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Affordable Housing Viability Study

Prepared for

Royal Borough of Kingston upon Thames

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1 Executive Summary

1.1 This report tests the ability of a range of sites throughout the Royal Borough of Kingston upon Thames to provide varying levels of affordable housing, with and without grant and with various tenure mixes, on a range of sites in various existing uses throughout the Borough.

Methodology

1.2 The study methodology compares the residual value of a range of hypothetical development scenarios to a range of typical existing use values, plus a margin to incentivise landowners to release their sites for development. If a residential scheme has a higher value than the existing use value (plus appropriate landowner's margin), the scheme can be judged to be viable with a given level of affordable housing and other planning obligations.

1.3 The study utilises the residual land value method of calculating the value of each hypothetical or real development situation. This method is used by developers when determining how much to bid for land and involves calculating the value of the completed units within the scheme and deducting development costs (construction, fees, finance and planning obligations) and developer's profit. The residual amount is the sum left after these costs have been deducted from the value of the development, and equates to the amount that a developer would normally pay for the site.

1.4 The housing market is inherently cyclical and the Council is testing its affordable housing policy at a time when values have fallen below their peak. We have therefore tested the viability of the policy against both today's values and at values that reflect future movements during the plan period.

Key findings

1.5 The key findings of the study are as follows:

- The appraisals indicate that up to 50% affordable housing is financially viable with grant in some circumstances at current market values.
- If grant funding is unavailable, the extent to which affordable housing can be provided at the level above will be more limited.
- The level of sales values and existing use value of sites are key factors in determining whether an individual site is capable of providing 50% affordable housing. The current use and value of sites across the Borough varies significantly; where schemes are delivered on sites with low existing use values, a higher affordable housing quantum is more likely to be viable. This is because the 'benchmark value' which the residual value of a scheme must exceed is lower than would be the case on sites in higher value uses.
- There is no evidence that would support the adoption of an affordable housing policy that would require a *minimum* level of provision. Any policy adopted by the Council should be treated as a target, which is subject to viability testing on individual sites.
- Our appraisals of small sites under the 10 unit threshold for on-site affordable housing indicate that there are no reasons (in terms of financial viability) why a lower threshold could not be adopted. However, the ability of schemes to make financial contributions in-lieu would vary between sites and areas. It is therefore unlikely to be possible to arrive at a common formula that can be applied to all sites and there may therefore be a need to assess the level of financial contribution on a site by site basis.

Summary of conclusions

1.6 The study indicates that up to 50% affordable housing (in combination with other planning obligations) is generally achievable on the types of sites coming forward for development over the plan period. Sites with lower EUVs (in particular, sites in local authority ownership) appear to be most able to provide up to 50% affordable housing, with grant funding support. Affordable housing delivery is adversely affected by non-availability of grant in many cases. Our sensitivity testing of this main finding indicates that changes to main appraisal variables in isolation do not have a significant impact that would result in a different conclusion, as follows:

- We have appraised hypothetical schemes using two profit levels (17% and 20%), with 17% reflecting average profit levels up to 2007 and 20% reflecting average profit levels in the current market). The results of the appraisals indicate that an increase in target profit levels should not significantly change the levels of affordable housing that can be viably delivered (assuming other variables remain unchanged). Conversely, a reduction in profit will result in a modest improvement in viability and the ability of sites to deliver affordable housing. It is possible (although not guaranteed) that profit levels could fall back towards 17% over the plan period.
- We have modelled the hypothetical schemes using three levels of Section 106 financial contribution that are based on the Council's Planning Obligations SPD; reflecting Education requirements only; the full SPD tariff; and a mid point between the two. The imposition of increased Section 106 requirements at the full tariff level will impact on the ability of schemes to meet the Council's affordable housing target, although this factor is unlikely to be the major determinant in scheme viability.
- An alternative viability benchmark that is 38% higher than the assumed existing use values has a modest impact on scheme viability and the maximum viable levels of affordable housing that can be secured. Increasing values of other land uses (perhaps in response to a wider property market recovery) should not give rise to any change in the general conclusions drawn from the data (assuming other variables remain unchanged).
- A 10% increase in build costs has a limited impact on overall scheme viability (assuming other variables remain unchanged) and could be accommodated in the context of increasing values over the medium term, without affecting affordable housing delivery.

2 Introduction

2.1 This study has been commissioned to provide an evidence base on affordable housing targets in the Royal Borough of Kingston upon Thames ('RBK'), as required by paragraph 29 of Planning Policy Statement 3. The aims of the study are summarised as follows:

a to test the impact upon the economics of residential development of a range of affordable housing policy options;

b to test affordable housing percentages of 30%, 40% and 50% affordable housing, with and without Social Housing Grant;

c to consider the ability of sites below the current threshold for affordable housing provision to make on-site contributions and in-lieu contributions;

d to test the impact of current S106 requirements on the ability of schemes to provide affordable housing;

e to test a the impact on scheme viability of a requirement for all housing to meet Code for Sustainable Homes level 4; and

f to consider the impact of changes in future house prices upon the deliverability of affordable housing in the Borough.

2.2 In terms of methodology, we adopted standard residual valuation approaches to make appropriate comparisons and evaluations. However, due to the extent and range of financial variables involved in residual valuations, they can only ever serve as a guide. Individual site characteristics (which are unique), mean that blanket requirements and conclusions must always be tempered by a level of flexibility in application of policy requirements on a site by site basis. In Kingston, individual site viability testing to establish affordable housing requirements is well established.

Background and experience

2.3 BNP Paribas Real Estate has extensive experience of advising local planning authorities on the viability of their proposed affordable housing policies. We have also advised local planning authorities, developers and landowners on scheme-specific viability issues, with particular focus on affordable housing and other Section 106 obligations. We have recently carried out similar benchmarking exercises for a number of local authorities, including the London Boroughs of Barking & Dagenham, Barnet, Brent, Ealing, Hackney, Hammersmith & Fulham, Islington, Lambeth, Lewisham, Southwark, Tower Hamlets and Wandsworth; Tunbridge Wells Borough Council; Bristol City Council, Sheffield City Council; Fareham Borough Council; South Oxfordshire District Council and Vale of White Horse District Council.

Context

2.4 The Policy Context

Paragraph 29 of Planning Policy Statement 3 ("PPS3") states that: *"In Local Development Documents, Local Planning Authorities should…set an overall (ie plan-wide) target for the amount of affordable housing to be provided. The target should reflect the new definition of affordable housing in this PPS. It should also reflect an assessment of the likely economic viability of land for housing within the area, taking account of risks to delivery and drawing on informed assessments of the likely levels of finance available for affordable housing, including public subsidy and the level of developer contribution that can reasonably be secured."*

2.5 The application of paragraph 29 of PPS3 was tested during the *Blyth Valley* case (Case Number C1/2008/1319) which concluded that local planning authorities cannot rely on housing needs surveys alone in setting their affordable housing targets. Blyth Valley Council had submitted its Core Strategy for examination prior to the publication of PPS3 and its affordable housing policy was based on evidence from its Housing Needs survey. At the time, there was no explicit requirement for councils to test the impact of their affordable housing policies on development economics (although some local authorities had undertaken such work prior to the publication of PPS3). Persimmon Homes and others challenged the soundness of the Core Strategy as the evidence base did not include a viability study that would satisfy the requirements of paragraph 29 of PPS3. This challenge was upheld

2.6 Key elements of affordable housing viability testing were challenged in the High Court by Barratt Developments in regards to Wakefield MDC's Core Strategy (Case Number CO/5036/2009). Barratt argued that the house price growth that the Council's target relied upon could not be guaranteed. Therefore, Barratt argued that the Council should set its target based on *current* market conditions, disregarding any potential future improvements in viability. This would have resulted in a target of 5%, despite proven need for a much greater proportion of affordable housing.

2.7 Central to the Barratt challenge was the concept that many advisors to local authorities have adopted; namely that the viability of affordable housing targets should be tested in the context of both current *and improved* market conditions. Local authorities then adopt the highest possible affordable housing target (based on improved market conditions), recognising that the target may not be achieved on individual sites until sales values increase. Barratt argued that affordable housing percentages should be 'stepped' in some way; Mr Justice Pritchard's judgement was that this was *"doomed to failure because of the difficulties of accurate prediction and definition"*. In July 2010, Barratt submitted an Appeal against the judgement, which was dismissed (Case Number C1/2010/0044), with a similar view taken of 'stepped' policies *"because market conditions were continually changing, it was not possible or appropriate to have "varying thresholds and/or lower affordable housing targets within the Policy""*.

Thresholds

2.8 While Government has applied site size thresholds to affordable housing for some time, no threshold applies to other Planning Obligations. Circular 05/05 makes clear that small schemes can be required to contribute planning obligations.

2.9 PPS3 states that the national indicative minimum site size for requiring affordable housing is 15 units. However, the case for reducing site size thresholds for affordable housing is addressed in PPS3, which enables local planning authorities to justify a case for reduction. Given that the Council's current policy position is to deliver affordable housing on qualifying sites (10 or more units, in line with London Plan policy), we have considered the viability of a potential reduction in the threshold. We have also explored the potential for sites below the 10 unit threshold to make a contribution in-lieu of on-site affordable housing.

Economic and housing market context

2.10 Following a ten-year trend of growth in the housing market, house prices across England reached a peak in the second half of 2007 and the market entered a period of 'correction'. This correction of values gathered momentum during 2008, with the main commentators all reporting falls in values. The Halifax house price index showed an annual fall across England of 16.2% by the end of 2008. Similarly, the Nationwide showed an annual fall in prices of 15.9%. Prices of new build properties fell much further, with falls in some parts of England of up to 40% from peak 2007 values, as developers cut prices to complete sales to maintain cashflow.

2.11 A key cause of the downturn was the sub prime lending 'credit crunch' in the US in the final quarter of 2007. UK and European banks were also exposed to sub prime lending, resulting in significant restrictions in lending criteria and has seen the government underwriting 'toxic' assets of the high street banks, leaving many buyers finding it too difficult or expensive to obtain the necessary financing to complete a transaction. However, the market had shown signs of weakening prior to the 'credit crunch' following the impact of five interest rate rises over the previous two years. These factors, combined with a collapse in general market confidence, severely reduced the number of sales taking place in the market.

2.12 In October 2008 the government announced a £1 billion housing package in an attempt to revive the beleaguered market. The headline measures of the package included raising the stamp duty threshold to £175,000 and initiating a HomeBuy shared equity scheme for low income first time buyers. However, the measures were met with a lukewarm response from within the property sector. Whilst government action was welcomed, there was a general feeling that the measures proposed would do little to revive the market whilst mortgage liquidity remained constrained.

2.13 The acquisition by the government of preference shares in some of the major banks helped to restore some confidence. The second half of 2009 also saw the Halifax, Nationwide and Land Registry reporting increases in house prices. While this is not regarded as a signal that the correction has necessarily run its course, it provides some early signals that the market may be bottoming out. There are concerns that the current stabilisation in prices is driven by limited supply, and that prices may fall if home owners who have delayed sales pending a recovery place their properties on the market. There is also a concern that unemployment may increase further, particularly as a result of impending cuts in public expenditure, possibly resulting in repossessions. However, analysts predict that the market will recover to 2007 sales within the first half of the plan period.

2.14 This is a difficult context within which the Council must test its affordable housing policies. To reflect this difficulty, we have run our appraisals with a sensitivity analysis on future house prices, to demonstrate the impact of improved market conditions on the delivery of affordable housing.

Local Policy context

2.15 The Council published its initial 'Issues and Options' consultation for its Core Strategy in March 2009, with consultation until May 2009. The proposals contained in this document were informed by comments received during an earlier consultations (June 2008). The Council's Preferred Strategy consultation was carried out between November 2009 and January 2010. Publication of pre-submission respresentations and the proposal map is due in January or February 2011. The Core Strategy Examination in Public is expected to take place in September 2011.

2.16 The Council is currently undertaking a Strategic Housing Market Assessment, which highlights the affordability problems in many parts of the Borough, with very acute difficulties for people on low incomes. Consequently, there is an acute shortage of good quality affordable housing. The Council's approach has been to seek to ensure that the supply of affordable housing meets as much of the need as possible by negotiating the maximum possible provision on suitable sites.

2.17 The Council expects residential developments to provide a mix of affordable housing tenures, sizes and types to help meet identified housing needs and contribute to the creation of mixed, balanced and inclusive communities. The precise number, tenure, size and type of affordable units will be negotiated to reflect identified needs, site suitability and economic viability. In circumstances where site specific or market factors affect scheme viability, developers will be expected to provide viability assessments to demonstrate an alternative affordable housing provision.

Development context

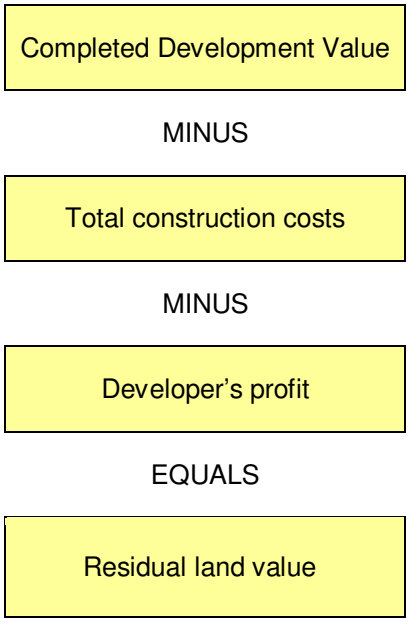
2.18 Sites in the Borough are developed with a range of styles and densities, reflecting the types of land available and public transport accessibility (which varies significantly). Sites in the Borough range from offices; redevelopment of existing residential; major regeneration sites; and public houses. Over the past decade, development proposals in the Borough have increased in density, with the densest schemes located adjacent to transport hubs (including sites close to Kingston Town Centre.

3 Methodology

3.1 Our methodology follows standard development appraisal conventions, using assumptions that reflect local housing market and planning policy circumstances. The study is therefore specific to the Royal Borough of Kingston upon Thames and reflects the policy requirements that the Council currently considers may be introduced over the plan period. We have attempted to ensure that the study reflects longer term housing market trends, rather than focusing solely on the current point in the cycle. As far as is possible, we have taken account of all these variables in carrying out this study.

Approach to Financial Viability Development

3.2 Appraisal models can be summarised via the following diagram:



3.3 Residual Land Value – the sum that the developer will pay to the landowner to secure a site for development – will normally be the key variable. If a proposal generates sufficient positive land value, it will be implemented. If not, the proposal will not go ahead, unless there are alternative funding sources to bridge the 'gap' (and these will normally be particular to regeneration areas via public bodies such as the Homes and Communities Agency).

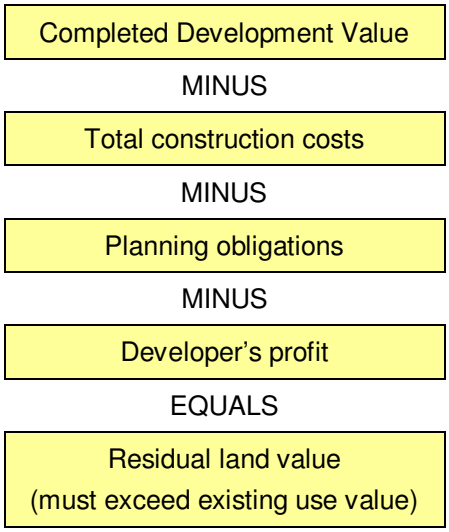
3.4 The problems with Development Appraisals all stem from the requirement to identify the key variables – sales values, costs etc – with some degree of accuracy in advance of implementation of a scheme. Even on the basis of the standard convention that current values and costs are adopted (not values and costs on completion), this can be very difficult. Problems with key appraisal variables can be summarised as follows:

- Development costs are subject to extensive national and local monitoring and can be reasonably accurately assessed in 'normal' circumstances. In boroughs like Kingston upon Thames, the vast majority of sites will be previously developed. These sites can often encounter 'exceptional' costs such as decontamination. Such costs can be very difficult to anticipate before detailed site surveys are undertaken.

- Development value and costs will also be significantly affected by assumptions about the nature and type of affordable housing provision and other Planning Obligations. In addition, on major projects, assumptions about development phasing; and infrastructure required to facilitate each phase of the development will affect residual values. Where the delivery of the obligations are deferred, the less the real cost to the applicant (and the greater the scope for increased affordable housing and other planning obligations). This is because the interest cost is reduced if the costs are incurred later in the development cashflow.
- While Developer's Profit has to be assumed in any appraisal, its level is closely correlated with risk. The greater the risk, the higher the profit level required by lenders. While profit levels were typically up to around 15% of completed development value at the peak of the market in 2007, banks now require schemes to show a higher profit to reflect the current risk. We do not know when and if profit levels may begin to fall back.

3.5 Ultimately, the landowner will make a decision on implementing a project on the basis of return and the potential for market change, and whether alternative developments might yield a higher value. The landowner's 'bottom line' will be achieving a residual land value that sufficiently exceeds 'existing use value' or other appropriate benchmark to make development worthwhile. For modelling purposes, we have assumed a 15% margin above EUV. Margins above EUV may be considerably different on individual sites, where there might be particular reasons why the premium to the landowner should be lower or higher than our assumption.

3.6 The following two diagrams summarise the outcomes of the residual valuation calculation.



3.7 The standard appraisal calculation shown above is reasonably clear, subject to the issues noted earlier in this section. However, the delivery of Planning Obligations, and in particular the provision of affordable housing, complicates the calculation by reducing Completed Development Value and (in the case of financial contributions) adding to scheme costs. The extent to which Completed Development Value is reduced depends on the percentage, tenure and funding of the affordable housing. On the assumption that other development costs remain unchanged, a reduced Completed Development Value resulting from the requirement to provide affordable housing results in a lower Residual Land Value.

3.8 With the exception of affordable housing – which is determined according to a Borough wide target – other planning obligations must be directly related to the scheme itself. The level of obligations can therefore vary between sites, depending on the needs created by the development and, for example, availability of places in pre-existing services, such as schools.

Completed Development Value

MINUS

Total construction costs

MINUS

Planning obligations

MINUS

Developer contributions for affordable housing

MINUS

Developer's profit

EQUALS

Residual land value

(must still exceed existing use value, but will be reduced by planning obligations, and depends on tenure and %)

3.9 Developers will seek to mitigate the impact of 'unknown' development issues through the following strategies:

- When negotiating with the landowner, the developer will either attempt to reflect planning requirements in the offer for the land, or seek to negotiate an option to purchase, or complete a deal 'subject to planning' which will enable any additional costs arising (Planning obligations and affordable housing for example) to be passed on to the landowner. It should be noted that such arrangements are not always possible. Ultimately, the landowner meets the cost through reduced land value, providing the basic condition for Residual Land Value to exceed existing use value (plus landowners' margin) or other appropriate benchmark is met; and/or,
- The developer will seek to build in sufficient tolerance into the development appraisal to offset risks including, for example, design development where costs might be incurred to satisfy planning and design requirements etc. It would also be normal to have a contingency allowance which would generally equate to 2% to 5% of build costs.
- The extent to which developers can successfully mitigate against all the risks outlined above depends largely on the degree to which developers have to compete to purchase sites. In a competitive land market, the

developer who is prepared to 'take a view' on the risks is likely to offer the winning bid.

3.10 Clearly, however, landowners have expectations of the value of their land which often exceed the value of the existing use. Planning obligations required by local policy will be a cost to the scheme and impact on the residual land value. Ultimately, landowners cannot be forced to sell their land and (unless a Local Authority is prepared to use its compulsory purchase powers) some may simply hold on to their sites, in the hope that policy may change at some future point with reduced requirements. It is within the scope of those expectations that developers have to formulate their offers for sites. The task of formulating an offer for a site is complicated further still during buoyant land markets, where developers have to compete with other developers to secure a site, often speculating on continued rises in value.

Viability benchmark

3.11 PPS3 provides no specific guidance on how local authorities should test the viability of their affordable housing policies. However, there is a range of guidance generated by both the Homes and Communities Agency and appeal decisions that assist in how planning authorities should approach viability testing for planning policy purposes.

3.12 The Homes and Communities Agency recently published a good practice guidance manual 'Investment and Planning Obligations: Responding to the Downturn'. This defines viability as follows: "*a viable development will support a residual land value at level sufficiently above the site's existing use value (EUV) or alternative use value (AUV) to support a land acquisition price acceptable to the landowner*".

3.13 A number of planning appeal decisions provide guidance on the extent to which the residual land value should exceed existing use value to be considered viable:

Barnet & Chase Farm: APP/Q5300/A/07/2043798/NWF
"the appropriate test is that the value generated by the scheme should exceed the value of the site in its current use. The logic is that, if the converse were the case, then sites would not come forward for development"

Bath Road, Bristol: APP/P0119/A/08/2069226
"The difference between the RLV and the existing site value provides a basis for ascertaining the viability of contributing towards affordable housing."

Beckenham: APP/G5180/A/08/2084559
"without an affordable housing contribution, the scheme will only yield less than 12% above the existing use value, 8% below the generally accepted margin necessary to induce such development to proceed."

Oxford Street, Woodstock: APP/D3125/A/09/2104658
"The main parties' valuations of the current existing value of the land are not dissimilar but the Appellant has sought to add a 10% premium. Though the site is owned by the Appellants it must be assumed, for valuation purposes, that the land is being acquired now. It is unreasonable to assume that an existing owner and user of the land would not require a premium over the actual value of the land to offset inconvenience and assist with relocation. The Appellants addition of the 10% premium is not unreasonable in these circumstances."

3.14 It is clear from the decisions above and HCA guidance that the most appropriate test of viability for planning policy purposes is to consider the residual value of schemes compared to the existing use value plus a premium of between 10% and 20%. As discussed later in this report, our study adopts a premium above EUV of 15% as a viability benchmark, with an additional sensitivity of a higher benchmark.

4 The Appraisal Exercise

Key appraisal variables

4.1 The key variables in any development appraisal are as follows:

4.2 **Sales values:** Sales values for residential and the investment value of commercial rents will vary between local authority areas (and within local authority areas) and are constantly changing. Developers will try to complete schemes in a rising or stable market, but movements in sales values are a development 'risk'. During times of falling house prices, local authorities may need to apply their policy requirements flexibly, or developers may cease bringing sites forward.

4.3 **Density:** Density is an important determinant of development value. Higher density development results in a higher quantum of units than a lower density development on the same site, resulting in an increase in gross development value. However, high density development often results in higher development costs, as a result of the need to develop taller buildings, which are more expensive to build than lower rise buildings and the need to often provide basements for car parking and plant. Planning obligations on higher density schemes will also be higher than on lower density schemes. It should therefore not *automatically* be assumed that higher density development results in higher residual land values; while the gross development value of such schemes may be higher, this can be partially (or wholly) offset by increased build costs and higher planning obligations.

4.4 **Gross to net floor space:** The gross to net ratio measures the ratio of saleable space (ie the area inside residential units) compared to the total area of the building (ie including the communal spaces, such as entrance lobbies and stair and lift cores). The higher the density, the higher the gross to net floor space ratio; in taller flatted schemes, more floor space is taken up by common areas and stair and lift cores, and thus less space is available for renting or sale - and this will adversely affect the residual land value.

4.5 **Base construction costs:** While base construction costs will be affected by density and may be affected by other factors, such as flood risk, ground conditions etc., they are well documented and can be reasonably accurately determined in advance by the developer.

4.6 **Exceptional costs:** In common with the majority of other London boroughs, clean, serviced and previously undeveloped sites are almost unheard of in Kingston. With the vast majority of schemes coming forward on previously developed land, exceptional costs have become more of an issue for development viability. Exceptional costs relate to works that are 'atypical', such as remediation of sites in former industrial use and that are over and above standard build costs. However, for the purposes of this exercise, it is not possible to provide a reliable estimate of what exceptional costs would be, as they will differ significantly from site to site. Our analysis therefore excludes exceptional costs, as to apply a blanket allowance would generate misleading results. An 'average' level of costs for decontamination, flood risk mitigation and other 'abnormal' costs is already reflected in BCIS data, as such costs are frequently encountered on sites in London.

4.7 **Developer's Profit:** Following standard practice, developer profits are based on an assumed percentage of gross development value. While developer profit ranged from 15% to 17% of gross development value in 2007, banks currently require a scheme to show higher profits. Higher profits reflect levels of perceived and actual risk; the higher the potential risk, the higher the profit margin in order to offset those risks. At the current time, development risk is high and we have therefore run our appraisals with a profit level of 20%. However, it is possible that over the life of the Plan, the banks' requirements in terms of profit levels may change. If conditions improve, it is possible (but by no means guaranteed) that banks will relax their lending criteria and reduce the amount of profit they require schemes to achieve. We have therefore adopted two levels of profit in our appraisals; 20% (reflecting current market conditions where development risk is considered to be higher); and 17% (representing improved market conditions in which development risk is perceived to be lower).

Existing Use Value

4.8 Existing Use Value ("EUV") Alternative Use Value ("AUV") and acquisition costs are key considerations in the assessment of development economics. Clearly, there is a point where the Residual Land Value (what the landowner receives from a developer) that results from a scheme may be less than the land's existing use value. Existing use values in London can vary significantly, depending on the demand for the type of building relative to other areas. Similarly, subject to planning permission, the potential development site may be capable of being used in different ways – as a hotel rather than roritesidential for example; or at least a different mix of uses. EUV / AUV is effectively a 'bottom line' in a financial sense and a therefore a key factor in this study.

4.9 In this study, we have adopted EUVs that most closely reflect the current use on the range of sites that typically come forward for development in Kingston, as advised by the Council. The majority of sites coming forward in Kingston are either secondary offices; existing residential plots; former public houses; and local authority owned land, including housing estates. We have arrived at a broad judgement on the likely value of these uses. In each case, our calculations assume that the landowner has made a judgement that the current use does not yield an optimum use of the site; for example, it has many fewer storeys than neighbouring buildings; or there is a general lack of demand for the type of space, resulting in low rentals, high yields and high vacancies (or in some cases no occupation at all over a lengthy period). We would not expect a building which makes optimum use of a site and that is attracting a reasonable rent to come forward for residential development, as residential value may not exceed existing use value in these circumstances.

4.10 Landowners will often consider a range of uses for their sites, not just residential, so AUVs will feature in their decision making process. By using a range of non-residential values in our assessment, we are able to determine how the value of residential development (with varying levels of affordable housing) compares to the alternative development types.

4.11 In considering the value of commercial property, it is necessary to understand the concept of 'yields'. Yields form the basis of the calculation of a building's capital value, based on the net rental income that it generates. Yields are used to calculate the capital value of any building type which is rented, including both commercial and residential uses. Yields are used to calculate the number of times that the annual rental income will be multiplied to arrive at a capital value. Yields reflect the confidence of a potential purchaser of a building in the income stream (i.e. the rent) that the occupant will pay. They also reflect the quality of the building and its location, as well as general demand for property of that type. The lower the covenant strength of the occupier (or potential occupiers if the building is currently vacant), and the poorer the location of the building, the greater the risk that the tenant may not pay the rent. If this risk is perceived as being high, the yield will be high, resulting in a lower number of years rent purchased (i.e. a lower capital value).

4.12 Over the past two years, yields for commercial property have 'moved out' (i.e. increased), signalling lower confidence in the ability of existing tenants to pay their rent and in future demand for commercial space. This has the effect of depressing the capital value of commercial space. However, as the economy recovers, we would expect yields to improve (i.e. decrease), which will result in increased capital values. Consequently, EUVs will increase, increasing the base value of sites that might come forward as potential residential sites, which may have implications for the delivery of affordable housing and other planning obligations.

4.13 Redevelopment proposals that generate residual land values below EUV plus an appropriate margin to the landowner are unlikely to be delivered. While any such thresholds are only a guide in 'normal' development circumstances, it does not imply that individual landowners, in particular financial circumstances, will not bring sites forward at a lower return or indeed require a higher return. It is simply indicative. If proven existing use value justifies a higher EUV than those assumed, then appropriate adjustments may be necessary. Similarly, the margin above EUV that individual landowners may require will inevitably vary. As such, Existing Use Values should be regarded as benchmarks rather than definitive fixed variables on a site by site basis.

4.14 The EUVs of the individual sites identified in this study therefore give a broad indication of likely land values across the Borough, but it is important to recognise that other site uses and values may exist on the ground.

4.15 In the very short term, some 'distressed sales' of land may result in very low land values, as existing owners seek to realise cash to cover their credit commitments. In some cases, administrators may instruct site sales. These sites might therefore be purchased by developers at low cost, making the delivery of affordable housing a more viable prospect (even at today's depressed unit sales values).

Specific Modelling Variables

4.16 This section summarises the particular assumptions used in the benchmarking exercise for sites in Kingston.

Sales Values

4.17 Residential values in the Borough reflect national trends in recent years but do of course vary significantly within the Borough. Our research on transacted property values and discussions on values with local agents at a base date of August 2010 indicates that sales values range from £320 per sq ft to £855 per sq ft, as shown in table 4.17.1. We have also run our appraisals factoring in an element of sales value inflation (approximately 6%, as shown by Land Registry

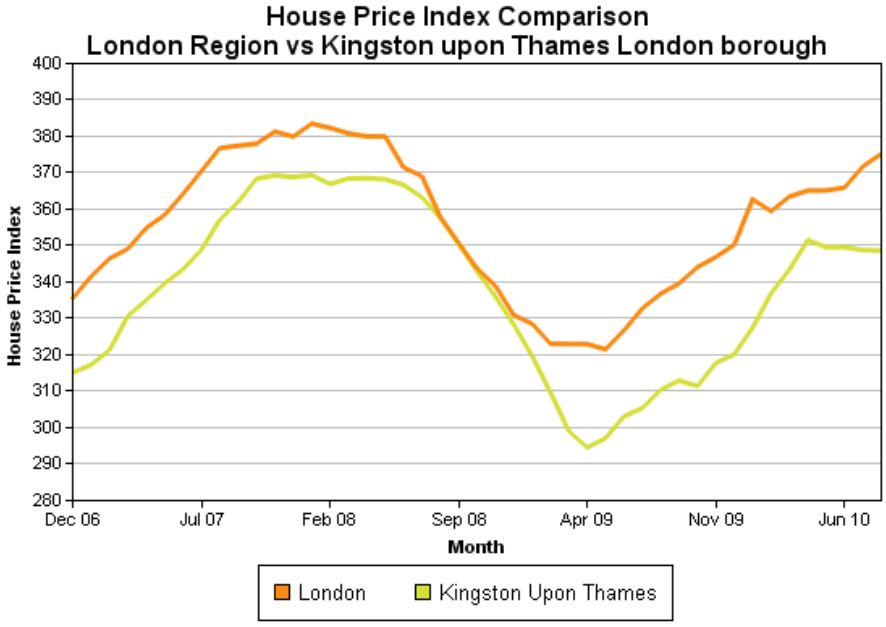
data on sales values, see chart below), reflecting future potential growth back up to 2007 values over the early part of the plan period.

Table 4.17.1: Sales values (£s per square metre)

Post Code	Current market Low (£ per sq ft)	Current market High (£ per sq ft)	2007 market high (£ per sq ft)	2007 market low (£ per sq ft)
KT2	365	855	387	906
KT1/KT2	325	810	345	859
KT3	320	450	339	477
KT5/6	400	600	424	636
KT9	350	375	371	398

4.18 Sales values fell between late 2007 and early 2009 but there is widespread expectation that they will recover over the medium term (indeed, there are now early signs that the decline in prices may be coming to an end, with increases in values during the second half of 2009 and early 2010). Sales values achieved at the peak of the housing market cycle in late 2007/early 2008 were clearly higher and we would expect values to return to those levels over the next six to eight years. Our results are shown using both August 2010 values and values that reflect those at the peak of the market in late 2007, to provide an indication of levels of affordable housing that might be viable both in the current market and following a recovery.

4.19 Land Registry data on property transactions shows that average values in London are slightly higher than in Kingston. Since May 2009, values in both London and Kingston have recovered, but the rate of recovery in London as a whole is faster. This indicates that properties in Kingston will have become more affordable relative to other areas in London, making it well placed to capitalise on any stronger recovery in future years.



Source: Land Registry

Density

4.20 We have run appraisals using the range of densities that are typically encountered across the borough, as advised by the Council. Densities are assumed to range from 35 units per hectare – a modest suburban density – to 405 units per hectare – a high central urban density. The density bands are shown in table 4.20.1 below.

Table 4.20.1: Density of hypothetical developments

Density Band	Density units per hectare)
1	35
2	65
3	110
4	155
5	210
6	260
7	340
8	405

Unit mix

4.21 Unit mix will vary with density, with a greater proportion of houses than flats in lower density schemes, and smaller flats in higher density schemes. Tables 4.21.1, 4.21.2 and 4.21.3 show the unit mix assumed in our appraisal model for private housing, social rented housing and intermediate housing.

Table 4.21.1: Private housing mix

Units / Density (units per ha)	1BF	2BF	3BF	4BF	2BH	3BH	4BH
35					33.3%	33.3%	33.3%
65					33.3%	33.3%	33.3%
110	20.0%	40.0%	25.0%	15.0%			
155	20.0%	40.0%	25.0%	15.0%			
210	25.0%	45.0%	20.0%	10.0%			
260	25.0%	45.0%	20.0%	10.0%			
340	30.0%	50.0%	15.0%	5.0%			
405	30.0%	50.0%	15.0%	5.0%			

Table 4.21.2: Social rented housing mix

Units / Density (units per ha)	1BF	2BF	3BF	4BF	1BH	2BH	3BH	4BH
35					24%	34%	30%	12%
65					24%	34%	30%	12%
110	24%	34%	30%	12%				
155	24%	34%	30%	12%				
210	24%	34%	30%	12%				
260	24%	34%	30%	12%				
340	24%	34%	30%	12%				
405	24%	34%	30%	12%				

Table 4.21.3: Intermediate housing mix

Units / Density (units per ha)	1BF	2BF	3BF	4BF	1BH	2BH	3BH	4BH
35					50%	41%	9%	
65					50%	41%	9%	
110	50%	41%	9%					
155	50%	41%	9%					
210	50%	41%	9%					
260	50%	41%	9%					
340	50%	41%	9%					
405	50%	41%	9%					

Gross to Net Floor space

4.22 The higher the density in a development, the greater the amount of communal space which has to be provided, but generates no value. This is because flatted schemes require common areas and stair cores, whereas houses provide 100% 'saleable space'. In our model, as a greater quantum of flats is incorporated into the hypothetical development, the build costs increase, to reflect the cost of building the communal space in the blocks of flats.

4.23 In our model, we have adopted a gross to net ratio for flats of 85% for flats in schemes of densities of up to 150 units per hectare; and 80% for flats in schemes of densities of over 200 units per hectare. This reflects the typical ratio in schemes that BNP Paribas Real Estate has valued or appraised on behalf of developers, banks and local authorities. The gross to net ratio is reflected in the build cost when measured on the total saleable area (i.e. the area that excludes common areas). For example, if a building is comprised of 10 flats each with a net internal area (i.e. the floorspace inside the flat itself) of 100 square metres, the total net area of the building is 1,000 square metres. However, when the entrance lobbies, corridors and stair cores are taken into account, the total floor area (what is known as the gross internal area) is 1,200 square metres. The net area is 83% of the gross area. If the build cost is

£1,500 per square metre of gross internal floorspace, this equates to £1,800 per square metre per net square metre. This is an important distinction when considering whether a build cost is reasonable – the unit of measurement (i.e. gross or net) needs to be consistent.

Base Construction Costs

4.24 The modelling exercise plots a range of base construction costs reflecting scheme density ranging from £915 per square metre to £2368 per square metre (net). These costs are drawn from the RICS Building Cost Information Service (BCIS) and subject to adjustment to take account of external works (which are excluded from the BCIS figures). We would not expect to see any significant difference in build costs between affordable and market housing, in the average scheme. Higher internal specification in market housing is typically offset by regulatory requirements in affordable units and developments are typically required to be 'tenure blind' with regards to external specification.

4.25 We also draw attention to a consensus among forecasters on the future trend of build costs, which fell during 2009 and are expected to remain broadly flat during 2010. The RICS BCIS predicts that costs will remain flat during 2010 and increase from 2011 onwards. Lower costs (or no increase in costs) will help to improve viability over the next year to 18 months by offsetting some of the impact of potential falls in values over 2010 (despite the recent positive house price data from Nationwide, Halifax and the Land Registry many commentators still see downside risks to the economy which will place continued downwards pressure on house prices). However, in the medium term, we expect the relationship between house price growth and built cost inflation to be re-established.

4.26 It is important to note that build costs could increase further should 'exceptional costs' arise. Such costs include decontaminating and remediating sites. As a result, costs need to be treated with caution and where normal levels are exceeded, the capacity of the site concerned to meet the Council's planning obligations will be affected. However, with almost all developments in the Borough coming forward on previously developed sites, the build costs we have sourced from BCIS includes an 'average' cost for decontamination and site clearance.

Code for Sustainable Homes

4.27 Meeting the requirements of the Code for Sustainable Homes will result in increased costs above those required to meet Part L of the 2006 Building Regulations. We have relied on the Communities and Local Government/Cyril Sweet study ('Costs Analysis of the Code for Sustainable Homes – Final Report' July 2008) and the Davis Langdon CLG March 2010 review to estimate these additional costs. The uplift in costs above base construction costs indicated by these studies is 11% for CSH level 4, which is the level required by the Homes and Communities Agency for affordable housing and a requirement of the Council for private housing.

Developer's profit

4.28 As noted in Section 4.7, Developer's profit is closely correlated with the perceived risk of residential development. The greater the risk, the greater the required profit level, which helps to mitigate against the risk, but also to ensure that the potential rewards are sufficiently attractive for a bank to fund a scheme. In 2007, profit levels were at around 15-17% of Gross Development Value. However, following the impact of the credit crunch and the collapse in interbank lending and the various government bailouts of the banking sector, profit margins have increased. It is important to emphasise that the level of minimum profit is not necessarily determined by developers (although they will have their own view and the Boards of the major housebuilders will set targets for minimum profit).

4.29 The views of the banks which fund development are more important; if the banks decline an application by a developer to borrow to fund a development, it is very unlikely to proceed, as developers rarely carry sufficient cash to fund it themselves. Consequently, future movements in profit levels will largely be determined by the attitudes of the banks towards residential development.

4.30 The near collapse of the global banking system in the final quarter of 2008 is resulting in a much tighter regulatory system, with UK banks having to take a much more cautious approach to all lending. In this context, the banks may not allow profit levels to decrease much lower than their current level, if at all.

4.31 The minimum generally acceptable profit level is currently around 20% of GDV. Our appraisals therefore show the viability of varying levels of affordable housing at 17% and 20% profit on the private housing (and 6% of GDV on the affordable housing in both cases). A lower return on the affordable housing is appropriate as there is very limited sales risk on these units for the developer; there is often a pre-sale of the units to an RSL prior to commencement. Any risk associated with take up of intermediate housing is borne by the acquiring RSL, not by the developer. A reduced profit level on the affordable housing reflects both the GLA's Development Control Toolkit guidance and the Homes and Communities Agency's guidelines in its Economic Appraisal Tool.

Planning Obligations

4.32 Levels of Planning Obligations will vary according to needs arising from individual developments. The extent of any planning obligations will depend upon a number of factors, including child yield; availability of school places in the locality; trip generation and highways impacts and other related factors.

4.33 The Council adopted a Planning Obligations Supplementary Planning Document ('SPD') on 9 March 2010. This SPD sets out the amounts of obligations (covering education, play space, community facilities, health, sustainable car parking and climate change) that the Council will normally seek from residential developments. The amounts sought vary according to the mix and tenure of each individual scheme.

4.34 For the purposes of this study, we have modelled Planning Obligations at three levels; education contribution only; the full amount of the SPD tariff; and a mid-point between these two levels, as shown in table 4.34.1 below.

Table 4.34.1: Planning obligations

	Contribution per private and intermediate unit	Contribution per social rented unit
1. Education only	£4,015	£8,717
2. Mid point	£10,504	£15,863
3. Full tariff	£16,994	£22,649

Affordable housing values

4.35 At lower densities (where build costs are lower), social rented and intermediate housing can sometimes make a positive contribution to land value, subject to levels of grant available. However, at higher densities, the affordable housing does not typically cover its costs and a subsidy from private housing is required.

4.36 We have calculated the value of social rented housing by capitalising the net target rents, set in accordance with government formulae. This results in a value of £861 per square metre, assuming no grant is available.

4.37 As intermediate housing is linked to market values, the values will be determined in part by varying market values. The values adopted for this tenure are based on the assumption that 25% of the equity is sold to the occupier and the RSL charges a rent of 2.75% on the retained equity. The values in the model are capped to ensure that, when market values increase, the actual price paid by the RSL still allows end purchasers on incomes of up to around £40,000 to afford the combined mortgage and rent payment. This a cautious approach as price paid will in reality move with the market changes and also RSL ability to fund acquisitions and their business plan assumptions.

4.38 PPS 3 Para 29 requires councils to take account in its viability an "*informed assessment of the likely level of finance available for affordable housing including public subsidy*". Given the current uncertainties on future funding, we have run our appraisals both with and without Public subsidy. Where grant is assumed to be available, we have adopted an average of £27,000 grant per person for social rented units and £10,000 grant per person for intermediate units.

4.39 The level of Public Sector Grant available for delivery through the planning system has been relatively high over the past five years. Forthcoming downwards pressure on public expenditure is likely to result in a reduction in the availability of grant funding for affordable housing procured through planning obligations. We have reflected this by adopting an assumption on grant towards the lower end of the range of recent allocations.

Existing use values

4.40 We have researched values of sites with a range of uses, which the Council has advised are brought forward for residential development in the Borough. These existing use types are shown in table 4.40.1 below, along with our estimates of indicative values in August 2010.

Table 4.40.1: Existing use values

Property Type	Estimate of EUV (£ millions per hectare)
Existing residential	18.8
Secondary offices	14.4
Public houses	7.5
Local authority land, including housing estates	0

4.41 The scope of our analysis was limited to secondary properties only, on the assumption that these are the most likely candidates for redevelopment. In the current market, there is very little transactional evidence and, where necessary, we have derived values from discussions with agents with experience in the area. In all cases, our values specifically exclude any hope value.

4.42 Our analysis incorporates a 15% return above EUV as a premium to the landowner to incentivise him/her to bring the site forward for development.

4.43 Values for local authority land are assumed to be zero. This is because our working assumption is that the Council's preference would be to deliver the maximum possible quantum of affordable housing on its own land. This would be particularly pertinent in the case of local authority estate redevelopments, where affordable housing levels need to be maximised to re-house existing tenants. There may be individual cases where the Council's preference would be to receive a capital receipt for its land; in these circumstances the existing use value of such sites would have to increase to reflect this.

Other Influential Factors

4.44 Variability of landowner attitudes: Land markets need time to adapt to changing policy circumstances and landowners may have the choice to hold sites back and hope that policies change. Up until the recent housing market recession, a more common circumstance in areas of sharp price inflation has been fierce competition between developers. This resulted in some developers buying sites without consent on the expectation that rising capital values would offset risk. When the market turns, these developers find that they are unable to implement their schemes and cannot afford their infrastructure and affordable housing obligations.

4.45 Site specific circumstances may arise where the authority is obliged to weigh up perhaps conflicting policy requirements. On sites with an extensive requirement for decontamination (ie above average levels), not all the Council's planning requirements may be affordable. For example, an employment protection policy may require commercial space to be provided in a predominantly residential scheme. The commercial space is likely to have a negative or low value, which requires a cross subsidy from the private housing. This is likely to reduce the amount of subsidy available to provide affordable housing and other planning obligations.

4.46 On larger schemes, perhaps phased over some years, developers will seek to agree terms on S106 and affordable housing at the outset; their driving factor will be the certainty, required to secure bank funding. In such circumstances, it is often in the authorities' interest to seek monitoring and review mechanisms in the S106 that will allow a renegotiation at some future date should it become necessary. The corollary to this is that, if the Authority expects to receive a share of the 'upside', it should also be prepared to accept a potential reduction in benefits should the market move the other way. Review mechanisms are now used frequently by authorities for larger schemes with multiple phases, particularly in the current housing market recession. There are various models in place, but the most typical is for the Developer to submit a fresh development appraisal with each reserved matters application. If values improve in a particular phase, to the extent that the profit increases above the agreed level, an increased proportion of affordable housing would be provided in that phase. The level of affordable housing in each phase and across the scheme could not exceed the relevant Authority's target percentage without the Developer's agreement.

5 Appraisal outputs

5.1 Before examining the illustrated outcomes, it is important to highlight the variables which may change the outputs – positively and negatively. They are summarised in Table 5.1.

Table 5.1: Positive and negative impacts on appraisal outcomes

Positive impacts	Negative impacts
Net land value contribution from affordable housing (generally lower density schemes with low build costs only)	Net loss on affordable housing (build costs exceed price paid by RSL) requiring cross subsidy from private housing
Increase in intermediate tenures may deliver a better receipt than social rented housing	Public subsidy not available to meet viability gaps where they occur
Low and/or deferred Planning Obligations	High and/or up-front Planning Obligations
Historic land cost (minimal)	High Existing/Alternative Use Value
Availability of gap funding	Unexpected contamination or remediation costs

5.2 With these factors in mind, the tables in the following section summarise the key outputs of our development appraisals.

Presentation of data

5.3 The tables are constructed to provide the maximum amount of data in the same place to provide easy comparison. Each table shows a range of sales values (on the left hand side) and a range of densities (along the top row). For each density, we show the build costs per square metre. The appraisal outputs are compared with four different Existing Use Values, as described in Section 4.40.

5.4 Each cell in the first table of each set of data shows the residual land value of a hypothetical one hectare scheme (of a given density and at the relevant sales value). This residual value is then compared to each of the four different existing use values. Residual values are very sensitive to small changes in appraisal variables. Consequently, our test of viability allows for a 15% margin below EUV (where schemes are shown as marginally unviable). We also allow a 15% margin above EUV to reflect landowners' premium. In these sections of the tables, **green** symbols show where the residual land value of each hypothetical scheme exceeds EUV by a margin of at least 15%. **Yellow** symbols show where the residual value is between 15% below EUV and up to 14.9% above EUV. In these situations, the scheme is considered marginally viable (i.e. with some adjustments and modest reductions in cost and increases in values, it *could* become viable). **Red** symbols show where the residual value of each scheme is more than 15% lower than EUV and is clearly unviable unless there are significant shifts in some of the appraisal variables.

5.5 On the far right hand side of each table, we provide an indication of where the range of sales values falls in the current market and at the peak of the last housing market cycle in 2007. These value bands have been drawn more widely than the values currently being achieved in those areas, reflecting values from the peak of the market in 2007, to provide an indication of viability when the market recovers.

5.6 The full set of data tables are attached as Appendix 1, which also show the residual land values from which the symbols are derived. The data tables show the following variables:

- Affordable housing: 30%, 40% and 50% affordable housing;
- A social rent to intermediate housing split of 70% social rent and 30% intermediate and an alternative tenure split of 60%:40%;
- Three levels of Section 106 contribution; £4,015 and £8,717; £10,504 and £15,863; and £16,994 and £22,649 per private/intermediate and social rented unit respectively.
- Code for Sustainable Homes level 4 for all tenures;
- Each of the above with profit levels of 17% and 20% on GDV; and
- Sensitivities of an increase in EUV of 20% and build costs of 10%.

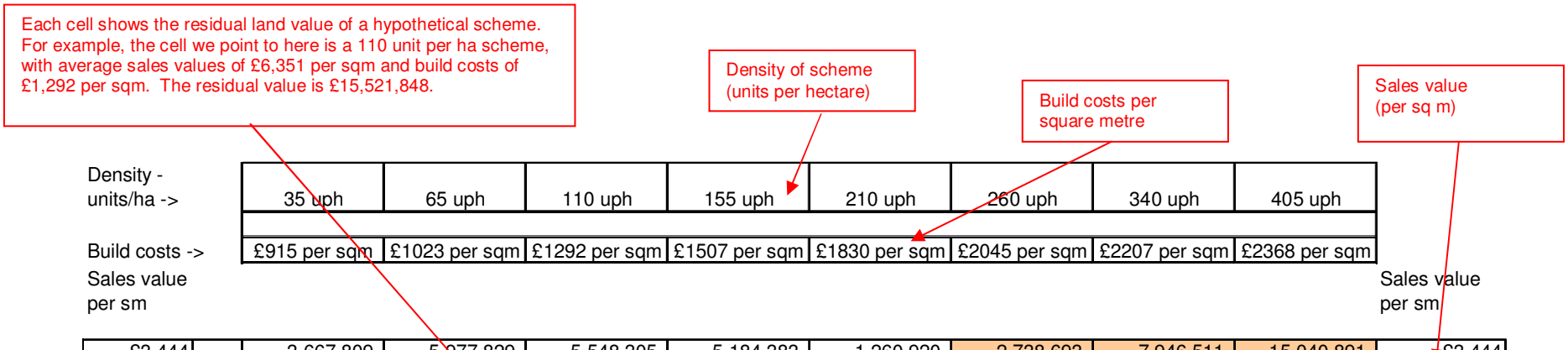
5.7 For each affordable housing percentage, there are 48 separate tables. Each table is comprised of 112 residual valuations, which are then analysed against four EUVs, providing a total of 448 individual assessments per page. The dataset for each affordable housing percentage therefore comprises some 21,054 separate calculations; and the entire dataset comprises 64,512 individual calculations.

5.8 An annotated version of the data output is provided on the following page.

5.9 We provide some examples of the results in the following sections to illustrate the layout of the tables. The full set of results can be found at Appendix 1. Examples 1 to 6 on the following pages illustrate a range of scenarios.

Guide to appraisal outputs

The appraisal outputs contain a series of tables, showing different scenarios (eg level of affordable housing, tenure mix, profit levels and planning obligations), as shown on the Index page. At the top of each page, we show the residual values from a series of hypothetical schemes, which are then compared to four different existing use values in the tables below. The first table below shows the layout of the residual values:



Density - units/ha ->		35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph	
Build costs ->		£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm	
Sales value per sm										Sales value per sm
£3,444		3,667,809	5,977,829	5,548,305	5,184,383	1,260,920	- 2,738,693	- 7,946,511	- 15,040,891	£3,444
£4,026		4,539,746	7,575,490	7,557,446	8,016,203	4,931,865	1,823,345	- 2,192,734	- 8,434,241	£4,026
£4,607		5,409,854	9,173,150	9,566,586	10,848,023	8,566,981	6,373,137	3,480,291	- 1,856,785	£4,607
£5,188		6,278,820	10,770,811	11,575,728	13,679,843	12,202,096	10,875,803	9,093,037	4,660,002	£5,188
£5,770		7,147,786	12,363,100	13,584,868	16,510,277	15,837,212	15,376,422	14,705,783	11,176,790	£5,770
£6,351		7,989,227	13,904,191	15,521,848	19,225,467	19,333,453	19,705,101	20,092,677	17,362,743	£6,351
£6,932		8,773,939	15,339,978	17,310,117	21,732,886	22,543,496	23,679,440	25,014,125	23,001,186	£6,932
£7,513		9,558,652	16,775,766	19,098,386	24,240,306	25,750,547	27,653,779	29,931,155	28,639,629	£7,513
£8,095		10,343,365	18,211,553	20,886,654	26,747,727	28,943,426	31,628,118	34,817,713	34,278,071	£8,095
£8,676		11,128,079	19,647,340	22,674,922	29,255,146	32,136,305	35,602,458	39,704,271	39,916,514	£8,676
£9,257		11,912,792	21,083,127	24,463,191	31,762,567	35,329,183	39,565,414	44,590,830	45,554,956	£9,257
£9,838		12,697,504	22,518,915	26,251,459	34,269,986	38,522,062	43,518,502	49,477,388	51,193,399	£9,838
£10,420		13,482,217	23,954,703	28,039,728	36,777,407	41,714,941	47,471,590	54,363,946	56,831,841	£10,420
£11,033		14,310,526	25,470,256	29,927,345	39,424,128	45,085,202	51,644,294	59,521,979	62,759,706	£11,033

These results are then compared to a series of existing use values, using a system of symbols. **Green** symbols show where the residual land value is 15% or higher than the existing use value (and is therefore considered viable); **yellow** symbols show where the residual value is between 14.9% below EUV and 14.9% above EUV (and is considered marginal); and **red** symbols show where the residual value is 15% or greater less than EUV and is clearly unviable.

Each cell in the table follows an identical pattern to the table on the previous page. The arrow points to a scheme of 110 units per ha, with average sales values of £6,351 per sqm and build costs of £1,292 per sqm. The residual value of that scheme (£15.5 million) is 8% higher than the EUV (£14.4 million). This scheme is judged as 'marginal', as the residual falls short of exceeding EUV by 15%.

Here, the arrow points to a scheme of 155 units per ha, with sales values of £5,770 per sqm and build costs of £1,507 per sqm. The residual value of the scheme is £16.51 million, 15% higher than EUV. This scheme is assessed as 'viable' and represented by a green symbol.

These columns show the range of values across the Borough (August 2010 values and 2007 values)

£14,352,000 per hectare
£5,810,526 per acre

Secondary offices

Existing use value

Density - units/ha -> / Build costs->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607
£5,188	☹	☹	☹	😐	😐	☹	☹	☹	£5,188
£5,770	☹	😐	😐	🙂	😐	😐	😐	☹	£5,770
£6,351	☹	😐	😐	🙂	🙂	🙂	🙂	🙂	£6,351
£6,932	☹	😐	🙂	🙂	🙂	🙂	🙂	🙂	£6,932
£7,513	☹	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£7,513
£8,095	☹	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£8,095
£8,676	☹	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£8,676
£9,257	☹	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£9,257
£9,838	😐	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£9,838
£10,420	😐	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£10,420
£11,033	😐	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£11,033

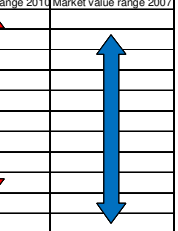
Market value range 2010 | Market value range 2007

Example 1: 40% affordable housing with grant; 70% social rent and 30% intermediate; Section 106 contributions - Education only; 17% developer's profit

RLVs less existing use value — **£14,352,000 per hectare** **£5,810,526 per acre** — **Secondary offices**

Density - units/ha ->	35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph
Build costs ->	£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm
Sales value £per sq m								
£3,444								
£4,026								
£4,607								
£5,188								
£5,770								
£6,351								
£6,932								
£7,513								
£8,095								
£8,676								
£9,257								
£9,838								
£10,420								
£11,033								

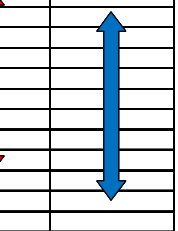
Sales value £per sq m | Market value range 2010 | Market value range 2007



RLVs less existing use value — **£18,825,467 per hectare** **£7,621,647 per acre** — **Existing residential**

Density - units/ha ->	35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph
Build costs ->	£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm
Sales value per sq m								
£3,444								
£4,026								
£4,607								
£5,188								
£5,770								
£6,351								
£6,932								
£7,513								
£8,095								
£8,676								
£9,257								
£9,838								
£10,420								
£11,033								

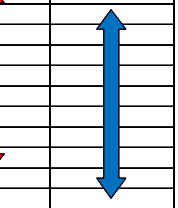
Sales value per sq m | Market value range 2010 | Market value range 2007



RLVs less existing use value — **£7,534,800 per hectare** **£3,050,526 per acre** — **Pubs/petrol stations**

Density - units/ha ->	35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph
Build costs ->	£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm
Sales value £per sq m								
£3,444								
£4,026								
£4,607								
£5,188								
£5,770								
£6,351								
£6,932								
£7,513								
£8,095								
£8,676								
£9,257								
£9,838								
£10,420								
£11,033								

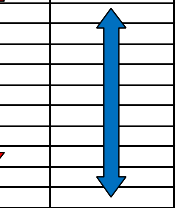
Sales value £per sq m | Market value range 2010 | Market value range 2007



RLVs less existing use value — **£1 per hectare** **£0 per acre** — **LA Land (estate redevelopments)**

Density - units/ha ->	35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph
Build costs ->	£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm
Sales value per sq m								
£3,444								
£4,026								
£4,607								
£5,188								
£5,770								
£6,351								
£6,932								
£7,513								
£8,095								
£8,676								
£9,257								
£9,838								
£10,420								
£11,033								

Sales value per sq m | Market value range 2010 | Market value range 2007



Example 2: As per Example 1, but with 20% developer's profit

RLVs less existing use value — **£14,352,000 per hectare** / **£5,810,526 per acre** — **Secondary offices**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	😐	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	😐	😐	😐	😐	😐	☹	£5,770		
£6,351	☹	😐	😐	☺	☺	☺	☺	😐	£6,351		
£6,932	☹	😐	☺	☺	☺	☺	☺	☺	£6,932		
£7,513	☹	😐	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☹	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☹	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☹	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	😐	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	😐	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	😐	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£18,825,467 per hectare** / **£7,621,647 per acre** — **Existing residential**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	☹	☹	☹	☹	☹	☹	£5,770		
£6,351	☹	☹	☹	😐	😐	😐	😐	☹	£6,351		
£6,932	☹	☹	😐	😐	😐	☺	☺	😐	£6,932		
£7,513	☹	😐	😐	☺	☺	☺	☺	☺	£7,513		
£8,095	☹	😐	😐	☺	☺	☺	☺	☺	£8,095		
£8,676	☹	😐	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☹	😐	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☹	😐	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☹	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☹	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£7,534,800 per hectare** / **£3,050,526 per acre** — **Pubs/petrol stations**

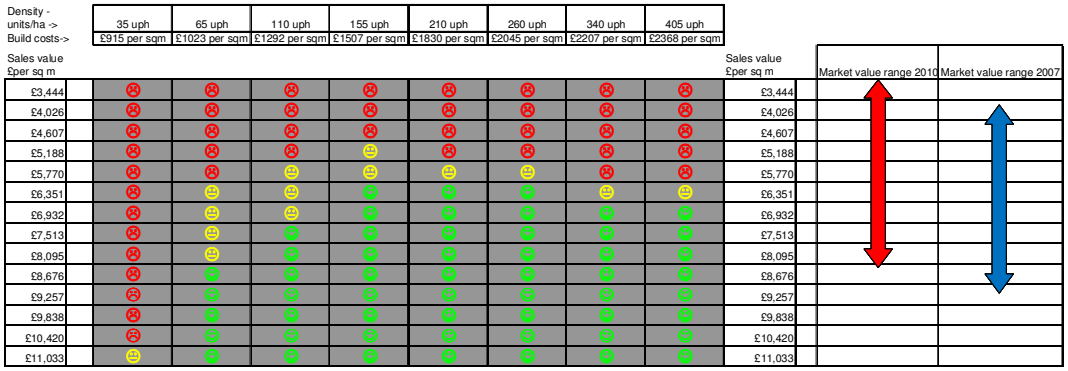
Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	😐	😐	😐	☹	☹	☹	☹	£4,026		
£4,607	☹	☺	☺	☺	😐	☹	☹	☹	£4,607		
£5,188	☹	☺	☺	☺	☺	☺	😐	☹	£5,188		
£5,770	😐	☺	☺	☺	☺	☺	☺	☺	£5,770		
£6,351	😐	☺	☺	☺	☺	☺	☺	☺	£6,351		
£6,932	😐	☺	☺	☺	☺	☺	☺	☺	£6,932		
£7,513	☺	☺	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☺	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☺	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£1 per hectare** / **£0 per acre** — **LA Land (estate redevelopments)**

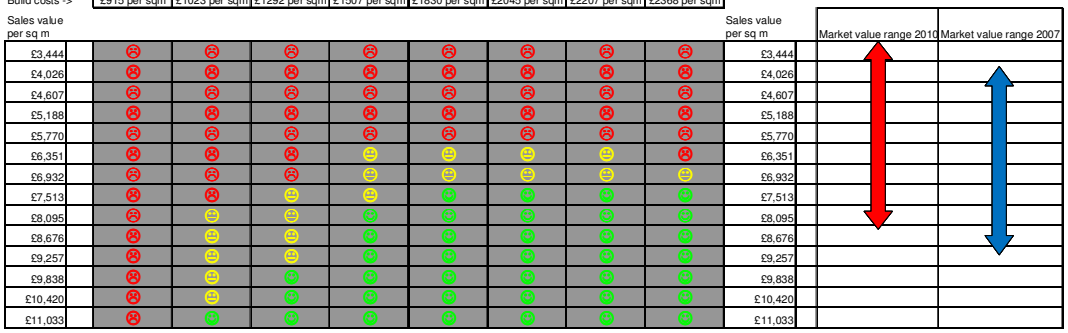
Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m	Market value range 2010	Market value range 2007
£3,444	☺	☺	☺	☺	☺	☹	☹	☹	£3,444		
£4,026	☺	☺	☺	☺	☺	☺	☹	☹	£4,026		
£4,607	☺	☺	☺	☺	☺	☺	☺	☹	£4,607		
£5,188	☺	☺	☺	☺	☺	☺	☺	☺	£5,188		
£5,770	☺	☺	☺	☺	☺	☺	☺	☺	£5,770		
£6,351	☺	☺	☺	☺	☺	☺	☺	☺	£6,351		
£6,932	☺	☺	☺	☺	☺	☺	☺	☺	£6,932		
£7,513	☺	☺	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☺	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☺	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

Example 3: 50% affordable housing with grant; 70% social rent and 30% intermediate; Section 106 contributions - Education only; 17% developer's profit

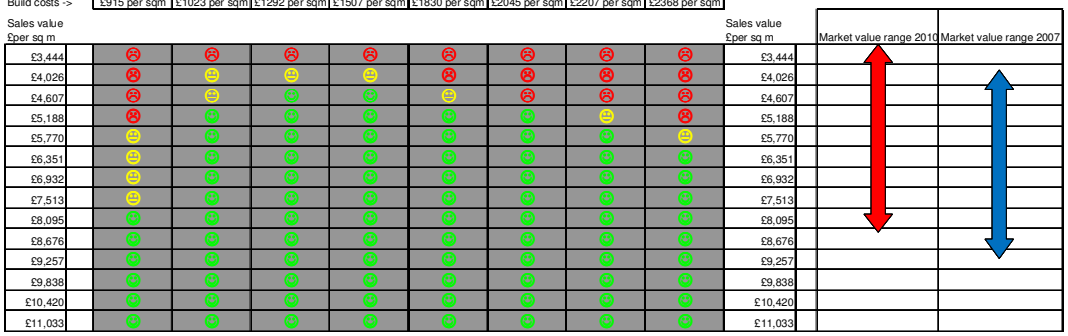
RLVs less existing use value — **£14,352,000 per hectare** / **£5,810,526 per acre** — **Secondary offices**



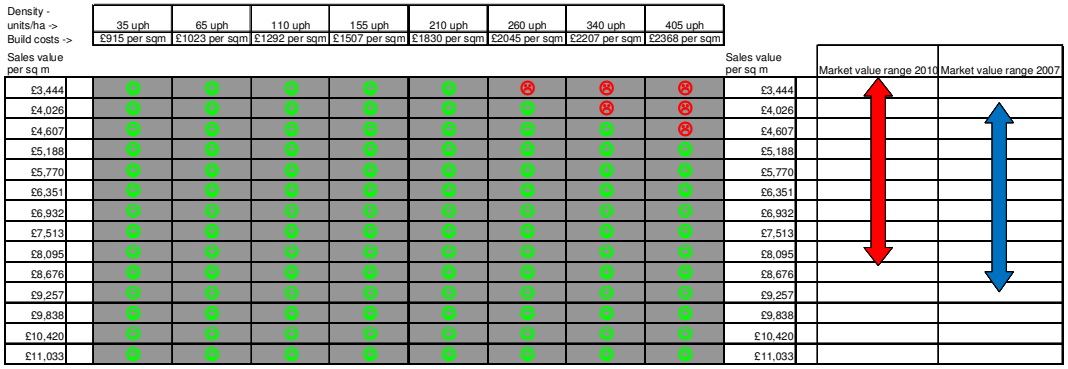
RLVs less existing use value — **£18,825,467 per hectare** / **£7,621,647 per acre** — **Existing residential**



RLVs less existing use value — **£7,534,800 per hectare** / **£3,050,526 per acre** — **Pubs/petrol stations**



RLVs less existing use value — **£1 per hectare** / **£0 per acre** — **LA Land (estate redevelopments)**



Example 4: As per Example 3, but with 20% profit

RLVs less existing use value — **£14,352,000 per hectare** / **£5,810,526 per acre** — **Secondary offices**

Density - units/ha -> / Build costs->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m
Sales value £per sq m									
£3,444									£3,444
£4,026									£4,026
£4,607									£4,607
£5,188									£5,188
£5,770									£5,770
£6,351									£6,351
£6,932									£6,932
£7,513									£7,513
£8,095									£8,095
£8,676									£8,676
£9,257									£9,257
£9,838									£9,838
£10,420									£10,420
£11,033									£11,033

Market value range 2010 / Market value range 2007

RLVs less existing use value — **£18,825,467 per hectare** / **£7,621,647 per acre** — **Existing residential**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m
Sales value per sq m									
£3,444									£3,444
£4,026									£4,026
£4,607									£4,607
£5,188									£5,188
£5,770									£5,770
£6,351									£6,351
£6,932									£6,932
£7,513									£7,513
£8,095									£8,095
£8,676									£8,676
£9,257									£9,257
£9,838									£9,838
£10,420									£10,420
£11,033									£11,033

Market value range 2010 / Market value range 2007

RLVs less existing use value — **£7,534,800 per hectare** / **£3,050,526 per acre** — **Pubs/petrol stations**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m
Sales value £per sq m									
£3,444									£3,444
£4,026									£4,026
£4,607									£4,607
£5,188									£5,188
£5,770									£5,770
£6,351									£6,351
£6,932									£6,932
£7,513									£7,513
£8,095									£8,095
£8,676									£8,676
£9,257									£9,257
£9,838									£9,838
£10,420									£10,420
£11,033									£11,033

Market value range 2010 / Market value range 2007

RLVs less existing use value — **£1 per hectare** / **£0 per acre** — **LA Land (estate redevelopments)**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m
Sales value per sq m									
£3,444									£3,444
£4,026									£4,026
£4,607									£4,607
£5,188									£5,188
£5,770									£5,770
£6,351									£6,351
£6,932									£6,932
£7,513									£7,513
£8,095									£8,095
£8,676									£8,676
£9,257									£9,257
£9,838									£9,838
£10,420									£10,420
£11,033									£11,033

Market value range 2010 / Market value range 2007

Example 5: 50% affordable housing no grant; 70% social rent and 30% intermediate; Section 106 – Education only; 17% developer's profit

RLVs less existing use value — **£14,352,000 per hectare / £5,810,526 per acre** — **Secondary offices**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	☹	☹	☹	☹	☹	☹	£5,770		
£6,351	☹	☹	☹	☹	☹	☹	☹	☹	£6,351		
£6,932	☹	☹	☹	😐	☹	☹	☹	☹	£6,932		
£7,513	☹	☹	😐	😐	😐	😐	☹	☹	£7,513		
£8,095	☹	😐	😐	☺	☺	😐	😐	☹	£8,095		
£8,676	☹	😐	😐	☺	☺	☺	☺	😐	£8,676		
£9,257	☹	😐	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☹	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☹	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☹	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£18,825,467 per hectare / £7,621,647 per acre** — **Existing residential**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	☹	☹	☹	☹	☹	☹	£5,770		
£6,351	☹	☹	☹	☹	☹	☹	☹	☹	£6,351		
£6,932	☹	☹	☹	☹	☹	☹	☹	☹	£6,932		
£7,513	☹	☹	☹	☹	☹	☹	☹	☹	£7,513		
£8,095	☹	☹	☹	😐	😐	😐	☹	☹	£8,095		
£8,676	☹	☹	☹	😐	😐	😐	😐	😐	£8,676		
£9,257	☹	☹	😐	😐	☺	☺	☺	😐	£9,257		
£9,838	☹	😐	😐	☺	☺	☺	☺	☺	£9,838		
£10,420	☹	😐	😐	☺	☺	☺	☺	☺	£10,420		
£11,033	☹	😐	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£7,534,800 per hectare / £3,050,526 per acre** — **Pubs/petrol stations**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	😐	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	😐	😐	☺	☹	☹	☹	☹	£5,770		
£6,351	☹	☺	☺	☺	😐	☹	☹	☹	£6,351		
£6,932	☹	☺	☺	☺	☺	☺	😐	☹	£6,932		
£7,513	😐	☺	☺	☺	☺	☺	☺	😐	£7,513		
£8,095	😐	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	😐	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£1 per hectare / £0 per acre** — **LA Land (estate redevelopments)**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m	Market value range 2010	Market value range 2007
£3,444	☺	☺	☺	☹	☹	☹	☹	☹	£3,444		
£4,026	☺	☺	☺	☺	☹	☹	☹	☹	£4,026		
£4,607	☺	☺	☺	☺	☹	☹	☹	☹	£4,607		
£5,188	☺	☺	☺	☺	☺	☹	☹	☹	£5,188		
£5,770	☺	☺	☺	☺	☺	☺	☹	☹	£5,770		
£6,351	☺	☺	☺	☺	☺	☺	☺	☹	£6,351		
£6,932	☺	☺	☺	☺	☺	☺	☺	☺	£6,932		
£7,513	☺	☺	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☺	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☺	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

Example 6: As Example 5, but with 20% developer's profit

RLVs less existing use value — **£14,352,000 per hectare** / **£5,810,526 per acre** — **Secondary offices**

Density - units/ha -> / Build costs->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	☹	☹	☹	☹	☹	☹	£5,770		
£6,351	☹	☹	☹	☹	☹	☹	☹	☹	£6,351		
£6,932	☹	☹	☹	😐	☹	☹	☹	☹	£6,932		
£7,513	☹	☹	☹	😐	😐	☹	☹	☹	£7,513		
£8,095	☹	😐	😐	😐	😐	😐	😐	☹	£8,095		
£8,676	☹	😐	😐	☺	☺	☺	☺	😐	£8,676		
£9,257	☹	😐	😐	☺	☺	☺	☺	☺	£9,257		
£9,838	☹	😐	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☹	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☹	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£18,825,467 per hectare** / **£7,621,647 per acre** — **Existing residential**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	☹	☹	☹	☹	☹	☹	£5,770		
£6,351	☹	☹	☹	☹	☹	☹	☹	☹	£6,351		
£6,932	☹	☹	☹	☹	☹	☹	☹	☹	£6,932		
£7,513	☹	☹	☹	☹	☹	☹	☹	☹	£7,513		
£8,095	☹	☹	☹	😐	☹	☹	☹	☹	£8,095		
£8,676	☹	☹	☹	😐	😐	😐	😐	☹	£8,676		
£9,257	☹	☹	😐	😐	😐	😐	😐	😐	£9,257		
£9,838	☹	😐	😐	☺	☺	☺	☺	☺	£9,838		
£10,420	☹	😐	😐	☺	☺	☺	☺	☺	£10,420		
£11,033	☹	😐	😐	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£7,534,800 per hectare** / **£3,050,526 per acre** — **Pubs/petrol stations**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	😐	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	😐	😐	😐	☹	☹	☹	☹	£5,770		
£6,351	☹	☺	☺	☺	😐	☹	☹	☹	£6,351		
£6,932	☹	☺	☺	☺	☺	😐	☹	☹	£6,932		
£7,513	😐	☺	☺	☺	☺	☺	☺	☹	£7,513		
£8,095	😐	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	😐	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	😐	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — **£1 per hectare** / **£0 per acre** — **LA Land (estate redevelopments)**

Density - units/ha -> / Build costs ->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value per sq m	Market value range 2010	Market value range 2007
£3,444	☺	☺	☺	☹	☹	☹	☹	☹	£3,444		
£4,026	☺	☺	☺	☺	☹	☹	☹	☹	£4,026		
£4,607	☺	☺	☺	☺	☹	☹	☹	☹	£4,607		
£5,188	☺	☺	☺	☺	☺	☹	☹	☹	£5,188		
£5,770	☺	☺	☺	☺	☺	☺	☹	☹	£5,770		
£6,351	☺	☺	☺	☺	☺	☺	☺	☹	£6,351		
£6,932	☺	☺	☺	☺	☺	☺	☺	☹	£6,932		
£7,513	☺	☺	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☺	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☺	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

Capacity for smaller sites to contribute towards affordable housing

5.10 We have tested the financial viability of sites of between 2 and 15 units to determine whether the Council could viably reduce the affordable housing threshold from the current 10 units, which has also been in operation for some time.

5.11 The appraisal method used to test the ability of sites of 10 and 15 units to provide affordable housing is identical to the method used for larger sites. The hypothetical schemes are run with 15, 13, 11, 10, 8, 6, 4 and 2 units, with the same range of sales values as used in the main viability testing. The residual land values from each hypothetical scheme are then compared to three different existing use values. We have assumed that the development would be constructed as a flatted development.

5.12 Tables 5.12.1, 5.12.2 and 5.12.3 show the residual values generated by the schemes, with a 30%, 40% and 50% affordable housing requirement. The results are also included at Appendix 2.

5.13 Our assumptions for the three EUV benchmarks are as follows:

- **EUV 1: Single house for redevelopment or conversion:** the property would need to be sufficiently large to accommodate up to 14 flats, but probably not in prime condition. Based on our search of the local property market, we have adopted indicative values ranging from £600,000 (at the 2 unit end of the scale) to £1.6 million (at the 15 unit end of the scale).
- **EUV 2: Public houses:** we have assumed that varying sizes of public houses could be purchased for between £200,000 (for a 0.03 ha site to accommodate a 2 unit scheme) and £1.5 million (for a 0.2 ha site to accommodate a 15 unit scheme). These are estimates only as the actual purchase prices of pubs would be influenced by a range of factors; most notably the turnover of the pub and its profitability (if the business is trading).
- **EUV 3: Community sites and In fill sites:** placing a value on in-fill sites is difficult and depends on the extent to which individual owners can be persuaded to dispose of part of their property. The site purchase cost we have assumed of between £96,000 and £720,000 (depending on size of development) can be regarded only as a high level indication of how much it might cost to purchase suitable sites from owners. In some parts of Kingston, the sums suggested here may be insufficient to incentivise individual owners to dispose of parts of their sites.

5.14 Tables 5.12.1, 5.12.2 and 5.12.3 show the results of our appraisals of small sites using a similar presentational approach to the larger site appraisals at Appendix 1. Table 5.12.1 shows the results of the appraisals with 30% affordable, to provide an indication of the likely viability of such sites under the existing thresholds of 10 units. Moving across the table columns from left to right, the size of scheme increases from two units to fifteen units. This table indicates that smaller schemes will be more viable on sites with lower existing use values and with higher sales values. In this respect, the results for the small site appraisals are no different from the larger sites.

5.15 Table 5.12.2 shows the results with a requirement for 40% affordable housing, which indicates a reduced range of viable scenarios compared to a 30% requirement.

5.16 Table 5.12.3 shows the results with a requirement for 50% affordable housing, which would result in a further deterioration in viability, in comparison to the results where 40% affordable housing is provided. This is a pattern that we would expect to see. Table 5.12.4 shows that the impact of the affordable housing requirement on viability could be mitigated to some extent by an alternative tenure mix, ie switching the affordable housing from 100% social rented to 100% intermediate.

5.17 The results indicate that there is little difference in viability between 5 and 10 units, suggesting that there is little evidence – in terms of scheme economics – that would preclude a threshold of less than 10 units. The results indicate that there are some circumstances where affordable housing could be delivered below the current threshold of 10 units without adversely affecting development viability. However, because some schemes would not be viable at a reduced threshold, the Council would need to apply any revised threshold on a 'subject to viability' basis.

Table 5.12.1: Small sites viability – 30% affordable housing (100% social rented), with grant, S106 contributions of education only, 20% developer's profit

RLVs less existing use value — 1 - High EUV

	£600,000	£650,000	£750,000	£900,000	£1,050,000	£1,200,000	£1,400,000	£1,600,000
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	Build costs - £ per							
	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm

Sales value £per sq m									Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	☹	☹	☹	☹	😐	😐	😐	😐	£5,770		
£6,351	☹	☹	😐	😐	😐	😐	😐	😐	£6,351		
£6,932	☹	☹	😐	😐	☺	☺	☺	☺	£6,932		
£7,513	☹	😐	😐	☺	☺	☺	☺	☺	£7,513		
£8,095	☹	😐	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☹	😐	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☹	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☹	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☹	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☹	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — 2 - Medium EUV

	£200,928	£401,856	£602,784	£803,712	£1,004,640	£1,105,104	£1,306,032	£1,506,960
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	Build costs - £ per							
	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm

Sales value £per sq m									Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	☹	☹	☹	☹	☹	☹	☹	☹	£4,026		
£4,607	☹	☹	☹	☹	☹	☹	☹	☹	£4,607		
£5,188	☹	☹	☹	☹	☹	☹	☹	☹	£5,188		
£5,770	😐	😐	😐	😐	😐	😐	😐	😐	£5,770		
£6,351	😐	😐	😐	😐	😐	😐	😐	😐	£6,351		
£6,932	☺	☺	☺	☺	☺	☺	☺	☺	£6,932		
£7,513	☺	☺	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☺	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☺	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

RLVs less existing use value — 3 - Low EUV

	£95,680	£191,360	£287,040	£382,720	£478,400	£526,240	£621,920	£717,600
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	Build costs - £ per							
	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm

Sales value £per sq m									Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	☹	☹	☹	☹	☹	☹	☹	☹	£3,444		
£4,026	😐	😐	😐	😐	😐	😐	😐	😐	£4,026		
£4,607	☺	☺	☺	☺	☺	☺	☺	☺	£4,607		
£5,188	☺	☺	☺	☺	☺	☺	☺	☺	£5,188		
£5,770	☺	☺	☺	☺	☺	☺	☺	☺	£5,770		
£6,351	☺	☺	☺	☺	☺	☺	☺	☺	£6,351		
£6,932	☺	☺	☺	☺	☺	☺	☺	☺	£6,932		
£7,513	☺	☺	☺	☺	☺	☺	☺	☺	£7,513		
£8,095	☺	☺	☺	☺	☺	☺	☺	☺	£8,095		
£8,676	☺	☺	☺	☺	☺	☺	☺	☺	£8,676		
£9,257	☺	☺	☺	☺	☺	☺	☺	☺	£9,257		
£9,838	☺	☺	☺	☺	☺	☺	☺	☺	£9,838		
£10,420	☺	☺	☺	☺	☺	☺	☺	☺	£10,420		
£11,033	☺	☺	☺	☺	☺	☺	☺	☺	£11,033		

Table 5.12.2: Small sites viability – 40% affordable housing (100% social rented), with grant, S106 contributions - Education only, 20% developer's profit

RLVs less existing use value — 1 - High EUV

	£600,000	£650,000	£750,000	£900,000	£1,050,000	£1,200,000	£1,400,000	£1,600,000
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	Build costs - £ per							
	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm

Sales value £per sq m	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	£3,444		
£4,026	£4,026		
£4,607	£4,607		
£5,188	£5,188		
£5,770	£5,770		
£6,351	£6,351		
£6,932	£6,932		
£7,513	£7,513		
£8,095	£8,095		
£8,676	£8,676		
£9,257	£9,257		
£9,838	£9,838		
£10,420	£10,420		
£11,033	£11,033		

RLVs less existing use value — 2 - Medium EUV

	£200,928	£401,856	£602,784	£803,712	£1,004,640	£1,105,104	£1,306,032	£1,506,960
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	Build costs - £ per							
	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm

Sales value £per sq m	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	£3,444		
£4,026	£4,026		
£4,607	£4,607		
£5,188	£5,188		
£5,770	£5,770		
£6,351	£6,351		
£6,932	£6,932		
£7,513	£7,513		
£8,095	£8,095		
£8,676	£8,676		
£9,257	£9,257		
£9,838	£9,838		
£10,420	£10,420		
£11,033	£11,033		

RLVs less existing use value — 3 - Low EUV

	£95,680	£191,360	£287,040	£382,720	£478,400	£526,240	£621,920	£717,600
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	Build costs - £ per							
	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm

Sales value £per sq m	Sales value £per sq m	Market value range 2010	Market value range 2007
£3,444	£3,444		
£4,026	£4,026		
£4,607	£4,607		
£5,188	£5,188		
£5,770	£5,770		
£6,351	£6,351		
£6,932	£6,932		
£7,513	£7,513		
£8,095	£8,095		
£8,676	£8,676		
£9,257	£9,257		
£9,838	£9,838		
£10,420	£10,420		
£11,033	£11,033		

Table 5.12.3: Small sites viability – 50% affordable housing (100% social rented), with grant, S106 contributions of education only, 20% developer's profit

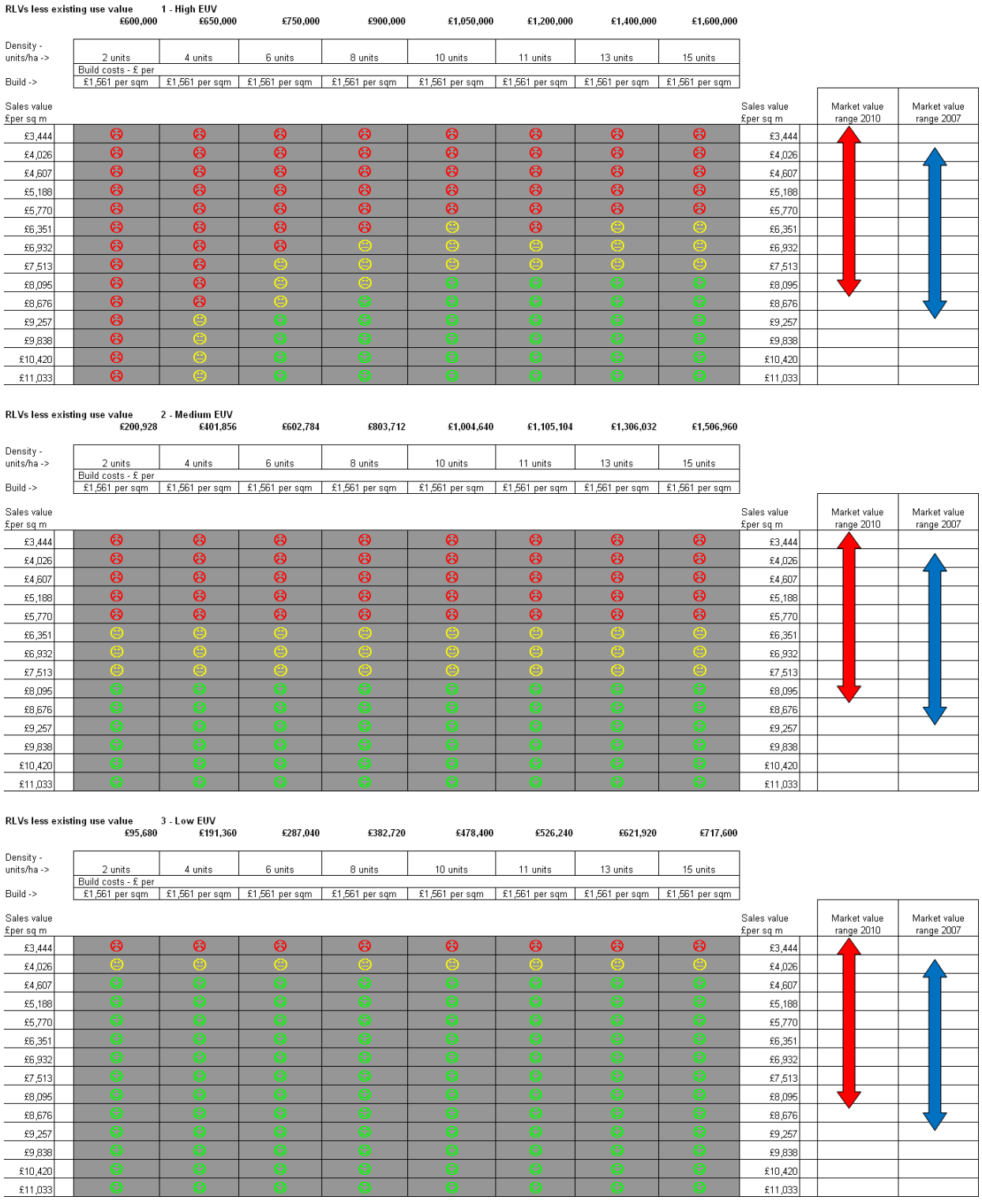
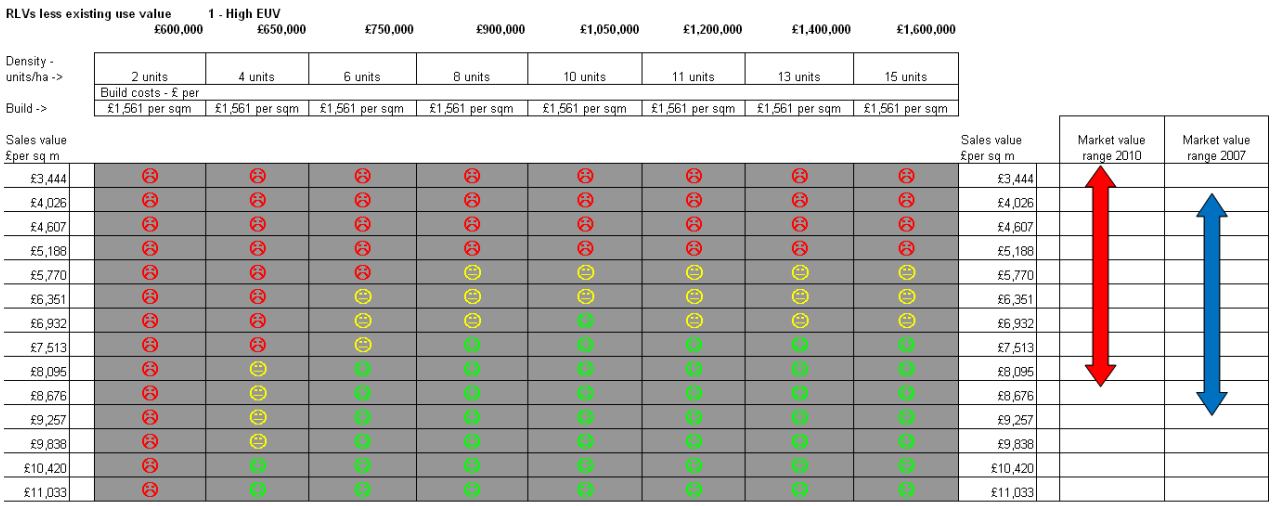
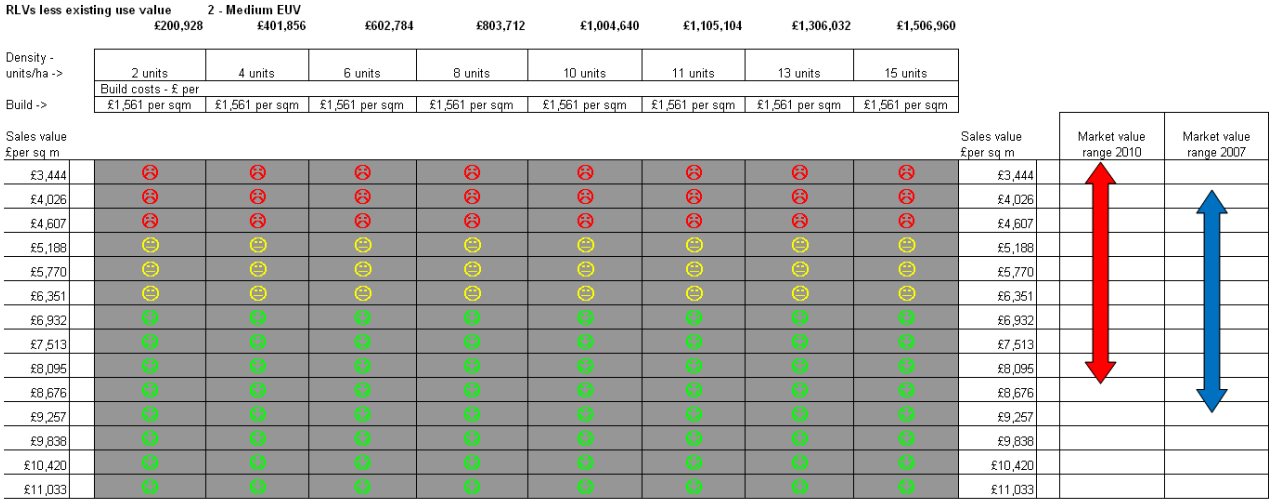
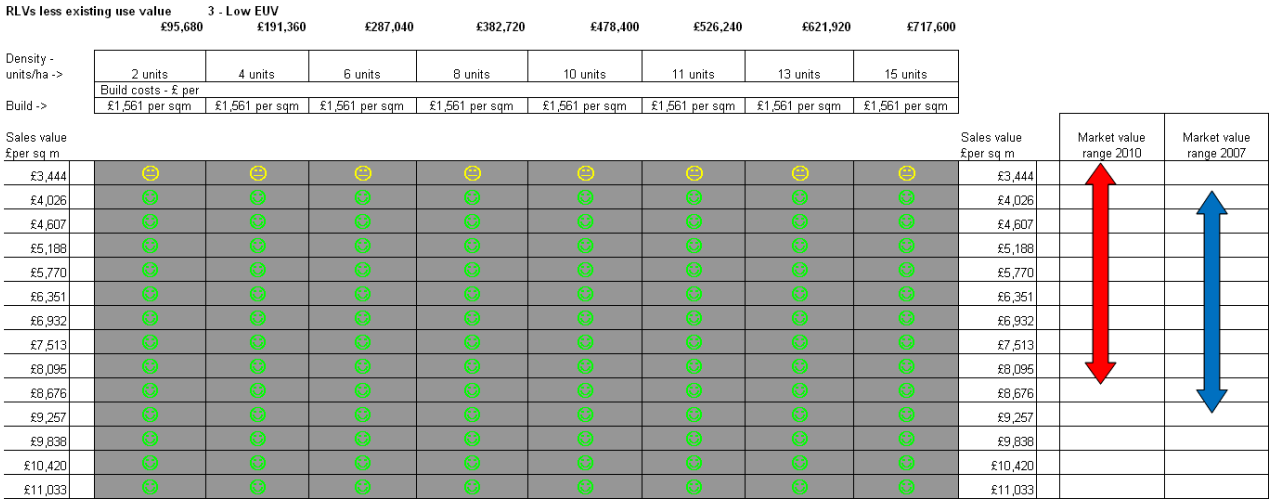


Table 5.12.4: Small sites viability – 50% affordable housing (100% shared ownership), with grant, S106 contributions of education only, 20% developer's profit







Commuted sums for schemes below the 10 unit threshold

5.18 With regards to off-site contributions, a requirement for a payment in lieu of affordable housing on small sites does not make a site viable, that would otherwise have been unviable with a requirement for on-site affordable. Any contribution in-lieu of affordable housing would need to be set sensitively and applied flexibly to take account of individual site circumstances.

5.19 A contribution towards affordable housing provision could be calculated by deducting the sum that an RSL could pay for an affordable housing unit from the equivalent market value for that unit. For the purposes of illustrating how this might work in practice, we have assumed that the contribution is based on a two bed unit.

5.20 Table 5.20.1 shows the residual values generated by small residential developments with zero affordable housing, less the EUV of the site (which in this case is assumed to be a public house). The numbers in white cells are effectively 'additional' profits to the developer (over and above the 'normal' level of profit built into our appraisal), part of which could in principle be secured for a fund to enable the provision of affordable housing on other sites.

Table 5.20.1: Residual land values less EUV (public house)

RLVs less existing use value	2 - Medium EUV		Public houses		For area calculation, resi assumed to be developed at 75 units per hectare			
200,928.00	401,856.00	602,784.00	803,712.00	1,004,640.00	1,105,104.00	1,306,032.00	1,506,960.00	
Density - units/ha ->	2 units	4 units	6 units	8 units	10 units	11 units	13 units	15 units
Build ->	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm	£1,561 per sqm
Sales value £per sq m								Sales value £per sq m
£3,444	- 153,992	- 307,985	- 461,978	- 615,971	- 769,963	- 846,960	- 1,000,952	- 1,154,945	£3,444
£4,026	- 108,409	- 216,820	- 325,229	- 433,639	- 542,049	- 596,254	- 704,663	- 813,074	£4,026
£4,607	- 62,827	- 125,654	- 188,481	- 251,308	- 314,134	- 345,548	- 408,375	- 471,202	£4,607
£5,188	- 17,244	- 34,488	- 51,733	- 68,977	- 86,221	- 94,843	- 112,086	- 129,330	£5,188
£5,770	28,117	56,236	84,353	112,472	140,589	154,648	182,766	210,884	£5,770
£6,351	73,340	146,681	220,021	293,361	366,701	403,372	476,711	550,052	£6,351
£6,932	118,563	237,125	355,689	474,251	592,814	652,095	770,657	889,220	£6,932
£7,513	163,786	327,570	491,356	655,140	818,926	900,818	1,064,603	1,228,389	£7,513
£8,095	209,008	418,015	627,023	836,031	1,045,037	1,149,542	1,358,549	1,567,557	£8,095
£8,676	254,230	508,460	762,690	1,016,920	1,271,150	1,398,265	1,652,495	1,906,725	£8,676
£9,257	299,453	598,905	898,357	1,197,809	1,497,262	1,646,988	1,946,440	2,245,893	£9,257
£9,838	344,675	689,350	1,034,025	1,378,700	1,723,374	1,895,711	2,240,386	2,585,061	£9,838
£10,420	389,897	779,795	1,169,692	1,559,589	1,949,487	2,144,435	2,534,332	2,924,229	£10,420
£11,033	437,632	875,264	1,312,896	1,750,528	2,188,160	2,406,976	2,844,608	3,282,241	£11,033

5.21 Table 5.21.1 shows an example of an eight unit scheme and its ability to make a financial contribution to delivery elsewhere.

Table 5.21.1: Financial contributions on eight unit scheme (EUV: public house)

Sales value £s per sq m	Market value (based on 70 sqm two bed unit) £s	Affordable housing RSL price payable (70 sqm 2 bed unit)	Financial contribution (difference in value between market unit and RSL price) x 4 (50% of 8)	Residual value less EUV £s	Surplus/loss after deduction of financial contribution
£3,444	£241,114	177,068	£256,183	-615,971	-872,154
£4,026	£281,802	177,068	£418,935	-433,639	-852,574
£4,607	£322,489	177,068	£581,687	-251,308	-832,995
£5,188	£363,177	177,068	£744,438	-68,977	-813,415
£5,770	£403,865	177,068	£907,190	112,472	-794,718
£6,351	£444,553	177,068	£1,069,942	293,361	-776,581
£6,932	£485,241	177,068	£1,232,693	474,251	-758,442
£7,513	£525,929	177,068	£1,395,445	655,140	-740,305
£8,095	£566,617	177,068	£1,558,197	836,031	-722,166

5.22 Table 5.21.1 above indicates that the financial contribution would render all sites financially unviable even at the higher value range.

5.23 In table 5.23.1, we undertake a similar analysis, but assuming an EUV of an in-fill site. We have also changed the basis of calculation to an equivalent of 25% affordable housing. On this basis, schemes with private sales values exceeding £5,770 per sqm could yield a payment in lieu of varying amounts.

Table 5.23.1: Financial contributions on eight unit scheme (EUV: infill site)

Sales value £s per sq m	Market value (based on 70 sqm two bed unit) £s	Affordable housing RSL price payable (70 sqm 2 bed unit)	Financial contribution (difference in value between market unit and RSL price) x 2 (25% of 8)	Residual value less EUV £s	Surplus/loss after deduction of financial contribution
£3,444	£241,114	177,068	£128,092	-194,979	-323,071
£4,026	£281,802	177,068	£209,467	-12,647	-222,114
£4,607	£322,489	177,068	£290,843	169,684	-121,159
£5,188	£363,177	177,068	£372,219	352,015	-20,204
£5,770	£403,865	177,068	£453,595	533,464	79,869
£6,351	£444,553	177,068	£534,971	714,353	179,382
£6,932	£485,241	177,068	£616,347	895,243	278,896
£7,513	£525,929	177,068	£697,722	1,076,132	378,410
£8,095	£566,617	177,068	£779,098	1,257,023	477,925

5.24 In view of the results of this exercise, it is therefore unlikely that the Council would be able to establish a single formula for financial contributions that could be applied to all sites. The levels of actual contributions will need to be determined on an individual site basis, to ensure that such payments do not render developments unviable.

Case study appraisals

5.25 The Council provided information on 14 actual development sites which we have appraised as a 'sense-check' on the results of our hypothetical site appraisals. These sites range in size from 2 units up to 562 units; with a range of existing uses; and some including commercial floorspace.

5.26 These appraisals are inevitably high level, as detailed information on existing uses, scheme content and site conditions was unavailable. They should only be regarded as a guide to potential viability of these sites.

5.27 The sites were tested on a 'with' and 'without' grant basis. When grant was available, 11 of the sites were found to be viable at 50% affordable housing. If grant is unavailable, 9 sites remain viable, while 5 were unviable.

5.28 The results of the case study appraisals are provided in table 5.28.1 (with grant) and 5.28.2 (no grant).

Table 5.28.1: Case study appraisals – with grant

Site Number	Existing Use	Postcode	Number of Units	Commercial Elements	EUV	RLV (With Grant)	RLV-EUV	Viable @ 50% Affordable
1	Vacant petrol filling station/car wash	KT3	54	-	£350,000	£2,124,000	£1,721,500	Yes
2	Carpet and furniture showroom	KT3	16	-	£1,713,000	£1,244,000	-£725,950	No
3	Vacant film studio	KT3	44	-	£658,000	£3,928,000	£3,171,300	Yes
4	Cleared Site	KT6	23	313 sq m retail	£217,500	£1,812,000	£1,561,875	Yes
5	Garden	KT5	14	-	£101,000	£975,000	£858,850	Yes
6	Vacant offices	KT6	34	-	£2,344,000	£2,487,000	-£208,600	No
7	Vacant service station	KT9	10	-	£85,000	£577,000	£479,250	Yes
8	Vacant public house	KT9	21	-	£650,000	£1,972,000	£1,224,500	Yes
9	Vacant public house	KT6	50	1145 sq m retail	£1,022,500	£5,167,000	£3,991,125	Yes
10	Vacant government office	KT6	562	13,662 sq m retail, 2,581 sq m D1/D2/A3	£53,800,000	£66,242,000	£4,372,000	Yes
11	Vacant electricity power station	KT1	356	180 bed hotel	£1,850,000	£18,095,000	£15,967,500	Yes
12	Vacant site	KT1	24	-	£180,000	£1,442,000	£1,235,000	Yes
13	Surface car park	KT6	160	-	£8,100,000	£12,730,000	£3,415,000	Yes
14	Single dwelling with garden	KT2	2	-	£2,000,000	£264,000	-£2,036,000	No

Table 5.28.2: Case study appraisals – no grant

Site Number	Existing Use	Postcode	Number of Units	Commercial Elements	EUV	RLV (No Grant)	RLV-EUV	Viable @ 50% Affordable
1	Vacant petrol filling station/car wash	KT3	54	-	£350,000	£755,000	£352,500	Yes
2	Carpet and furniture showroom	KT3	16	-	£1,713,000	£752,000	-£1,217,950	No
3	Vacant film studio	KT3	44	-	£658,000	£2,634,000	£1,877,300	Yes
4	Cleared Site	KT6	23	313 sq m retail	£217,500	£1,223,000	£972,875	Yes
5	Garden	KT5	14	-	£101,000	£587,000	£470,850	Yes
6	Vacant offices	KT6	34	-	£2,344,000	£1,641,000	-£1,054,600	No
7	Vacant service station	KT9	10	-	£85,000	£189,000	£91,250	Yes
8	Vacant public house	KT9	21	-	£650,000	£1,036,000	£288,500	Yes
9	Vacant public house	KT6	50	1145 sq m retail	£1,022,500	£3,845,000	£2,669,125	Yes
10	Vacant government office	KT6	562	13,662 sq m retail, 2,581 sq m D1/D2/A3	£53,800,000	£49,167,000	-£12,703,000	No
11	Vacant electricity power station	KT1	356	180 bed hotel	£1,850,000	£6,686,000	£4,558,500	Yes
12	Vacant site	KT1	24	-	£180,000	£622,000	£415,000	Yes
13	Surface car park	KT6	160	-	£8,100,000	£7,958,000	-£1,357,000	No
14	Single dwelling with garden	KT2	2	-	£2,000,000	£181,000	-£2,119,000	No

6 Assessment of the results

6.1 This section needs to be read in conjunction with the tabular / graphical presentation in Appendix 1 (with a few examples shown in the preceding sections). In these tables, the residual land values are calculated for scenarios with different sales values and densities of development, and then compared to existing use values. The tables show the outputs of our appraisals using the variables set out in Section 4.

Assessment

6.2 The tables in Appendix 1 demonstrate that the delivery of up to 50% affordable housing (in combination with other planning obligations as noted above) is achievable in many cases on the types of sites coming forward for development. Sites with lower EUVs (in particular Council owned sites and public houses) appear to be most able to provide between 40% and 50% affordable housing, providing grant funding is available. Achieving these levels of affordable housing is more problematic if grant funding is unavailable; this is regardless of whether current or improved market values are assumed.

6.3 Table 6.3.1 summarises the full set of results that can be found at Appendix 1. The summary table shows the results across the full range of sales values (£3,444 to £9,752 per square metre, reflecting the lowest value in the current market and the highest value in the 2007 market), on a 210 unit per hectare scheme. The appraisals assume Section 106 contributions of £4,105 per private and intermediate unit and £8,717 per social rented unit; and a profit margin of 20% (reflecting current housing market conditions).

6.4 The results are split between the four existing use values and show the maximum viable proportion of affordable housing with and without grant, at each sales value.

Table 6.3.1: Maximum viable proportions of affordable housing

Density of 210 units per hectare; 70% social rent and 30% intermediate; 20% profit; CSH Level 4 on all tenures; Section 106 contributions of £4,105 per private and intermediate unit and £8,717 per social rented unit

Values per sq m	Secondary offices		Existing residential		Public houses/ petrol stations		Local authority owned sites, including housing estates	
	Grant	No Grant	Grant	No Grant	Grant	No Grant	Grant	No Grant
£3,444	<30%	<30%	<30%	<30%	<30%	<30%	50%	<30%
£4,026	<30%	<30%	<30%	<30%	<30%	<30%	50%	<30%
£4,607	<30%	<30%	<30%	<30%	50% m	30% m	50%	40%
£5,188	30% m	<30%	<30%	<30%	50%	30%	50%	50%
£5,770	50% m	<30%	30% m	<30%	50%	40% m	50%	50%
£6,351	50%	30% m	40% m	<30%	50%	50% m	50%	50%
£6,932	50%	40% m	50% m	30% m	50%	50%	50%	50%
£7,513	50%	50% m	50% m	40% m	50%	50%	50%	50%
£8,095	50%	50% m	50%	40% m	50%	50%	50%	50%
£8,676	50%	50%	50%	50% m	50%	50%	50%	50%
£9,257	50%	50%	50%	50% m	50%	50%	50%	50%
£9,838	50%	50%	50%	50%	50%	50%	50%	50%

m = marginal (i.e. residual value is between 14.9% above and 15% below EUV)

6.5 The summary tables show a variance in the results between the different types of existing use, as is to be expected. The existing use values used in our analysis range from £0 to £18.8 million per hectare, which the schemes must exceed by an appropriate margin to be considered viable. In the current market, table 6.3.1 indicates that the proposed targets of up to 50% could only be achieved on secondary office sites in areas where private sales values are £6,351 or more. However, on public house sites, targets of up to 50% could be achieved where private sales values are at £5,188 psm or more. On sites in local authority ownership, 50% could be delivered on sites with considerably lower sales values (£3,444 psm or more) As values increase back towards their 2007 levels, more areas at the lower end of the range will move into the zones where the targets are financially viable.

6.6 There are three further important caveats to the results:

6.7 As noted previously, residual land values need to exceed Existing Use Value (plus appropriate landowner's margin) to be considered viable. There may be site specific circumstances where these EUV benchmarks may be higher or lower. While a higher existing use value requires a commensurate higher residential sales value, in many circumstances, this will still be viable. However, higher density schemes are more vulnerable to existing use value requirements due to their higher build costs and greater contribution towards planning obligation in comparison to low density schemes.

6.8 That schemes coming forward do not incur considerable (ie above average) exceptional development costs. Extensive decontamination, for example, would require significant expenditure, which could have a considerable impact on the residual land value. In these particular circumstances, the council's requirements for affordable housing may not be deliverable at the target levels of up to 50%.

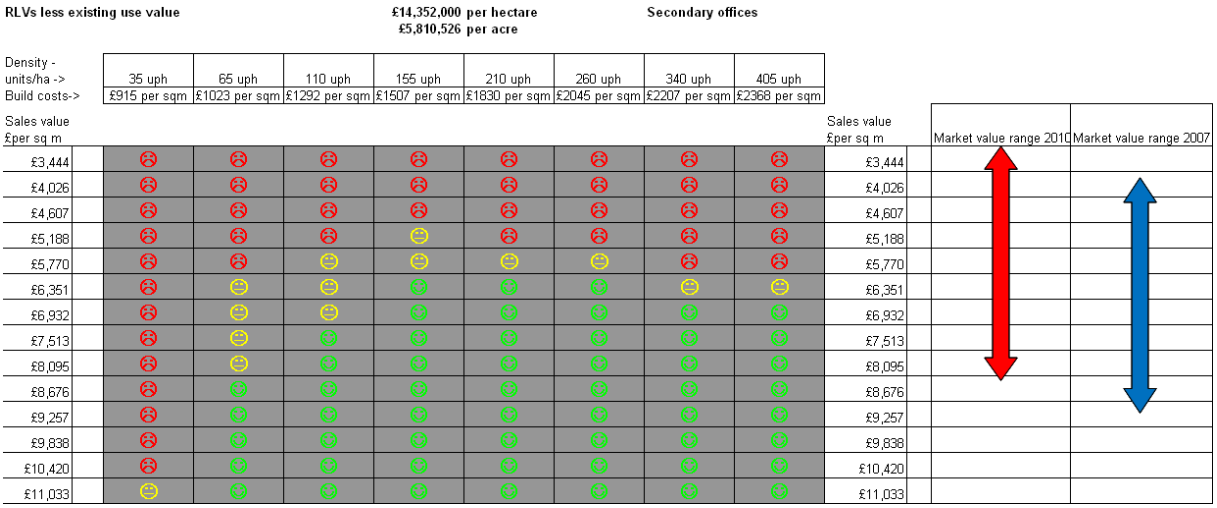
6.9 The local authority may need to take a corporate decision as to whether their own development sites should prioritise affordable housing delivery or capital receipts. Our assumption in arriving at an estimate of existing use value for these sites is that the local authority will seek to prioritise affordable housing delivery, rather than maximising capital receipts. This would be particularly important where the site is an existing housing estate, where the existing tenants would need to be re-housed.

Impact of varying levels of developer's profit

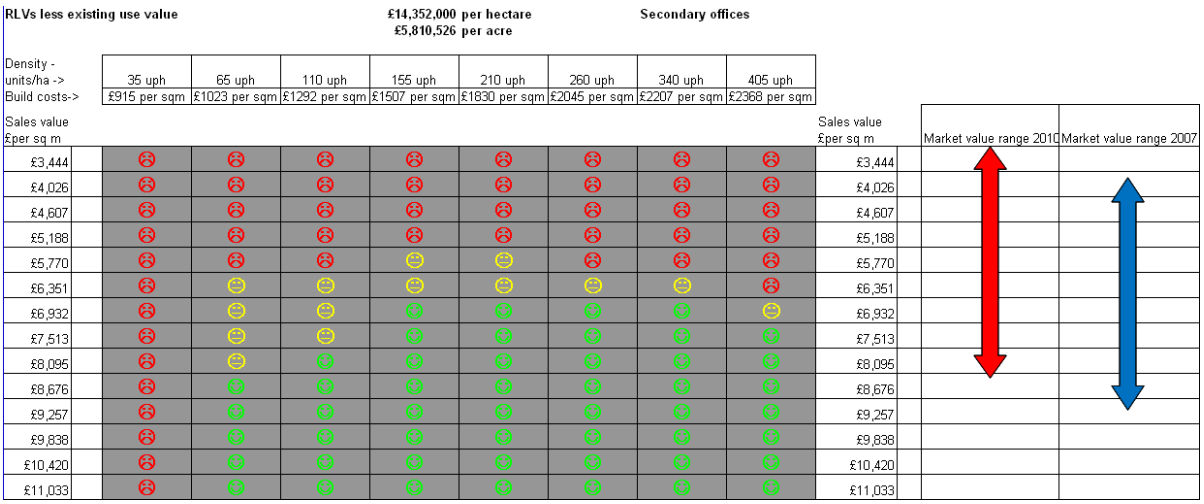
6.10 The tables at Appendix 1 clearly show the impact of movements in developer's profit on the viable quantum of affordable housing. Assuming there are no changes to other variables, the impact of changes in the profit level has a modest effect upon the outcomes on affordable housing delivery. Two extracts from the results below provide a direct comparison of viability with a 17% and 20% profit (all other variables in the table are identical). Extract 1 below assumes 17% profit, while extract 2 assumes 20% profit. While the range of viable schemes increases when profit is lower, the impact is relatively modest.

6.11 While the actual residual values decline when a 20% profit is required (eg at 210 units per ha and a sales value of £5,770 per sqm, the residual value with 17% profit is £13.88m; while at 20% profit, the residual falls to £12.91m), the changes are not sufficiently significant to change the pattern of viable schemes in the tables.

Extract 1: Schemes with 17% developer's profit



Extract 2: Schemes with 20% developer's profit



Impact of grant availability

6.12 All our appraisals are tested on the basis of two assumptions regarding availability of grant; firstly, grant is available and secondly, the affordable housing is to be delivered with nil grant. The results demonstrate that higher levels of affordable housing could be achieved if grant were made available. The impact of grant funding on the viable proportions of affordable housing can be seen clearly in Table 6.3.1.

Affordable housing on small sites

6.13 The analysis in paragraphs 5.10 to 5.17 indicate that it should be possible (in principle) for schemes that are below the 10 unit threshold for on-site affordable housing to make an on-site contribution.

6.14 Some sites may be able to afford a payment in lieu, but the Council would need to apply any requirement sensitively. Some form of viability testing is likely to be required to determine whether individual sites coming forward for planning are able to make a payment in lieu, taking full account of individual site circumstances.

Impact of alternative viability benchmark

6.15 We have also considered the impact of using a viability benchmark that is higher than our main assumption of EUV plus a landowner's margin of 15%. Despite the significant volume of guidance from the HCA and appeal decisions, some developers and agents argue that viability benchmarks for policy testing should relate more closely to transacted land values than the value of sites in their current use. Their approach is, of course, counterintuitive as market values will reflect past planning requirements, rather than future requirements.

6.16 To rely wholly on transacted land values is likely to result in an unreliable assessment of the ability of sites in the Borough to deliver affordable housing.

6.17 Other measures that have been suggested, such as splitting the uplift in land value equally between the landowner and the local authority[1] have no basis in planning policy or practice; have not been the basis of scheme economics at any planning appeal; and do not feature in any guidance from the Homes and Communities Agency.

6.18 There are also serious concerns about when such an approach should be adopted; a developer could buy a site and then seek a return on their land cost. This would have the effect of resulting in a windfall (and unearned) profit for the developer and also reducing the capacity of the site to provide affordable housing.

6.19 We have, nevertheless, tested the viability of schemes using a benchmark that is 38% higher than the estimated EUVs to explore the potential impact on ability of sites to provide affordable housing. This uplift is the product of a 20% increase to base EUV plus a further 15% uplift on the inflated EUV. The two extracts from the dataset below show the impact on scheme viability of a 20% increase in the four EUVs. All other variables in the two extracts are identical.

6.20 The two extracts indicate that, whilst there are fewer circumstances at lower sales values where 50% affordable housing could be achieved, many other sites remain able to deliver at this level. The impact of an increased EUV is therefore not sufficiently significant to give rise to any change in the general conclusions drawn from the data.

[1] See Barking & Dagenham Core Strategy Review – commentary by Nigel Jones

Extract 1: Viability with base EUV

RLVs less existing use value — **£7,534,800 per hectare** / **£3,050,526 per acre** — **Pubs/petrol stations**

Density - units/ha ->	35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph	
Build costs ->	£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm	
Sales value £per sq m									Sales value £per sq m
£3,444									£3,444
£4,026									£4,026
£4,607									£4,607
£5,188									£5,188
£5,770									£5,770
£6,351									£6,351
£6,932									£6,932
£7,513									£7,513
£8,095									£8,095
£8,676									£8,676
£9,257									£9,257
£9,838									£9,838
£10,420									£10,420
£11,033									£11,033

Extract 2: Viability with EUV increased by 20%

RLVs less existing use value — **£9,041,760 per hectare** / **£3,660,632 per acre** — **Pubs/petrol stations**

Density - units/ha ->	35 uph	65 uph	110 uph	155 uph	210 uph	260 uph	340 uph	405 uph	
Build costs ->	£915 per sqm	£1023 per sqm	£1292 per sqm	£1507 per sqm	£1830 per sqm	£2045 per sqm	£2207 per sqm	£2368 per sqm	
Sales value £per sq m									Sales value £per sq m
£3,444									£3,444
£4,026									£4,026
£4,607									£4,607
£5,188									£5,188
£5,770									£5,770
£6,351									£6,351
£6,932									£6,932
£7,513									£7,513
£8,095									£8,095
£8,676									£8,676
£9,257									£9,257
£9,838									£9,838
£10,420									£10,420
£11,033									£11,033

Impact of increase in build costs

6.21 We have tested the impact of 10% increase in build costs. Long term growth in sales values has historically more than cancelled out increases in build costs, although this trend does not necessarily apply to new requirements (eg sustainability).

6.22 Extract 1 below shows a base position with current assumptions on build costs, while extract 2 shows the position resulting from a 10% increase over base build costs. The increased build cost does not have a significant impact on viability and could be accommodated in the context of increasing values over the medium term.

Extract 1: Base build costs

RLVs less existing use value — **£14,352,000 per hectare / £5,810,526 per acre** — **Secondary offices**

Density - units/ha -> / Build costs->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m
£3,444	😞	😞	😞	😞	😞	😞	😞	😞	£3,444
£4,026	😞	😞	😞	😞	😞	😞	😞	😞	£4,026
£4,607	😞	😞	😞	😞	😞	😞	😞	😞	£4,607
£5,188	😞	😞	😞	😞	😞	😞	😞	😞	£5,188
£5,770	😞	😞	😞	😐	😐	😞	😞	😞	£5,770
£6,351	😞	😐	😐	😐	😐	😐	😐	😞	£6,351
£6,932	😞	😐	😐	🙂	🙂	🙂	🙂	😐	£6,932
£7,513	😞	😐	😐	🙂	🙂	🙂	🙂	🙂	£7,513
£8,095	😞	😐	🙂	🙂	🙂	🙂	🙂	🙂	£8,095
£8,676	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£8,676
£9,257	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£9,257
£9,838	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£9,838
£10,420	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£10,420
£11,033	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£11,033

Extract 2: Base build costs plus 10%

RLVs less existing use value — **£14,352,000 per hectare / £5,810,526 per acre** — **Secondary offices**

Density - units/ha -> / Build costs->	35 uph £915 per sqm	65 uph £1023 per sqm	110 uph £1292 per sqm	155 uph £1507 per sqm	210 uph £1830 per sqm	260 uph £2045 per sqm	340 uph £2207 per sqm	405 uph £2368 per sqm	Sales value £per sq m
£3,444	😞	😞	😞	😞	😞	😞	😞	😞	£3,444
£4,026	😞	😞	😞	😞	😞	😞	😞	😞	£4,026
£4,607	😞	😞	😞	😞	😞	😞	😞	😞	£4,607
£5,188	😞	😞	😞	😞	😞	😞	😞	😞	£5,188
£5,770	😞	😞	😞	😐	😞	😞	😞	😞	£5,770
£6,351	😞	😞	😐	😐	😐	😞	😞	😞	£6,351
£6,932	😞	😐	😐	🙂	😐	😐	😐	😞	£6,932
£7,513	😞	😐	😐	🙂	🙂	🙂	🙂	😐	£7,513
£8,095	😞	😐	🙂	🙂	🙂	🙂	🙂	🙂	£8,095
£8,676	😞	😐	🙂	🙂	🙂	🙂	🙂	🙂	£8,676
£9,257	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£9,257
£9,838	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£9,838
£10,420	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£10,420
£11,033	😞	🙂	🙂	🙂	🙂	🙂	🙂	🙂	£11,033

7 Conclusions

7.1 Kingston has a high requirement for additional affordable housing. The Borough's affordable housing policy requirements are clearly based on need proven through the Council's Strategic Housing Market Assessment.

7.2 This report examines, in terms of financial viability, the potential for development sites in the Borough to deliver affordable housing at varying percentages and mixes, while also securing other planning obligations at levels suggested by the Council's Planning Obligations SPD. By comparing the residual land values generated by our appraisals to a range of existing use values (plus landowner margin), we can determine whether residential development is likely to come forward, with a target of up to 50% affordable housing and other planning requirements. An important caveat to the results is that they have not taken account of any site specific exceptional costs and, where these arise, they may override our conclusions. This underlines the importance of rigorous testing of individual site viability appraisals and the application of a target-based policy, rather than a policy that operates as a quota or a minimum requirement.

Key question 1: Do the appraisal results provide support for a 50% affordable housing target, in line with the current London Plan?

7.3 It is important to consider the affordable housing target in its proper context – it is a strategic target for delivery from all sites in the Borough, some of which may deliver more than 50% affordable housing (eg estate regeneration schemes). The number of units coming through RSL led schemes and estate regeneration schemes will also be important as not every Section 106 site will be able to deliver the affordable housing target at all times over the plan period. It would appear sensible to us that the Council adopt an affordable housing target of 50% on S106 sites, which should be applied sensitively, taking full account of individual site circumstances, including financial viability. This is essential, as the results of our appraisals indicate that 50% affordable housing is unlikely to be viable in *all* market conditions over the plan period; in *all areas* across the Borough; and consistently between sites in differing existing uses. In cases where the target is currently not viable, the policy would need to be applied flexibly until values recover or other factors assist in improving viability (e.g. a reduction in interest rates or falling build costs).

7.4 Adopting a lower target than 50% could lead to a reduction in potential affordable housing delivery. Table 6.3.1 indicates that adopting a target lower than 50% would only very marginally increase the range of viable scenarios. Conversely, adopting a 40% affordable housing across the whole Borough would result in a significant number of sites that could have provided 50% affordable housing providing only 40%.

7.5 Furthermore, the results of our analysis (summarised in Table 6.3.1) indicate that in a range of circumstances across the Borough, 50% affordable housing could be achieved.

7.6 The results thus suggest that the delivery of 50% affordable housing on every single site coming forward for development in the Borough is currently (and is likely to continue to be) an ambitious target that not all sites coming forward will be able to achieve. This is no different from other local authority areas, where some sites are able to meet the respective Council's strategic affordable housing target. Other sites are not, due to site specific circumstances and the cyclical nature of the housing market. However, the

variable pattern of viability can be addressed providing the Council's policy is drafted with sufficient flexibility to address situations where the targets are unviable. London Plan policies already provide this flexibility.

7.7 It is evident that on sites with high EUVs, in some circumstances sales values would need to increase beyond the 2007 peak for 50% affordable housing to be achievable. The target may also be easier to achieve on a greater number of sites as a result of future increases in sales values, providing build cost inflation does not accelerate beyond long term trend rates.

Key question 2: Is the impact of movements in appraisal variables sufficiently significant to change the Study's conclusions on the maximum viable proportion of affordable housing? In particular, what is the impact of increasing profit levels, increased planning obligations, increasing build costs and adoption of alternative viability benchmarks?

7.8 Small changes in variables can have a significant impact on the residual land value generated by a scheme. In the case of this study, changes in variables therefore have the potential to change the conclusions that we reach on the viability of particular affordable housing targets.

7.9 We have sensitivity tested our results by adopting different levels of profit; planning obligations; build costs; and alternative viability benchmarks. The changes in these variables that we have tested individually do not have a significant impact upon scheme viability and thus our conclusions on viable affordable housing targets.

7.10 We cannot predict with full certainty how variables will move over the entire plan period. It is therefore important that any affordable housing target is applied with sensitivity and subject to viability. This approach is fully endorsed by London Plan policies 3A.9 and 3A.10.

Key question 3: Do the results of the study provide an indication of any potential impact of the requirement for affordable housing upon the supply of land for residential development?

7.11 Policy makers need to carefully consider the balance between their aims of seeking to maximise affordable housing supply and ensuring that the supply of residential land (upon which affordable housing supply depends) does not fall.

7.12 The study indicates that, in many cases across the Borough, residential development incorporating an element of affordable housing generates a higher residual value than other uses that landowners may consider. Consequently, it is therefore unlikely that the Council's requirements will reduce residential land supply. However, there will always be individual cases where landowners may seek a higher return for their land and thus decide to wait for an improvement in values or a change in policy.

7.13 Furthermore, the Council's flexible approach to the application of the policy target to individual developments should ensure that landowners are encouraged to bring sites forward.

Key question 4: For schemes under the 10 unit threshold for on site provision, is it reasonable (in viability terms) to seek a contribution in the form of either on-site provision or as cash payment in lieu?

7.14 It is important firstly to emphasise that replacing on-site affordable housing with a financial contribution does not make an unviable site viable. The ability of developments under the 10 threshold to make financial contributions towards affordable housing will be dependent on scheme viability.

7.15 Section 5 of this report indicates that the economics of schemes below 10 units sites are not significantly different from sites above the threshold. Therefore, it follows that sites under the current 10 unit threshold should be capable of either providing on-site affordable or making financial contributions (equivalent to the difference between the value of a market unit and the value that an RSL would pay to acquire an equivalent affordable housing unit).

7.16 However, our analysis at paragraphs 5.18 to 5.24 indicates that there is unlikely to be a single formula for cash payments in-lieu that can be applied to all sites, without rendering many developments as unviable. Financial contributions may need to be calculated on a site by site basis, taking into account the level of sales values and the site's existing use (plus appropriate landowner's margin).

Key question 5: Is the Council's affordable housing target compliant with the requirements of Paragraph 29 of PPS3 (namely that targets should reflect an assessment of the likely economic viability of land for housing within the area, taking account of risks to delivery and drawing on informed assessments of the likely levels of finance available for affordable housing, including public subsidy and the level of developer contribution that can reasonably be secured)?

7.17 This study assists the Council in complying with the requirements of paragraph 29 of PPS 3, as it assesses the Council's proposed affordable housing targets in the context of the likely economic viability of land for housing in a cyclical housing market, in which values, costs, risks to delivery, developers' returns and existing use values may vary. The study also considers the likely levels of public subsidy available for affordable housing and the impact of future regulatory changes in terms of sustainability requirements.

7.18 The study indicates that a target of up to 50% affordable housing (in combination with other planning obligations as noted above) is achievable in many circumstances on the types of sites coming forward for development over the plan period. Sites with lower EUVs appear to be most able to meet a 50% policy, although grant funding will continue to be an important factor in achieving this level of affordable housing.

Appendix 1 Appraisal results

See separate electronic file

Appendix 2 Small sites appraisal results

See separate electronic file