Affordable Housing Development [Viability] Appraisal Refresh Study

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Rotherham Metropolitan Borough Council

Postscript

Professor Stephen Walker began this Affordable Housing Refresh Study in November 2018 and by July 2019 it was largely completed, pending receipt of some additional information on the performance and delivery of affordable housing in Rotherham over the period since the last study in 2011. This important information became available in February 2020 and subsequently added to the report.

Changes to reporting and regulations around the Community Infrastructure Levy [CIL] occurred in September 2019, while updated national guidance also redefined the approach to be taken with regard to contesting viability particularly in respect of the benchmark land value [based on the existing use value plus a premium], which shall now reflect the "*minimum requirement to incentivise a reasonable landowner*". This latter change does not adversely affect the results of the site-based viability appraisals rather such changes will have improved the viability position of the sites.

This study provides the foundation for a number of Supplementary Planning Documents that the Council has been preparing covering Affordable Housing, Contesting Viability and Developer Contributions. The Council in the coming months will be making these available for public consultation and scrutiny prior to their formal adoption.

Professor Stephen Walker
19th May 2020

Affordable Housing Development [Viability] Appraisal Refresh Study, July 2019

Rotherham Metropolitan Borough Council

This report presents the findings of a refresh study on development viability appraisal conducted to support RMBC's current affordable housing and other planning policy requirements.

Professor Stephen Walker

EXECUTIVE SUMMARY

Purpose

- This is a refresh study appraising development viability in Rotherham Metropolitan Borough Council planning authority in June 2019 focusing on the impact of delivering the Council's extant affordable housing policy requirements and other mitigation costs arising from housing development secured through planning obligations.

- It presents the findings of appraising **twenty-seven** sites, which were selected to represent the pool of sites located across Rotherham's six housing market areas that the planning authority has identified and allocated in its recently adopted Local Plan [see Tables 2.3 to 2.8]. Sixteen of these sites are green field sites and eleven are brown field sites [see Table 2.1].

- All the appraisals are site-based which implicitly take into account site-specific factors that influence their development potential, the local market context, the sites' conditions, and the planning authority's extant planning and housing policy requirement, all of which is in accordance with current guidance.

- The study has made a critical examination of the principal variable inputs and assumptions applied in carrying out the appraisals in order to evaluate and then confirm their suitability [see Tables 3.1 to 3.4].

- As with other housing markets, the two most influential variable inputs affecting the land value estimates, namely house prices and build costs, have undergone a cycle of changes over the last 10 years or so since the last viability studies. The balance of these changes, in today's terms, has determined the capacity of study sites to deliver all the necessary policy requirements without rendering them unviable [see Tables 3.5 and 3.8].

- The appraisal methodology applied is reasonably simple and straightforward – so long as one respects certain conventions. In that, the appraisal methodology is not a science, and is based on a number of assumptions set at a point in time [i.e. now]. Conditions can change and no two sites will be the same. So a pragmatic approach to viability testing has been adopted based on sensible assumption inputs and a good appreciation of what is currently happening in the local markets.

- Viability is tested by comparing the generated land value estimate against a site's existing use value [inclusive of a premium]. The latter is necessary to incentivise the present landowner to sell. However, neither the current land owner nor a prospective owner [e.g. a developer] should set an agreed sum [called a "price"] which ignores the market context, the site's conditions and crucially the known and declared planning and housing policy requirements that are set out in a planning authority's up-to-date local plan.

What has been found?

Land Value Estimates

- The generated land value estimate [LVE] outputs for each site are presented in Tables 4.2 and 4.3. The appraisals cover zero through 100% affordable housing provision. Figure 7 shows the LVE position for full policy compliant schemes which includes 25% affordable housing provision, other planning requirements, chargeable CIL payments and any abnormal development costs.

- Sixteen of the twenty-seven sites record LVEs of at least £500,000 per hectare while delivering policy compliant schemes. This includes three brown fields that have recorded similar LVEs of at least £500,000 per hectare.

- Three of the sixteen green field sites record low or negative LVEs: these can be explained by the fact these all possess site attributes that are typically "brown field". To get them to a point as being serviced sites they would all incur substantial abnormal development costs and being located in relatively low value areas of Rotherham explains their relatively low worth.

- The relative weak position of the other brown field sites is not too surprising. Many have been derelict or vacant and have remained undeveloped for a good number of years. The additional costs needed to get them to a point of being serviced sites, results in very low or negative LVEs if a policy compliant scheme is being proposed. The externalities arising from their location reinforces their inability to pass normal viability tests.

Existing Use Values plus Premium versus Land Value Estimates

- The setting of a "premium" over and above the EUV is not unusual but it is not without some controversy and disagreement. Base values are only tenable so long as there is in place a measurable stream of rental income from an operational business [see Tables 4.4 and 4.5].

- Of the green field sites the vast majority of the sites pass the viability tests in delivering policy compliant schemes [see Table 4.6]. Indeed, many could deliver a higher level of affordable housing if required.

- For good reasons the EUVs for the brown field sites are heavily discounted since there was an absence of an observable rental income stream [see Table 4.7]. Given this situation:
    - Four of the brown field sites [H30; H38; H75 and H83] are all viable while being policy compliant despite their respective EUVs;
    - Two other sites [H25 and H50] are capable of delivering 10% and 20% affordable housing respectively given their EUVs; and
    - Five other sites [H20; H21; H22; H49; and LD0148] are unviable given their EUVs and the appraisal iterations confirm that they would never be able to do so, given their site and current market conditions.

What do the findings mean?

- The **green field sites are viable** with the **potential to deliver a higher proportion of affordable than policy demands**. This is crucial given that the recently adopted Sites and Policies Local Plan has allocated a substantial numbers of green field sites as housing sites.

- **This cannot be declared for the vast majority of brown field sites**. Indeed, the appraisals have shown that **many of the brown field sites may incur difficulties in getting built out in the future** as many of the sites have been derelict or vacant and remain undeveloped for at least the last decade.

- **Their continuing inclusion** in the adopted Sites and Policies Local Plan in meeting the planning authority's future housing land supply and delivery targets **will need to be kept under close review**. For such brown field sites, the **policy position for RMBC will need to be much more tailored to their specific circumstances**; **the planning authority will need to be receptive to not only market conditions but how other complementary actions** might help deliver development on these kinds of sites in the future.

Contents

Section 1: Study Introduction

Preamble
This report presents the findings from a study involving the appraisal of development viability for Rotherham Metropolitan Borough Council [RMBC] planning authority which focuses on the impact of delivering the Council's affordable housing policy requirements and other mitigation costs arising from housing development secured through planning obligations [also called S106 legal agreements].

RMBC commissioned Professor Stephen Walker to carry out site-based development viability appraisals on **twenty seven sites** that have been drawn from the planning authority's adopted *Sites and Policies Local Plan* [RMBC 2018]. These sites were selected to represent the pool of sites that the planning authority has allocated as housing sites. Importantly, these sites all have the potential to contribute directly to the delivery of the Local Plan's housing requirements as set out in the adopted *Core Strategy* [RMBC, 2014].

Site-based development viability appraisals involve taking into account site-specific factors which influence their development potential and explicitly take account of the local market context; site conditions; and the Planning Authority's extant planning and housing policy requirements [see MHCLG, 2019a & 2019b].

General Context
The last study of development viability appraisals was conducted in 2010 and 2011 covering 13 large sites [>0.5 hectares] and 12 small sites [<0.5 hectares]; after public scrutiny the report was published in May 2012. This evidence subsequently informed the planning authority's Core Strategy and the recently adopted *Sites and Policies Local Plan* [RMBC, 2018].

It is clear, however, that current market conditions are now materially different from those in 2010/11 and this refresh study has an aim of reviewing and updating evidence so that the results of development viability appraisals can be relied upon to continue to inform and support the planning authority's affordable housing policy and other requirements in the context of these different conditions.

In liaison with RMBC officers sites that have been subject to appraisal were selected from the pool of sites included in the *Sites and Policies Local Plan* [RMBC, 2018] but with a keen eye on the sites that had been appraised in the earlier studies. In particular, a number of so-called brownfield have been re-appraised. The final selection of sites necessarily included a broad representation of Greenfield sites as a good number of these have been released from their green belt designation as part of ensuring that the present local plan has a secure housing land supply[1] that is in accordance with current NPPF guidelines [MHCLG, 2019a].

This study involves a critical examination of the principal variable inputs and assumptions applied that had been used in the earlier studies. Vitally, the two most influential variable inputs affecting the land value estimates [i.e. the residual land valuations], house prices and build costs, have undergone a cycle of changes over the last 10 years or so. The balance of these changes, in today's terms, will determine whether the selected study sites can deliver all the necessary policy requirements without rendering them unviable.

Importantly, the basis of the appraisals will draw on recently completed developments in Rotherham as well as on up-to-date data sets, some of which have fortuitously come on stream in the last year [i.e.

[1] Based on current position the Local Plan has over 10.63 years of housing land supply. The figures also show the increasing importance of the green field land sites in the second half of the current quinquennial [2017/18 to 2022/23] when over 65% of new dwellings is expected to be delivered on green field sites.

ONS new house price index] and from the authoritative Build Cost Information Services [BCIS, 2019] data sets.

Since the last study, the policy definition of affordable housing has undergone several changes and mutations, especially exempting smaller sites from providing affordable housing [i.e. sites with a capacity of 10 or fewer units]. The refresh study will also interpret how these changes affect, in particular, the transfer values as well as the tenure types/mix that will be expected to be delivered on-site. The new NPPF [MHCLG, 2019a] reaffirms the policy position that small sites of less than 10 units are not required to deliver affordable housing. Thus, this refresh study only focuses on sites that are expected to deliver affordable housing in accordance with the local planning authority's extant planning, housing and other policies.

The current NPPF [MHCLG, 2019a], and its accompanying Planning Practice Guidance for Viability [MHCLG, 2019b], has clarified matters relating to land value and land price and how these not only differ but how they are interpreted in terms of contesting viability. As a result, the focus of this refresh study will be to verify whether the uplift multipliers [i.e. in the land value estimates] presented in the earlier study are maintained in 2019 and to ensure that the generated LVEs can satisfy the current test in relation to "incentivising" the landowner.

Another key change in policy terms is the introduction of a Community Infrastructure Levy [CIL] by RMBC in April 2017. Rotherham has adopted differential residential zones CIL rates of between £15/m^2 to £55/m^2. This additional line of cost has been incorporated as a separate line in the overall costs of building out sites. However these additional costs have been subtracted from the cost arising from mitigating any needs arising from development that are typically secured through S106 contributions. Thus, the overall position is no different in real terms from the previous study, so that the combined CIL and S106 cost is now equivalent to £8,890 per dwelling at today's prices.

The appraisal methodology applied is reasonably simple and straightforward – so long as one respects certain conventions. In that, the appraisal methodology is not a science, and is based on a number of assumptions set at a point in time [i.e. now]. Conditions can change and no two sites will be the same. So a pragmatic approach to viability testing based on sensible assumption inputs and a good appreciation of what is currently happening in the local markets has been adopted. This means that the assumptions used in site-based development viability appraisals are dependent upon specific site scenarios, including site conditions, policy requirements and market context [i.e. especially prices and costs]. In this respect the appraisal methodology uses current costs and values and this refresh study has sought to utilise the best and most up-to-date datasets available.

Finally, the logic of the appraisal methodology requires a developer's target rate of profit is set as an input. The previous study set this at a rate of 20% of gross development value [GDV] [or 25% on All Costs] for the market homes and a rate of 5.66% of GDV [or 6% on All Costs] for the affordable homes – the latter being a proxy of a contractor's rate of profit. Case Law as well as NPPF & Planning Practice Guidance [MHCLG, 2019a and 2019b] supports the application of differential profit rates, as they reflect different "market" risks. It must also be recognized that as markets are subject to cyclical fluctuations – whether in terms of house prices or land values – so it should not be too surprising to affirm that booked profits of the house-builders has recorded a similar cyclical pattern [see FAME, 2019]. In the last three financial years, the major house-builders in the UK have been able to achieve super-normal profits – meaning that these are significantly higher than the assumed rates typically used in development appraisals! Evidence from Morgan Stanley and others [Morgan Stanley, July 2018; NAO, 2019] indicate that this is explained by way the Government's Help to Buy scheme has artificially raised householder demand which in turn has resulted in higher transaction prices than would otherwise have been the case. The major house-builders [in particular] are also able to benefit from significant economies of scale relative to the costs sums based on average prices drawn from BCIS, which helps to further raise their booked profits. This position of super-normal profits must then be placed against

situations where these same house-builders are contesting viability by seeking a reduction from a local planning authority's affordable housing policy requirement.

Given the current context, it is vital that the assumptions and the data inputs are carefully reviewed and selected so that the development appraisals can be relied upon and that the current policy position of the planning authority can be protected as far as practicable. There will always be certain site and market conditions where this will be absent; in these circumstances a flexible approach will need to be adopted by all parties in respect of these individual cases.

The rest of the report is structured as follows:

Section 2: Summarises the site details for the **twenty-seven sites** that were selected for the development viability appraisals.

Section 3: Sets out the approach taken in conducting residential development viability appraisals and summarises the assumptions and inputs used to inform these appraisals. It also considers the changes in market conditions over the last 8 years or so in terms of new house prices, housing delivery, provision of affordable housing and the impact of policy and possible site conditions on a site's worth or value.

Section 4: Sets out the study's main findings, including an in-depth consideration of viability testing and the setting of comparator existing use values.

Section 5: Makes recommendations to RMBC.

Section 2: Study Sites

This report contains viability appraisals of **27** residential development sites in Rotherham Metropolitan Borough Council (RMBC) area. These sites were selected to represent the pool of sites located across Rotherham's six housing market areas [HMA] that the planning authority has identified and allocated in the recently adopted *Site and Policies Local Plan* [RMBC, 2018]. These sites all have the potential to contribute directly to the delivery of the Local Plan's housing delivery requirements.

Specifically, Table 2.1 summarises the size and capacity details of the sites selected for appraisal.

Table 2.1: Summary of Sites

Refresh Affordable Housing Viability Appraisal Study 2019			
Site Capacity [units]	**No. Sites**	**Greenfield [GF]**	**Brownfield [BF]**
More than 10 but fewer than 20	1	1	0
20 to 29	5	2	3
30 to 49	4	2	2
50 to 99	5	2	3
100 to 174	5	3	2
175 to 249	3	3	0
250 and more	4	3	1
Total Number of Sites	**27**	**16**	**11**
Total Hectares	**115.00**	**91.50**	**23.49**
Total Number of Dwellings	**3294**	**2393**	**901**
Gross Density [DPH]	**28.64**	**26.15**	**38.35**
Net Density [NDPH}	**43.99**	**37.08**	**54.04**

To reflect the fact that the recently adopted *Sites and Policies Local Plan* [RMBC, 2018] now contains a larger number of allocated housing sites that are classified as green field sites, including a large number released from green belt designation, there is a slight bias in terms of the proportion of sites in the sample,[i.e. 16 compared to 11]. However, these same green field sites represent about 80% of the land area [i.e. of 115 hectares] and just under three-quarters of the number of dwellings [i.e. of 3294]. The other sites are classified as brown field sites [which is in accordance with the revised definition contained in the NPPF [MHCLG, 2019a], in that these have been in a previous use and may require remediation or decontamination prior to being developed for housing.

Housing Market Areas in Rotherham

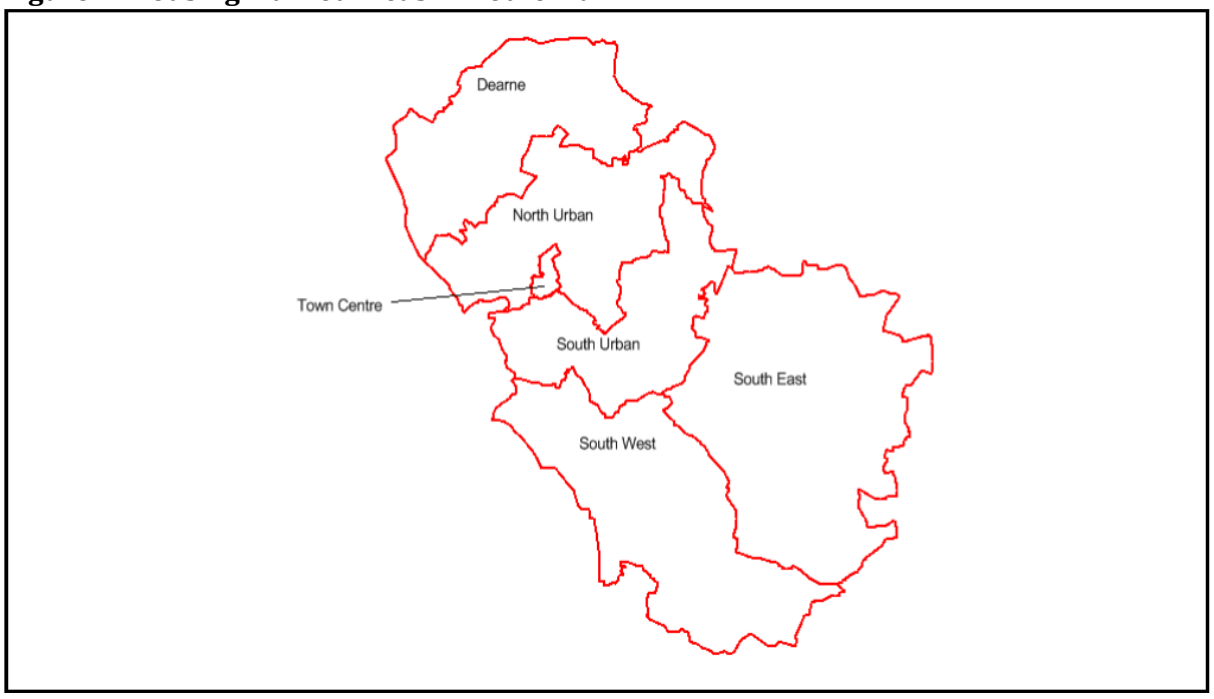
Evidence from the recently conducted Sheffield and Rotherham Strategic Housing Market Assessment by Centre for Regional Economic and Social Research [CRESR, 2019], reveals significant differences between Rotherham's housing market areas.

The smallest of the HMAs is the **Town Centre HMA** covering just 1.5 square kilometres. It is a newly identified HMA for Rotherham [compared to the previous SHMA] comprising of around 1240 dwellings, Less than 20% of this stock is owner-occupied, with nearly 46% in the private rented sector. The HMA, however, is the location of significant retail and commercial space. As well as the core of the Town Centre the HMA also includes some dense residential areas, particularly adjacent to Clifton Park.

The largest of the HMAs is the **South East HMA** covering over 88 square kilometres comprising of popular villages with classic rural attributes, many with excellent access to the trunk road network. Nearly 70% of its housing stock is owner-occupied [i.e.15,115 of 21,820].

The **South West HMA** covers 64 square kilometres and comprises a mix of smaller settlements, some with rural attributes but most with housing associated with former industrial and mining activities. Nearly 72% of its housing stock is owner-occupied [i.e. 11,512 of 16.047].Significant housing growth is being delivered at the Waverley development, while some of the more popular villages [e.g. Aston] can take advantage of good transport links and their rural positions.

Figure 1: Housing Market Areas in Rotherham



The **Urban North HMA** covers nearly 47 square kilometres and is dominated by densely urbanized settlements within a deindustrialised employment and physical landscape. Over 50% of its housing stock is owner-occupied [i.e. 16,750 of 33,329], which is low relative to the Borough average [61.5%]. Survey evidence reveals that this HMA is characterized by low land values and relatively low popularity rating by home searchers. This HMA includes the strategic allocation at Bassingthorpe Farm, which envisages over the local plan period to provide around 2,500 homes.

The **Dearne HMA** covers an area of nearly 47 square kilometres [being very similar in size as the Urban North HMA]. Over 62% of its housing stock is owner-occupied [i.e. 14,806 of 23,772]. This HMA is

characterized by a mix of small and semi-rural settlements, most notably Wentworth and Harley, and small towns such as Wath and Swinton; the latter being formerly associated with heavy industries in the Dearne Valley. The Dearne Valley has been the focus of significant new housing supply in recent years and the local plan has identified a number of additional green field sites for housing.

The **Urban South HMA** covers an area of around 38 square kilometres and contains a range of popular neighbourhoods that are geographically central to Rotherham, to the north and east of the M1 and M18 motorways. Nearly 65% of its housing stock is owner-occupied [i.e. 14,159 of 21,820]. The most popular of these is thought to be Wickersley. This HMA also contains several significant social housing areas [e.g. at Canklow] [2].

There is a plethora of evidence from CRESR SHMA report that provide vital insights which helps to explains the existence of differences within Rotherham's housing market. Evidence on affordability and income distribution reaffirms the relative position of the six HMAs, with Urban South, Dearne and South West HMAs requiring the highest income [least affordable in relative terms] to enter the housing market and the remaining HMAs as being the most affordable [see Table 4.11, p52 and 4.13, p.63 of the Sheffield and Rotherham Strategic Housing Market Assessment 2018 prepared by Centre for Regional Economic and Social Research (SHU, 2019)].

However, the Town Centre HMA has the highest proportion of households with less than £20,000 gross household income [i.e. 80%]; while this proportion is 57% of households in the Urban North HMA. The position of households in the Urban South HMA and Dearne HMA is significantly better showing that just 25% of households have gross incomes of less than £25,000[3]. This profile is mirrored by tenure with owner-occupation being the predominant tenure in the same least affordable HMAs. Importantly, the above evidence accords with the distribution and variations in the new house price data presented in Section 3, especially Table 3.5 of this report.

These differences in and between the HMAs will clearly influence the outcomes of the site-based development viability appraisals.

Study Site Details

Information of the site details and their capacities are displayed in Table 2.2 according to the sites' location in Rotherham's six housing market areas [HMA].

Table 2.2: Site Details by Housing Market Areas

HMA	Number of Sites	Site Area [hectares]	Site Capacity [number of dwellings]	Implied Gross Density [DPH]	Net Density [DPH]
Dearne	8	33.92	906	26.71	34.76
South East	3	16.45	544	33.07	43.76
South West	4	12.28	333	27.12	36.04
Town Centre	2	2.90	196	67.59	90.68
Urban North	7	18.32	626	34.18	51.71
Urban South	3	31.13	689	22.13	30.32
All HMA	27	115.00	3294	28.64	43.99

[2] See Table 4.26 [p.64] of Sheffield and Rotherham SHMA, CRESR, 2019

[3] See Table 4.10 and Figure 4.56 [p.48] of Sheffield and Rotherham SHMA, CRESR, 2019

Specific site details are set out in the next series of tables, which are categorized according to Rotherham's **six housing market areas** [HMA], as follows:

• Dearne HMA Table 2.3 [on pp.11-13]	• Town Centre HMA Table 2.6 [on p.15]
• South East HMA Table 2.4[on p.13]	• Urban North HMA Table 2.7 [on pp.16-17]
• South West HMA Table 2.5 [on p.14]	• Urban South HMA Table 2.8 [on p.18]

Sites located in Dearne Housing Market Area

The eight sites numbered 1 to 8 are located in the Dearne HMA. The total housing capacity of the eight is estimated to be 906 dwellings on sites with a total site area of 33.92hectares, equating to 34.76 net dwellings per hectare [NDPH].

Table 2.3: Dearne HMA - Site Details

Site Number	Site Name & Coding	Site Area [ha]	Site Capacity [dwellings]	Gross Density [DPH]	Site Details
1	Off Lawrence Drive, Piccadilly, Swinton [H52]	1.09	32	29	This is a green field site. The site is very overgrown with woods/trees. A local green infrastructure corridor connects to the site. There are some important constraints: access issues; sloping site which is frankly precipitous! Possible access via Wentworth Gardens. Infill houses located in Kew Court [3-storey houses] and at the SE corner of the site: these houses are likely to have been built in the last 10/15 years. These constraints limit the site's capacity and potential value.
2	Civic Hall Site, Swinton [H49]	1.57	50	32	Site is owned by RMBC and is currently being marketed for sale. It is a mixed use site with a number of operating businesses and uses. The site accommodates a number of low-rise buildings; as such these fail to use the site to its potential. The need to retain car parking is likely to constrain development opportunities. It is basically a large site with most units being in active use on the SW of the site - fronting Station Street; the shopping centre units [with flats above] look tired, with some units closed. The site accommodates the Council's library. The site at the back [NE] has already been cleared [some years ago] - the land is flat, overgrown and connects well with another cleared site on Charnwood Street. The site is located in a conservation area, which could constrain development options. The high street scene is largely underwhelming!
3	Charnwood House, Swinton [H50]	0.62	20	32	Site is owned by RMBC. Site has been cleared. It is located to the rear of the Civic centre. The site steps down to a lower level. Behind the site is located the local school. It is well located and can access local services and Swinton's small retail centre. The site has strong boundaries; though largely grass there is likely to be foundations of the previous care/elderly persons' home. Along Charnwood Street, there are signs of some infilling, but most of the housing is terraced or semi-detached homes.There is a new Council housing scheme at Potteries Court to the West of Charnwood Street. Swinton is an attractive "village"; it has an historic core. The high street, however, is frankly disappointing with 2-storey shops and premises - the range/variety is limited and the quality of the offer is very limited. A number of the retail shops in the block surrounding the Civic centre are empty; above are flats; with car parking at the side and rear.

4	Land at Eldertree Lodge, Thorpe Hesley [H38]	0.88	21	24	Access to the site from Eldertree Road. 10 garages in RMBC ownership face onto a road access. The site holds single storey sheds, some in poor condition, and a 2-storey house, with an open area forming gardens. There is a public right of way that is regularly in use [Ecclesfield Footpath] which runs southwards from the site, on the front boundary to the site. The site has different levels; has established fir/yew trees. The local neighbourhood has established suburban housing, most in good condition. Access to the m-way system gives the site a good and convenient location.
5	Land to The East of Harding Avenue, Upper Haugh [H16]	10.49	291	28	This is a green field site. The site is owned by the FWE. This site is opposite The Wickets, which has been built out by Taylor Wimpey. The site is adjacent to Haugh Green, another recent development of primarily detached 3/4 bed houses [around 5 to 7 years ago]. Site is a steeply sloping green field. The site rises to a ridge on the site's north side; a stream runs along the site's southern boundary; and a balancing pond [for The Wickets] located in the south west corner of the site. There will be a need to conform to SDG which include matters relating to heritage/archaeology; recognising established boundaries and hedgerows; and the need to produce a masterplan.
6	Land off Stubbin Road, Upper Haugh [H19]	0.89	20	22	This is a green field site. This comprises two adjoining sites. Predominantly flat sites that can access the main road route to Greaseborough [and Rotherham] and to Barnsley, including M1. Though GF, it fills a gap between established council housing and some older units that front onto the Greaseborough road [west side of site]; also close to the new housing at The Wickets. Site bounded by established hedgerows. Both sites look reasonably well-serviced sites; their value is likely to draw on the recent development at The Wickets.
7	Land to the North of Upper Wortley Road, Thorpe Hesley [H39]	6.65	144	22	This is a green field site. It is an elevated site with good access to the M1. The site is contiguous to established neighbourhoods of privately owned, well maintained homes. The site has a ridge on the south side; the east side abuts a school; the north side falls away to existing dwellings built in the 1950/1960s. The main road is busy and generates plenty of noise. Though it offers a short yet convenient link onto the M1. Developers are currently on site carrying out site and heritage investigations. RMBC is waiting the signing of S106 agreement with Jones Homes.
8	Land between Pontefract Road and Barnsley Road, West Melton [H98]	11.73	328	28	The site, which is owned by FWE, is in agricultural use [arable]. Previously a green wedge/buffer to ensure that coalescence did not occur between West Melton and Brampton. Site is contiguous with a sports/green open space which is owned by RMBC. OHP lines run across the site in a north/south direction, being positioned close to the site's western boundary. Gas pipelines also run along the edge of the western boundary of the site and is covered by a 2metre wide hedgerow buffer. The rest of the site is framed by strong hedgerow growth; taller bushes and saplings found closer to the housing on the north eastern side of the site. The site is largely flat, though there is a slight slope from the south falling away towards the Dearne Valley and the industrial estates. The site is large enough to be split into 3 separate housing plots to accommodate different developers. A recently built out site by Persimmons is located to the South east of the site. Also there is a nearby infants'

					school and other private/community sports facilities nearby - bowling green/club, junior football pitches. Given the proximity of the green/open space, there will not be a requirement to provide such open space on-site, so raising the site's overall net density.

Sites located in South East Housing Market Area

Sites numbered 9 to 11 are located in the South East HMA. The total housing capacity of these three sites is an estimated to be 544 dwellings on sites covering a total area for housing of 16.45hectares, equating to 43.76 net dwellings per hectare {NDPH].

Table 2.4: South East HMA – Site Details

Site Number	Site Name & Coding	Site Area [ha]	Site Capacity [dwellings]	Gross Density [DPH]	Site Details
9	Former Timber Yard off Outgang Lane, Dinnington [H75]	7.96	271	34	Site was subject to a viability appraisal back in 2010 as part of the last the 2012 VA study. The site contains a large water pond - which will need to be removed and land remediated. Part of the site remains occupied by factory buildings. The site has been partially cleared, with large heaps of heavy concrete piles evident across the site and clearly framing the site. To the north west of the site is housing. Opposite the site are modern industrial units [built over the last 8 years]. If the site is to come forward, there are substantial locational constraints given the road and the "feel" of employment/industrial sector! Evidence shows that the current landowner may have overpaid for the site.
10	Land Between Sheffield Road and Mineral Railway, Ryton Road, South Anston [H83]	1.04	30	29	Site was subject to a viability appraisal back in 2015. It is an awkward site being on a very busy cross road junction. There are factory units opposite; a Shell garage adjacent; a railway line framing the rear boundary. Existing structures on the site will need to be removed and the land remediated. An office block in one corner of the site is presently empty, evidently the ground floor has been let as a children's play centre and upper floors has been leased [June 2018] to a computer facilities management company. Another part of the site is being used for storage/parking. These buildings and the hard-standing areas impose constraints on the site. There is considerable noise from the road network. However, the site is well located to access the M-way system; there is new housing currently being completed just up the road, opposite the Shell garage.
11	Land off Wentworth Way, Dinnington. [H81; also cited as LDF0219 - 243 units [2020/21 to 2026/27]]	7.45	243	33	This is a green field site. The site is located on the edge of the town - there is a sense that this site is "rounding-off" the urban edge of the settlement. Possible access from Wentworth Way as well as from a house off Swinston Hill Road [requiring the house to be demolished]. Recent evidence of infill housing located on the north edge of the site [probably 7 to 10 years ago]. The site is flat, with established hedgerows that form a strong boundary to the site. Suburban housing is typical for this part of the settlement.

Sites located in South West Housing Market Area

The four sites numbered 12 to 15 are located in the South West HMA. The total housing capacity of the four sites is an estimated to be 333 dwellings on sites with a total site area of 12.28hectares, equating to 36.04 net dwellings per hectare [NDPH].

Table 2.5: South West HMA – Site Details

Site Number	Site Name & Coding	Site Area [ha]	Site Capacity [dwellings]	Gross Density [DPH]	Site Details
12	Land to East of Lodge Lane [H87]	0.59	19	32	A green field site. The site is very overgrown with light trees and shrubs. Access to the site is possible from Roberts Grove which is a recently developed housing site, largely comprising 2/3 storey detached and s-detached units. Water course evident. The site steps down by around 2 to 3 metres. Evidence of local fly tipping. The site is effectively an enclave of open land being surrounded by housing and a nearby school. The site is situated in a quiet location.
13	Land off Aston Common, East of Wetherby Drive {H88] also cited as LDF448	6.44	175	27	A green field site. This is an elevated site, which is steeply sloping: this restricts is development potential - need to set back the development [i.e. away from the valley].The site looks over an attractive green/wooded valley [though there is a road running along its floor]. There is established housing to the North of the site; employment/industrial buildings frame the NE of the site - some of these are empty/derelict- in their present state/status, these reduce the site's development potential.
14	Land off Keeton Hall Road, Kiveton Park [H93] also cited as LDF0469 – 100 units (2020/21 to 2023/24)	3.638	100	27	A green field site. Access to the site is possible from a cul-de-sac to the north-west of Kiveton Hall Road; however, access is not possible from Essex Close. Bungalows and SD homes front the site - some ex-Council housing - overall, the housing seems in good quality and repair. The site is in a prominent location on the eastern edge of Kiveton village. Any development will need to respect the site's sensitive landscape and ecological value and the listed building at Kiveton Hall. The site is also a wildlife site, which could reduce the site's development potential. The site is adversely affected by the presence of HV Power lines. The site is framed by existing shrubs/hedgerows. The site slopes from NW to SE; the ridge line is critical in terms of adversely affecting site planning.
15	Land off Winney Hill, Firvale, Harthill [H95] also cited as LDF0533	1.61	39	24	A green field site. The site is formed from 2 parcels of land under different ownership - unsure of their relationship. The southern site was granted planning permission with conditions for 24 homes in November 2018 [by Jones Homes]. The site is located at the edge of the village. A public footpath is located at the west side of the site. The neighbouring housing is well-established being a mix of infill and older properties; but none are of great architectural worth. There are signs of recent infill housing to the north of the site. The site is a largely flat, open field. Field boundaries are evident denoting the two landowners' interests. The site is framed by a strong boundary of hedgerow. Local residents access the site from a farm track, but not sure if there is a public footpath. The site slopes down from the main Winney Hill Road. Access will have to be from the main road.

Sites located in the Town Centre Housing Market Area

Sites 16 and 17 are located in the Town Centre HMA. The total housing capacity of the two sites is estimated to be 196 dwellings on sites with a total site area of 2.90hectares, equating to 90.68 net dwellings per hectare [NDPH].

Table 2.6: Town Centre HMA – Site Details

Site Number	Site Name & Coding	Site Area [ha]	Site Capacity [dwellings]	Gross Density [DPH]	Site Details
16	Post Office site, land of Westgate, opposite Riverside House [H21]	2.25	143	64	Currently occupied as a Royal Mail sorting/collecting office; its building is in poor condition and upper floors are presently vacant. Other buildings on the site are presently vacant [one was previously used as a Halfords exhaust/tyre centre]. The rest of the site is cleared and is being used as a fee paying car park. The site is generally flat though site investigations are likely to reveal footings and possible need for remediation measures. The site occupies a key location which is contiguous to the town centre. Though there are signs of inward investment opposite at Westgate Chambers, this site could perform a strategic platform for this part of the town centre's future. The Council has allocated the site as a housing site in its adopted Local Plan however there are particular constraints regarding the height of new development [no more than 3 storeys] and its river location offering constraints as well as opportunities.
17	Henley's Garage Site, land off Wellgate and Hollowgate [H22]	0.65	53	82	This site is owned by RMBC. H22 is an allocated housing site in the Sites and Policies Local Plan [June 2018]. The immediate neighbourhood is predominantly small terraced housing - Victorian - low quality, low value units. The site is largely flat with a high rear wall that frames the back of the site which is contiguous with a poorly maintained children's pocket park located on the site's South west boundary. The site fronts onto Wellgate which leads to the town centre, with conveniently accessible bus stops, though easily walkable too. Local shops, petrol station and supermarket are nearby; though many of the local shops are closed or vacant and those that are operating their quality of offer limited. Evidence of extensive on-site fly-tipping; the pocket park is poorly maintained; and poorly maintained streets and back streets dominate the neighbourhood. The immediate neighbourhood has a strong feeling of low value, though the housing nearby, especially at the top of Moorgate have higher values and where recently developed new housing/apartments are located. Overall, the site's location is its best attribute! The site has been included in a development partnership scheme being promoted by RMBC with Wilmot Dixon to be build out 53 units, with 26 being affordable for rent and the other 27 being sold as affordable shared ownership units for older persons/households: specifically, 17 no 2b4ph [66.6m2]; 16 no 1b2pf [50m2]; 20 no 2b3pf [61m2]. This capacity is clearly much lower than that envisaged in the Sites and Policies Local Plan [see pp.218-219].

Sites located in Urban North Housing Market Area

The seven sites numbered 18 to 24 are located in the Urban North HMA. The total housing capacity of the seven is estimated to be 626 dwellings on sites with a total site area of 18.32hectares, equating to 51.71 net dwellings per hectare [NDPH].

Table 2.7: Urban North HMA - Site Details

Site Number	Site Name & Coding	Site Area [ha]	Site Capacity [dwellings]	Gross Density [DPH]	Site Details
18	Land to the North West of Norwood Street, Doncaster Road, Dalton [H25]	0.63	38	60	This site is situated on the main road to Doncaster [A630]; it is a busy road but well served by local buses. It is opposite the South Yorkshire HA housing development; this development has been stepped back to create a green buffer zone between the housing and Doncaster Road. The site is presently occupied by a redundant/derelict training centre [previously owned by RMBC]; more recently it has been subject to a fire [an arson attack]. The site will need to provide improved vehicle and pedestrian access. Though overgrown, there are signs that trees and other large shrubs have been cut down recently. It is next door to a recently developed block of apartments. Thus, the site is likely to be suitable for similar build out with perhaps two blocks comprising of 2 and 3 bed apartments, with on-site parking, landscaping and other structural planting; the latter should offer some degree of noise and pollution abatement.
19	Chester Hill, Oldgate Lane, Thrybergh [H31]	4.75	148	31	This site is owned by RMBC and currently being marketed for sale. The site was part of a development partnership contract with Keepmoat, now revoked. This is a more attractive site compared to Whinney Hill nearby. The site has several different levels, though giving good sight lines may create difficulties in planning and building out the site. The site overlooks reclaimed countryside to the south [former colliery]. Some existing council housing is located on the site, with the rest of the site grassed over having been subject of clearance in the 1990s. Close by is located a school [to the north east of the site]; a church is located on the site's northern boundary. There are many trees on site that are largely overgrown and there are many signs of flying tipping. The site is crossed by the existing street/roads; these may need to be removed as part of re-planning the site [incurring additional costs]. The NPPF [2018] classifies this site as Greenfield.
20	Whinney Hill, Oldgate Lane, Thrybergh [H32]	2.08	75	36	This site is owned by RMBC and is currently being marketed for sale. The site was part of a development partnership contract with Keepmoat, now revoked. [See earlier Viability appraisal, Nov 2014.] This site was cleared under a CPO in the 1970s. The site is very steep, being framed by the A630 and Oldgate Lane. The site is adversely affected by past coal mining with an old shaft being located in the centre of the site. The latter will serve to restrict the site's development capacity. The site is located on good bus routes to the centre of Rotherham. The site overlooks Rotherham to the west across the Dearne Valley. Though on the edge of Rotherham, the area is currently a relatively low value area.The NPPF [2018] classifies this site as Greenfield.
21	Land off York Road, St.	0.47	20	43	The site is owned by RMBC. It is located on the busy A630 Doncaster Road as being conveniently across from Rotherham's town centre and shopping centre. This site

	Ann's, Rotherham [H20]				is also located in Rotherham's AQMA. It is currently being used as a car park with access from Rawson Road. A number of garages are located on the site. Two buildings contiguous to the site are used as a doctors' surgery and a pharmacy [eastern corner of site]. Adjacent to the site, there are a number of Victorian houses and buildings that are largely in poor repair. There are some infill flats - York Road Flats - that have allocated parking spaces that forms part of the site. Buildings fronting St Ann's roundabout are also in poor repair and the road is enclosed here, being used for parking. The local neighbourhood comprises predominantly low quality and low valued small terraced housing. New housing will bring long needed and added vitality to this locality.
22	Site of former Herringthorpe Leisure Centre [H30]	3.04	97	32	The site is owned by RMBC. The site was cleared some time ago; it is overgrown with uneven ground levels. Part of the site is being used as a car park, which supports the nearby sports ground and large public park. The site is well-located and its development would bring some additional vitality to the neighbourhood. The local housing nearby was probably once Council housing; it is predominantly semi-detached and bungalows, all of which seem to be in good order. Will need to set back any development from the main road to reduce noise and air pollution from heavy traffic movements. The plan's site development guidelines [SDG] are likely to constrain the site's capacity.
23	Ivanhoe Works, Kimberworth Road, Masbrough [LDF0148 – 158 units [2022/23 to 2027/28]	4.39	158	36	The site is currently an allocated site for light industry. But it could come forward as a windfall site [so long as Policies SP17 and SP55 are met]. This site is occupied by a number of businesses housed in factory buildings that are largely in poor condition. A large section of the site has been recently [in 2018] cleared of its factory building. The road network in the locality is in need of urgent re-planning and regularising so the site can be better served and linked to the immediate neighbourhood. There are a number of businesses currently operating from contiguous sites including: recycling; joinery; storage; heavy vehicle repairs. There is a local Aldi store nearby and the site is conveniently located to access key routes to the M-way as well as to the rest of Rotherham. The site has been subject of a viability appraisal in the past [2010]. The site is likely to require remediation and site clearance if housing is to be built on the site.
24	Fenton Road, Rotherham [H4/RU4]	2.96	90	30	This is a green field site. A site that is now part of the Masterplan for Bassingthorpe Farm Strategic Allocation. The site is in joint ownership between RMBC and the Watson Estate. The site has been marketed for sale recently [c.2016]. Access will have to be sought via Fenton Road [which will require a new major road junction].The site is framed by housing on its southern side by innovative housing located on Henley Way. Critically, OH Power lines traverse the site in a N/S direction. South side of the site abuts cliffs that formed a defunct quarry. The site is likely to require remediation arising from past earthworks and extraction activity. There is a public footpath/track, termed Henley Lane, running along the site's south boundary in a NW/SE direction. The site was subject of a separate viability appraisal in October 2018.

Sites located in the Urban South Housing Market Area

Sites numbered 25 to 27 are located in the Urban South HMA. The total housing capacity of these three sites is an estimated to be 689 dwellings on a total site area for housing of 31.13hectares, equating to 30.32 net dwellings per hectare [NDPH].

Table 2.8: Urban South HMA - Site Details

Site No.	Site Name & Coding	Site Area [ha]	Site Capacity [dwellings]	Gross Density [DPH]	Site Details
25	Land off Lathe Road / Worry Goose Lane, Whiston [H34; also cited as LDF0233]	20.02	450	22	This is a green field site. The site abuts the edge of the existing urban area. The local housing is typically 1930 and 1950s housing, with some more recent infill development. The site is situated in a relatively quiet location. The site is reasonably flat and open. Access is possible from Lathe Road and Worry Goose Lane, but the current width of access here is limited.
26	Land off Shrogswood Road, Whiston [H35; also cited as LDF0237 and LDF838]	10.20	217	21	This is a green field site. The site is situated to the S/SE of Sheepcote Road - but access is not possible from this lane! Access is possible from Shrogswood Road, which is east of the site of the lane that gives access to Sitwell Park golf club. Another potential access point to the site is from the main A631 Bawtry Road. The site is presently open fields with strong boundaries being framed by hedgerows, especially at the rear of the housing located on Sheepcoate Lane. The land rises towards Wickersley and falls away to the East. Traffic noise is noticeable. A public footpath coincides with the east boundary of the site.
27	Land off Allott Close, Ravenfield Common [H64]	0.91	22	24	This is a green field site, though a former nursery. It is currently being marketed for sale by the owner. Access is only possible from an existing road link from Allott Close. An alternative access point via the Parish council hall site is most unlikely on technical as well as landownership matters [Parish Council]. The site is very overgrown, clearly unmanaged, but it appears reasonably level, with a strong natural boundary framed by hedgerows and small trees. The site is contiguous to a development of largely detached houses that were probably built in the last 10 years. Ravenfield Common is a high value village, which is attractive, and it offers a reasonably short journey time to access Jct.1 of M18. HS2 line may impose some negative effects, but if it is to be located in a culvert then its impact is likely to be limited and possibly temporary while under construction.

A brief summary

It is clear from the site-specific details that there are many differences or constraints that will impact on the actual pace and progress towards development of some of these sites. Also, some sites will be in direct competition with each other and therefore the probability of any one of them proceeding to enter the development pipeline will depend upon developers/house-builders' market sentiment. However, the approach adopted in carrying out the development appraisals will be in terms of today's market conditions. Of course, a certain amount of sensitivity analysis can illustrate potential market circumstances [i.e. their relative strengths].

The next section [Section 3] sets out in greater detail the inputs, parameters and assumptions used in carrying out the development appraisals.

Section 3: Development Appraisal Inputs, Parameters and Assumptions

This section sets out:

- The research approach to conducting the development appraisals.
- The assumptions used to inform the development appraisals.
- The outputs and results from development appraisal iterations.

Development viability appraisal methodology
The appraisal methodology uses current market values and building and other development costs relating to site-specific housing development schemes. However, as all "our" knowledge is the past and decision-making is required now for development to commence in the future, it is necessary to ensure that the variable inputs [and any assumptions] reflect markets and policy positions now [i.e. in present value terms].

In essence, conducting a development appraisal is relatively simple and straightforward; the basic framework for development appraisal involves conducting a residual [land] valuation estimate [RLVE]. This can be expressed in the form of a generic formula:

GDV - (BC + P) = RLVE

Where:
GDV = Gross Development Value
BC = Building Costs, including abnormal costs, planning obligations, fees, interest, stamp duty land tax
P = Developer's Capital Profits
RLVE = Residual Land Value Estimate

For our purposes, this basic equation can be presented and re-arranged, as follows:

[1] **GDV - (BC + P) = RLVE**
Here the Land Value is a residual. This is the maximum amount that can be offered to buy the land by the developer assuming a minimum target rate of profit.

[2] **GDV - (BC + RLVE) = P**
Here the Land Value is known; and hence becomes a price. The Profit is a residual in this equation.

[3] **GDV = (BC + P + RLVE)**
Here the GDV is made up of the three main "cost" elements which explicitly include the developer's profit.

From these different equations we can identify critical values for:
- Those who are seeking to **sell or buy land**; Equation 1.
- The amount of **profit** that might be achieved by the developer having **already purchased the land**; Equation 2; and
- Revealing the three **basic "costs**" that comprise the GDV: Equation 3.

For this refresh study **Equation 1** is the crucial reference point.

To appraise viability, the resultant RLVE [i.e. future use land value budget] must be compared with known land values [existing or current use values] that reflect current market conditions, site

conditions and, crucially, the planning and housing policy environment in which development is to occur. Viability is compromised when the RLVE [the developer's land bid budget] falls below the value of land that incentivises the landowner to agree to sell. However, current guidance makes clear that if these attributes are ignored, contesting viability cannot be supported if the land price agreed between the two parties is not in line with a site's worth/value [MHCLG, 2019a], i.e. the developer has overpaid for the land or the landowner has set a too optimistic land value threshold.

The development appraisals were carried out using a cash flow based methodology which Professor Stephen Walker has specifically prepared in Microsoft Excel©. This spreadsheet environment provides the flexibility to input a wide range of policy variables and parameters across a number of development scenarios.

Assumptions used to inform the development viability appraisals

The assumptions are informed by a review of economic theory and policy guidance on the practice of conducting development appraisal, especially relating to contesting viability, namely Ratcliffe et al [2009]; The NPPF [MHCLG, 2019a]; NPPG for Viability [MHCLG, 2019b]; The Planning Inspectorate [PI, 2013]; The Harman Report [2012]. In short it is contended that the approach adopted in this Report is up-to-date and rigorous.

The principal assumptions and inputs used to inform the 27 site-based development appraisals are summarised in the following Tables namely:

- Tables 3.1: Revenue assumptions,
- Tables 3.2: Cost assumptions,
- Tables 3.3: Unit size, pace of development and density, and
- Tables 3.4: Policy mix and affordable housing requirements.

Table 3.1: Revenue Assumptions		
Assumption	**Source**	**Details of data used in the study**
New Build House Prices of Completed Schemes in Rotherham	Hometrack [2018] & ONS New House Price Index [2019]	New build house prices for the years 2016, 2017 & 2018, rebased to November 2018 applying ONS New House Price Index [ONS, March 2019]. These vary across RMBC's six HMAs: please see **Table 3.5** [below] for these inputs.
Affordable Housing Transfer Values [Shared-ownership & Affordable Ownership]	Applied NPPF [2019] guidance & in liaison with RMBC officers	Intermediate: **80% of new build market values.** Shared Ownership and Affordable Ownership**: 60% of new build market values.**
Affordable Housing Transfer Values [Affordable and Social Rent]	Analysis of new build housing schemes within RMBC & information supplied by RMBC officers	Capitalised rent levels equivalent to **c. 40% of market values**

<table>
<tr><th colspan="3">Table 3.2: Cost Assumptions</th></tr>
<tr><th>Assumption</th><th>Source</th><th>Details of data used in the study</th></tr>
<tr><td>Build Costs of Completed Schemes</td><td>BCIS Average Prices, December 2018</td><td>BCIS is updated on a quarterly basis. BCIS offers a range of building prices[4] dependent on the final building specification. The lower quartile rate for Mixed Estate Housing of £949/m² [December, 2018] is applied to schemes of more than 50 dwellings; the median rate of £1,068/ m² is applied to schemes with fewer than 50 dwellings.</td></tr>
<tr><td>External Costs</td><td>As a proportion of BCIS Average Build Prices</td><td>Four rates have been applied according to site capacity[5]:
Up to 35 units: 7.5%
35 to 74 units: 10%
75 to 149 units: 12.5%
150 plus units: 15%</td></tr>
<tr><td>Preliminaries</td><td>BCIS Preliminaries, December 2018</td><td>These are included in Building prices. These are assumed to be 8%.</td></tr>
<tr><td>Abnormal Development Costs</td><td>Estimated or drawn from Consultants' reports</td><td>These are only applied to the brown field sites and other sites where intelligence is available.</td></tr>
<tr><td>Contractor's Rate of Profit</td><td>Nominal rate</td><td>This is extracted from the Building Prices sourced from BCIS at a rate of 5%.</td></tr>
<tr><td>Contingencies</td><td>Industry Standards</td><td>Contingencies are based upon the risk associated with each site and has been attributed as a percentage of build costs: Greenfield sites at 3% and Brownfield sites at 5%</td></tr>
<tr><td>Professional Fees</td><td>Industry Standards</td><td>Professional fees are based upon accepted industry standards and have been calculated as a percentage of build costs at 10%.</td></tr>
<tr><td>Sale Costs</td><td>Industry Standards</td><td>These are based on industry norms/scales as follows:
Land Acquisition: 0.5%
Legal Fees: 1% of value
Estate Agents' Fees: 1% of private new build sale prices
Marketing Costs: £1500/unit.</td></tr>
<tr><td>Finance Costs</td><td>Industry Standards</td><td>Based upon the likely cost of development finance at current market rates of interest of 6.15%pa. [inclusive of bank fees]</td></tr>
<tr><td>Stamp Duty Land Tax on Land Purchase</td><td>HMRC</td><td>Standard rates apply</td></tr>
<tr><td>Professional Fees on Land Purchase</td><td>Industry Standards</td><td>Fees associated with the land purchase are based on the industry standard:
Legal Fees: 0.75%</td></tr>
<tr><td>Planning Fees</td><td>MHCLG</td><td>These are based on the current national rates for a full planning application.</td></tr>
<tr><td>NHBC Fees</td><td>NHBC</td><td>These are set at £1,200/unit</td></tr>
<tr><td>Developer's Target Rate of Profit</td><td>Industry Standards and informed by Financial Analysis</td><td>Gross development profit [including overheads] taken as a percentage of gross development value [GDV] or % on costs.
<table>
<tr><th></th><th>% of GDV</th><th>% on Costs</th></tr>
<tr><td>Market Homes</td><td>20.00%</td><td>25%</td></tr>
<tr><td>Affordable/Social Homes</td><td>5.66%</td><td>6%</td></tr>
</table></td></tr>
</table>

[4] These build prices includes an allowance for preliminaries and a contractor's rate of profit.
[5] These rates are informed by VOA guidance.

	Made Easy [FAME] database	Together these generate a "blended" rate of profit according to the market/affordable housing tenure mix.
Housing Grant/ Subsidy	Homes England	**Nil**

Table 3.3: Unit size, pace of development, density

Assumption	Source	Details of data used in the study
Time scales, build rates, units/per annum	Market analysis of comparable sites and build out rates informed by RMBC *Sites and Policies Local* [2018]	These have been based upon current demand and build out rates in Rotherham's housing markets. Site Capacity: **No/month** / **Pre-build** Sites from 11 to 29 units: **3** / **9** Sites from 30 to 74 units: **4** / **9** Sites from 75 to 124 units: **4** / **12** Sites from 125 to 249units: **4** / **12** Sites of 250 units and more: **4** / **12**
Gross/Net Densities	RMBC *Sites and Policies Local Plan* [2018]	These are informed by local evidence supplied by RMBC. SP32 prescribes that on-site open space provision is required on sites with a capacity greater than 36 dwellings. This will raise the net density levels for these sites.
Dwelling Sizes [m^2]	In liaison with RMBC officers & examination of recently completed new build schemes	**Type 1** / **Type 2** / **Type 3** All Tenures: 70m^2 / 90m^2 / 120m^2
Dwelling Mix [Median %/HMA]	In liaison with RMBC officers & examination of recently completed new build schemes	**HMA** / **Type 1 [%]** / **Type 2 [%]** / **Type 3 [%]** **Dearne**: 25 / 35 / 40 **South East**: 25 / 35 / 40 **South West**: 25 / 35 / 45 **Town Centre**: 100 / 0 / 0 **Urban North**: 40 / 35 / 25 **Urban South**: 20 / 30 / 50

Table 3.4: Policy mix and affordability

Assumption	Source	Details of data used in the study
Affordable Housing	RMBC *Adopted Local Plan* [2018]	Proportion of Affordable Housing: **25% points**
Affordable Tenure Mix	RMBC *Adopted Local Plan* [2018]	Affordable/Social Rented: **14% points** Starter Homes/Shared-Ownership/Intermediate: **11% points**
S106 Policy Requirements & Community Infrastructure Levy	RMBC *Adopted Local Plan* [2018] & RMBC *CIL Study* [PBA, July 2013]	Overall fee costs: **£8,890 per unit** [excluding any AH policy requirement] S106 costs are set with reference to the above unit fee once CIL rate has been applied, which depends on a site's CIL [£/m^2] rate, which can vary from between **£15/m^2 and £55/m^2** depending upon the residential zone [1, 2, 3 and 4].

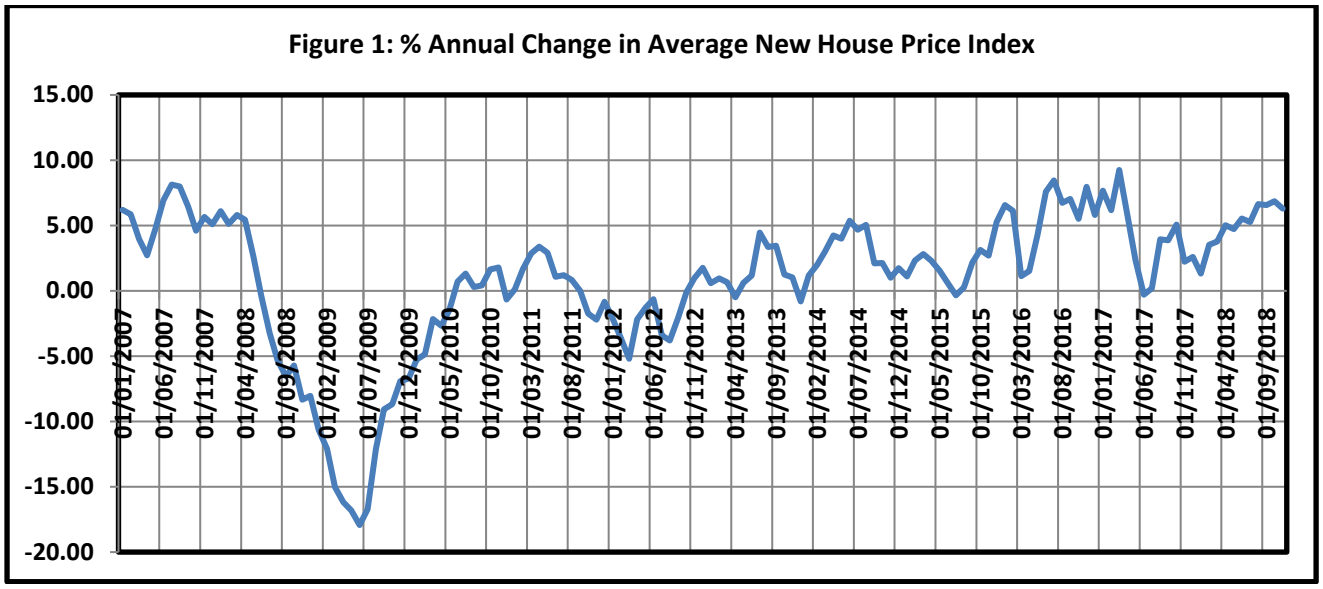
Observations

Prior to focusing on the main findings from the development viability appraisals [see Section 4], a number of observations are made with regard to the above parameters and assumptions. These cover:

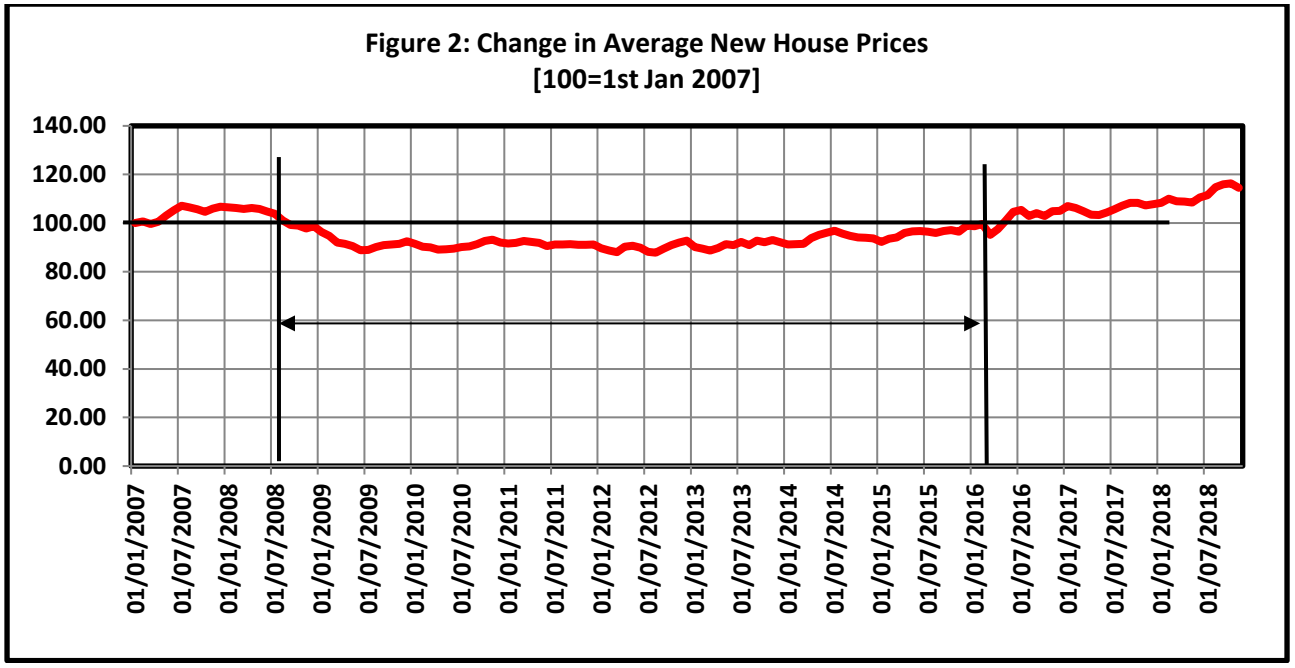
- Local New Build House Prices
- What is Land Worth?
- Land Values and Policy Requirements
- Housing Delivery in Rotherham Local Planning Authority Area
- Other Variations in or differences from the last affordable housing viability studies in 2010/2011.

Local New Build House Prices

Since the last study, the ONS has produced a new house price index. Figure 1 shows the percentage annual change in [average] new build house prices for Rotherham [ONS, March 2019]. As with many other housing markets, the data clearly identifies the impact of the banking crisis and the rapid decline in house prices [and volume of transactions] between mid-2007 and mid-2010. Another distinctive attribute is the repetitive cyclical changes in new house prices. It is against this background that house builders have to purchase land, build out and sell dwellings and exit their sites, hopefully, with their desired rate of profit.

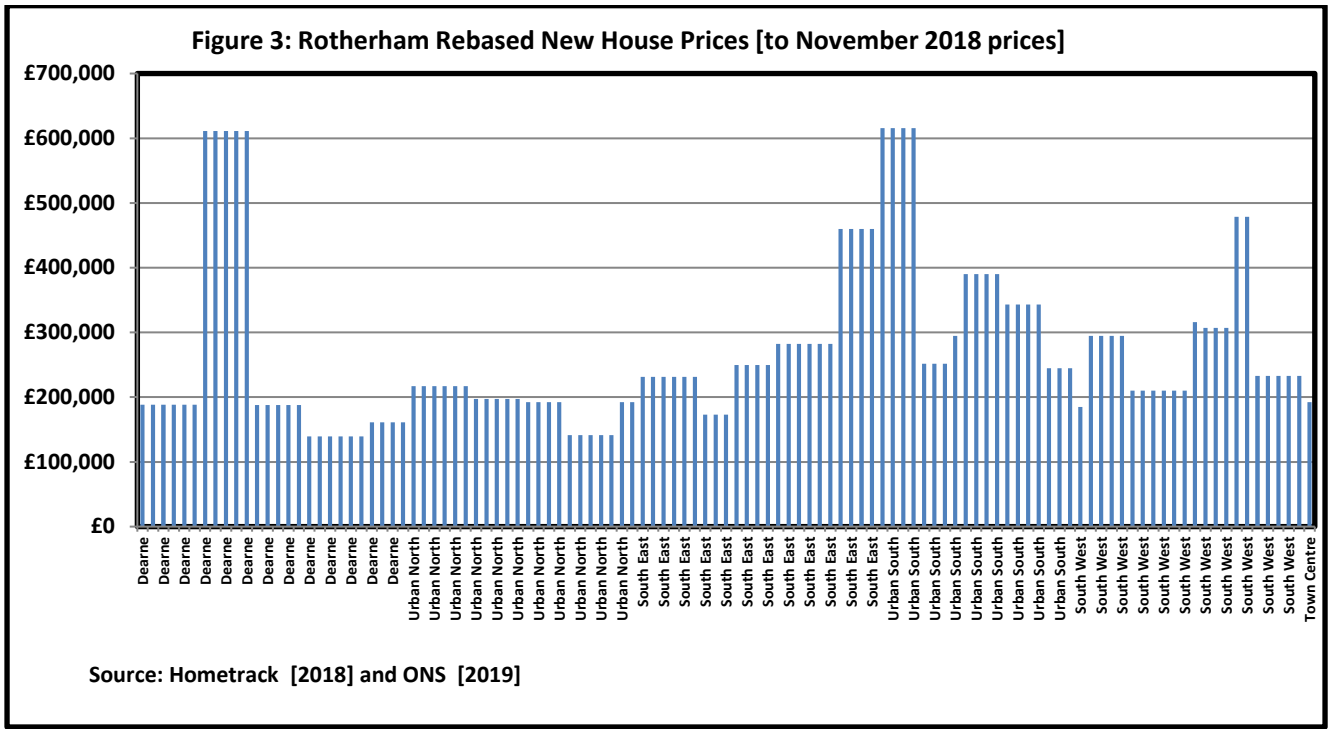


The path of new build house prices in Rotherham can be more clearly discerned from Figure 2, which shows that it took over eight years [i.e. to May, 2016] for new house prices to reach the same levels as last achieved in July 2010 being £177,000 on average. Since then new build house prices have continued to rise to reach a new peak of £204,000 by October 2018, before falling back to just over £200,000 in November 2018 [ONS, March 2019].



This recent acceleration in the prices of new build housing underpins the buoyancy in the land values being achieved in Rotherham, since house price is the most powerful of the factors explaining land values [see Ratcliffe et al, 2009, p.422].

Figure 3 presents new build house price transactions in Rotherham between 2016 and 2018. These have been rebased by applying the ONS new build house price index [HPI] so that all transactions are presented on a common price base set at November 2018 [ONS, March 2019]. This has meant that 2016 transaction prices have been up-rated by a factor of 16% points, 2017 prices by 7% points, and 2018 prices by 4% points.



As an integral aspect of carrying out the appraisals, adjustments have also been made to take account of any differences in the transacted house prices recorded in Rotherham's six HMAs. [See map on page 8 **o**f this report]. Such differences are displayed in Table 3.5 below. In particular, it shows that new house prices in the Urban South HMA are nearly 50% higher compared to the median, while prices in the Urban North, Dearne and Town Centre HMAs are between 16%, 17% and 19% lower than the median respectively. Specifically, the Town Centre HMA is also characterised by recording the fewest number of transactions for new build housing; this simply reinforces its relative sub-optimal position regarding new housing opportunities and the fact that it contains a large number of empty, derelict and problematic sites. Presently, such conditions make many of these sites [close to the town centre] an unattractive proposition in viability terms for typically speculative private housing development.

Table 3.5: New Build House Prices by Housing Market Area [HMA], rebased to November 2018 prices

HMA	Median [£/unit]	% Difference from the Median [£/unit]	Max [£/unit]	Min [£/unit]
Dearne	£193,031	-18.94	£628,871	£143,580
South East	£256,659	7.79	£473,222	£177,736
South West	£239,482	0.57	£492,293	£190,301
Town Centre	£197,987	-16.85	£197,987	£197,987
Urban North	£200,527	-15.79	£223,415	£145,548
Urban South	£353,161	48.31	£633,346	£251,498
ALL HMA	£238,120	0.00	£633,346	£143,580

Source: Hometrack & ONS HPI, December 2018, published March 2019.

The data presented in Table 3.5 also shows that there are some quite large differences in new house prices being achieved within each of the HMAs. These new house prices and the variations within each HMA have been reflected in the development appraisals. Additionally, these house price differences also affect the transfer values applied to affordable homes for sale used in the development viability appraisals.

What is land worth?

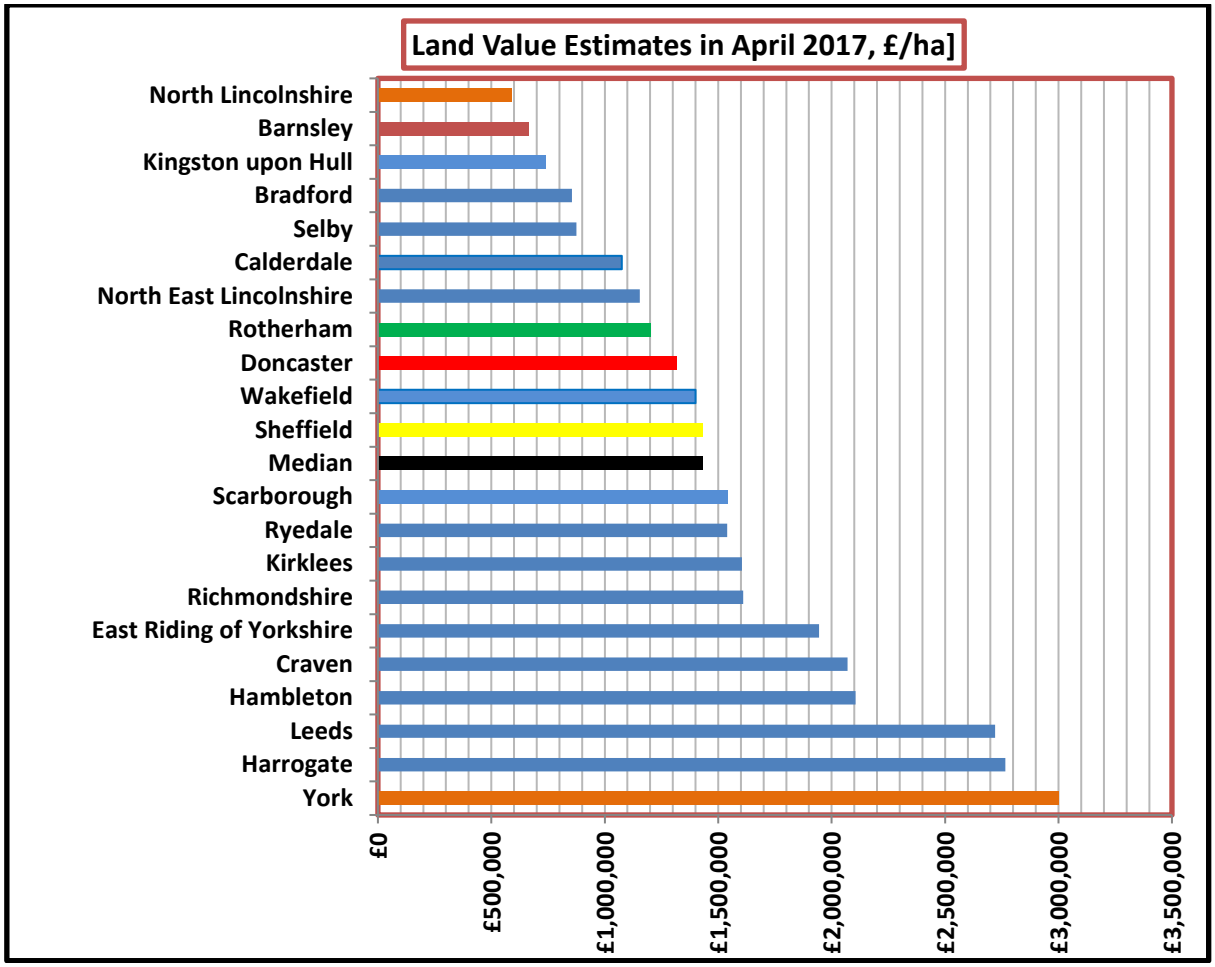
It is always intriguing to know what land is worth. Economic theory informs us that use determines value. As land has to mediate the planning system, the specific policy parameters of each planning authority will therefore have a big and direct impact on the use of land and hence its value. Indeed, the NPPF [MHCLG, 2019Aa] reinforces this point by stressing that developers and landowners cannot contest viability if they, in setting land price levels, ignore not only the particular market conditions, the site's specific attributes, but the extant planning and housing policy requirements of an up-to-date local plan.

As a starting point we can draw on a relatively new set of data published under the title of "*Land Value Estimates for Policy Appraisal*" by MHCLG, which is a "green book" valuation of land value[6] generated by the Valuation Office Agency [VOA]. In essence, the land value estimates reflect a "policy off" estimate.

Figure 4 [overleaf] presents the most recently released data of residential land values for all the local authorities in Yorkshire and Humber region [MHCLG, May 2018], showing significant differences between the highest [i.e. York at £3m/hectare and the lowest [i.e. North Lincolnshire at £0.59m/hectare]. Rotherham is recorded at £1.2m/hectare which is just below the median value for Yorkshire and Humber region at £1.43m/hectare.

[6] It is vital to consult Annex A of the MHCLG 2018 report, as it sets out in very clear terms the assumptions applied in generating the land value estimates [see Appendix 1 of this report which containsan extract].

Figure 4: Land Value Estimates for Residential Sites in Yorkshire & Humber Region [£/hectare], at April 2017prices [MHCLG, May 2018]



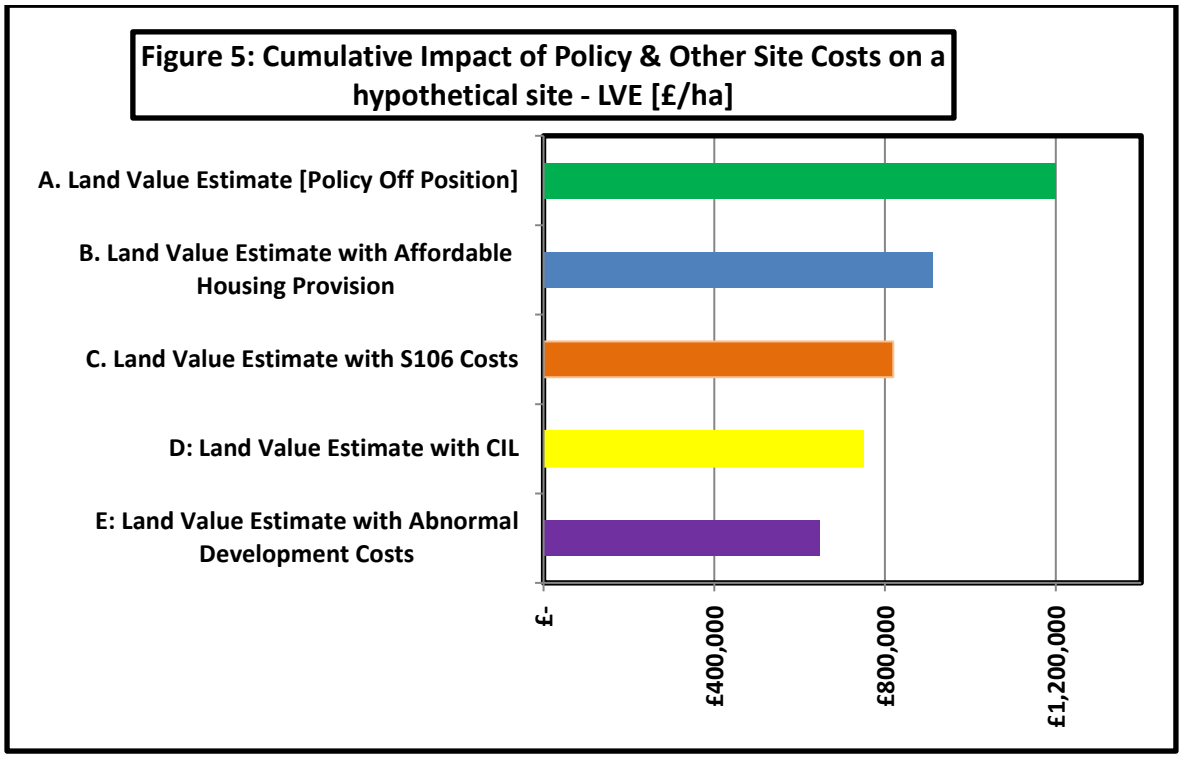
The figures on Table 3.6 show the land value estimates [LVE] for the planning authorities in South Yorkshire. The figures for Rotherham show a considerable rise in the levels recording £1.2m per hectare in April 2017 [MHCLG, 2019A]. These can be largely explained by the recovery in new house prices over the same period [see Figure 2 above], which pull up the value of land, which is in accordance with the logic of economic theory.

Table 3.6: Land Value Estimates

£/hectare	2014 prices	2015 prices	2017 prices
Rotherham	**£823,000**	**£970,000**	**£1,200,000**
Sheffield	£1,718,000	£1,515,000	£1,430,000
Barnsley	£1,053,000	£840,000	£665,000
Doncaster	£1,537,000	£1,280,000	£1,315,000

Sources: *Land Value Estimates for Policy Appraisal* (2014), February 2015, CLG; *Land Value Estimates for Policy Appraisal* (2015), December 2015, CLG; & *Land Value Estimates for Policy Appraisal* [2017), May 2018, MHCLG.

Vitally, these land value estimates explicitly **exclude** any of the usual policy requirements that have to be met if a planning permission is granted for development. It is possible to illustrate the impact of delivering policy requirements [i.e. affordable housing, on and off-site planning requirements [via S106 agreements]] as well as accounting for any site specific attributes or constraints [e.g. contamination, abnormal development costs]. For a hypothetical site, Figure 5 shows the extent to which the cumulative impact of policy and site costs reduces the "policy off" LVE. Thus, by generating "policy on" LVEs for individual sites, this will reveal the worth of these sites taking into account the local policy, market and site conditions [e.g. in Rotherham].



One thing that should be expected from conducting development appraisals is that differences in site issues, notwithstanding meeting a planning authority's policy requirements, will be reflected in differences between the sites' LVEs. The reasons and core purpose for conducting development appraisals is to ensure that such sites are not rendered unviable.

Land values and policy requirements

The main policy requirement for developer contributions [in financial terms] has been to provide affordable housing, and this was supported by the previous study [RMBC, 2012]. The effect of these policy requirements has filtered through in land value negotiations, which over the last 8 or so years [since that last report] have coincided with a house price decline and subsequent recovery in real terms of new build house prices [especially since mid 2016].

It is difficult to predict land values for non-serviced sites that don't have the benefit of planning consent, as they will all have different servicing issues with varying costs. A contaminated site with abnormal development costs may cost the owner/promoter of the site more to fully service, but once the contamination has been removed by the landowner, the site will be sold for the same amount as one with no contamination. In this case the costs of remediation, etc. is amortised in a lower land value/price position for the current landowner; if the site is sold on without undertaking remediation, then the additional costs incurred by the new landowner [e.g. the developer] should result in a lower price being struck.

Indeed, it is typical for developers to agree to pay something close to the existing use value for a site [e.g. agriculture or employment which will ultimately depend on a site's credible current use], and there will be an agreement in place with the landowner to share any profits after costs (including an appropriate developers return) have been deducted. Thus there is scope, once the planning policy requirements and site investigations have been undertaken to assess the worth of the land more specifically to the site. This will necessarily factor in the actual planning policy requirements for such items as infrastructure, affordable housing, flood mitigation, energy efficiency and other resilient measures, and come to a more realistic view [i.e. typically lower value] on the actual price to be paid for the land.

As such, the price at which land is exchanged and transacted is a function of two opposing [and not necessarily equal or well-informed] forces:

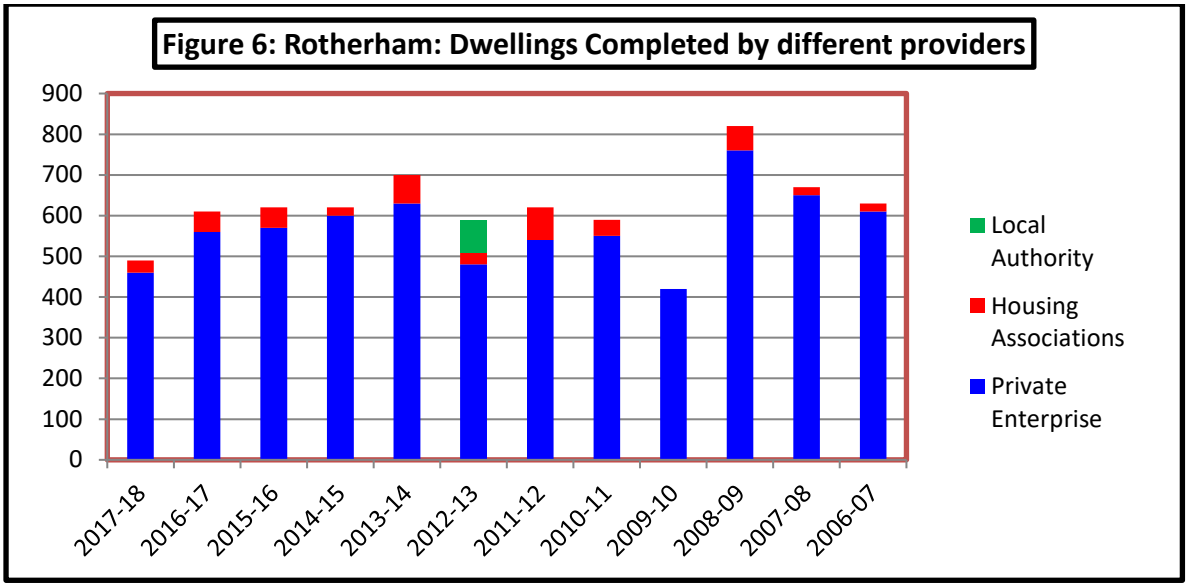
- Land owners will generally seek to secure an aspirational land value based on the planning consent that can be achieved for the land; and
- The price offered for land [by prospective developers] will need to reflect extant policy requirements, known site constraints and conditions, and market sentiment.

This means that land values should be set to provide sufficient incentives to encourage delivery of sites but at the same time look towards meeting all known policy requirements of an adopted Local Plan.

So setting a single/common land value threshold or benchmark for site-based development appraisals is misplaced and inappropriate. The actual price paid for land to a landowner comprises a function of many factors, including the landowner's financial circumstances, market demand and site specific residual valuations which may find a site is cheaper to develop than estimated, or requires less in the way of infrastructure and opening up costs. Therefore, it is unwise in principle and in practice to believe that by setting a single/common definitive threshold or benchmark land value this will bring forward land for development. This is confirmed by reference to the evidence presented on existing use values [plus a premium] in Section 4.

Housing Delivery in Rotherham Local Planning Authority Area

Figure 6 shows the volume of completed dwellings in RMBC from 2006/07 to 2017/18 [according to MHCLG Live Table 253, April 2019]. It shows the sharp decline in completions in 2009/10 which coincided with the banking crisis; a rise in number of completions to a peak in 2013/14 [of 700 dwellings]; a levelling-off in completions to around 600 for the next three years until a further sharp fall in completions in 2017/18 to just under 500 dwellings. As expected the private sector is the monopoly supplier recording over 90% of all completions in all of these years. Apart from 2012/13, the other providers have been housing associations.



In terms of the provision of affordable housing, figures in Table 3.7 for three financial years [2015/16 to 2017/18] show a mixed record in terms of the use of S106 agreements in the provision of affordable housing from private developers.

Table 3.7: Delivery of Completed Affordable Housing Dwellings, 2015/16 to 2017/18

Rotherham MBC	2015-16		2016-17		2017-18	
Types of Affordable Housing	**New Build Completions**	**% by S106**	**New Build Completions**	**% by S106**	**New Build Completions**	**% by S106**
Social Rent, of which:	32		25		14	
S106 (nil grant) new build:	32	100.0%	25	100.0%	12	85.71%
Affordable Rent, of which:	40		60		44	
S106 (nil grant) new build:	12	30.0%	6	10.0%	0	0.0%
Intermediate Rent	0		0		0	
S106 (nil grant) new build:	0	0.0%	0	0.0%	0	0.0%
Shared Ownership	6		10		0	
S106 (nil grant) new build:	6	100.0%	10	100.0%	0	100.0%
Affordable Ownership	11		0		0	
S106 (nil grant) new build:	11	100.0%	0	0.00%	0	0.0%
OVERALL TOTAL	**89**		**95**		**58**	
S106 (nil grant) new build:	**61**	**68.54%**	**41**	**43.16%**	**12**	**20.69%**

The above figures depict large differences between the years as well as between the different types of affordable tenures being delivered. These figures also reveal that intermediate rent is never delivered [this is also confirmed from much earlier dates], whereas depending upon funding streams other kinds of affordable housing is provided through specific capital and grant allocations via HCA/Homes England initiatives or directly by RMBC as the local housing authority.

The actual delivery of affordable housing is dependent upon the S106 agreements signed between applicants and the planning authority. Interrogating these agreements covering the period 2010 to mid-

2019[7] shows that these agreements involved 4,066 dwellings of which 617 will be affordable units. Currently of these 617 affordable units 356 have been delivered, while the remainder [263] will be delivered in accordance with the pace and rhythm of delivery, which are subject to national as well as local market pressures. Needless to say, some of these sites involve large schemes which are being built out over phases taking at least five years or more to complete [indeed, the site at Waverley is expected to take ten years].

Figures in Table 3.8 demonstrate the degree to which RMBC's affordable housing policies are being met. Of the 43 developments where there is an agreement to deliver affordable housing, no fewer than 36 of these delivered the planning authority's affordable housing policy requirement either directly through delivery on site, by accepting a different housing mix, or commuted sums which were deemed to provide equivalent compensation for a number of actual units that would normally be delivered on-site.

It is also worth noting that the planning authority's policy could not be delivered because vacancy building credits have been claimed on 3 sites, while on another site a viability appraisal confirmed that no affordable housing could be delivered. Interestingly, there are three sites where a higher proportion of affordable housing has been achieved [one because of public subsidy, the other 2 because of agreements with the developers to deliver a different mix of affordable units].

Table 3.8: Delivery of Completed Affordable Housing Dwellings, 2015/16 to 2017/18

AH Policy Compliance	Number of Qualifying Schemes	Comments
Higher than Policy	3	e.g. With aid of HCA grant; agreed different AH housing mixes that generated additional AH units.
Policy Compliant	29	i.e. at 7.5%; 15%; or 25%
Compliant, but with alternative housing mix	2	e.g. Bungalows taken in a 1: 2 ratio
Compliant, but with compensatory Commuted Sums	4	
Compliant, but with compensatory Overage payments	1	
Lower or zero, as a result of viability appraisal	1	
Lower, as a result of claiming Vacant Building Credit	3	
Total	**43**	

In addition to the 43 agreements, there are eight other residential schemes where presently their planning status remains uncertain. Specifically:

- Four schemes are not proceeding; three of these were judged to be unviable; and another scheme is unlikely to proceed as the applicant has been declared bankrupt;
- One other scheme is proceeding, though rather slowly, however a commuted sum has been agreed instead of on-site provision; and
- There are three other applications where their planning status remains undetermined, though there are agreements in principle to deliver the affordable housing policy requirements [i.e. 25%]. If these schemes do proceed, they will deliver 482 dwellings, of which 120 will be affordable, meaning that the planning authority's policy of seeking 25% affordable housing [or equivalent] on these sites is also being met.

[7] The planning authority's affordable housing policy was two-tiered [7.5% and 15%] and this was raised to 25% as a result of viability assessments in 2012.

Overall, the evidence above confirms that the planning authority is successfully **delivering its affordable housing policy requirement.** Any deviations from the policy requirement were due to specific site matters, whether this related to a lack of viability or where the planning authority had to negotiate a different housing mix or an off-site commuted sum that were judged to be equivalent in planning and housing policy terms**. It also reveals that the planning authority has been flexible** and respectful of market conditions and site specific matters that can affect both viability and the ability of a site to deliver its quotient of affordable housing in accordance with local plan policy.

Other variations in or differences from the last viability studies

There are a number of other variations or differences in the parameters or assumptions applied in this refresh study compared to the last studies that merit a brief mention, namely:

- **Housing tenure mix**: a compliant affordable policy requirement of 25% has been applied, where this proportion is split into Affordable/Social Rented Homes [14%] and for Affordable Homes for Sale [5%] and Shared Ownership [6%]. Though **no provision** has been made to deliver Intermediate Homes since this category of affordable housing is too onerous for Rotherham householders. Additionally, the new category of Starter Homes[8] is included in the affordable homes for sale proportion where these will be made available at 80% of market value.
- **Housing density**: we have applied net density figures drawn from RMBC *Sites and Policies Local Plan* [June, 2018], which is shown to be marginally higher than in the earlier study to reflect current industry norms.
- **On-site open space**: provision of 15% of a site whose site capacity is greater than 36 dwellings [see in particular SP32, which specifies the provision of on-site open space].
- **Building costs**: these have recorded an increase since the last study, caused by inflation as well as a result of shortages in skilled labour and additional costs associated with changes to Building Regulations [especially energy efficiency measures][9]. BCIS figures reveal that since 1st Quarter 2010, private housing construction cost index has risen by over 37% points [see Appendix 2]. In the last 2 years, average building prices for Rotherham have risen by around 7.5% [see Table 3.8].

Table 3.8: Average Build Prices [£/m²]: Rotherham

Average Build Prices	March 2017	March 2018	Sept 2018	Dec 2018	March 2019
Lower Quartile [LQ]	£890	£926	£933	£949	£959
Median	£1,004	£1,040	£1,049	£1,068	£1,080
LQ % change	0.00	4.04	4.83	6.63	7.75
Median % change	0.00	3.59	4.48	6.37	7.57

- **Cash flow based appraisal methodology**: This study is based on development appraisals involving a cash flow based methodology. This appraisal methodology explicitly takes into account timing and the phasing of values accrued and costs incurred in building out a housing scheme and exiting from the site. The cash flow model calculates the actual interest charges incurred rather than applying standard weighting factors which attempt to do the same in the context of a static appraisal methodology.
- **Community Infrastructure Levy [CIL] payments**: This is new charge that was introduced by RMBC in April 2017. CIL is designed to make a financial contribution to a range of identified off-

[8] NPPF [2018] states that this new category of affordable housing should be 10% of the total number of dwellings being built on a site and these are to be made available to purchase at 80% of market value.

[9] See for example BCIS "Housebuilders' rising costs as output increases", published 8th May 2019.

site infrastructure [see RMBC, CIL123 Regulation List, 2016[10]]. RMBC has a number of different CIL rates for its residential zones. These are applied according to a site's location.

- **S106 policy requirements:** Most planning authorities seek or require that housing [and other] developments mitigate impacts on the local area and economy. With the exception of affordable housing, the basis of these planning requirements are triggered by the needs arising from proposed development and whether there is adequate provision and capacity in the local area regarding physical, social and community services. The sort of requirements can include:
  - Highways and related road and street improvements [e.g. junctions, pelican crossings, pedestrian crossings];
  - Transport covering for example parking, cycle-ways and footpaths, bus services;
  - School places in nursery, primary and secondary schools;
  - Libraries and other leisure provision [including sporting facilities –new, enhancements, maintenance];
  - Open space and children's play areas and equipment; landscape, woodlands, greenways;
  - Health and social personal services – e.g. doctors' surgeries, health centres, community and village halls;
  - Public realm improvements and maintenance and Public Art provision.

It was not feasible to estimate the contributions arising from the development on each of the study sites. However, as an integral part of the appraisal we have included a standard charge to cover a mix of requirements that might be paid by housing developers.

In the previous viability studies [2010 to 2012], a standard S106 contribution of £7,000 per unit was applied to all sites. This current study has re-valued this sum to today's prices and thus has applied a sum of £8,890 per dwelling. Presently, this sum covers two separate charges: Community Infrastructure Levy [CIL][11] and S106 costs. Together, this sum is available for a variety of on-site and off-site requirements. Rotherham has four different residential zones CIL rates ranging from £15/m^2 to £55/m^2. Thus, once the compulsory CIL is paid, the remainder of the standard charge is assumed to be available to be spent in respect of S106 requirements.

We recognize that Rotherham's present approach to their use of planning obligations is partial though embryonic; compared to many other planning authorities, the scope set out in its recently adopted *Sites and Policies Local Plan* [RMBC, 2018] is limited.

We are also conscious that these standard contributions, in total, will generate quite large lump sums from each site. Indeed, the mean sum across all the sites [in the AH Refresh Study] amounts to £221,000 per hectare. The equivalent sum for the brown field sites is just over £291,000 per hectare and for the green field sites £173,000 per hectare. The largest sum is £693,000 per hectare [Site H22] and the smallest sum is close to £70,000 per hectare [site H64]. Indeed, the 27 sites that have been appraised as part of this AH Refresh Study, have a total site capacity of 3,294 dwellings, which generates over £20.67m or £6,275 per dwelling to be available to be spent via S106 requirements.

One might argue that regarding other planning obligations to be funded by private housing developers, we are being over-optimistic or indeed opportunistic. However, our view is that we are being risk averse as these additional costs are reflected in lower outturn land value estimates; they do not affect the target rate of profit sought by the private housing developer as this is a fixed input to the development viability appraisal.

[10] The CIL 123 List is to be abolished at 1st September 2019. From that date onwards, local charging authorities will be required to publish an Infrastructure List, A CIL Report and a S106 Report to show how monies resulting from development have been applied to infrastructure on the new Regulation [121A (a) Infrastructure List.
[11] Rotherham introduced a CIL in April 2017.

And, clearly, in recognizing that there may be a need to make such contributions we are ensuring that a "truer" or "fuller" cost of development is being covered; such costs should be amortised in local land values in the way that abnormal costs and costs tied to remediation impact on land values.

- **Miscellaneous items**: for some sites special designations or site conditions generate additional constraints and costs; sometimes however these higher specifications can lead to higher outturn prices. Where such costs are incurred or required these have been applied to specific sites.

Though these differences and variations affect both the "value" and the "costs" side [excluding land], on balance the overall impact is **unlikely to adversely affect development viability** [i.e. the ability to deliver RMBCs extant affordable housing and other policy requirements].

The next section presents the findings of the appraisals.

Section 4: Study Findings

Introduction
This section sets out the study's findings.

Development [viability] appraisal outputs
A number of 'iterations' have been conducted to reflect different planning policy requirements in the development viability appraisals. The aim of these appraisals is to provide up-to-date and reliable evidence in support of RMBC's extant affordable housing planning and other policy requirements contained in the recently *Adopted Sites and Policies Local Plan* [RMBC, 2018].

An explanation of how to interpret the development viability appraisal output tables
For all the housing development scenarios the appraisals have:

- Calculated the overall development value of completed schemes.
- From this, we deducted the development cost to build the scheme and the developer's profit margin.
- All fees and finance costs were included in the costs and these are an integral element of the costs.
- All site specific planning and other policy requirements are included in the costs and hence subtracted from outturn value.
- The result of subtracting all costs from a site's gross development value is to generate a residual land value per hectare [£/ha], which is available to pay for the land after all finance, fees, planning and other policy requirements have been taken into account.
- Several iterations have been prepared to illustrate how different proportions of affordable housing affects the residual land value estimate; the focus, of course, is on RMBC's extant affordable housing policy requirement.

The generated land value estimate [LVE] outputs for each site can be found in the following Tables 4.2 and 4.3 and in Figure 7. The appraisals include iterations regarding variations in the proportion of affordable housing i.e. from zero through 100% affordable housing. The reference point is obviously the current policy requirement for affordable housing provision [25%] and the tables and charts focus on this position. Figure 7 shows the LVE position for full policy compliant schemes which includes 25% affordable housing provision and other planning requirements and chargeable CIL payments.

The figures in Table 4.1 summarises the range of LVEs and reveals a schism in the values between the green field and brown field sites.

Table: 4.1: Generated Land Value Estimates for Study Sites-Policy Compliant LVE [£m/hectare]

Land Value Estimates	Green field sites	Brown field sites	All Sites
£1.5m/ha and higher	1	1	2
£1.25m to £1.449m/ha	3	0	3
£1m to £1.249m/ha	4	0	4
£0.75m to £0.99m/ha	1	0	1
£0.5m to £0.99m/ha	4	2	6
£0.25m to £0.499m/ha	1	1	2
£0 to £0.249m/ha	1	1	2
Less than £0/ha	1	6	7
All Sites	**16**	**11**	**27**

Of these 27 sites, 16 sites record LVEs of at least £500,000 per hectare while delivering policy compliant schemes. 3 of the 16 green field sites and 8 of the 11 brownfield sites record lower or negative LVEs.

Figure 7: RMBC Refresh Study Sites: Land Value Estimates for 25% AH Policy Compliant Scheme[/£ha]

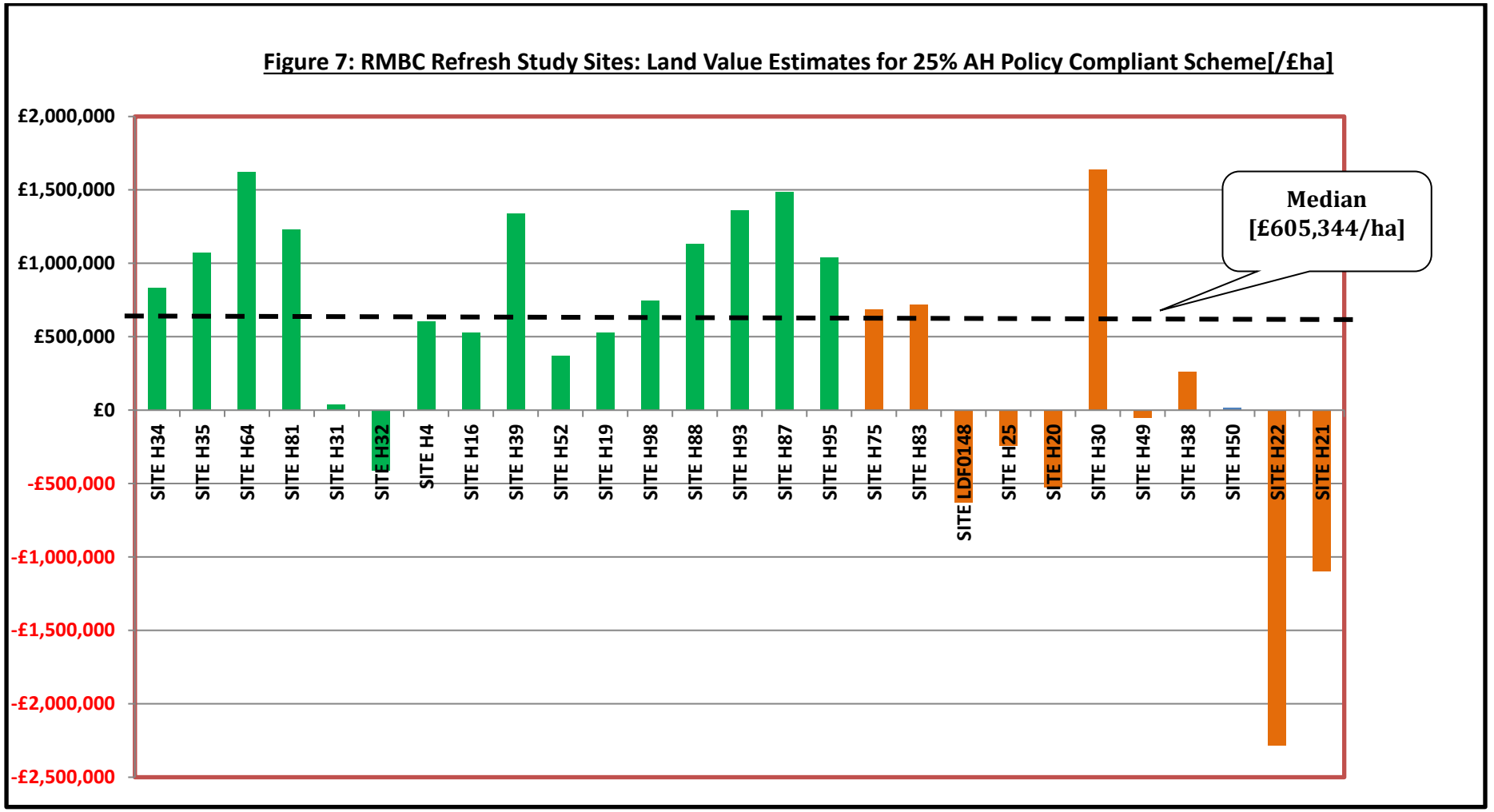


Table 4.2: Land Value Estimates for Greenfield Sites [£/ha] with Affordable Housing Policy Iterations

Site Type	GF	GF	GF	GF	GF	GF
Site Code	SITE H34	SITE H35	SITE H64	SITE H81	SITE H31	SITE H32
Site Location	Land off Lathe Road/Worry Goose Lane, Whiston	Land off Shrogswood Road, Whiston	Land off Allott Close, Bramley	Land off Wentworth Way, Dinnington	Land at Chester Hill, Oldgate Lane, Thrybergh	Land off Whinney Hill, Oldgate Lane, Thrybergh
HMA Name	Urban South	Urban South	Urban South	South East	Urban North	Urban North
Site Size [Ha]	20.02	10.2	0.91	7.45	4.75	2.08
Site Capacity	450	217	22	243	148	75
APPRAISAL ITERATION	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]
ALL MARKET SCHEME	£1,092,399	£1,400,556	£2,141,808	£1,646,254	£312,593	-£85,032
10% AH POLICY SCHEME	£988,787	£1,269,372	£1,934,975	£1,480,248	£205,605	-£216,049
15% AH POLICY SCHEME	£936,899	£1,203,782	£1,831,561	£1,397,168	£149,973	-£281,557
20% AH POLICY SCHEME	£885,008	£1,072,513	£1,728,148	£1,313,919	£93,839	-£347,065
25% AH POLICY COMPLIANT SCHEME	**£833,120**	**£1,072,513**	**£1,624,318**	**£1,230,434**	**£37,278**	**-£412,572**
30% AH POLICY SCHEME	£781,221	£1,006,786	£1,519,078	£1,146,955	-£28,222	-£478,079
100% AH POLICY SCHEME	£5,612	£23,803	-£34,500	-£139,862	-£1,116,490	-£1,395,125

Table 4.2 (continued): Land Value Estimates for Greenfield Sites [£/ha] with Affordable Housing Policy Iterations

Site Type	GF	GF	GF	GF	GF	GF
Site Code	SITE H4	SITE H16	SITE H39	SITE H52	SITE H19	SITE H98
Site Location	Land at Fenton Road, Rotherham	Land to the East of Harding Avenue, Upper Haugh	Land to the North of Upper Wortley Road, Thorpe Hesley	Land off Lawrence Drive, Piccadilly, Swinton	Land off Stubbin Road, Upper Haugh	Land off Pontefract Road, West Melton
HMA Name	Urban North	Dearne	Dearne	Dearne	Dearne	Dearne
Site Size [Ha]	2.96	10.49	6.65	1.09	0.89	11.73
Site Capacity	90	291	144	32	20	328
APPRAISAL ITERATION	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]
ALL MARKET SCHEME	£1,083,927	£782,105	£1,725,192	£754,769	£836,900	£1,000,829
10% AH POLICY SCHEME	£892,494	£681,681	£1,570,528	£600,314	£712,850	£898,951
15% AH POLICY SCHEME	£796,778	£631,087	£1,493,202	£523,086	£650,825	£847,707
20% AH POLICY SCHEME	£701,061	£580,475	£1,415,879	£445,858	£588,801	£796,466
25% AH POLICY COMPLIANT SCHEME	**£605,344**	**£529,349**	**£1,338,561**	**£368,630**	**£526,776**	**£745,228**
30% AH POLICY SCHEME	£509,628	£476,969	£1,261,112	£290,302	£464,751	£693,952
100% AH POLICY SCHEME	-£1,162,896	-£558,718	£36,657	-£949,801	-£489,919	-£267,958

Table 4.2 (continued): Land Value Estimates for Greenfield Sites [£/ha] with Affordable Housing Policy Iterations					
Site Type	**GF**	**GF**	**GF**	**GF**	**16**
Site Code	**SITE H88**	**SITE H93**	**SITE H87**	**SITE H95**	**Average All GF Sites**
Site Location	**Land off Aston Common, East of Wetherby Drive**	**Land off Kiveton Hall Road, Kiveton Park**	**Land to the East of Lodge Lane**	**Land off Winney Hill, Firvale, Harthill**	**Median LVE [£/ha]**
HMA Name	**South West**	**South West**	**South West**	**South West**	**Refresh Study Total [GF]**
Site Size [Ha]	6.44	3.64	0.59	1.61	91.50
Site Capacity	175	100	19	39	2393
APPRAISAL ITERATION	**LVE [£/ha]**	**LVE [£/ha]**	**LVE [£/ha]**	**LVE [£/ha]**	**LVE [£/ha]**
ALL MARKET SCHEME	£1,467,796	£1,730,619	£2,060,175	£1,445,456	£1,246,478
10% AH POLICY SCHEME	£1,334,615	£1,582,614	£1,831,316	£1,284,060	£1,129,079
15% AH POLICY SCHEME	£1,267,854	£1,508,682	£1,716,887	£1,202,991	£1,069,945
20% AH POLICY SCHEME	£1,200,699	£1,434,802	£1,602,458	£1,121,926	£978,761
25% AH POLICY COMPLIANT SCHEME	**£1,133,043**	**£1,360,359**	**£1,484,335**	**£1,040,242**	**£936,681**
30% AH POLICY SCHEME	£1,064,958	£1,285,919	£1,364,608	£957,477	£869,349
100% AH POLICY SCHEME	£60,993	£207,589	-£389,307	-£315,275	-£291,617

Table 4.3: Land Value Estimates for Brownfield Sites [£/ha] with Affordable Housing Policy Iterations

Site Type	BF	BF	BF	BF	BF	BF
Site Code	SITE H75	SITE H83	SITE LDF0148	SITE H25	SITE H20	SITE H30
Site Location	Former Timber Yard off Outgang Lane, Dinnington	Land between Sheffield Road & Mineral Railway, Ryton Road, South Anston	Land at Ivanhoe Works, Kimberworth Road, Masbrough	Land to the north west of Norwood Street, Doncaster Road, Dalton	Land off York Road, St. Ann's, Rotherham	Land at Former Herringthorpe Leisure Centre
HMA Name	South East	South East	Urban North	Urban North	Urban North	Urban North
Site Size [Ha]	7.96	1.04	4.39	0.63	0.47	3.04
Site Capacity [number of dwellings]	271	30	158	38	20	97
APPRAISAL ITERATION	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]	LVE [£/ha]
ALL MARKET SCHEME	£1,039,570	£1,151,464	-£303,119	£236,094	-£142,388	£2,156,781
10% AH POLICY SCHEME	£898,110	£982,239	-£434,262	£51,421	-£295,532	£1,949,674
15% AH POLICY SCHEME	£826,852	£897,545	-£499,827	-£44,415	-£372,104	£1,846,128
20% AH POLICY SCHEME	£754,906	£809,305	-£565,388	-£144,649	-£448,675	£1,742,588
25% AH POLICY COMPLIANT SCHEME	£682,898	£720,690	-£630,943	-£244,883	-£525,247	£1,639,054
30% AH POLICY SCHEME	£610,343	£632,075	-£696,494	-£345,117	-£601,819	£1,535,526
100% AH POLICY SCHEME	-£882,020	-£753,626	-£1,613,417	-£1,621,816	-£1,673,801	-£128,518

Table 4.3 (continued): Land Value Estimates for Brownfield Sites [£/ha] with Affordable Housing Policy Iterations						
Site Type	**BF**	**BF**	**BF**	**BF**	**BF**	**11**
Site Code	**SITE H49**	**SITE H38**	**SITE H50**	**SITE H22**	**SITE H21**	**ALL BF SITES**
Site Location	**Land Civic Centre, Swinton**	**Land Eldertree Lodge, Thorpe Hesley**	**Land at Charnwood House, Swinton**	**Henley's Garage Site, Westgate**	**Land to the west of Wellgate**	**Median LVE [£/ha]**
HMA Name	**Dearne**	**Dearne**	**Dearne**	**Town Centre**	**Town Centre**	**Refresh Study Total [BF]**
Site Size [Ha]	1.57	0.88	0.62	0.65	2.25	**23.5**
Site Capacity [number of dwellings]	50	21	20	53	143	**901**
APPRAISAL ITERATION	**LVE [£/ha]**	**LVE [£/ha]**	**LVE [£/ha]**	**LVE [£/ha]**	**LVE [£/ha]**	**[LVE [£/ha]**
ALL MARKET SCHEME	£278,267	£575,914	£374,894	-£1,715,835	-£633,706	£278,267
10% AH POLICY SCHEME	£151,169	£450,886	£232,345	-£1,942,519	-£818,806	£151,169
15% AH POLICY SCHEME	£85,920	£388,372	£161,071	-£2,055,861	-£911,352	£85,920
20% AH POLICY SCHEME	£19,526	£325,857	£89,796	-£2,169,202	-£1,003,895	£19,526
25% AH POLICY COMPLIANT SCHEME	**-£54,132**	**£262,832**	**£18,522**	**-£2,282,542**	**-£1,096,435**	**-£54,132**
30% AH POLICY SCHEME	-£130,757	£199,378	-£57,312	-£2,395,883	-£1,188,971	-£130,757
100% AH POLICY SCHEME	-£1,203,470	-£749,758	-£1,141,388	-£3,982,579	-£2,483,969	-£1,203,470

9 sites [8 green field and 1brownfield] register LVE figures of at least £1m/hectare, which shows that in the future there is a potential to raise the present affordable housing policy requirements, particularly as the adopted local plan has allocated a substantial number of similar green field sites as housing sites.

2 of the green field sites [H30 and H31] have recorded very low or negative LVEs and these can be easily explained by their site conditions which demand significant abnormal development to bring them to a position as serviced sites. Their position is compounded by the sites' location being in a low value area for Rotherham.

The relative weak position of the brownfield sites is not too surprising as the appraisals have included a specific line of estimated costs relating to abnormal development costs that are likely to be required to establish them as serviced sites. Many of these sites are located in "lower" valued HMAs and with the higher costs incurred in servicing them, the LVEs are accordingly reduced with some recording very low and negative LVEs.

A good number of the brownfield sites have either been appraised in the previous AH study [i.e. Site H75, site LDF048], or have been subject to independent development viability appraisals [i.e. sites H31, H32, H4 and H83] in the last four years. The fact that these sites remain derelict and undeveloped is testament to their predicament, namely that they are:

- Adversely affected by specific, yet major site constraints;
- Located in relatively low value areas; and are
- Adversely affected by externalities which if they are to pass normal viability tests will require a more mutual and concerted strategy if they are to be built out in the future.

Existing Use Values

The purpose of setting out the existing use values [EUV] in Table 4.4 [below] for land situated in Rotherham planning authority area is to establish value comparators to be used in assessing whether sites that have been subject of development appraisals can deliver policy compliant development schemes without rendering them unviable.

Table 4.4: Existing Use Values - Comparator Values [£/hectare]

Rotherham Metropolitan Borough Council	Column1	Column 2	Column 3	Column 4	Column 5
Land Uses		**Existing Use Value [EUV]**	**EUV Land Value Plus Premium [£/ha]**	**Abnormal Development Costs [£/ha]**	**Abnormal Development Costs [£/m2]**
Agricultural Land	**Base input**	£22,750	Not applicable		
Premium on EUV Agricultural Land for Large Greenfield Housing Sites [>3ha]	**10**	=EUV+(EUV*10)	**£250,250**	£0.00	£0.00
As above with Abnormal Development Costs	**7.5**	=EUV+(EUV*7.5)	**£193,375**	**£56,875**	**£5.69**
Premium on EUV Agricultural Land for Small Greenfield Housing Sites [<3ha]	**15**	=EUV+(EUV*15)	**£364,000**	£0.00	£0.00
As above with Abnormal Development Costs	**12.5**	=EUV+(EUV*12.5)	**£307,125**	**£56,875**	**£5.69**

Industrial/Warehousing Land	**Base input**	**£400,000**	Not applicable		
Premium on EUV Industrial/Warehousing Land for Housing Sites	**20.00%**	=EUV+(EUV*0.2)	**£480,000**	£0.00	£0.00
As above with Abnormal Development Costs	**6.00%**	=EUV+(EUV*0.06)	**£424,000**	**£56,000**	**£5.60**
Office Land [Out of town]	**Base input**	**£400,000**	Not applicable		
Premium on EUV Office [out of town] Land for Housing Sites	**20.00%**	=EUV+[EUV*0.2)	**£480,000**	£0.00	£0.00
As above with Abnormal Development Costs	**6.00%**	=EUV+(EUV*0.06)	**£424,000**	**£56,000**	**£5.60**

The comparator values stem from Valuation Office Agency valuations prepared to generate land value estimates for policy appraisals [MHCLG, 2019A]. The valuation methodologies used are explained in their published report in May 2018 [see Appendix 1 for an extract of the methodology].

Table 4.4 presents the EUV for four use classes namely, agricultural land; residential land; industrial/warehousing land and office [out of town] land.

These values represent a **"policy off"** position and where abnormal development costs and planning and housing policy costs are absent. As such the different uses to which land can be developed reflect a presumption in favour of development and that it can proceed to be built out in the presence of known and effective demand for the space that is created. As such, these are optimistic/aspirational conditions and so long as these are known and fully understood it is not too difficult to understand how these are derived. In practice, of course, most sites present a variety of unique conditions and situations, as well as having to take account of both market positions [i.e. prices and costs] and the range of planning and housing policy requirements that are legitimately set to ensure that sustainable and environmentally sound development is delivered while recognising the need to mitigate on-site and off-site impacts.

These base values are only tenable so long as there is in place a measurable stream of rental income from an operational business [i.e. a lease with known rental payments]. If these conditions are not present, then the EUV for the land must be heavily discounted, perhaps to a level at or close to a nominal, exigent value. This point is critical for a number of the sites that have undergone appraisal in this study; this will be discussed later in this report [see pp. 43-44].

The setting of a "premium" over and above the EUV is not unusual but it is not without some controversy and disagreement. The premium represents the value of the stream of forgone benefits that accrues if landowners give up their right to collect future rental income as well as reflecting the worth associated with any uplift in the land's worth associated with the rights associated with gaining planning permission to change the land's use. It is not surprising therefore that this premium is a large multiple if agricultural land is allocated in a local plan for housing or for other uses. For example, the premium[12] attached to agricultural land that has

[12] The Council is aware that recently updated NPPF [MHCLG, 2019a] and PPG for Viability [MHCLG, 2019b] indicates that the incentive needed to release land for development is couched in terms "minimum requirement" to incentivise a "reasonable landowner". In this respect the premium is likely to be around 7 for a large site [>3 hectares] and 10 for smaller sites. Given that this study has allowed higher

gained planning permission for housing is, typically around 15 for smaller sites [up to 3 hectares] and 10 for larger sites [of greater than 3 hectares].

If the land is currently in industrial or office use, the premium attached to land for housing is usually expressed as a percentage-uplift on its EUV, typically at 20%. This value reflects a serviced site with no abnormal development costs. Again, if such a site requires remediation prior to development its worth is reduced, on some occasions this can be substantial. Table 4.4 shows that the EUV value for industrial/warehousing land in RMBC is around £0.4m/hectare; with a premium such a site will be worth £480,000/hectare. Similarly, office land has the same EUV of £0.4m/hectare and with the same premium uplift it will be worth around £480,000/hectare. However, if these same sites are adversely affected by difficult site conditions, then their worth will be lower, and in some cases substantially so. Internally generated data from site investigations sourced from RMBC show that abnormal development costs association with remediation and servicing can vary enormously, with average costs amounting to around £19,000/dwelling unit or around £25.12/m^2.

The sites that have been in a previous use, the so-called brownfield sites, will incur remediation costs in order for them to be ready for development. To take account of their site conditions, a line of abnormal costs has been notionally set. The figures in columns 4 and 5 of Table 4.5 were generated by simply reducing the EUV premium for the different land uses. A good majority of these sites, **7 of the 11,** have no operational activity, meaning that the current landowners are not receiving any rental income at all and therefore these sites' EUV will be substantially lower than the threshold values being cited by the VOA in Table 4.4 [above].

Information of the site conditions, current uses and activity status of these 11 sites is presented in Table 4.5 [below]. This shows the following:

- Sites[13] H25 and H75 comprise derelict buildings and are not in any operational activity.
- Sites H20; H22; H30 and H50 have had their buildings cleared and their appearance today is largely rough grassed sites with no obvious operational activity [except H20].
- Sites H21; H38; H49; H83 and LDF0148 currently register some, though limited, operational activities and hence rental income.

The operational status of these sites will materially and adversely affects their worth and thus their EUV. Accordingly, the final column [to the right] in Table 4.5 presents the scale of discount that has been applied to their EUV and hence their comparator values when testing for viability, which were agreed in liaison with RMBC officers.

Table 4.5: Existing Uses, Site Conditions & Current Activity Status of Sites in RMBC

Site Code in Rotherham *Sites & Policies Local Plan*, June 2018	Site Comments and Current Activity Status	Existing Use Class	Discount [%] from EUV
H75	Derelict site; buildings in state of disrepair and partially demolished; site contains a large amount of demolished building materials; the site is not presently in any use; absence of marketing; no income.	Industrial	80

premiums means that the study has allowed a higher comparator which benefits the developer contesting viability!

[13] Site names can be found in Section 2 of this report, specifically in Tables 2.2 through to 2.8 on pages 7-19.

Table 4.5 [continued]: Existing Uses, Site Conditions & Current Activity Status of Sites in RMBC			
Site Code in Rotherham *Sites & Policies Local Plan*, June 2018	**Site Comments and Current Activity Status**	**Existing Use Class**	**Discount [%] from EUV**
H25	Derelict building; building subject to arson; no income; owners wanting to redevelop for housing; it had been previously used as a training centre by RMBC. It was subsequently sold on by RMBC to a private owner.	Community Use	80
H22	Cleared site; previously government offices, Last used as Henley's Garage and showrooms.	C3 – Housing [washed over]	80
H32	Cleared site many years ago; no income; currently being marketed for sale; RMBC as owners are seeking to sell. Technically classified as "green field" by NPPF [2018] though possessing obvious "brownfield" attributes.	C3-Housing [washed over]	80
H50	Cleared site; footings of demolished nursing homes; no income; absence of marketing.	C3 – Housing [washed over]	80
H20	Part being used as a Car Park; rest of the site is cleared comprising rough/dirt ground. Limited income; absence of marketing. RMBC [General Fund] are the owners seeking to sell.	C3 – Housing [washed over]	70
H83	Part of site in use; office block vacant, though recent leases for play centre and software business - so future income stream likely; absence of marketing; owners looking to sell.	Industrial/missed uses	60
LDF0148	Part of site in use for storage, vehicle repair and scrap-yard.; a large factory building and site has been recently cleared; absence of marketing; some income generated	Industrial	60
H38	Comprises a number of barns, farm building [pig farm] and sheds; very limited income from small scale activities; absence of marketing.	Agricultural	50
H21	Currently occupied as a Royal Mail sorting/collecting office; part cleared. In use. Building in poor condition. Other buildings are presently vacant [one was previously used as a Halfords exhaust/tyre centre]. The rest of the cleared site being used as a fee-paying car park.	Mixed uses	40
H49	Part of site in use; ground floor shops with apartments above; a number of the shops are vacant; public parking to the rear of the main buildings; community uses [library] adjacent to the site. Rental income being generated; currently being marketed for sale; RMBC are seeking to sell.	Mixed uses	25

When is a site viable?
This is the key question and reason for carrying out development viability appraisals. Now that the appraisals have generated LVEs, there is a need to compare each of the site's LVE against the site's specific existing use value [EUV] which must include a premium that represents the incentive to sell the land. Figures in Table 4.4 show the EUV that reflect norms used in their setting.

Greenfield Sites: All of these sites are judged to be Greenfield even though four sites [i.e. H4; H64; H31 and H32] have been in a previous use prior to their reclamation. For Greenfield sites that are judged to be in agricultural use data [see MHCLG, 2019A] indicates that such land in RMBC is being traded at around £22,750 per hectare. Given that these sites are now allocated as housing sites in the adopted *Sites and Policies Local Plan* [RMBC, 2018] a premium equivalent to 10 or 15 times their EUV is typically applied. The figures in column 1 of Table 4.6 are set according to the base inputs displayed in Table 4.4. The larger sites [>3 hectares] are allotted an EUV land value [£/ha] of just over £250,000. Given the scarcity value associated with smaller sites [<3 hectares], the premium attached to these sites is equivalent to 15 times their EUV, meaning that their EUV is £364,000 per hectare.

Table 4.6: Greenfield Sites – Viability Test

Site Code	[1] EUV + Premium [£/ha]	[2] LVE at 25% AH [£/ha]	[3] Balance [between 2-1] [£/ha]	[4] Viable? [YES/NO]
H04	£307,125	£605,344	£298,219	YES
H16	£250,250	£529,349	£279,099	YES
H19	£364,000	£526,776	£162,776	YES
H31	£193,375	£37,278	-£156,097	NO
H32	£307,125	-£412,572	-£719,697	NO
H34	£250,250	£833,120	£582,870	YES
H35	£250,250	£1,072,513	£822,263	YES
H39	£250,250	£1,338,561	£1,088,311	YES
H52	£364,000	£368,630	£4,630	YES
H64	£364,000	£1,624,318	£1,260,318	YES
H81	£250,250	£1,230,434	£980,184	YES
H87	£364,000	£1,484,335	£1,120,335	YES
H88	£250,250	£1,133,043	£882,793	YES
H93	£250,250	£1,360,359	£1,110,109	YES
H95	£364,000	£1,040,242	£676,242	YES
H98	£250,250	£745,228	£494,978	YES

On the basis of the figures in Table 4.6, **RMBC's current planning and affordable housing policy requirements remain viable for all the sites except H31 and H32**[14]. Both of these sites are in RMBC ownership and have been vacant sites now for several decades. Both sites will require remediation and incur additional/abnormal development costs to get them to a point as serviceable sites. So the appraisal outcome is not much of a surprise and the planning authority will need to be flexible in its policy demands regarding the provision of affordable housing.

[14] These sites are washed over housing sites in the Local Plan. Though clearly they have been previously in use, under current national guidance they are categorised as being "green field" sites, though both will require substantial remediation and attenuation costs to get them to a point of becoming serviced sites.

It is clear from the results presented in Table 4.6 that **thirteen of the seventeen green field sites** pass the viability test with ease. This means that these sites could in fact deliver a higher proportion of affordable housing than RMBC's extant policy position. The only exception to this position is the green field site H52.

Brownfield Sites: The position of the brownfield sites is quite different from the green field sites. Setting EUV for these sites is much more uncertain as it depends on their present operational status i.e. are they are currently generating any income or are in a practical position to operate in accordance with their use class? It is important to understand how one can arrive at a specific EUV for each site. The EUV methodology is based on the income approach to valuation, where the stream of future rents is capitalised at an all risk yield. In effective, this means that a lease is in place [now] and that business occupiers are responsible for the future stream of rental income.[15]

Convention informs us that in Rotherham sites that have been largely in industrial, storage, or warehousing uses have EUVs of around £400,000 per hectare [see Table 4.4 above & MHCLG, 2019A]. If a premium of 20% of EUV is added, then a typical site's EUV is increased to £480,000 per hectare. However, this land value is based on known/actual demand, where a lease is in place and a rent is being paid and collected, and that there is an absence of abnormal costs.

Table 4.7: Brownfield Sites – Viability Test

Site Code	Present Operational Status	[1] EUV + Premium [£/ha]	[2] LVE at 25% AH	[3] Balance [2-1]	[4] 25% AH Policy Compliant =Viable [Yes/No]	[5] When Viable? [% of AH]
H20	Car Park; cleared site, limited income; absence of marketing; owners seeking to sell	£127,200 [discounted by 70%]	-£525,247	-£398,047	NO	Never
H21	Currently occupied as a Royal Mail sorting/collecting office; part cleared. In use. Building in poor condition. Two other properties are vacant The rest of the cleared site being used as a fee-paying car park.	£254,400 [discounted by 40%]	-£1,096,435	-£842,035	NO	Never
H22	Cleared site; previously government offices, Last used as Henley's Garage and showrooms.	£84,800 [discounted by 80%]	-£2,282,542	-£2,197,742	NO	Never
H25	Derelict building; no income; owners wanting to redevelop; [earlier sold on by the Council]	£84,800 [discounted by 80%]	-£244,883	-£160,083	NO	At 10%

[15] It is important to note that a very different valuation methodology is applied to an estimate of worth for housing, where it is valued on the basis of vacant possession.

Table 4.5 [continued]: Brownfield Sites – Viability Test						
Site Code	**Present Operational Status**	**[1] EUV + Premium [£/ha]**	**[2] LVE at 25% AH**	**[3] Balance [2-1]**	**[4] 25% AH Policy Compliant =Viable [Yes/No]**	**[5] When Viable? [% of AH]**
H30	Cleared site; footprint of previous use evident; no income; absence of marketing; owners seeking to sell	£84,800 [discounted by 80%]	£1,639,054	£1,554,254	YES	Not Applicable
H38	Some farm buildings and sheds, low income from small scale activities/storage; absence of marketing;	£153,563 [discounted by 50%]	£262,832	£109,269	YES	Not applicable
H49	Part of site in use; some retail; vacant shops; some income generated; absence of marketing; owners seeking to sell	£318,000 [with discount of 25%]	-£54,132	-£372,132	**NO**	Never
H50	Cleared site; footings of demolished nursing homes; no income; absence of marketing; owners seeking to sell	£42,400 [with discount of 80%]	£18,522	-£23,878	**NO**	at 20%
H75	Derelict site; not in use; absence of marketing; no income	£96,000 [with discount of 80%]	£682,898	£586,898	**YES**	not applicable
H83	Part of site in use; part of office block vacant, some income generated; absence of marketing; owners looking to sell	£169,600 [with discount of 60%]	£720,690	£551,090	**YES**	not applicable
LDF0148	Part of site in use; site cleared; absence of marketing; some income generated	£169,600 [with discount of 60%]	-£630,943	-£461,343	**NO**	Never

Many of the sites that are brownfield in this study **do not have a guaranteed future rental flow.** Therefore, their existing worth is not only questionable but **logically their worth will be much lower than £480,000 per hectare;** perhaps being much closer to zero than many would envisage. It must be noted, that this EUV worth [whatever the sum] represents the price an investor would have to pay for the right [and risk] to collect future rental flows. Where a rental

income is being paid and collected then the EUV is higher than on a site where there is no rental income being paid and where there is no evidence of marketing the site in its present use. Currently, a good majority of these sites do not have a known and certain future rental flow. Additionally, given that these sites have been re-designated as housing sites, it is very unlikely that their landowners would want to seek to retain them in their current state.

On the basis of the above, Table 4.7 summarises their individual positions which compares the appraisal results against their respective EUVs plus a premium or assumed notional value as adjusted to represent the lack of a known rental flow. Unequivocally, there are **4 brown field sites [H30; H38; H75 and H83] that are viable while being policy compliant** despite their respective EUVs. Two other sites, **H25 and H50 are capable of delivering 10% and 20% affordable housing respectively** given their EUVs. The **remaining sites [H20; H21; H22; H49; and LD0148] are unviable** given their EUVs and the appraisal iterations confirm that they would never be able to do so, given their current market and site conditions.

In summary for the brown field sites, the above development viability appraisals reveal that despite changes in the overall market conditions relating to the recovery in house prices as well as increases in build costs, on balance these changes have not materially improved the present position of several of the brown field sites. Given their particular site specific constraints, this is finding may not be too surprising but it could have [serious] implications regarding their continuing inclusion in meeting future housing supply and delivery targets.

If these kinds of brown field sites are found to be unviable, then policy position for RMBC will need to be tailored to the specific circumstances arising for each of these allocated housing sites. The planning authority will need to be receptive to not only market conditions but how other complementary actions might help the implementation of development on these kinds of sites in the future. For example, 7 of these housing sites [i.e. H20; H22; H25; H30; H31; H32; H49; and H50] are owned by RMBC. All have had buildings cleared from their sites and have remained in this situation for at least 7 years or more. Though current market conditions have improved, this has not materially changed their position. Indeed, their cleared status demonstrates that compared to green field sites, they remain at a distinct disadvantage, even if the sites are sold at very low or zero land prices. For these RMBC owned sites that have been found to be unviable, it might be possible for RMBC, as the landowner, to take a different position regarding profit expectations as well as seeking any capital receipt from the land itself. Evidence from other development appraisals relating to similar kinds of brown field sites located in the Town Centre HMA reinforces the need for a more concerted and coordinated approach in order to establish a more stable, conducive and supportive environment[16].

[16] This last point draws on internal reports held by the Council.

Section 5: Study Recommendations

Preamble

The current National Planning Policy Framework [NPPF] (MHCLG, 2019) underpins the fact that both developers and landowners must take into the extant policy position as well as current market and site-specific conditions in agreeing a land price. In this respect land value is not the same as land price, though of course a developer can offer any price to secure the land transaction.

Up-to-date development viability appraisals serve as a vital support to the deliverability of the housing targets in adopted Local Plans. However, it must also be recognized that there has been an unstable policy framework as well as a stuttering set of housing market conditions, which lead to a degree of uncertainty about the future direction in particular for local house prices.

Recently, housing is being delivered on a number of sites across Rotherham, particularly on sites with limited infrastructure costs and stronger market demand [e.g. at Waverley]. The assumptions and inputs have been selected to reflect current market and policy circumstances for sites that do not require any major critical infrastructure to bring them forward, especially in the authority's five-year supply.

The development viability appraisals are based on current market values and prices and "hypothetical" yet realistic development scenarios for the kind of housing development that is "planned" to come forward in the near term [i.e. the next five years]. In an uncertain policy and economic market, this approach avoids potentially misplaced assumptions about future economic changes that might render the viability judgements unrealistic.

One of the main policy successes for RMBC has been to secure affordable housing and appropriate developer contributions towards other needs arising from development. The results of the development viability appraisals demonstrate that RMBC current policies are deliverable without rendering the vast majority of the sites tested as unviable.

Recommendations

Recommendation One: RMBC will need to make important choices about policy requirements and affordable housing requirements for brown field sites

The results of the development viability appraisals confirm that green field sites are viable and that given the increase in the number of such sites in its adopted *Sites and Policies Local Plan* [RMBC, 2018], the planning authority should be confident that these will come forward and deliver the requisite affordable housing as well as mitigating the needs arising from such development on-site and off-site.

The approach regarding brown field sites will need to be on a case-by-case basis. The appraisals show that some of the brown field sites are viable in delivering the affordable housing and mitigating on and off-site needs arising from development. Landowners will need to adjust their price expectations regarding these kinds of sites, and this will include the Council too.

The appraisal findings also confirm that viability is a function of both geography and site size and capacity, and that viability can be maintained if variations in affordable housing requirements are sought for some of the more problematical sites [i.e. the brownfield sites].

Recommendation Two: Policy reviews based on market monitoring of key indicators

Good practice shows the importance of including a flexible approach to policy to account for changes in economic cycles and also to meet longer term policy targets. The further away we move from the current timescales the harder it is to estimate the direction of future markets.

To reflect these sentiments and to recognise the general economic uncertainty, the policies promulgated in the *Core Strategy* [RMBC, 2014] and the adopted *Sites and Policies Local Plan* [RMBC, 2018] should allow for a degree of flexibility [i.e. improvements and deterioration] in local housing market circumstances. In doing so, it will allow:

- Developers to negotiate current delivery based on site specific circumstances whilst there is uncertainty and marginal viability.
- RMBC to adjust policy requirements to reflect changes (particularly improvements) in the market in the future.

Evidence shows that developers are seeking a higher degree of certainty at least for the short term as to what will be required by way of developer contributions. So policy requirements for the next five years should be set based on the current market conditions. For instance, in the short term there may be an improvement in the level of affordable housing so there may be less available to fund other planning policy requirements. If this is the case then the viability appraisal should then be kept under review to reflect changes in the market and to move closer towards target based policy requirement for the medium to longer term. Two forthcoming Supplementary Planning Documents on *Contesting Viability* and on *Developer Contributions* will clarify the approach to be adopted by the planning authority[17].

There are no prescribed review periods in legislation. Much will depend on market conditions and their impacts on development viability, as well as lessons learned from the implementation of the S106, affordable housing and other policy requirements. Housing development viability is most sensitive to changes in development value so typically a 10% change in the value of development can increase or decrease land values by around 30%. Similarly, a 10% change in build costs can affect land values by around 16%. Other factors which have a significant impact on viability include landowner value expectations, the density of development and policy requirements. These assumption inputs should be kept under review and used as triggers for reviewing policy linked to viability.

We suggest that RMBC implements a programme of structured and focused monitoring, involving for example:

- New build house price transactions – annually/bi-annually – at least from Hometrack and ONS, but it should include locally completed scheme details too;
- Building prices and costs – annually/bi-annually – at least from BCIS;
- Affordable housing delivery records - annually/bi-annually;
- Collating results from independent viability appraisals – as they arise;
- House types, mix and sizes – annually – from Energy Performance Certificates.
- Regular follow-up surveys on recently completed development schemes focusing on occupier surveys.

Such monitoring should complement other annual monitoring activities.

[17] These are expected in draft form by mid to late 2020.

Recommendation Three: Implications for housing delivery for the next five years

Housing delivery objectives underpinning the adopted *Sites and Policies Local Plan* [RMBC, 2018] will depend on having sufficient sites in lower risk locations, which have low servicing costs and where developers can generate sufficient value, to offer a better price for the land and be confident that the properties they build will sell [i.e. there is effective demand].

There is development taking place within Rotherham indicating that schemes are viable based on current policy requirements and effective negotiations with development partners. In the coming five years, it will be vital that sites will come forward in locations where developers can build without the need for high infrastructure costs and in areas where they can readily sell. Most of these will, therefore, be green field sites in locations that are currently achieving higher then median prices. However, the inferences that can be drawn from these appraisals are that a good number of brownfield sites are unlikely to enter the development pipeline and thus make an important contribution towards the Local Plan's delivery targets without significant public sector interventions and recognising that a typically speculative development approach to development is most unlikely [at least in the short to medium term].

Recommendation Four: Innovative approaches to infrastructure funding and securing income for infrastructure

Looking towards the future, the developer, infrastructure provider, landowner and RMBC will need to work together to deliver growth, infrastructure and other policy requirements in as cost-efficient way as possible.

In the future:

- There is a need to have flexibility to allow for staged developer contribution payments, especially for sites experiencing marginal viability issues.
- Assessments should be undertaken to investigate mechanisms to help forward fund critical infrastructure using various local authority powers and policy trade-offs [e.g. PWLB funding sources; RMBC and other public sector agencies, such as the Health Authority].
- There should be some consideration of new and innovative mechanisms to help deliver the much needed affordable housing requirements off-site [e.g. with modern methods of construction [MMC]].
- In co-operation with other Councils, RMBC can also investigate opportunities to secure longer term revenue income streams by investing in energy generating projects, maximising carbon reduction measures (without the high cost implications) and reduce infrastructure requirements by innovative delivery of capital infrastructure.
- The Council has an opportunity to review its current approach to securing on-site and off-site benefits that explicitly mitigate development impacts, especially through a review of setting reasonable S106 costs and tariffs for a range of infrastructure requirements, particularly in the light of the changes that are planned with regard to the Community Infrastructure Levy [CIL] and the abolition of the CIL Regulation 123 List on 1st September 2019 and the introduction of new annual reporting requirements for both CIL and developer contributions.

END

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Appendix 1

Extract from "Land Value Estimates for Policy Appraisal" [April 2017], MHCLG, May 2018

General Assumptions regarding the valuation methodologies used in generating land value estimates.

Guidelines for use

The land values presented here have been provided specifically for the purpose of policy appraisal and are based on the assumptions set out in this document. It is strongly recommended that they are not used for any other purpose and it is important to emphasise that they have been produced adopting different assumptions from the Property Market Report previously published by the Valuation Office Agency. Whilst the model adopted by the Valuation Office Agency is designed to provide a consistent approach to valuations across England's local authorities, it should be noted that residual valuations are highly sensitive to small changes in the inputs. As a result the values of a particular site may vary significantly from the 'typical residential site' value for the local authority that is provided in this document; where land values for a specific site under appraisal are known these should therefore be used over the 'typical values' presented in this document.

Further detailed assumptions associated with all these values are provided in Annex A.

Residential land values

The valuations have been undertaken using a truncated residual valuation model. This involves valuing the proposed development and deducting the development costs, including allowances for base build cost, developer's profit, marketing costs, fees, and finance to leave a "residual" for the site value.
The purpose of these values is to use in appraising land projects from a social perspective, in line with Green Book principles1. The values here assume nil Affordable Housing provision in order to give pure residential use value, rather than market value. In reality we expect the market value of land to reflect the cost of affordable housing provision.

Values provided for England and the LEPs are weighted averages. They are weighted by net additions to the housing stock by local authority.

Industrial land values

The value estimates for industrial land can be used to proxy alternative use value for developments on brownfield land. These are provided for hypothetical sites in England assuming:

- A typical urban, brownfield location, with nearby uses likely to include later, modern residential developments;
- All services are assumed available to the edge of the site;
- Use is restricted to industrial/warehouse and full planning consent is in place;
- There are no abnormal site constraints or contamination and/or remediation issues;

Commercial land values

Outside of London, two values for commercial land are provided, on the following basis;

- City centre offices assumed to be of 4,106 square metres net
- Out of town offices, assumed to be in business park type locations, 10,187 square metres net

In London values are provided for grade A office space which are:

- 9,662 square metres net in Inner London
- 10,266 square metres net in Outer London

Agricultural land values

Agricultural land values are provided for hypothetical sites which are typical for the region. These values exclude any uplift from 'pony paddock' markets or hope value, therefore representative values appropriate for a commercial agriculture user.
These values are also appropriate for use in valuing greenfield land.

Annex A

Assumptions applying to all valuations

1. The valuations are desk based without inspections of the locality.
2. All sites are assumed to be freehold with vacant possession.
3. It is assumed that the land and its value are unaffected by any statutory notice or proposal or by any matters that would be revealed by a local search and replies to the usual enquiries, and that neither the proposed construction of the new property will be unlawful or in breach of any covenant.
4. Any liability for the Community Infrastructure Levy, even where it was chargeable as at 1 March 2015, has been excluded.

Assumptions applying to residential land values only

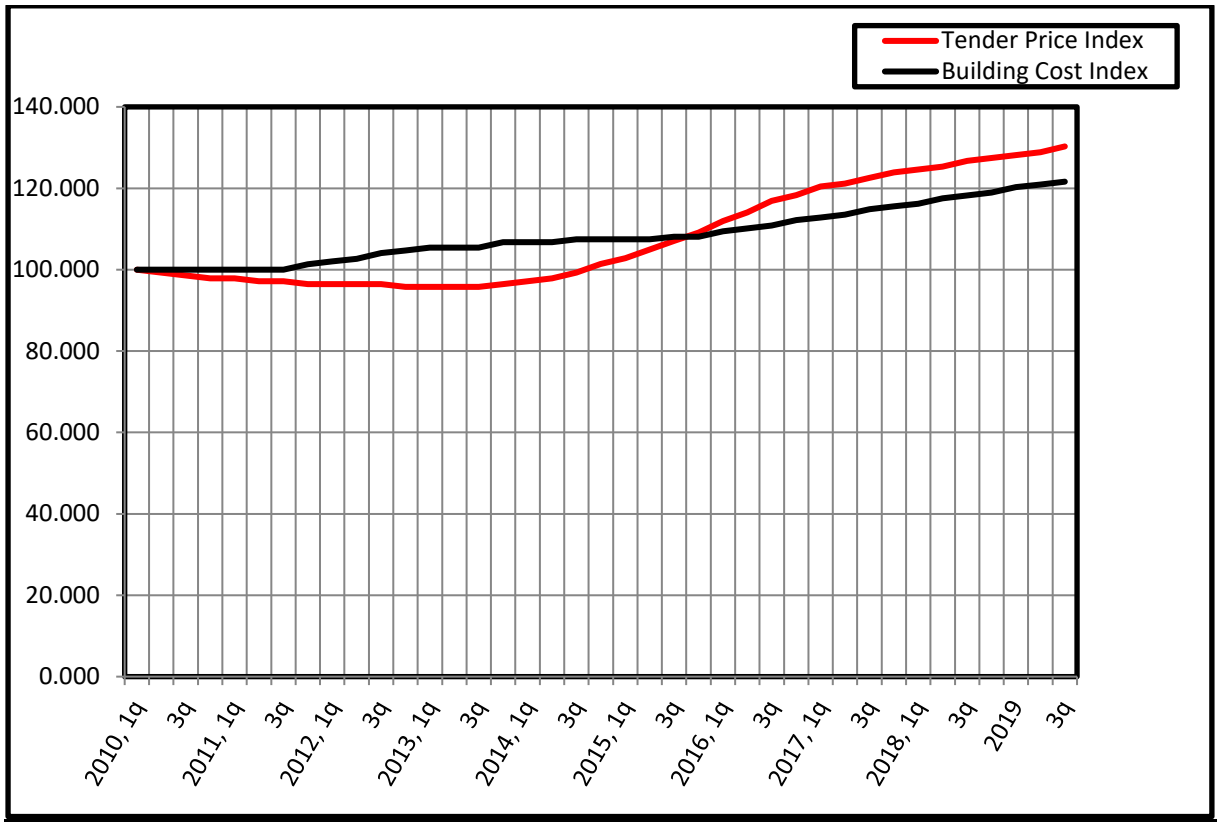
1. The figures provided assuming nil Affordable Housing provision are hypothetical and in the majority of local authorities, it is likely that such a scheme would not obtain planning consent. The figures on this basis, therefore, may be significantly higher than could reasonably be obtained for land in the actual market.
2. It has been assumed that full planning consent is already in place; that no grants are available and that no major allowances need to be made for other s106/s278 costs.
3. Valuation Office Agency's local valuers have identified sites considered to be 'typical' for the local authority area based on their own knowledge and experience of that area.
4. The figures provided are appropriate to a single, hypothetical site and should not be taken as appropriate for all sites in the locality.
5. In a number of cases schemes that do not produce a positive land value in the model. Based on VOA market knowledge a 'reserve value' (£2,470,000 for London and £370,000 elsewhere) has been adopted to represent a figure at less than which it is unlikely (although possible in some cases) that one hectare of land would be released for residential development. This has been taken on a national basis and clearly there will be instances where the figure in a particular locality will differ based on supply and demand, values in the area, potential alternative uses etc. and other factors in that area.
6. The Valuation Office Agency assumed that each site is 1 hectare in area, of regular shape, with services provided up to the boundary, without contamination or abnormal development costs, not in an underground mining area, with road frontage, without risk of flooding, with planning permission granted and that no grant funding is available; the site will have a net developable area equal to 80 per cent of the gross area.
7. For those local authorities outside London, the hypothetical scheme is for a development of 35 two storey, 2/3/4 bed dwellings with a total floor area of 3,150 square metres.
8. Different assumptions are used for inner and outer London:

- For outer London the hypothetical site consists of 97 units comprising 1 to 4 bed flats with a gross building area of 8,672 square metres and a net sales area of 7,371 square metres.
- For inner London the hypothetical site consists of 215 units comprising 1 to 4 bed flats with a gross building area of 19,457 square metres and a net sales area of 16,538 square metres.

9. These densities are taken as reasonable in the context of this exercise and with a view to a consistent national assumption. However, individual schemes in many localities are likely to differ from this and different densities will impact on values produced.
10. Where recent, local data is available, lower quartile build costs are taken from the RICS Building Cost Information Service. Where this is absent, recent cost figures from neighbouring locations are applied.
11. Basic build costs are increased by 15 per cent to cover any external works, service connections, gardens, fencing and roads.
12. Profit is taken at 17 per cent of gross development value (GDV) for market housing (17.5 per cent in London)
13. Fees are taken at 8 per cent of build costs.
14. Marketing costs are assumed at 3per cent of the sale price.
15. Finance cost is calculated using a cash flow with a 6 per cent debit rate and a 2 per cent credit rate.

Appendix 2:

Building Costs and Tender Price Indices [2010 to 2019] [with 100=2010, 1st Quarter]



Source: Building Cost Information Services [BCIS], May 2019