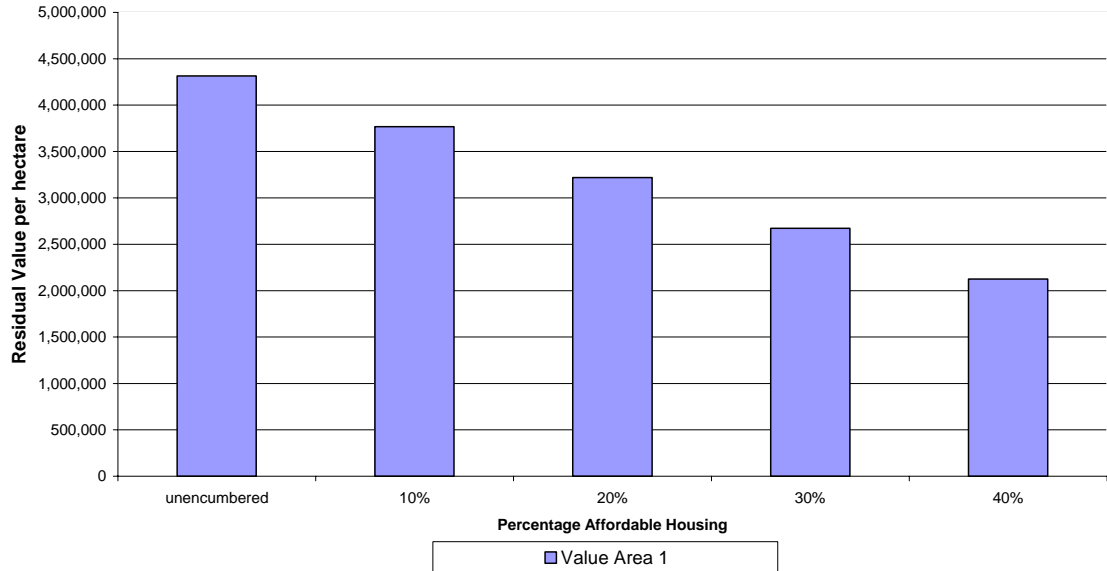
- 11.19 On schemes coming forward with sales values equivalent to the ones we have used for these areas, it is unlikely that schemes below 15 units could provide any amount of affordable housing.

### **General development sites (15-150 units)**

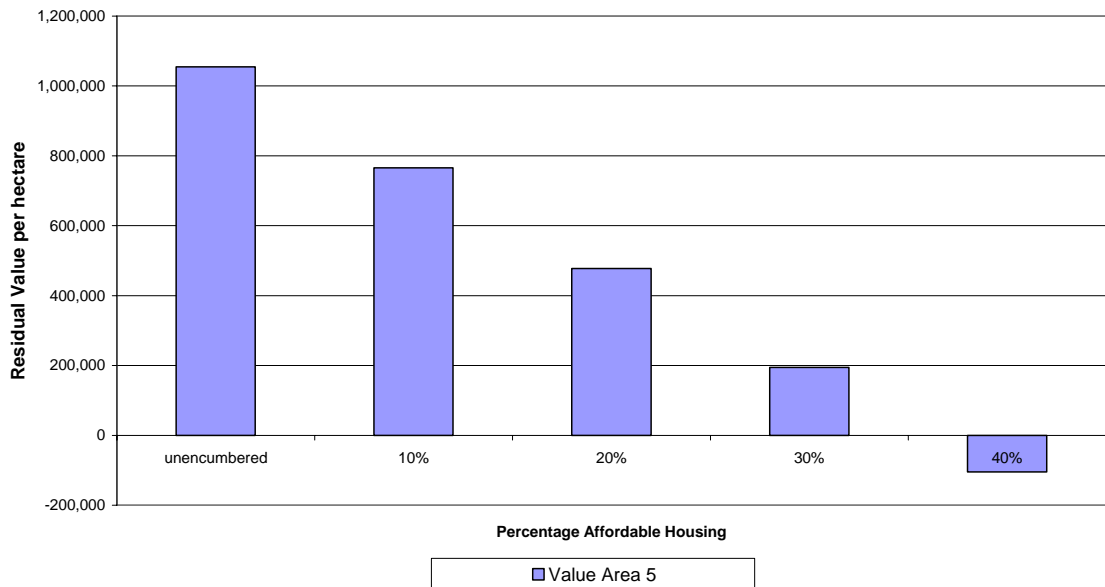
- 11.20 This section contains conclusions drawn from each notional site assessed in respect of each value area in Bradford. In addition analysis has been undertaken regarding development viability across the local authority area as a whole. These general conclusions across all value areas are drawn below.
- 11.21 The following figures examine the relationship between residual land value per hectare and the percentage of affordable housing, again this analysis is based upon a 50 unit 50 dph notional scheme as assessed at the baseline position set out in the results section. This graph is based on a current 'snapshot' of viability and does not attempt to show how this position may change over time, nor the impact of the different market scenarios. The first figure shows the impact of the range of affordable housing percentages tested upon the residual land value and uses value area one sales values. The second figure shows the same position but assumes value area 5 sales values. Although the actual residual land values differ due to the sales values assumed, the important consideration is the depressing effect that higher affordable housing percentages have on the residual land value that can be achieved. This trend is seen across all value areas.



**Effect of Different Affordable Housing Targets Upon Residual Land Value  
 (50 unit 50 dph scheme - Value Area 1)**



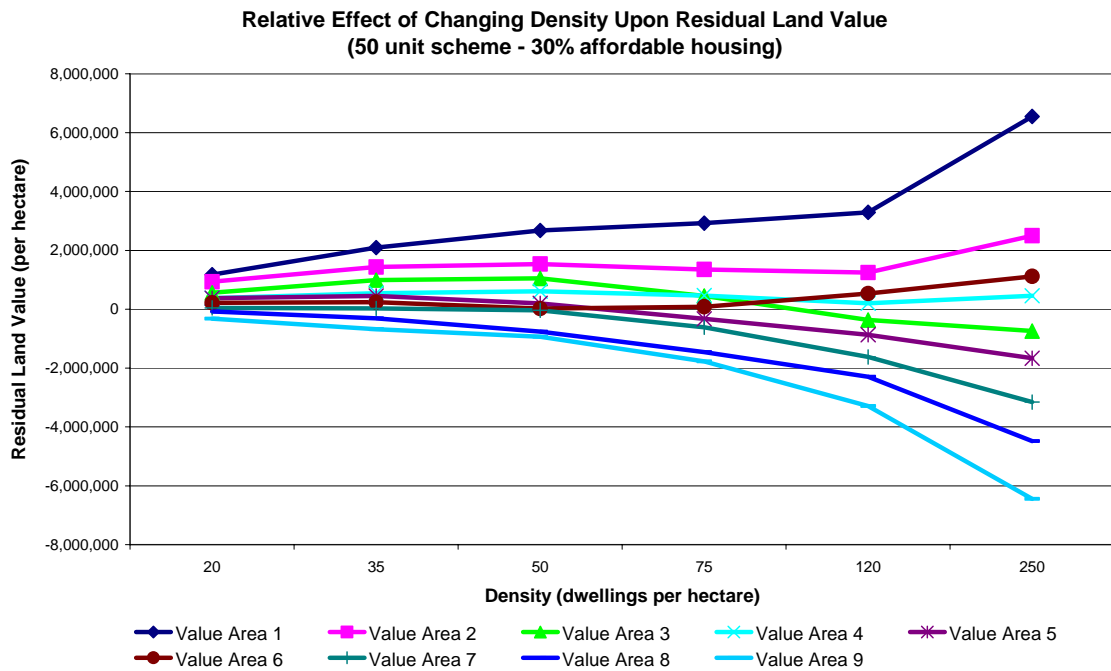
**Effect of Different Affordable Housing Targets Upon Residual Land Value  
 (50 unit 50 dph scheme - Value Area 5)**



11.22 The figure below shows the effect of different density development on residual land values for each value area. In other words, it demonstrates which development density in each value area generates the largest residual land value. A 50 unit notional scheme assuming 30% affordable housing with all other variables in line

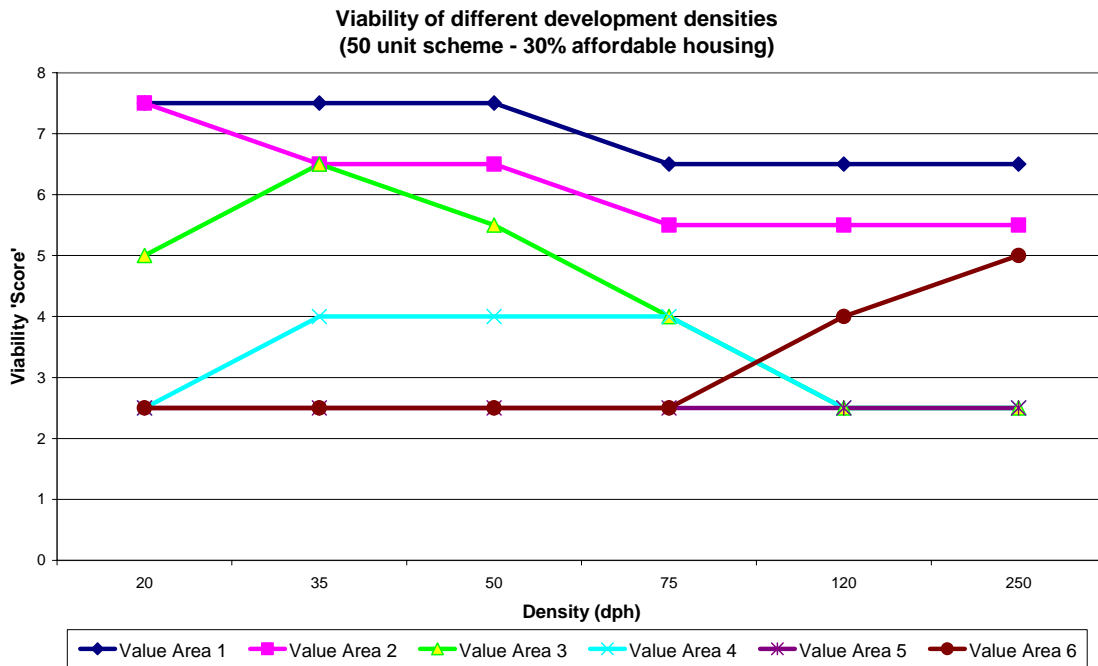


with our baseline position as set out in the results section has been assessed against all development densities we have been asked to consider. It should be noted that this figure does not consider the tests of viability, that is alternative/existing use values and the test of RLV as a proportion of GDV. It should also be considered that this figure represents the current position (2010) and does not attempt to show how this position may change over time, nor the impact of the different market scenarios.



11.23 In very general terms (and with due consideration to the points raised in the preceding paragraph), schemes with higher residual land values are more likely to come forward for development at the parameters we have assessed than those with lower residual values, and, those with negative land values are unlikely to come forward at all, again within the parameters we have assessed. It can also be seen that the difference in the residual land value is much more pronounced between value areas as density increases. This is largely due to the wide range of sales values for flatted development between value areas.

11.24 As stated the above graph does not consider the impact upon viability of different density developments. The following figure takes the viability 'score' of 30% affordable housing (with all parameters in line with the baseline position) on a 50 unit scheme coming forward across the range of different densities tested, thus the test of RLV as a proportion of GDV is considered as is the existing/alternative use assumed for the purposes of this graph at £560,000 per hectare. Again, this figure represents the current position (2010) and does not attempt to show how this position may change over time, nor the impact of the different market scenarios. Value Areas 7-9 inclusive have not been plotted.

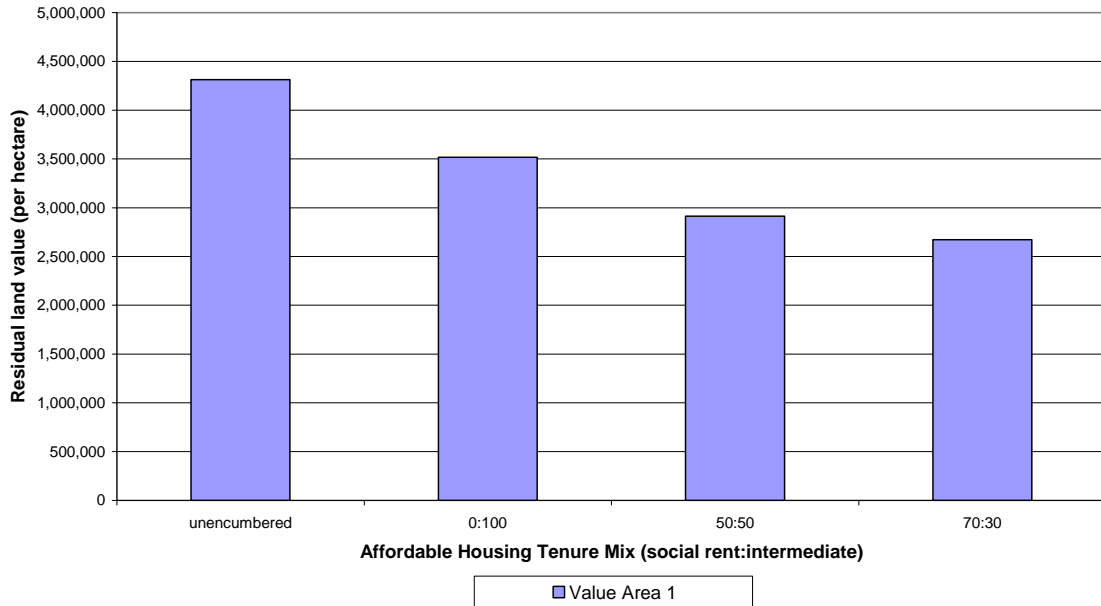


11.25 In value area 1, the optimum development densities are 20 dph – 50 dph and as density increases to 75 dph and above, viability reduces. This position, that it is more challenging to achieve a viable outcome at higher percentages of affordable housing on high density developments is repeated for most value areas with the exception of value area 6 where, as stated earlier in the report, as density increases to 120 dph and above, viability improves. In value areas 3 and 4 it is also clear that it is more viable to deliver dwellings at 35 dph than at 20 dph.

11.26 The figures below show the impact upon residual land value of three different affordable housing tenure mixes of a scheme providing 30% affordable housing as well as the same scheme unencumbered by affordable housing. This analysis is based upon a 50 unit 50 dph notional scheme as assessed at the baseline position set out in the results section. The first figure shows the impact of the range of tenure mixes upon the residual land value and uses value area one sales values. The second figure shows the same position but assumes value area 5 sales values. Although the actual residual land values differ due to the sales values assumed, the important consideration is the increase in residual land value that results from increasing the proportion of intermediate affordable units at the expense of social rented ones. This trend is seen across all value areas on schemes at all densities and sizes and demonstrates that increasing the proportion of intermediate affordable housing is a mechanism that could be employed to ease viability if required on certain schemes.



**Effect of Different Affordable Housing Tenure Mixes Upon Residual Land Value**



**Effect of Different Affordable Housing Tenure Mixes Upon Residual Land Value**





## Conclusions Table – General Development Sites

11.27 This report and appendices outline in detail the results from the wide range of testing that has been undertaken. In order to present the results clearly, the main conclusions that can be drawn in respect of general development locations are outlined in the table below. The table shows the likely maximum amount of affordable housing that could be achieved over the life of the Core Strategy based upon the baseline position assessed within the results section. The percentages within this table are not based upon results of testing that have shown viability in very limited periods (one or two years) however it should be recognised that these affordable housing percentages will not apply to every site that is likely to come forward within each Value Area.

<b>Value Area</b>	<b>Baseline Position</b>  (Nil grant, S106 contributions at 100% of the baseline level, Code for Sustainable Homes Requirements as mandatory timescale, 70:30 social rent:intermediate affordable housing mix, Lifetime Homes allowance £600 per unit and additional sustainability requirement of £1,200 per unit)
<b>1</b>	40% affordable housing is the likely maximum amount that could be achieved
<b>2</b>	40% affordable housing is the likely maximum amount that could be achieved
<b>3</b>	30% affordable housing is the likely maximum amount that could be achieved
<b>4</b>	30% affordable housing is the likely maximum amount that could be achieved
<b>5</b>	30% affordable housing is the likely maximum amount that could be achieved
<b>6</b>	20% affordable housing is the likely maximum amount that could be achieved
<b>7</b>	Between 10-20% affordable housing is the likely maximum amount that could be achieved
<b>8</b>	Between 0-10% affordable housing is the likely maximum amount that could be achieved
<b>9</b>	Between 0-10% affordable housing is the likely maximum amount that could be achieved

Table 5 – General Development Sites Conclusions



## Large sites (500 dwellings)

- 11.28 Paragraphs 7.1 to 7.6 of this report outline in detail the limitations of viability assessments undertaken for the purposes of policy setting on sites of this nature and thus the conclusions drawn here must be viewed in light of these earlier comments.
- 11.29 At value area One sales values, up to 40% affordable housing may be achievable (dependent upon market conditions) on this 500 unit notional scheme at densities of 35 dph and 50 dph without the need for subsidy. This assumes S106 requirements are not in excess of the levels tested. Development at a higher density (75 dph) is more likely to achieve a viable position with up to 30% affordable housing within these same parameters.
- 11.30 At value area Two sales values it is more challenging to achieve a viable position with 40% affordable housing (without considerations of subsidy and/or tenure mix) and up to 30% affordable housing is more likely to be deliverable, particularly when developing at higher densities (75 dph). Again this is dependent upon market conditions and assumes S106 requirements are not in excess of the levels tested.
- 11.31 At value area Three sales values, it is challenging to achieve up to 30% affordable housing and delivery of up to 20% affordable housing is more likely to be achievable on lower density (35 dph and 50 dph) developments. Market conditions, tenure mix and the availability of public subsidy are factors which will impact upon the ability to achieve this percentage. At higher densities (75 dph) up to 10% affordable housing is more likely to be achievable.
- 11.32 At value area Four sales values, up to 10% affordable housing is the likely maximum that may be deliverable and again, market conditions, tenure mix and the availability of public subsidy are factors which will impact upon the ability to achieve this percentage.
- 11.33 At sales values used for value areas Five – Nine (inclusive), achieving a viable position with in excess of 10% affordable housing is unlikely even with considerations of public subsidy, tenure mix and planning gain requirements. Market conditions will also impact significantly upon the overall level of affordable housing that may be achievable. At sales values equivalent to value areas 7 -9 (inclusive) there are likely to be many instances where it is not possible to viably deliver any amount of affordable housing.
- 11.34 Given the scale and phased nature of developments of this type, the Council may wish to negotiate affordable housing on a phased basis to take advantage of improvements to the viability position which may occur over time and/or in periods of market buoyancy.

## Recommendations

- 11.35 It is essential that any district wide affordable housing policy is not unduly rigid and can be applied flexibly and pragmatically allowing development to come forward whilst meeting the needs of the community. It will be necessary to consider sites on an individual basis having due regard to the planning benefits of granting permission. The framework for enabling such decisions to be made including those of viability could be set out within a Supplementary Planning Document.





- 11.36 Furthermore, the Council may update the assumptions used within this study in respect of property price growth, land value growth, build cost growth, inflation, and RPI to assess whether market conditions experienced at any given point represent best the downside, middle or upside market assumptions used within this study. It is recommended this is undertaken on an annual basis and more frequently in times of sharp rises or falls in any of these indices. This will enable the Council at any given time over the life of the Plan to refine their expectations in terms of the nature and extent of affordable housing that is likely to be achievable.
- 11.37 The limitations of assessing economic viability on large sites within the framework of a District wide viability assessment undertaken to inform policy have been outlined within this study. We would recommend that more detailed analysis of such development is undertaken in order to clarify and quantify the Council's requirements on sites of this nature and identify the approach to viability. This is particularly pertinent as development on such sites may account for a very significant proportion of new development within Bradford over the Core Strategy period. Such work could be set out in a Supplementary Planning Document or Area Action Plan.
- 11.38 A site size threshold of 5 units on sites in higher value areas can produce developable, deliverable sites with affordable housing however the exact level will have to be determined at the point of application having due regard to the value area and the potential alternative/existing uses of the site. Within lower value areas testing demonstrates that the majority of sites below 15 units are not capable of delivering affordable housing.
- 11.39 The Council's preferred tenure mix of 70:30 social rent:intermediate may be chosen as the starting point for all affordable housing negotiations however in the context of small sites it may be necessary to apply a high level of flexibility to ensure delivery and satisfy the needs of the local community.
- 11.40 The findings of the Strategic Housing Market Assessment 2010, as summarised in this report in paragraphs 2.30 *et seq.* indicate that there is an affordable housing need across the District and suggests an affordable housing target of 25%-30% for urban areas. Given the pressures upon development viability outlined in the report in some of these urban areas, it is recommended that grant funding and any other forms of public subsidy for affordable housing is directed toward development in these locations.