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Bradford District Local Plan Core Strategy – Viability Assessment

Prepared on behalf of
City of Bradford Metropolitan District Council
September 2013

Contents

Appendix A: References

1 Introduction

1.1 PURPOSE

1.1.1 DTZ has been appointed by City of Bradford Metropolitan District Council (the Council) to prepare viability evidence to support the emerging Local Plan Core Strategy. This document incorporates the findings from the preliminary viability modelling work. It is the intention that this report will inform the ongoing development of the Council's Local Plan document with a final 'submission version' produced at an appropriate point in time when the Council is in a position to submit its Local Plan to the Planning Inspectorate.

1.2 LOCAL PLAN VIABILITY CONTEXT

1.2.1 The need for viability testing of the Local Plan has arisen as a result of the requirements of the National Planning Policy Framework (NPPF) published in March 2012. The NPPF has strengthened the importance of viability in the planning process and particularly in respect of development plan preparation. In order to ensure viability and deliverability of Local Plans, the NPPF states:

"Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable." Para 173

1.2.2 It has reinforced the requirements for the provision of a deliverable supply of housing land, stipulating the need for a rolling five year supply of deliverable sites with a buffer of 20% for authorities where there has been 'persistent under delivery'. It also requires local authorities to identify sites for years 6-10 and 11-15 which should be realistically deliverable over the development plan period. In respect of the five year supply, it clarifies the definition of 'deliverable' stating:

"To be considered deliverable, sites should be available now, offer a suitable location for development now, and be achievable with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable. Sites with planning permission should be considered deliverable until permission expires, unless there is clear evidence that schemes will not be implemented within five years, for example they will not be viable, there is no longer a demand for the type of units or sites have long term phasing plans." Footnote 11

1.2.3 The publication of *Viability Testing Local Plans* by the Local Housing Delivery Group, May 2012, offers guidance for local authorities in assessing local plan viability in accordance with the NPPF. It suggests the need for a distinct Local Plan Viability Assessment to demonstrate that the policies put forward in a Local Plan are viable and accord with the requirements of the NPPF, and therefore the plan meets the tests of soundness.

1.2.4 The guidance underlines the importance of assessing the cumulative impact of policies on development viability and suggests a structured and transparent means of assessing viability. It recommends an economic viability testing model that can be applied area-wide and over the short (0 to 5 years), medium (6-10 years) and

long (11-15 years) term. It also suggests close collaboration with the development industry throughout the process.

1.3 SCOPE

1.3.1 A viability evidence base is required for Bradford to support the submission version of the Local Plan Core Strategy, due to be finalised by the end of the year. The evidence assesses and tests the policies contained in the plan and makes recommendations for areas of policy that should be considered and reviewed.

1.3.2 There is a significant overlap between the CIL viability evidence that DTZ is already instructed to produce and the requirements of viability testing of the Local Plan. Much of the evidence collection and structure of financial modelling has been extended to incorporate the requirements of Local Plan viability testing.

1.3.3 The table below summarises the approach that has been taken:

Step	Tasks / approach
1. Review evidence	Review core strategy policies to determine those that require economic viability assessment. Traffic light table analysis of policy to identify risk of impact on viability and policies requiring economic viability assessment
	High level review of evidence base documents to identify any issues / implications for viability testing
2. Devise and agree viability methodology and assumptions	Methodology for viability testing
	Treatment of values and costs over time
	• Use classifications to be tested • Site typologies • Threshold site values • Cost and revenue assumptions
3. Viability appraisal and testing	• Assessment of viability (including each policy requirement separately and cumulatively) • Review of outputs, refine and revise modelling
4. Policy recommendations	• Conclusions on viability of policies • Policy recommendations
5. Report preparation	Preparation of report

1.4 STRUCTURE OF REPORT

1.4.1 We set out in the remaining sections of this report the assumptions used for our appraisals and the results.

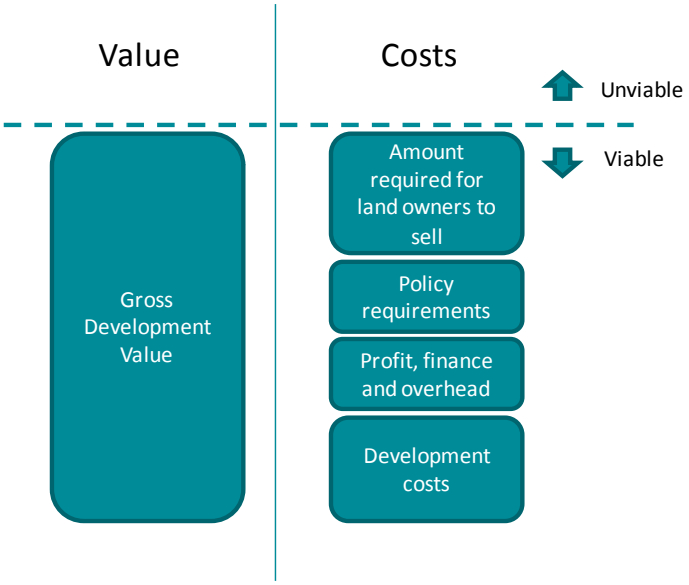
- Economic viability methodology
- Review of Core Strategy and evidence
- Viability testing results
- Interpretation and policy recommendations

2 Methodology

2.1 VIABILITY TESTING METHODOLOGY

2.1.1 The publication of *Viability Testing Local Plans* by the Local Housing Delivery Group, May 2012, offers guidance for local authorities in assessing local plan viability in accordance with the NPPF. It underlines the importance of assessing the cumulative impact of policies on development viability and suggests a structured and transparent means of assessing viability. It recommends the use of an economic viability model based on a simple residual development appraisal whereby the impact of various policy standards can be quantified and assessed against the value of a development scheme. If the cumulative impact of all policy standards result in development costs exceeding Gross Development Value, then development is not viable.

Figure 2.1: Viability testing – principles



2.1.2 DTZ's approach involves the analysis of a selection of hypothetical development schemes to reflect the wide range of circumstances in which development is anticipated to come forward in Bradford. DTZ has developed a spreadsheet economic viability model that allows a large number of development scenarios to be tested in this way, including sensitivity testing of key variables. The appraisals are carried out on a residual site value basis, whereby the impact of various policy standards is taken into consideration alongside other costs, including profit which are discounted from Gross Development Value to produce a residual site value. The site value is then tested against a benchmark to determine whether or not development is viable.

2.1.3 The recent RICS guidance note *Financial Viability in Planning* 2012 defines site value as follows:

"Site Value should equate to the market value subject to the following assumption: that the value has regard to development plan policies and all other material planning considerations and disregards that which is contrary to the development plan."

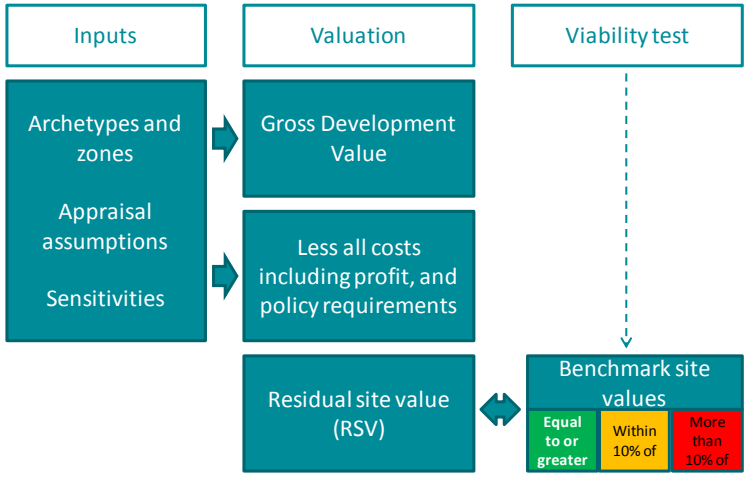
2.1.4 When undertaking Local Plan or CIL (area-wide) viability testing, a second assumption needs to be applied to the above:

"Site Value (as defined above) may need to be further adjusted to reflect the emerging policy / CIL charging level. The level of the adjustment assumes that site delivery would not be prejudiced. Where an adjustment is made, the practitioner should set out their professional opinion underlying the assumptions adopted. These include, as a minimum, comments on the state of the market and delivery targets as at the date of assessment."

2.1.5 Viability will be tested by the relationship of residual site values of hypothetical schemes against a benchmark. Where site values of the hypothetical schemes (including relevant cumulative policy impacts) is:

- Equivalent to or more than the benchmark, it will be recorded as green, and therefore regarded as viable
- Within 10% of the benchmark, it will be recorded as amber and therefore at risk of compromising land release
- More than 10% below the benchmark it will be recorded as red and therefore likely to compromise land release

Figure 2.2 Approach to viability testing



2.1.6 Where:

- Gross Development Value (GDV) represents the cumulative capital sales value of the development.
- Development costs represent all the costs incurred by a developer in delivering the completed development scheme – site costs, build costs, contingencies, developer's profit, finance and all relevant professional, legal, sales/marketing fees, stamp duty, policy costs and planning obligations.
- Residual land value represents the difference between Gross Development Value and Development costs.

2.2 CONSULTATION

2.2.1 A developer workshop was held to inform this work together with a survey of developers, house-builders, retail operators and property and planning agents. The consultation was used to test and refine the approach and assumptions behind the viability modelling. Attendees of the workshop were as follows:

- Bellway Homes
- Ben Bailey Homes
- Taylor Wimpey
- Skipton Properties
- Mark Brearley and Company
- Persimmon Homes
- Bradford NHS Trust
- GMI Property Company Ltd
- Steel Consulting
- Jones Homes
- Dacre Son and Hartley
- Keyland Developments
- Yorkshire Building Society
- David Wilson Homes
- Savills
- ID Planning
- Jones Homes
- Accent Homes

2.3 CAVEATS

2.3.1 This report deals specifically with economic viability of selected hypothetical development schemes. It does not address the matter of either:

- Area wide development quantum / forecast; or
- Deliverability of land supply

2.3.2 These matters sit outside of the scope of this instruction and are being addressed by the Council as part of the wider evidence base supporting the Local Plan preparation.

2.3.3 It is also emphasised that the viability assessments undertaken as part of this instruction are indicative development appraisals only and are highly sensitive to the assumptions made. We have considered sensitivities in attempt to cover the potential range of variations but we would underline that there remains a significant degree of uncertainty around many of these variables and that on a generic area wide level, viability appraisals are an approximate indicator only.

3 Review of Core Strategy and evidence

3.1 THE LOCAL PLAN CORE STRATEGY

3.1.1 The Bradford District Core Strategy Further Engagement Draft (CSFED) was published for public consultation in October 2011. The next stage is to produce a Publication Draft for submission to Government which will take account of consultation responses, the new National Planning Policy Framework and the evolving evidence base. The Publication Draft is scheduled to be published late in 2013.

3.1.2 The document seeks to address the key challenges facing Bradford's communities, in particular, meeting the needs of a growing population in terms of homes and jobs in a sustainable way. The spatial approach of the CSFED outlines the quantum of development planned for each of the four locations: City of Bradford (including Shipley and Lower Baildon), Airedale, Wharfedale and South Pennine Towns and Villages.

3.1.3 The housing growth level is set at 48,500 by 2028, broadly reflecting the projections in the Regional Spatial Strategy which formed part of the statutory development plan at the time of issuing the Core Strategy Further Engagement Draft[1]. The CSFED suggests that the majority of these houses will be focused in and around the City of Bradford with the emphasis on regeneration and Previous Developed Land (PDL) as far as is possible given the deliverability of land supply determined through the the Strategic Housing Land Availability Assessment (SHLAA). Areas prioritised for growth include Shipley and Canal Road Corridor, the Leeds-Bradford Corridor and South East Bradford (including Holme Wood) and the City Centre. The principal towns of Keighley, Bingley and Ilkley will also support housing and economic growth.

3.2 HOUSING POLICIES

3.2.1 The Further Engagement Draft Core Strategy sets out housing targets based on the approved version of the Yorkshire and Humber Regional Spatial Strategy which have been adjusted to allow for the impact of market conditions in restricting delivery rates in the early years of the programme. This generates a total housing growth requirement of 48,481 over the Core Strategy period set out in two instalments of annual rates:

- Up to 2016, 2430 dwellings per annum
- 2016-2028, 2,700 dwellings per annum

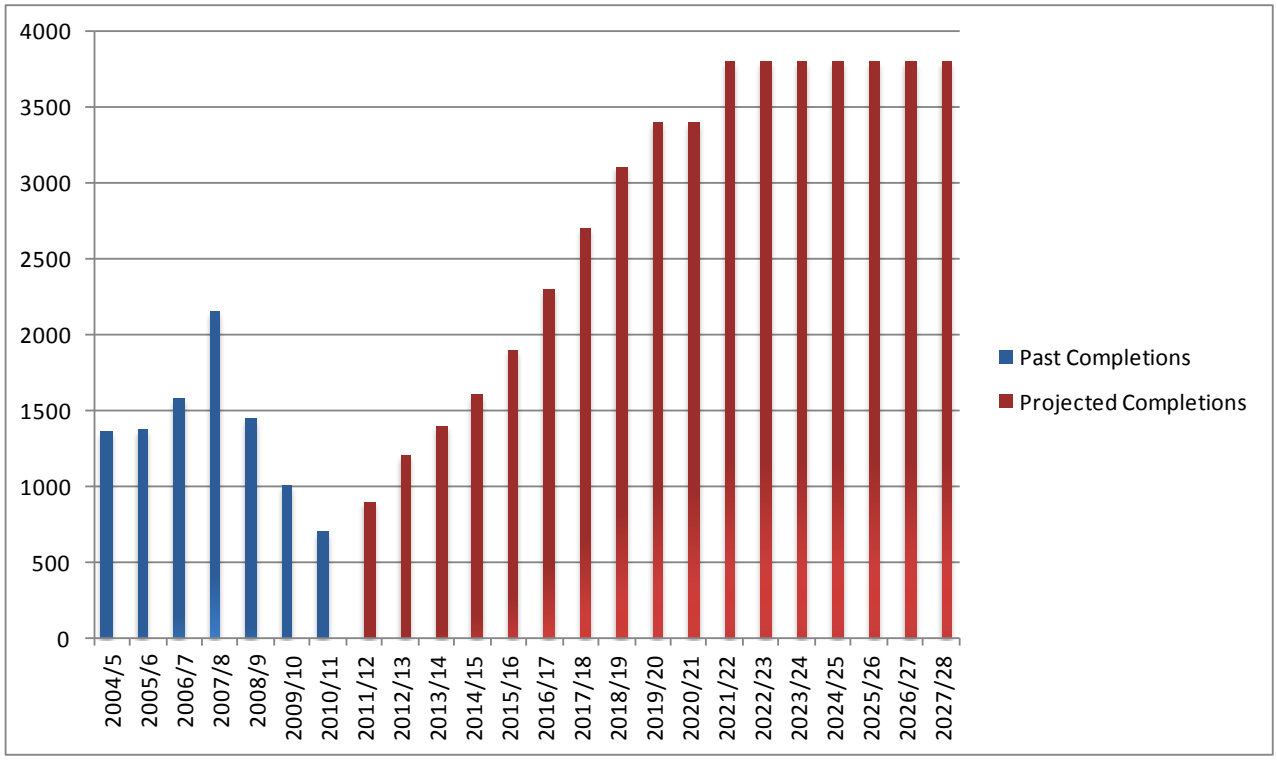
3.2.2 Bradford Council has developed a housing trajectory based on recent performance of housing completions and anticipated future delivery rates in view of market conditions and supply factors. The trajectory, as illustrated by Figure 3.1 below, is heavily back-loaded, not only to allow for weak market conditions over the short to medium term, but also because the Council anticipate that much of the land releases required to deliver the larger quantities of housing will be brought forward only in the medium to long term because of the need for new allocations and in some cases complex masterplans to unlock sites.

3.2.3 The housing trajectory demonstrates that the rates of delivery throughout the development period are considerable and well in excess of historic rates of completion. Whilst the first few years allow for a lower rate of delivery, this is stepped up year on year and by the final phase of delivery from 2021 onwards, the rate of annual completions is increased substantially to 3,800 per annum, near double the level of completions achieved at the peak of the market in 2007/08 (2156). It is anticipated that this step change in housing delivery

[1] The Regional Spatial Strategy, as far as it applies to Bradford, was revoked in February 2013

performance will be facilitated by a less restrictive planning regime that has hitherto been in place in which large scale land releases are brought forward to meet requirements.

Figure 3.1: Housing trajectory 2004/5-2027/28



Source: Appendix 6, Core Strategy Development Plan Document, Engagement Draft, October 2011

Sources of supply

3.2.4 Under Policy HO2, the Engagement Draft sets out that the sources of housing supply will be as follows:

- Housing completions since April 2004
- Existing commitments with planning permission
- Unimplemented but deliverable or developable sites allocated for residential use in the UDP
- Additional sites to be allocated through the LDF (Allocations DPD, Bradford City Centre AAP, Shipley and Canal Road AAP)
- A windfall contribution of 600 dwellings per annum in the final five years of the plan

3.2.5 In addition, the Core Strategy states that the following growth areas/sites will be prioritised for growth through the allocations process:

- Urban eco settlement in Bradford Shipley Canal Road Corridor
- Bradford City Centre
- South East Bradford, including an urban extension at Holme Wood
- Queensbury, Menston, Silsden and Steeton with Eastburn

- Regeneration/modelling of existing urban areas including Holme Wood, Laisterdyke, Ravenscliffe and Manningham
- Local Greenbelt releases where consistent with the plan's sustainability principles.

Spatial distribution

3.2.6 The Engagement Draft apportions the housing targets geographically in accordance with the spatial strategy set out in the document. This is as follows:

Table 3.1: Housing apportionment

The Regional City of Bradford				
Bradford City Centre	3500		Bradford North East	5000
Canal Road	3000		Bradford South West	4500
Shipley	2000		Bradford North West	4000
Bradford South East	6000			
Subtotal	28000			
The Principal Towns				
Ilkley	1300		Bingley	1600
Keighley	5000			
Subtotal	7900			
Local Growth Centres				
Burley in Wharfedale	500		Steeton with Eastburn	800
Menston	900		Thornton	700
Queensbury	1500		Silsden	1700
Subtotal	6100			
Local Service Centres				
Addingham	400		East Morton	150
Baildon	550		Harden	150
Cottingley	300		Haworth	600
Cullingworth	200		Oakworth	250
Denholme	450		Oxenthorpe	150
Wilsden	300			
Subtotal	3500			

3.2.7 The Further Engagement Draft also sets out a spatial vision for each of the four key 'Sub Area Policies' for City of Bradford, Airedale, Wharfedale and Pennine Towns and Villages. These spatial visions envisage potential greenbelt releases. The key elements of residential development proposed in each of these visions, all of which include the likelihood of greenbelt releases, are as follows:

- City of Bradford – urban regeneration and renewal priorities including City Centre, Canal Road Corridor, Shipley town centre, Leeds Bradford Corridor, Manningham, Little Horton and Allerton;
- Airedale – urban regeneration and renewal priority areas in Keighley and Bingley
- Wharfedale – potential localised greenbelt releases
- Pennine Towns and Villages – potential localised green belt releases at Thornton and Queensbury.

3.2.8 The sub areas outline the need for green belt releases in most parts of the district. The only more specific and definite urban extension being proposed at this stage being that east of the Holme Wood estate as part of the Bradford SE growth area.

Policy requirements of development

- Policy HO5 housing densities – requirement for a minimum of 30 units per hectare and higher densities in areas well served by public transport
- Policy HO6 maximising the use of previously developed land (PDL) – requirement for 50% of development to be on PDL across the district and the following location requirements:
  - 60% of development on PDL in the Regional City of Bradford
  - 40% of development on PDL in the Principal Towns
  - 15% of development on PDL in Local Growth Centres
  - 35% of development on PDL in Local Service Centres
- Policy HO8 housing mix – a requirement for a mix of housing with a dual emphasis on family housing (including larger family houses) and affordable housing
- Policy HO9 housing quality – the requirement for all homes to meet Level 4 of the Code for Sustainable Homes from April 2013 and Code 6 from April 2016
- Policy HO11 affordable housing – affordable housing is required on sites over 0.4 ha / 15 units. The target is that 25-30% of all new houses will be affordable, split geographically as follows:
  - Up to 40% in Wharfedale (with a lower threshold of 5 units)
  - Up to 30% in the Bradford Shipley Canal Road Corridor and Urban Eco Settlement area
  - Up to 15% in inner Bradford and Keighley
  - Up to 30% in the rest of the district.

3.3 OTHER USES

3.3.1 The Further Engagement Draft Core Strategy sets out an overall target of 146 ha of employment land to be delivered over the 15 year plan period equating to 9.73 ha per annum. This target, based on the Council's Employment Land Review update 2011, incorporates 22 ha earmarked for B1 use, equating to 1.46 ha per annum. The overall employment land supply is to be distributed as follows:

- 105 ha in City of Bradford
- 31 ha in Airedale
- 10 ha in Wharfedale

3.3.2 Policy EC4 Sustainable Economic Growth stipulates the requirement for all commercial schemes over 1000 sq m of floor area to secure at least 10% of their energy from decentralised and renewable or low carbon sources and meet BREEAM Very Good standards.

3.4 HEALTH CHECK REVIEW OF POLICIES

3.4.1 The table over the page provides a review of the policies contained within the Core Strategy Local Plan to identify:

- Those policies that will have a direct impact on development costs
- The level of delivery risk associated with each policy.

Table 3.2: Health check of Local Plan policies

Policy ref	Policy description	Direct impact on economic viability of development? Y/N	Impact	Comments on general deliverability
SC1	Overall approach and key spatial policies	N	N/a	
SC2	Climate change and resource use	N	N/a	
SC3	Working together to make greate places	N	N/a	
SC4	Hierarchy of settlements	N	N/a	
SC5	Location of development	N	N/a	
SC6	Green infrastructructure	N	N/a	
SC7	Green Belt	N	N/a	
BD1	City of Bradford including Shipley and Lower Baildon	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence
BD2	Investment priorities for the City of Bradford including Shipley and Lower Baildon	N	N/a	
AD1	Airedale	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence
AD2	Investment priorities for Airedale	N	N/a	
WD1	Wharfedale	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence
WD2	Investment priorities for Wharfedale	N	N/a	
PN1	South Pennine Towns and Villages	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence
PN2	Investment Priorities for the Pennine Towns and Villages sub area	N	N/a	
EC1	Creating a successful and competitive Bradford District Economy within Leeds City Region	N	N/a	
EC2	Supporting business and creating jobs	N	N/a	
EC3	Employment land requirement	N	N/a	Commercial market update will enhance employment land evidence
EC4	Sustainable economic growth	Y	Cost uplift on commercial	Although policy states renewable requirement on a subject to viability basis
EC5	City, town, district and local centres	N	N/a	Updated retail evidence required

Table 3.2: Health check of Local Plan policies (continued)

Policy ref	Policy description	Direct impact on economic viability of development? Y/N	Impact	Comments on general deliverability
TR1	Travel reduction and modal shift	N	N/a	
TR2	Parking policy	N	N/a	Assessment of parking standards recommended to ensure competitiveness with market expectations
TR3	Public transport, cycling and walking	N	N/a	
TR4	Transport and tourism	N	N/a	
TR5	Rural transport	N	N/a	
TR6	Freight	N	N/a	
TR7	Transport investment and management priorities	N	N/a	
TR8	Aircraft safety	N	N/a	
HO1	Scale of housing required	N	N/a	Subject to housing land supply and market demand
HO2	Strategic sources of supply	N	N/a	Subject to housing land supply and market demand
HO3	Distribution of housing requirement	N	N/a	
HO4	Phasing and release of housing sites	N	N/a	Deliverability is dependent on site viability which has not been examined as part of this commission
HO5	Density of housing schemes - requirement for higher densities close to public transport	Y	Densities of up to 50 DPH tested	Housebuilders preference is currently for low density family housing schemes
HO6	Maximising use of previously developed land	N	Potential for increased abnormal costs	Need to test the delivery of brownfield land through SHLAA
HO7	Housing site allocation principles	N	N/a	Subject to site allocations process
HO8	Housing mix	N	N/a	Precise mix will be determined according to need and demand on case by case basis - therefore no standards to test in Local Plan.
HO9	Housing quality	Y	Impact of code for sustainable homes level 4 and level 6, lifetime home standards, additional impact on design standards.	Economic viability test required
HO10	Overcrowding and vacant homes	N	N/a	
HO11	Affordable housing	Y	40% in Wharfedale, 15% in inner Bradford and Keighley, 30% elsewhere	Affordable housing standards to be tested
HO12	Provision of sites for gypsies, travellers and travelling show people	N	N/a	

Table 3.2: Health check of Local Plan policies (continued)

Policy ref	Policy description	Direct impact on economic viability of development? Y/N		Impact		Comments on general deliverability
EN1	Open space, sports and recreational	N		N/a		
EN2	Biodiversity and Geodiversity	N		N/a		
EN3	Historic environment	N		N/a		
EN4	Landscape	N		N/a		
EN5	Trees and woodlands	N		N/a		
EN6	Energy	N		N/a		Subject to any standards set out in DPDs
EN7	Development and flood risk	N		N/a		Subject to land supply
EN8	Environmental protection policy	N		N/a		
EN9	New Minerals extraction	N		N/a		
EN10	Sand stone supply	N		N/a		
EN11	Sand, gravel, fireclay and coal supply	N		N/a		
EN12	Minerals safeguarding	N		N/a		
EN13	Waste management	N		N/a		
EN14	Waste management	N		N/a		
ID1	Development plan documents and authority monitoring report	N		N/a		
ID2	Development management	N		N/a		
ID3	Developer contributions	N		N/a		
ID4	Working with partners	N		N/a		
ID5	Facilitating delivery	N		N/a		
ID6	Simplification of planning guidance to encourage sustainable development	N		N/a		
ID7	Community involvement	N		N/a		
ID8	Regeneration funding and delivery	N		N/a		

3.4.2 Overall, this analysis indicates that there are a small number of Local Plan policies that require economic viability testing, which are:

- HO5 – Housing Densities
- HO9 – Housing Quality
  - Code for Sustainable Homes Level 4 and Level 6
  - Lifetime Home Standards
  - Space standards
  - Design standards
- HO11 – Affordable Housing
- EC4 i – BREEAM / carbon reduction target

3.4.3 The impacts of these proposed policies on economic viability are examined in the following chapter.

3.4.4 Of those policies highlighted amber in the table above, whilst these do not require viability testing to accord with the requirements of the NPPF, they are considered to be policies which could potentially affect deliverability. These are:

- Sub area policies BD1, AD1, WD1, PN1 – the deliverability of development within these locations is subject to the availability of land supply and localised market conditions which is being addressed through the SHLAA, the five year land supply and the allocations process. Site specific viability testing is recommended to support these processes.

- EC3 – Employment land requirement – the deliverability of the distribution of employment land is dependent on land supply. Updated commercial evidence and employment land forecasting should be considered to assist with ensuring the deliverability of employment land policies and site allocations.
- EC5 – City, town, district and local centres – similarly the deliverability of this policy will be subject to the availability of land to meet these needs.
- TR2 – Parking policy – We have reviewed the parking standards set out in Appendix 4 of the Core Strategy Local Plan document. Consultation with agents has indicated that the parking standards are broadly consistent with market requirements. Retail parking standards are in accordance with operator requirements at 1:14 sq m (food retail) and 1: 25 sq m (non food retail). Office parking standards are more favourable than those currently being delivered in Leeds City Centre, although as an out of town ratio, they are considered to be broadly in line with market requirements. Industrial standards are also broadly in accordance with requirements. The residential standard of 1.5 per dwelling is considered to be a reasonable overall benchmark, although it is considered to be at the minimum end of the range.
- HO4 – Phasing and release of housing sites – ensuring a mix of viable PDL and Greenfield sites in different locations across the District is recommended to ensure deliverability.
- HO8 – Housing mix – the proposal for separate guidance to be prepared on the housing mix to be achieved in individual areas will require viability testing at the appropriate time to ensure that it does not propose standards that have a negative impact on viability.
- EN6 – Energy – the requirement for schemes to identify renewable energy and means of reducing carbon could potentially affect viability, although the varied means by which this could be achieved is such that it is not practical to assess in economic viability terms.
- EN7 – flood risk – the requirements on developers to assess and implement sustainable flood alleviation solutions does have the potential to impact on viability. The costs of assessing the requirements will be borne out of professional fees that are accounted for in our viability appraisals.

4 Economic viability testing

4.1 POLICIES TESTED

4.1.1 DTZ has tested the following draft / emerging policies:

- HO5 – Housing Densities
- HO9 – Housing Quality
  - Code for Sustainable Homes Level 4 and Level 6
  - Lifetime Home Standards
  - Space standards
  - Design standards
- HO11 – Affordable Housing
- EC4 i – BREEAM / carbon reduction target

4.1.2 We have also examined the following policy areas in response to a request by Bradford Council:

- Design cost uplift
- HCA Space standards
- Community Infrastructure Levy

4.1.3 The approach we have taken is to assess the impact of each of these standards against a base appraisal, and then to show the cumulative impact of all the policies together.

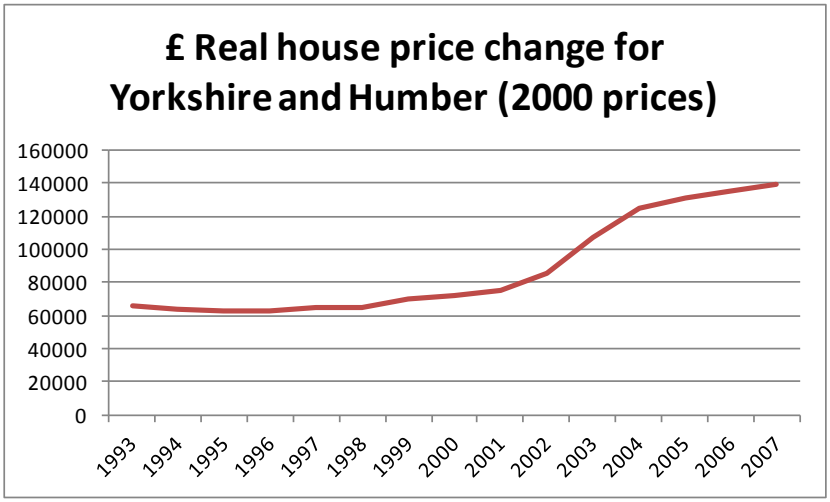
4.2 APPROACH TO TESTING VIABILITY OVER TIME

4.2.1 In accordance with the guidance set out in the Local Housing Delivery Group's advice on Local Plan Viability Testing, we have examined viability of the Local Plan policies over the 15 year period in which the plan will be in place. This analysis is intended to demonstrate how variation in market conditions over the plan period may affect viability levels. To do this, we have examined long term cyclical patterns in house prices which have informed the development of a number of value scenarios.

4.2.2 DTZ have maintained a long running index of UK average house prices and have examined the range of real price variance over the last property cycle 1988 to 2007 to provide the basis for looking at sensitivities over the future Local Plan period. The data is sourced directly from the DCLG, linked to RPI, to ensure nominal values are converted to real ones. This index is then regionally adjusted using the Nationwide House Price Index to get to our base position up to present day for the region.

4.2.3 Figure 4.1 below illustrates the real change in average house prices for Yorkshire and Humber over the course of the 15 year period prior to 2007. This illustrates that in real terms average house prices more than doubled from the bottom to the top of the cycle. Whilst the next fifteen year cycle will not necessarily replicate the change observed between 1992 and 2007, the potential for significant growth in real terms is clear, particularly if it assumed that the housing market is currently near the bottom of the cycle.

Figure 4.1: Real house price change 1993-2007



Source: DCLG

4.2.4 In considering the potential variance over the next 15 year cycle, DTZ has projected forward this index over the life of the plan period, reflecting official RPI forecasts, using a weighted average of the following four sources:

- The actual recorded changes in the previous property cycle
- DTZ Residential Research
- Savills Residential Research
- Knight Frank Residential Research.

4.2.5 Three value sensitivities have been drawn from this projection to provide parameters for the possible level of variance in values over the plan period:

- Base = 100% of current sales values
- Mid = 130% of current sales values
- High = 160% of current sales values

4.2.6 These scenarios are intended to represent possible changes in market conditions over the plan period, although we would emphasise that they are not predictions of how market conditions will change, but merely sensitivities to test potential levels of variation. As such we would urge caution in how the results are interpreted and in particular we would not recommend that the viability of Bradford's Local Plan policies rely on the achievement of the high value sensitivity in view of the inherent uncertainty.

4.3 APPRAISAL ASSUMPTIONS

4.3.1 The baseline appraisal assumptions are predicated on those tested through consultation with the development community and accord with the emerging Community Infrastructure Levy viability evidence.

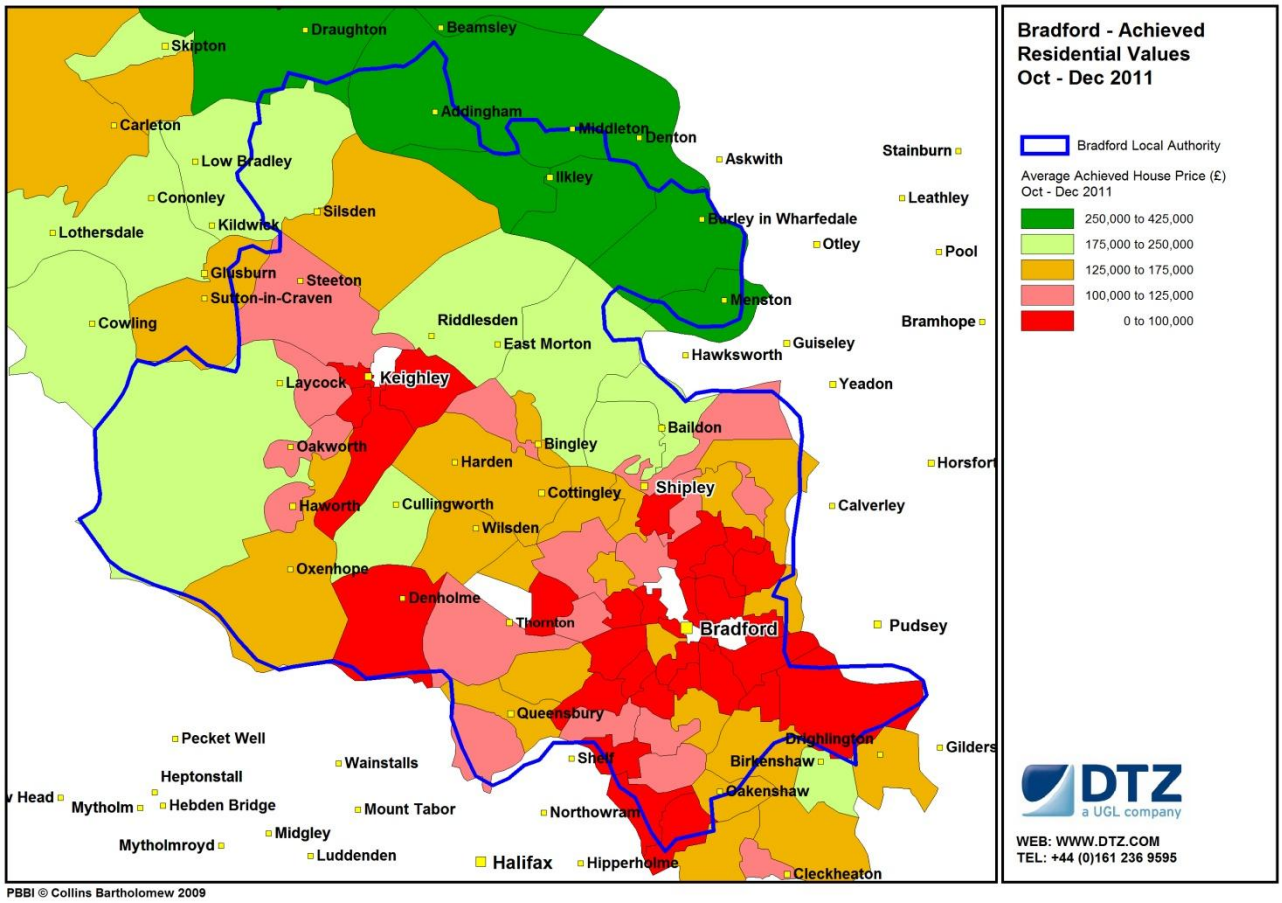
4.3.2 Five market areas have been selected to examine residential viability based on differences in average house prices drawn from Land Registry data:

- Value area 1 - £250,000 to £425,000 average house price band
- Value area 2 - £175,000 to £250,000 average house price band

- Value area 3 - £125,000 to £175,000 average house price band
- Value area 4 - £100,000 to £125,000 average house price band
- Value area 5 - sub £100,000 average house price band

4.3.3 Whilst there may be small variations in values concealed within each of the geographical boundaries presented, these value areas are considered to provide an adequate range and representation of the areas in which development is anticipated to come forward through the CSFED.

Figure 4.2: Residential market areas



4.3.4 A standard development density of 30 units per ha, and a site size of 1.5 ha (3.7 acres) has been used, with the following mix of units:

Table 4.1: Base housing mix

	House size mix (%)				
Development density	2 bed flat	2 bed house	3 bed house	4 bed house	5 bed house
20 units ph	0	0	25	50	25
30 units ph	0	10	45	40	5
40 units ph	10	45	40	5	0
100 units ph	100	0	0	0	0

4.3.5 Housing sizes have been selected consistent with the draft CIL viability evidence previously prepared:

Table 4.2: Base house sizes

House type	Size (GIA sq m)
2 bed flat	60
2 bed house	67
3 bed house	79
4 bed house	102
5 bed house	135

4.3.6 The following blended capital values have been assumed:

Table 4.3: Property values

	£psm		
	Base - 100%	Mid - 130%	High - 160%
Zone 1	£3,100	£4,030	£4,960
Zone 2	£2,200	£2,860	£3,520
Zone 3	£1,800	£2,340	£2,880
Zone 4	£1,400	£1,820	£2,240
Zone 5	£1,200	£1,560	£1,920

4.3.7 Baseline build costs are based on BCIS with an allowance for an uplift for external works, as follows:

- Houses £886 per sq m
- Flats £1059 per sq m

4.3.8 Other appraisal assumptions are as follows:

- Developer's profit 20% of GDV
- 30 dwellings per annum sales rate
- Professional fees 10%
- Contingencies 3%
- Marketing and sales agent fees 3.5%
- Acquisition cost 5.8%
- Finance 6.5%
- Blended affordable housing transfer values 35% discount from market value (65% of market value)
- Abnormal costs excluded

4.3.9 A site value benchmark of 20% of GDV is used which represents a benchmark land price for a site with planning permission free from abnormals. This is considered to be a reasonable self adjusting basis to reflect the range of circumstances across Bradford District and is equally applicable to be tested on higher sales value sensitivities.

4.4 APPRAISAL RESULTS

4.4.1 The various policy standards listed above are examined below on the basis of the appraisal assumptions set out. As explained in Section 2, viability is tested via a residual development appraisal where the residual site value is benchmarked against a site value threshold of 20% of GDV. Traffic light indicators are ascribed to

illustrate the results, with green indicating that the appraisal is equivalent to or greater than the benchmark (and therefore the policy standard tested is viable), amber is within 10% below the benchmark (at risk), and red more than 10% below the benchmark (likely to be compromised).

4.4.2 Each policy standard is tested separately after which the cumulative impact of the combined standards is considered. We also include reference to three value scenarios (base, mid and high) to reflect the possibility of improved market conditions throughout the life of the plan, as outlined above.

4.5 BASELINE – NO POLICY REQUIREMENTS

4.5.1 As indicated by the table below, the baseline appraisals show a wide range of residual site values reflecting the diversity of market characteristics across the District, with value area 1 (Wharfedale) generating site values of £3.26m per ha (£1.32m per acre), and at the other end of the spectrum, value area 5 (inner Bradford and Keighley), producing negative land values.

Table 4.4: Base appraisal results (Base scenario current values)

	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Sum available for policy standards
Value Area 1	£4,884,622	£3,256,415	£2,505,420	£1,670,280	£1,586,135
Value Area 2	£2,416,618	£1,611,079	£1,778,040	£1,185,360	£425,719
Value Area 3	£1,319,689	£879,792	£1,454,760	£969,840	-£90,048
Value Area 4	£222,998	£148,666	£1,131,480	£754,320	-£605,654
Value Area 5	£0	£0	£969,840	£646,560	-£646,560

4.5.2 The "sum available for policy standards" (final column) represents the difference between the site value benchmark and the site value on a per ha basis. Therefore, where there is a negative figure, this means that the scheme is unviable and there is no additional sum available with which to pay for planning standards or obligations. We consider the capacity of these figures to accommodate the required planning standards and obligations later in this chapter.

4.5.3 The reason for the high level of difference in the results and the negative viability position in value areas 4 and 5 is attributable to market conditions which impact on low value areas particularly acutely at the current time. With a return to improved market conditions through the course of the Local Plan period we envisage that development will become viable once again and the mid and high value scenarios that DTZ has tested below indicate this. At the mid value sensitivity (130% of current values) three areas indicate positive viability, and at 160% of current value, all areas are indicated to be viable. Accordingly, the "sum available for policy standards" is increased progressively in each scenario demonstrating the increased capacity to accommodate planning obligations.

Table 4.5 130% mid value appraisal results

	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Sum available for policy standards
Value Area 1	£7,435,344	£4,956,896	£3,257,046	£2,171,364	£2,785,532
Value Area 2	£4,226,646	£2,817,764	£2,311,452	£1,540,968	£1,276,796
Value Area 3	£2,800,406	£1,866,937	£1,891,188	£1,260,792	£606,145
Value Area 4	£1,374,518	£916,345	£1,470,924	£980,616	-£64,271
Value Area 5	£664,365	£442,910	£1,260,792	£840,528	-£397,618

Table 4.6 160% high value appraisal results

	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Sum available for policy standards
Value Area 1	£9,985,080	£6,656,720	£4,008,672	£2,672,448	£3,984,272
Value Area 2	£6,035,826	£4,023,884	£2,844,864	£1,896,576	£2,127,308
Value Area 3	£4,281,480	£2,854,320	£2,327,616	£1,551,744	£1,302,576
Value Area 4	£2,526,280	£1,684,187	£1,810,368	£1,206,912	£477,275
Value Area 5	£1,648,655	£1,099,103	£1,551,744	£1,034,496	£64,607

4.6 HO5 HOUSING DENSITIES

4.6.1 The viability analysis has indicated that the requirement for 30 dwellings per hectare is not an onerous requirement and will not affect development viability. Increasing the housing densities to 40 and 50 units per ha in our viability model has suggested a positive impact on viability, although it is notable that many house-builders are concentrating on low density family units at the current time and that therefore a higher density may be regarded less favourably and have an impact on the deliverability of development in the short term.

4.6.2 The following table illustrates the results of modelling an increased density of 50 dwellings per ha:

Table 4.7: Increased residential development densities (Base scenario current values)

	Densities				
	Assumption	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha
Value Area 1	50 dph	£8,141,431	£5,427,620.89	£4,175,700	£2,783,800
Value Area 2	50 dph	£4,027,864	£2,685,242.88	£2,963,400	£1,975,600
Value Area 3	50 dph	£2,208,066	£1,472,044.12	£2,424,600	£1,616,400
Value Area 4	50 dph	£371,664	£247,775.98	£1,885,800	£1,257,200
Value Area 5	50 dph	£0	£0.00	£1,616,400	£1,077,600

4.6.3 As the table shows, the effect is to increase residual site values when compared to the baseline appraisals shown in Table 4.4 above.

4.6.4 However, we would urge caution in the interpretation of these results as although the economics of development implies that increased densities can drive higher land values, market appetite is particularly weak

for high density schemes currently, particularly those that necessitate flats. The reason why there is a weak market appetite for flatted development is attributable to the dramatic reduction in purchaser demand for flats (linked partly to mortgage lending restrictions), and also because such schemes require a large capital outlay and cannot be phased against sales in the way that individual houses can, thus increasing financing cost and risk in a difficult market. However, this is a reaction to currently challenging market conditions and over the course of the plan period we would expect this trend to change.

4.7 HO9B SUSTAINABLE CONSTRUCTION STANDARDS

4.7.1 Build costs £ per sq m have been prepared including a base position (equivalent to Level 3 of the Code for Sustainable Homes), and Level 4 and Level 6, to reflect CSFED Policy HO9B which requires Level 4 to be achieved from 1st April 2013, and Level 6 to be achieved from 1 April 2016. All costs include a 15% uplift for external works. The extra over costs are based on CLG Cost of building to the Code for Sustainable Homes Updated cost review August 2011. The cost assumptions are:

Table 4.8: Build cost sensitivities

	Code 3	Inflated to Code 4	Inflated to Code 6
Flats	£1,059	£1,121	£1,533
Houses	£886	£937	£1,282

4.7.2 The appraisal of Code 4 on the base appraisal indicates that the imposition of the cost can turn value area 3 from amber to red, but otherwise has little impact on viability against the site value benchmark. With the benefit of 130% mid values (Table 4.10), the results show an improvement in viability with all value areas except 5 able to withstand the additional cost. We also tested Code 4 costs against high values (160%) which indicated that such standards would be viable in all value areas albeit with value area 5 at risk of being unviable as indicated by the amber colour code (see Table 4.11).

Table 4.9: Code 4 appraisal results – (Base scenario current values)

	Sustainable construction standards Code 4					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£51	£4,676,731	£3,117,821	£2,505,420	£1,670,280	-£138,594
Value Area 2	£51	£2,208,705	£1,472,470	£1,778,040	£1,185,360	-£138,609
Value Area 3	£51	£1,115,807	£743,871	£1,454,760	£969,840	-£135,921
Value Area 4	£51	£13,108	£8,739	£1,131,480	£754,320	-£139,927
Value Area 5	£51	£0	£0	£969,840	£646,560	£0

Table 4.10: Code 4 appraisal results – 130% mid values

	Sustainable construction standards Code 4					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£51	£7,237,268	£4,824,845	£3,257,046	£2,171,364	-£132,051
Value Area 2	£51	£4,018,733	£2,679,155	£2,311,452	£1,540,968	-£138,609
Value Area 3	£51	£2,592,531	£1,728,354	£1,891,188	£1,260,792	-£138,583
Value Area 4	£51	£1,171,564	£781,043	£1,470,924	£980,616	-£135,303
Value Area 5	£51	£454,158	£302,772	£1,260,792	£840,528	-£140,138

Table 4.11: Code 4 appraisal results - 160% high values

	Sustainable construction standards Code 4					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£51	£9,777,203	£6,518,135	£4,008,672	£2,672,448	-£138,585
Value Area 2	£51	£5,827,989	£3,885,326	£2,844,864	£1,896,576	-£138,558
Value Area 3	£51	£4,073,566	£2,715,710	£2,327,616	£1,551,744	-£138,609
Value Area 4	£51	£2,318,373	£1,545,582	£1,810,368	£1,206,912	-£138,605
Value Area 5	£51	£1,440,766	£960,511	£1,551,744	£1,034,496	-£138,592

4.7.3 Reaching Level 6 of the Code for Sustainable Homes is indicated to be unviable in all areas other than the higher value area of Wharfedale at current values. It should be noted that the extra over costs associated with Level 6 are predicated on today's costs and it is possible that improvements in efficiencies and technology could result in the extra over costs being less than that anticipated at today's date. Whilst the standards required in respect of sustainable construction will in any event be formalised through building regulations, there remains a risk that stating the need for Level 6 to be achieved by 2016 in the District Local Plan could effectively contradict the requirements of NPPF given the likely impact on development viability.

Table 4.12 Code 6 appraisal results (base scenario current values)

	Sustainable construction standards Code 6					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£396	£3,269,616	£2,179,744	£2,505,420	£1,670,280	-£1,076,671
Value Area 2	£396	£806,602	£537,734	£1,778,040	£1,185,360	-£1,073,344
Value Area 3	£396	£0	£0	£1,454,760	£969,840	-£879,792
Value Area 4	£396	£0	£0	£1,131,480	£754,320	-£148,666
Value Area 5	£396	£0	£0	£969,840	£646,560	£0

4.7.4 Whilst an enhancement of market conditions through the plan period could improve the viability of meeting these standards, the table below demonstrates that even in the highest value sensitivity, there remain viability issues in value areas 4 and 5.

Table 4.13: Code 6 appraisal results (High value sensitivity – 160% of current values)

	Sustainable construction standards Code 6					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£396	£8,370,827	£5,580,552	£4,008,672	£2,672,448	-£1,076,168
Value Area 2	£396	£4,421,767	£2,947,845	£2,844,864	£1,896,576	-£1,076,039
Value Area 3	£396	£2,666,564	£1,777,710	£2,327,616	£1,551,744	-£1,076,610
Value Area 4	£396	£912,713	£608,475	£1,810,368	£1,206,912	-£1,075,712
Value Area 5	£396	£33,587	£22,391	£1,551,744	£1,034,496	-£1,076,712

4.8 HO9D ECO TOWN STANDARDS

4.8.1 The requirement for the development of an "Urban Eco Settlement" at Shipley and Canal Road could be difficult to sustain in viability terms given the results of the appraisals carried out in this report. The delivery of development in this location is shown to be marginal given other policy standards and therefore achieving any form of environmental construction standards could impinge further on development viability. However, it is understood that the Council has significant land holdings within this area and is committed to working with partners to assist delivery of development through joint ventures and other mechanisms and therefore delivery and viability can be supported to enable aspirational environmental construction standards to be achieved.

4.9 HO9E ENERGY FROM DECENTRALISED AND RENEWABLE OR LOW CARBON SOURCES

4.9.1 As with HO9D, this requirement is likely to impinge on development viability in many parts of the District, and the costs of such depend on the type of renewable energy and the scheme specifics, therefore it is not possible to establish credible generic costs of the impact of this policy to test in economic terms. It is noted that the draft policy wording currently contains a clause that enables a "subject to viability" test which ensures that this policy is in any event acceptable in viability terms.

4.10 HO9F LIFETIME HOMES

4.10.1 There have been a number of studies into the costs and benefits of building to the Lifetime Homes standard. These have concluded that the costs range from £545 to £1615 per dwelling, depending on:

- The experience of the home designer and builder
- The size of the dwelling (it is easier to design larger dwellings that incorporate Lifetime Homes standards cost effectively than smaller ones)
- Whether Lifetime Homes design criteria were designed into developments from the outset or whether a standard house type is modified (it is more cost effective to incorporate the standards at the design stage rather than modify standard designs)
- Any analysis of costs is a 'snapshot' in time. The net cost of implementing Lifetime Homes will diminish as the concept is more widely adopted and as design standards, and market expectations, rise.

(Source: http://www.lifetimehomes.org.uk/pages/costs.html)

4.10.2 Taking the mid-point of the above range and applying this to the average size of the housing range (3 bed – 79 sqm), indicates a cost of £13.50 per sq m which has been applied as an uplift on build costs to test this. The results are illustrated below:

Table 4.14: Lifetime Home standards (Base scenario current values)

	Lifetime homes					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	13.50	£4,827,555	£3,218,370	£2,505,420	£1,670,280	-£38,045
Value Area 2	13.50	£2,359,545	£1,573,030	£1,778,040	£1,185,360	-£38,049
Value Area 3	13.50	£1,262,617	£841,745	£1,454,760	£969,840	-£38,048
Value Area 4	13.50	£165,759	£110,506	£1,131,480	£754,320	-£38,160
Value Area 5	13.50	£0	£0	£969,840	£646,560	£0

4.10.3 As the results show, there is consistent pattern with only the higher value areas 1 and 2 able to withstand the impact of such costs. This would suggest that such a requirement could not be introduced unless on a geographical or subject to viability basis (as currently drafted).

4.10.4 At the mid value scenario (Table 4.15), viability is achieved in value area 3 (in addition to value area 1 and 2) and value area 4 becomes amber. In the high value scenario, the appraisals show the imposition of Lifetime Homes being viable across the value areas.

Table 4.15: Lifetime Home standards (Mid scenario 130% values)

	Lifetime homes					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	13.50	£7,391,799	£4,927,866	£3,257,046	£2,171,364	-£29,030
Value Area 2	13.50	£4,169,571	£2,779,714	£2,311,452	£1,540,968	-£38,050
Value Area 3	13.50	£2,743,346	£1,828,898	£1,891,188	£1,260,792	-£38,040
Value Area 4	13.50	£1,317,448	£878,299	£1,470,924	£980,616	-£38,047
Value Area 5	13.50	£606,218	£404,145	£1,260,792	£840,528	-£38,765

Table 4.16: Lifetime Home standards (High scenario 160% values)

	Lifetime homes					
	Cost uplift £psm	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	13.50	£9,928,016	£6,618,677	£4,008,672	£2,672,448	-£38,042
Value Area 2	13.50	£5,978,773	£3,985,849	£2,844,864	£1,896,576	-£38,035
Value Area 3	13.50	£4,224,405	£2,816,270	£2,327,616	£1,551,744	-£38,050
Value Area 4	13.50	£2,469,209	£1,646,139	£1,810,368	£1,206,912	-£38,048
Value Area 5	13.50	£1,591,585	£1,061,056	£1,551,744	£1,034,496	-£38,047

4.11 DESIGN QUALITY COST UPLIFT

4.11.1 We have also tested the impact of an increase in build costs by 10% to reflect the potential introduction of planning policy relating to design standards. The impact is to increase build costs by £88.60 per sq m on houses and £105.90 per sq m for flats. The results show a consistent output with value areas 1 and 2 being indicated to be able to withstand such requirements, but other areas being unviable. The mid and high value scenarios respectively show the impact of improving values as more value areas become viable.

Table 4.17: Design uplift (Base scenario current values)

	Design uplift - 10% cost uplift on build costs					
	Cost uplift	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£88.60	£4,521,819	£3,014,546	£2,505,420	£1,670,280	-£241,869
Value Area 2	£88.60	£2,061,005	£1,374,003	£1,778,040	£1,185,360	-£237,075
Value Area 3	£88.60	£958,972	£639,315	£1,454,760	£969,840	-£240,478
Value Area 4	£88.60	£0	£0	£1,131,480	£754,320	-£148,666
Value Area 5	£88.60	£0	£0	£969,840	£646,560	£0

Table 4.18: Design uplift (Mid scenario 130% values)

	Design uplift - 10% cost uplift on build costs					
	Cost uplift	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£88.60	£7,078,920	£4,719,280	£3,257,046	£2,171,364	-£237,616
Value Area 2	£88.60	£3,863,800	£2,575,867	£2,311,452	£1,540,968	-£241,897
Value Area 3	£88.60	£2,437,624	£1,625,082	£1,891,188	£1,260,792	-£241,855
Value Area 4	£88.60	£1,014,373	£676,249	£1,470,924	£980,616	-£240,097
Value Area 5	£88.60	£299,012	£199,341	£1,260,792	£840,528	-£243,569

Table 4.19: Design uplift (High scenario 160% values)

	Design uplift - 10% cost uplift on build costs					
	Cost uplift	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£88.60	£9,622,310	£6,414,873	£4,008,672	£2,672,448	-£241,846
Value Area 2	£88.60	£5,673,128	£3,782,085	£2,844,864	£1,896,576	-£241,799
Value Area 3	£88.60	£3,918,648	£2,612,432	£2,327,616	£1,551,744	-£241,888
Value Area 4	£88.60	£2,163,455	£1,442,303	£1,810,368	£1,206,912	-£241,884
Value Area 5	£88.60	£1,285,864	£857,243	£1,551,744	£1,034,496	-£241,861

4.12 SPACE STANDARDS

4.12.1 We have been asked to examine the impact of applying increased space standards in accordance with the HCA quality indicators. Having consulted HCA, a number of quality indicators were recently consulted on but never adopted. However, the earlier English Partnership space standards have been tested which provide the following uplift on sizes of units:

- 2 bed house – uplift from 67 sqm to 77 sq m
- 3 bed house – uplift from 77 to 93 sq m
- 4 bed house – uplift from 102 to 106 sq m

4.12.2 The results indicate an improvement in viability on the base appraisals. However, we would urge caution in this regard as the different space standards do not necessarily correspond with the requirements of

housebuilders who will achieve cost efficiencies in the delivery of standard house types which may not correspond to specific space requirements if prescribed in policy.

4.13 AFFORDABLE HOUSING

4.13.1 Affordable housing assumptions that have been tested accord with the Council's draft Policy HO11, with three rates of affordable housing across the District: 40% (Wharfedale), 15% (Inner Bradford and Keighley), 30% (elsewhere).

Table 4.21: Affordable housing assumptions

Area	Affordable housing percentage	Value assumption
Wharfedale	40%	35% discount to MV
Inner Bradford and Keighley	15%	35% discount to MV
Elsewhere	30%	35% discount to MV

4.13.2 The results show that at current values, viability is compromised in the lower value areas 3, 4 and 5, but that value areas 1 and 2 are able to withstand the affordable housing impacts. At the mid value scenario, there is an improvement in viability, but there remain difficulties in value areas 4 and 5. At the high value scenario, viability is improved to the extent that the affordable housing policy is shown to be 'green' in value areas 1-4, and 'amber' in value area 5.

Table 4.22: Affordable housing appraisal results (Base scenario current values)

	Affordable housing Assumption	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	40%	£3,843,384	£2,562,255.83	£2,154,965	£1,436,643	-£694,159
Value Area 2	30%	£1,872,085	£1,248,056.61	£1,595,396	£1,063,597	-£363,022
Value Area 3	30%	£871,243	£580,828.51	£1,305,324	£870,216	-£298,964
Value Area 4	15%	£42,283	£28,188.72	£1,071,700	£714,467	-£120,477
Value Area 5	15%	£0	£0.00	£ 918,600	£612,400	-

Table 4.23: Affordable housing appraisal results (Mid scenario 130% values)

	Affordable housing Assumption	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	40%	£6,069,898	£4,046,598.55	£2,801,455	£1,867,636	-£910,298
Value Area 2	30%	£3,519,564	£2,346,375.95	£2,074,015	£1,382,677	-£471,388
Value Area 3	30%	£2,218,883	£1,479,255.18	£1,696,921	£1,131,281	-£387,682
Value Area 4	15%	£1,146,102	£764,067.81	£1,393,210	£928,807	-£152,278
Value Area 5	15%	£461,652	£307,767.70	£1,194,180	£796,120	-£135,143

Table 4.24: Affordable housing appraisal results (High scenario 160% values)

	Affordable housing					
	Assumption	Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	40%	£8,306,532	£5,537,688.16	£3,447,944	£2,298,629	-£1,119,032
Value Area 2	30%	£5,161,107	£3,440,738.33	£2,552,634	£1,701,756	-£583,146
Value Area 3	30%	£3,570,773	£2,380,515.62	£2,088,518	£1,392,346	-£473,804
Value Area 4	15%	£2,239,950	£1,493,300.30	£1,714,720	£1,143,147	-£190,887
Value Area 5	15%	£1,403,244	£935,496.00	£1,469,760	£979,840	-£163,607

4.14 COMMUNITY INFRASTRUCTURE LEVY

4.14.1 The Community Infrastructure Levy will replace part of S106 obligations that have historically been collected. Whilst proposals for CIL have yet to be determined by Bradford Council, we have included the effects of introducing the following variable CIL levies on residential development:

- Value area 1: £100 psm
- Value area 2: £20 psm
- Value areas 3, 4 and 5: £5 psm

4.14.2 The results indicate that the base appraisals can accommodate the assumed CIL levies in value areas 1, 2 and 3 (albeit at risk), but would not be able to withstand the levy in areas 4 and 5. This corresponds with the emerging CIL viability evidence that DTZ has been responsible for. With the benefit of the mid and higher value scenarios, CIL rates at the proposed levies become increasingly viable. The results of the appraisals are illustrated below:

Table 4.25: CIL (Base scenario current values)

	CIL					
		Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£100	£4,509,010	£3,006,007	£2,505,420	£1,670,280	-£250,408
Value Area 2	£20	£2,341,492	£1,560,994	£1,778,040	£1,185,360	-£50,084
Value Area 3	£5	£1,300,908	£867,272	£1,454,760	£969,840	-£12,520
Value Area 4	£5	£204,210	£136,140	£1,131,480	£754,320	-£12,525
Value Area 5	£5	£0	£0	£969,840	£646,560	-

Table 4.26: CIL (Mid scenario 130% values)

	CIL					
		Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£100	£7,065,509	£4,710,339	£3,257,046	£2,171,364	-£246,557
Value Area 2	£20	£4,151,518	£2,767,678	£2,311,452	£1,540,968	-£50,086
Value Area 3	£5	£2,781,632	£1,854,421	£1,891,188	£1,260,792	-£12,516
Value Area 4	£5	£1,355,738	£903,826	£1,470,924	£980,616	-£12,520
Value Area 5	£5	£645,134	£430,090	£1,260,792	£840,528	-£12,821

Table 4.27: CIL (Base scenario 160% values)

	CIL					
		Residual site value	Residual site value per ha	20% GDV	20% GDV per ha	Financial impact per ha
Value Area 1	£100	£9,609,529	£6,406,353	£4,008,672	£2,672,448	-£250,367
Value Area 2	£20	£5,960,742	£3,973,828	£2,844,864	£1,896,576	-£50,056
Value Area 3	£5	£4,262,698	£2,841,798	£2,327,616	£1,551,744	-£12,521
Value Area 4	£5	£2,507,500	£1,671,667	£1,810,368	£1,206,912	-£12,520
Value Area 5	£5	£1,629,874	£1,086,583	£1,551,744	£1,034,496	-£12,520

4.15 CUMULATIVE IMPACTS

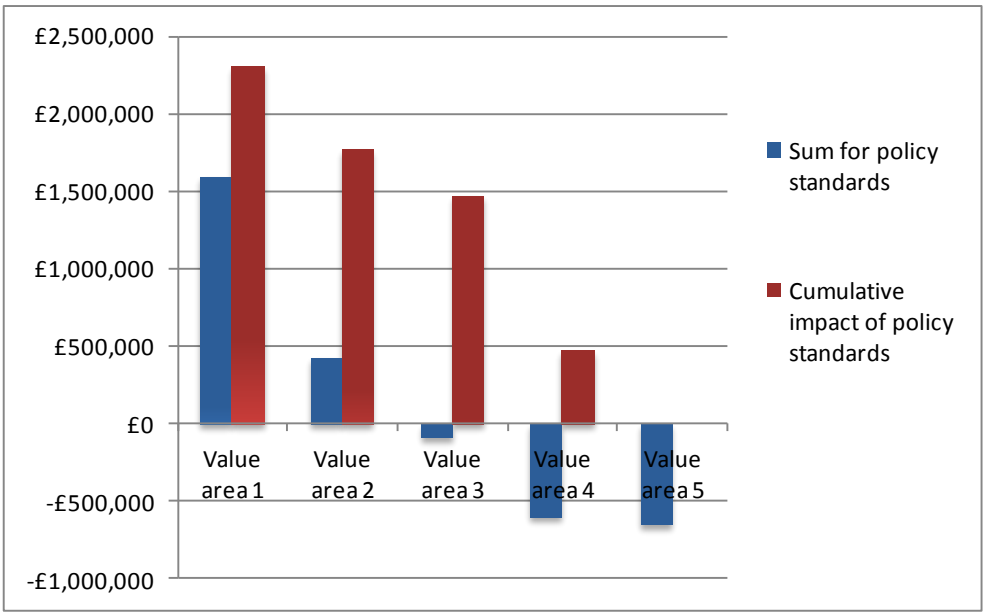
4.15.1 The tables above consider the individual impacts of each policy standard/obligation separately. We now consider the cumulative impact of all the standards together. Figure 4.3 below illustrates the sum available for policy standards against the cumulative impact of all policy standards, where:

- The 'sum available for policy standards' is calculated by deducting the residual site value per ha from the site value benchmark per ha in the baseline appraisal (i.e. where there are no planning obligations/policy standards assumed), and;
- The 'cumulative impact of policy standards' is a measure of the impact on residual site value of each the policy standards combined. Each financial impact is calculated by deducting the site value per ha of the appraisal with the specific policy standard tested, from the baseline appraisal (with no policy standards/obligations).

4.15.2 The chart therefore shows the cumulative financial impact of policy standards exceeding the sum available for policy standards in each value area. The sums available for policy standards range from approximately £1.5million per ha in Value Area 1 to zero in value areas 3, 4 and 5. The cumulative financial impact peaks for value area 1 at £2.25m and descends progressively for the other areas. [2]

[2] As the financial impact is calculated by examining the effect of each policy standard on site value, the cumulative impact for the lower value areas is distorted by the effect of negative land values. Therefore, in value area 5, as negative land values arise with no policy standards, the imposition of policy standards on the appraisal has a neutral impact on site value and the chart indicates zero impact on site value.

Figure 4.3: Total sum available versus cumulative financial impact (£ per ha) – base current values



4.15.3 Figure 4.3 demonstrates that development is unlikely to be able to withstand the aggregate cumulative impact of the various policy standards and obligations in the current market, even in the higher value areas.

4.15.4 In respect of the mid value sensitivities where sales values are inflated to 130% of the base current values scenario, the results indicate (shown in Figure 4.4 below) that value area 1 is likely to be able to withstand the cumulative impact of policies, value area 2 is marginal, but value areas 3-5 cannot withstand the cumulative impact of policy standards. Increasing the sales value assumption to 160% (Figure 4.5) indicates that the cumulative impact of policies is viable in value areas 1, 2 and (marginally) 3, but remains unviable in value area 4 and 5.

Figure 4.4: Total sum available versus cumulative financial impact (£ per ha) – mid value sensitivity 130%

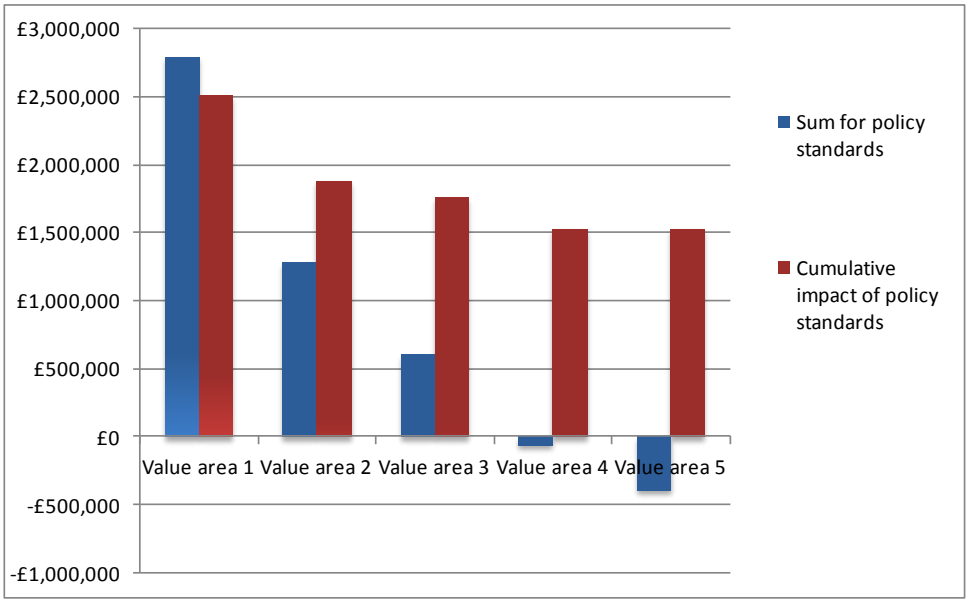
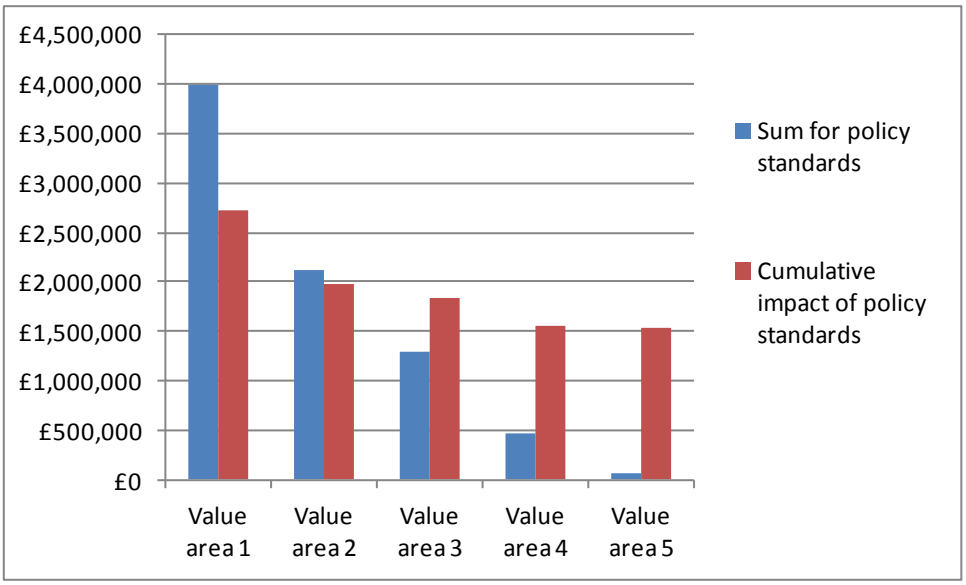


Figure 4.5: Total sum available versus cumulative financial impact (£ per ha) – high value sensitivity 160%

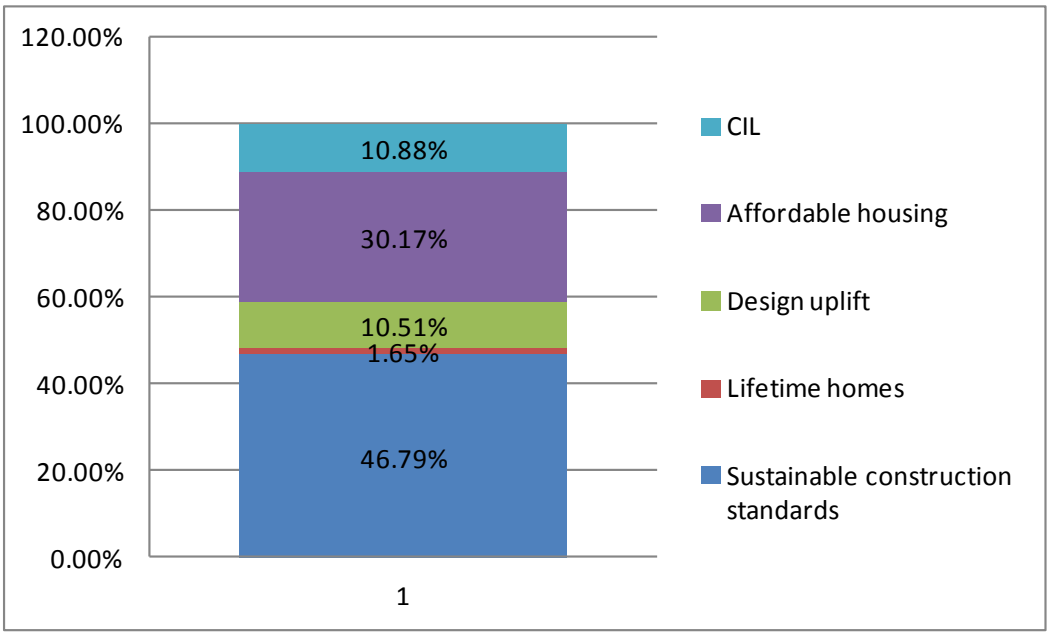


4.15.5 In summary therefore, even allowing for a significant improvement in market conditions, there remain some locations in Bradford where development is unlikely to be able to withstand the cumulative impact of the policy standards and obligations proposed. As a consequence, it will be necessary to either review the policies proposed in the Local Plan, or ensure that they are introduced on a 'subject to viability' test (or a combination of both).

4.16 POLICY CHOICES

4.16.1 Figure 4.6 below illustrates a typical split of the various planning policy standards in respect of the impact on site values. The split varies across value areas and the chart below is based on value area 1. It shows that the largest financial impact is sustainable construction standards, accounting for 46.79% of the cumulative impact, closely followed by affordable housing (30.17%).

Figure 4.6: Split of planning obligations – share of impact on site value



4.16.2 Affordable housing and sustainable construction standards are two key policy areas that may require review in order to ensure compliance with the requirements of the NPPF.

4.16.3 In respect of affordable housing policy, our analysis indicates that with the benefit of a return to peak market conditions, the proposed standards are viable if considered independently of other standards and obligations. However, as illustrated above, when combined with other policy standards, the impact is to undermine viability. The locations in which the effects are most pronounced are value areas 4 and 5 (i.e. the urban areas of Bradford and Keighley) where a requirement for 15% is imposed, and to a lesser degree in the mid value areas (i.e. value areas 2 and 3) where 30% is applied. Consideration to reducing affordable housing requirements in these areas, subject to complying with underlying 'affordable housing need' indicators, is recommended.

4.16.4 In respect of sustainable construction standards, as noted above, the cost uplifts assumed for complying with Level 6 for the Code for Sustainable Homes are based on meeting the requirements in today's market. In practice, it is envisaged that it may be possible to attain such standards with greater levels of efficiency such is the impact of advancement in building technologies over time. Further, there is some uncertainty as regards the actual standards that will be required by building regulations given concerns over the impact on development viability which has prompted the Government to review earlier aspirations for achieving 'carbon zero' build standards by 2016. Given the possibility of amendments to sustainable construction build

requirements after the plan's adoption, the removal of this policy requirement from Bradford's emerging Local Plan may be sensible.

4.17 COMMERCIAL DEVELOPMENT VIABILITY

4.17.1 The only commercial policy that requires testing in viability terms is EC4 i which stipulates that non residential buildings of more than 1000 sq m will require at least 10% of energy to be generated from decentralised or non renewable sources.

4.17.2 The viability evidence being prepared as part of the CIL instruction has demonstrated that office and industrial uses are not considered viable in current market conditions and that even with an improvement in market conditions viability is likely to be marginal. Therefore it is considered unlikely that this policy requirement will be viable except on large logistics distribution warehousing following an improvement in market conditions, and on large retail schemes.

4.18 SUMMARY

4.18.1 In conclusion, market conditions across Bradford are such that development viability varies hugely with some areas able to withstand many of the policies/standards and others struggling to make development viable even with no additional policy costs. The cumulative impact of the proposed policy standards shows that even in the more viable parts of the District, the impact could be to compromise / undermine the delivery of development.

4.18.2 The high value sensitivities indicate that a substantial improved market conditions will enhance the viability of these standards, but that the aggregate impact of all of the standards together could still impinge on development viability in some parts of the District.

4.18.3 Therefore, considerable care is required in the way that policies are drafted so as to avoid planning putting at risk the development of the area and contradicting the requirements of the NPPF.

4.18.4 In the following chapter, we outline the measures that we consider are required to support the viability of development through the planning process.

5 Conclusions and recommendations

5.1 This report has underlined the challenges associated with delivering development in the current market across Bradford. As a result, planning policies need to be implemented in a smart and effective way to ensure they assist, rather than hinder development.

5.2 We consider there to be four key areas that require consideration by Bradford Council.

1. Testing of spatial policies and evidence

5.3 This economic viability evidence has been limited to looking at the effects of policy standards on economic viability of hypothetical development appraisals. The broader deliverability of the plan relies on the evidence of land supply and there are several strategic spatial policies that we consider would benefit from further examination:

- Sub area policies BD1, AD1, WD1, PN1 – the deliverability of development within these locations is subject to the availability of land supply and localised market conditions. Site specific viability testing of a sample of sites is recommended to support the assessment of the Council's five year supply and allocations process.
- EC3 – Employment land requirement – the deliverability of the distribution of employment land is dependent on land supply which will be addressed through the site allocations process. Whilst the employment land evidence has been updated since its original publication, we consider there is merit in supplementing the evidence base with a commercial assessment to review the individual site allocations and inform the selection of sites through the site allocation process
- EC5 – City, town, district and local centres – similarly the deliverability of this policy will be subject to the availability of land to meet these needs
- Phasing and delivery of land – it is recommended that the Council consider bringing forward 7.5 years' supply of housing land (rather than the 5 years' requirement) to manage the risks on delivery relating to previously developed land and less attractive market locations.
- HO7 – Maximising site allocation principles – the deliverability of these principles could be influenced by the quality of the housing land supply and therefore consideration to site specific viability through the SHLAA is required
- HO8 – Housing mix – the proposal for separate guidance to be prepared on the housing mix to be achieved in individual areas will require viability testing at the appropriate time to ensure that it does not propose standards that have a negative impact on viability

2. Viability proofing the emerging Local Plan

5.4 The economic viability testing contained in chapter 4 has revealed that the cumulative impact of policies is likely to exceed the "pot" that will be available for such standards across the District. Therefore this indicates that in order to meet the requirements of the NPPF and ensure that the Local Plan can be regarded as sound, some adjustments need to be made to policy.

5.5 Consideration is required to:

- The balance of policy priorities, particularly in respect of housing quality and environmental construction standards
- Whether affordable housing requirements should be reduced to unlock potential for greater contributions in other areas, such as CIL – consideration is required to how this will impact on housing need

- Whether the planning policy relating to the Code for Sustainable Homes should be amended – as the largest contributor to the impact on viability outlined above (particularly in respect of level 6 of the Code which has a major impact on viability), there is a case for the amendment of this policy particularly given that building regulations will ensure compliance with environmental construction standards
- Whether a geographical approach to policy standards should be taken to reflect the approach similar to affordable housing and CIL, or whether a flat approach to policy is required
- As a minimum, the need to amend policy wording to allow a "subject to viability test" in each case to ensure minimum compliance and to avert challenge of the Local Plan through examination.

3. Formalising viability testing requirements through planning policy

5.6 We consider that viability testing through the development management process can be strengthened through adopting a specific approach in Local Plan policy. Such a policy would be based on the definition of and approach to, viability as set out in RICS *Financial Viability in Planning* 2012. It would also establish quality standards and consistency in the approach and would include:

- Pre prescribed format and template which applicants would be required to complete (thus enabling robust examination and benchmarking by the Council)
- Establishing a framework of input definitions
- Identification and updating of a range of benchmark indicators for each key appraisal input (e.g. profit, site value, professional fees), with a requirement for applicant to justify variance from these
- Appointment of a panel of specialist advisors to support in house staff in assessing and determining viability cases, paid for by the applicant
- An in house viability panel to ensure objectivity and independence of assessment
- Viability member training to ensure that councillors understand the factors impacting on viability.

4. Development of mechanisms for assisting the delivery of development

5.7 The combination of site constraints and market frailties mean that Bradford's ambitious plans for growth and regeneration will require intervention to facilitate delivery in the short term, particularly in respect of priority sites in inner Bradford. A strategy for how these sites can be brought forward for development is considered to be required, which can both assist the Local Plan evidence and the implementation process.

5.8 This should include consideration to matters such as:

- Planning incentives on an area basis
- Local funding models combining prudential borrowing, council tax, business rate and CIL receipts
- Links to Leeds City Region Regional Investment Fund and Transport Fund for bringing forward infrastructure that can unlock sites
- Use of Council interests, including proceeds from assets
- Innovative approaches to delivery including JVs, lease/income strip financing models

5.9 DTZ is preparing a paper on infrastructure delivery as part of the ongoing CIL instruction which will inform this approach.

5.10 A summary of DTZ's recommendations against the policies highlighted as at risk in Table 3.2 earlier in this report is provided below:

Table 5.1: Summary of recommendations

Policy ref	Policy description	Direct impact on economic viability of development? Y/N	Impact	Comments on general deliverability	Recommendations
BD1	City of Bradford including Shipley and Lower Baildon	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence	Site specific viability testing of a sample of sites is recommended to support the assessment of the Council's five year supply and allocations process.
AD1	Airedale	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence	Sample site specific viability test and review of market evidence in support of employment land evidence.
WD1	Wharfedale	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence	Sample site specific viability test and review of market evidence in support of employment land evidence.
PN1	South Pennine Towns and Villages	N	N/a	Subject to housing land supply and market demand - review SHLAA, employment land and retail evidence	Sample site specific viability test and review of market evidence in support of employment land evidence.
EC3	Employment land requirement	N	N/a	Commercial market update will enhance employment land evidence	Produce market assessment to ensure commercial robustness of employment land evidence.
EC4	Sustainable economic growth	Y	Cost uplift on commercial	Although policy states renewable requirement on a subject to viability basis	Policy already provides subject to viability test, it is also recommended that the obligation to meet Code 6 by 2016 is reviewed in light of the detrimental impact on viability.
EC5	City, town, district and local centres	N	N/a	Updated retail evidence required	Review retail evidence base.
TR2	Parking policy	N	N/a	Assessment of parking standards recommended to ensure competitiveness with market expectations	Assessment completed, no further action required.
HO4	Phasing and release of housing sites	N	N/a	Deliverability is dependent on site viability which has not been examined as part of this commission	it is recommended that the Council consider bringing forward 7.5 years' supply of housing land (rather than the 5 years' requirement) to manage the risks on delivery relating to previously developed land and less attractive market locations
HO5	Density of housing schemes - requirement for higher densities close to public transport	Y	Densities of up to 50 DPH tested	Housebuilders preference is currently for low density family housing schemes	No amendment required - policy is currently worded flexibly
HO6	Maximising use of previously developed land	N	Potential for increased abnormal costs	Need to test the delivery of brownfield land through SHLAA	Site specific viability testing of a sample of sites is recommended.
HO7	Housing site allocation principles	N	N/a	Subject to site allocations process	No amendments required.
HO8	Housing mix	N	N/a	Precise mix will be determined according to need and demand on case by case basis - therefore no standards to test in Local Plan.	Housing mix to be achieved in individual areas will require viability testing at the appropriate time to ensure that it does not propose standards that have a negative impact on viability
HO9	Housing quality	Y	Impact of code for sustainable homes level 4 and level 6, lifetime home standards, additional impact on design standards.	Economic viability test required	Review policy and obligations for Code 6. Ensure that policy is on a subject to viability basis.
HO11	Affordable housing	Y	40% in Wharfedale, 15% in inner Bradford and Keighley, 30% elsewhere	Affordable housing standards to be tested	Review affordable housing policy in the light of the cumulative impact of other standards and obligations.
EN6	Energy	N	N/a	Subject to any standards set out in DPDs	DPD to be viability tested.
EN7	Development and flood risk	N	N/a	Subject to land supply	To be determined through allocations process.

References

CLG, 2012	*National Planning Policy Framework* (NPPF)
CLG, August 2011	*Cost of building to the Code for Sustainable Homes Updated*
Local Housing Delivery Group May, 2012	*Viability Testing Local Plans*
RICS, 2012	*Financial Viability in Planning*
	http://www.lifetimehomes.org.uk/pages/costs.html