Whole Plan Viability Assessment Report

Birmingham Whole Plan Viability Assessment

Birmingham City Council

April 2024

Quality Assurance

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Limitation

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Non-Technical Summary

ES 1 AspinallVerdi have been instructed by Birmingham City Council (BCC) to provide an evidence base to assist in identifying the viability impacts of emerging planning policies in its draft Local Plan (Preferred Options Local Plan). The study is an important part of the evidence base for BCC.

ES 2 The primary aim of the commission is to produce an up-to-date viability assessment, which will form a robust and sound evidence base for the Local Plan Review. The current plan (Birmingham Development Plan) covers the period up to 2031 and was adopted in 2017. This plan had allocated enough housing and employment land to meet Birmingham's needs up to 2031. The new Birmingham Local Plan seeks to allocate the maximum amount of land to meet Birmingham's needs up to 2042 (assuming the plan is adopted in 2026).

ES 3 The overarching objective of the study is to provide a robust evidence base upon which Birmingham can make informed decisions regarding site allocations. This is particularly relevant in the context of the large amount of previously developed land (brownfield land) across the Borough.

ES 4 This is a full viability assessment of the draft policies and proposed preferred sites in the emerging Birmingham Local Plan.

ES 5 The key context for the Local Plan Viability Assessment is that the Plan needs to be informed by a consideration of viability. The PPG states that:

"The role for viability assessment is primarily at the plan making stage. Viability assessment should not compromise sustainable development but should be used to ensure that policies are realistic, and that the total cumulative cost of all relevant policies will not undermine deliverability of the plan." (Paragraph: 002 Reference ID: 10-002-20190509)

ES 6 We understand that the viability assessment is not intended to be a pass/fail test for a Local Plan, especially where key national and local imperatives exist to promote regeneration of brownfield land. The Plan must be positively prepared to contribute towards the achievement of sustainable development in a way that is aspirational but deliverable.

Net Zero Initiatives

ES 7 As a part of this study, we have evaluated the cumulative impact of implementing net zero standards to new build housing. Birmingham City Council commissioned Jacobs to produce a net zero report which identifies the cost of implementing net zero standards in new build houses / flats. Our study has produced sensitivities which assess the impact of net zero building

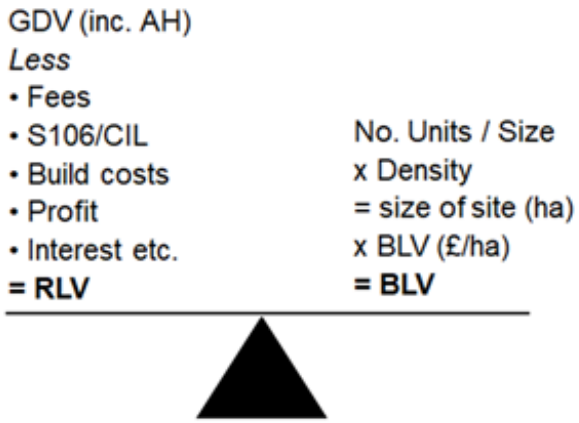
standards against affordable housing, with costs ranging from £0 (no net zero) up to £30,000 (near net zero operational emissions.) The baseline we have tested for this study is £10,000 per unit which is in line with the 2025 operational carbon targets under Building Regulations Part L.

ES 8 It is important to note that on 13 December 2023 the Minister of State for Housing gave a written ministerial statement (WMS) to parliament on Local Energy Efficiency Standards in order to clarify the priorities between building standards and particularly the net zero goal [, viability] and housing delivery. This is required due to the changing national policies including Code for Sustainable Homes and the 2021 Part L Building Regulations. The WMS confirms that, *'the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned buildings regulations. The proliferation of multiple, local standards by local authority area can add further costs to building new homes by adding complexity and undermining economies of scale'*.

Viability Assessment Method

ES 9 Our general approach is illustrated on the diagram below (Figure ES.1). This is explained in more detail in section 4 – Viability Assessment Method.

Figure ES.1 - Balance between Residual Land Value and Benchmark Land Value



Source: AspinallVerdi © Copyright

ES 10 We have carried out residual appraisals to establish the Residual Land Value (RLV). This is a traditional model having regard to: the gross development value (GDV) of the scheme; including affordable housing; and deducting all costs; including CIL; to arrive at the RLV. A scheme is viable if the RLV is positive for a given level of profit. We describe this situation herein as being 'fundamentally' viable.

ES 11 We have had regard to the cumulative impact of the emerging Birmingham Local Plan policies. The impact of each of the policies, either direct or indirect, is set out on the policies matrix (Appendix 1).

ES 12 This is then compared to the Benchmark Land Value (BLV). The BLV is the price at which a landowner will be willing to sell their land for development and is derived from benchmark Existing Use Values (EUV) plus a premium (having regard to benchmark policy compliant Market Values), the size of the hypothetical scheme and the development density assumption.

ES 13 For reporting purposes, if the balance is positive, then the policy is assumed to be 'viable'. If the balance is negative, then the policy is assumed to be 'not viable' and the policy obligations / affordable housing and/or CIL rates should be reviewed. Where the RLV is positive but below the BLV we describe this as being 'marginal' in terms of viability.

ES 14 That said, it is not 'black and white', this is an iterative process requiring judgement and interpretation of the viability results. Land value is one of the key variables, along with profit, which determines the viability and deliverability or otherwise of a scheme.

ES 15 In a functioning market, all the costs of site clearance, remediation, and abnormal costs should come off the value of the land. However, this only 'works' where the GDV of the scheme is sufficient to absorb these costs and provide incentivisation (for both landowner and developer) for the scheme to be delivered.

ES 16 In addition to the RLV appraisals and BLV analysis, we have also prepared a series of sensitivity scenarios for each of the typologies. This is to assist in the analysis of viability and to appreciate the sensitivity of the appraisals to key variables such as: affordable housing %; infrastructure costs; density; BLV and profit; and, to consider the impact of rising construction costs. This is to de-emphasise the BLV in each typology and help consider viability 'in-the-round' i.e., in the context of sales values, development costs, contingency and developer's profit, which make up the appraisal inputs.

ES 17 We draw your attention to the various Examiner's reports, such as those for the Mayor of London CIL (January 2012), the Greater Norwich CIL (December 2012), and the Sandwell CIL (December 2014) set out in Table 4.1. It is evident that landowners must consider reducing their land values for schemes to be both viable and deliverable, particularly in the context of providing affordable housing. Paragraph 32 of the Mayor of London CIL Examiner's report explicitly acknowledges that the price of development land may need to decrease, emphasising that this reduction is intrinsic to the land value capture concept. Similarly, the Greater Norwich Development Partnership's CIL Examiner's report underscores the necessity of establishing a threshold land value [/benchmark land value], which is derived from a reasonable reduction in

benchmark values to ensure viability, a factor crucial for meeting affordable housing targets. These findings collectively emphasise the importance of land value adjustments to facilitate the realisation of development schemes, including those aimed at providing policy compliant affordable housing.

ES 18 It is important to note that the BLV's contained herein are for 'high-level' plan viability purposes and the appraisals should be read in the context of the BLV sensitivity table (contained within the appraisals). It is important to emphasise that the adoption of a particular BLV £ in the base-case appraisal typologies in no way implies that this figure can be used by applicants to negotiate site specific planning applications. Where sites have obvious abnormal costs (e.g., sloping topography or limited access etc.) these costs should be deducted from the value of the land. The land value for site specific viability appraisals should be thoroughly evidenced having regard to the existing use value of the site in accordance with the PPG. This report is for plan-making purposes and is 'without prejudice' to future site-specific planning applications.

ES 19 Our detailed assumptions and results are set out in sections 7 of this report together with our detailed appraisals which are appended. In summary we make the following recommendations:

Results and Recommendations

ES 20 Based on our residential market research, we recommend that the policy should be differentiated by housing market zone and greenfield/brownfield land. This reflects the range of values across Birmingham and the different risks/costs associated with greenfield and brownfield development. This approach optimises the ability of Birmingham City Council to deliver affordable housing and fund infrastructure (through land value capture) with-out undermining delivery.

ES 21 The table below sets out our recommendations for the affordable housing targets, derived from the viability analysis herein. These targets assume no grant.

Recommended Affordable Housing Targets

ES 22 The table below summarises our recommended affordable housing targets.

Value Zone (new Zones)	Greenfield	Brownfield
Core Zone	Not applicable	Core Brownfield Typologies cannot support affordable housing at the proposed affordable housing rate (35%). We recommend an affordable housing rate of **10%.***
High Value Zone	High Value / Greenfield typologies can support affordable housing at the proposed affordable housing rate **35%.**	High Value / Brownfield typologies cannot support affordable housing at the proposed affordable housing rate (35%). We recommend an affordable housing rate of **25%.**
Medium Value Zone	High Value / Greenfield typologies can support affordable housing at the proposed affordable housing rate **35%**	Medium Value / Brownfield typologies cannot support affordable housing at the proposed affordable housing rate (35%) We would recommend targeting a rate of **15%** affordable housing in the Medium Value Zone (on brownfield sites)
Lower Value Zone	For lower value / Greenfield typologies we would recommend a rate of **10%*** affordable housing	We would recommend targeting a rate of **10%*** affordable housing in the Lower Value Zone (on brownfield sites)

* based on the NPPF paragraph 64 (February 2019) which requires that, 'where major development involving the provision of housing is proposed planning policies… should expect at least 10% of the homes to be available for affordable home ownership'; and the Council pursuing a strategy of proactive interventions in the market to deliver the housing in the lower value zones.

ES 23 The table above shows the *maximum potential* affordable housing which has the potential to be viable for the majority of scheme sizes (based upon the appraisal assumptions herein) on both greenfield and brownfield sites in core, higher, medium and low value zones.

ES 24 In the Core Zone and Lower Value zones where the affordable housing threshold for viability is below 10% the Council could rely on the NPPF paragraph 64 (February 2019) which requires that, '*planning policies… should expect at least 10% of the homes to be available for affordable home ownership'* (subject to exemptions for: a) Build to Rent homes (see below); b) specialist accommodation for specific needs (such as purpose-built accommodation for the elderly or students); c) custom self-build; or d) is exclusively for affordable housing, an entry-level exception site or a rural exception site). Birmingham City Council could therefore set the affordable housing target to 10% in-line with the minimum in national policy and consider other proactive

interventions in the market to support the delivery of housing and affordable housing. The recent changes to PPG confirm that this 10% requirement will continue alongside the policy in respect of First Homes.

ES 25 We recommend that Net Zero and energy efficiency polices are set at the minimum required to comply with Building Regulation in accordance with the WMS described above for all brownfield general needs housing typologies and in the lower value zone on both brownfield and greenfield sites. There is potential to go beyond this on high value (and potentially medium) zone greenfield sites, but we would recommend a cautious approach and apply the current Building Regulations in accordance with the written ministerial statement.

ES 26 We highlight that the unviable nature in the core is largely down to the high Benchmark Land Value of £2,500,000 per acre as well as the higher build costs 6+ storey developments are experiencing. We note, that across the plan period, both land values and build costs are likely to experience changes, which may lead to a shift in the viability position within the core. All things being equal, if costs increase due to (say,) higher design standards then the value of the land on a residual basis should reduce. To a certain extent this is an inevitable consequence of higher building standards. However, if the cost is too great or not phased-in over an appropriate time frame the impact on the land value could be too great and stymie development.

ES 27 The above recommended rates are based upon: the detailed research and analysis here-in; consultation with industry and Birmingham City Council Officers; the appraisal results and particularly the series of sensitivity scenarios which we have prepared for each of the typologies. The sensitivity tables (see Viability Modelling Best Practice and 'How to Interpret the Viability Appraisals in Section 4 above) in particular assist in the analysis of viability and to appreciate the sensitivity of the appraisals to key variables such as: Affordable Housing %; S106 Costs; BLV and profit; and, to consider the impact of rising construction costs. This is to de-emphasise the BLV in each typology and help consider viability 'in-the-round' i.e., in the context of sales values, development costs, contingency, developer's profit which make up the appraisal inputs. One has to appreciate that the typologies cannot possibly model every single actual development scheme that may come forward, and the sensitivity tables show where the margins of viability are (based on the baseline appraisal assumptions) and where buffers can be found e.g., developer profit, BLV, contingency etc.

ES 28 In the Lower Value zones and the core where the affordable housing threshold for viability is below 10% the Council could rely on the NPPF paragraph 64 (February 2019) which requires that, '*planning policies… should expect at least 10% of the homes to be available for affordable home ownership'.*

ES 29 Birmingham City Council could maintain the minimum affordable housing target at **10%** in-line with national policy and consider other proactive interventions in the market to deliver the housing. Birmingham City Council will need to be more proactive to deliver housing and regeneration in these areas. In this respect consideration could be given to, inter alia:

- facilitating development on Authority owned land e.g., with deferred land payments and/or overage;
- direct development of housing by Birmingham City Council (for lower profit margins);
- partnering with Registered Providers;
- establishing an Urban Development Company to act as master-developer and de-risk sites;
- delivery of brownfield/regeneration sites (e.g., in the strategic centres) through partnership and delivery funding schemes;
- use of grant and soft-loans e.g. Brownfield Housing Fund; Brownfield Infrastructure Land Fund etc. This could be linked to targets for lower carbon homes as well as affordable housing.

Older Persons Housing

ES 30 In addition to the above we make the following recommendations in respect of specialist accommodation for older people (C3 self-contained Supported Living typologies).

ES 31 Due to the specific viability challenges of delivering older persons housing we recommend that it is not set the same affordable housing targets as general needs housing. On the basis of our market research, appraisal inputs and policy requirements herein we recommend that older person's housing is exempted from affordable housing (0%).

ES 32 We also note that there is a cumulative impact of the Net Zero, Biodiversity Net Gain and Urban Greening factors additional policy expense and, in accordance with the Written Ministerial Statement, we recommend that only minimum policy requirements are reflected from national policy for older persons housing.

ES 33 Due to the aging population, it is important that policy obligations do not styme the delivery of more specialist housing for older people. This in turn has other policy benefits in terms of freeing-up family homes from households who are downsizing.

Build to Rent / Co Living

ES 34 The build to rent sectors is burgeoning with new development and operating models developing continuously.

ES 35 We have found herein that the traditional build to rent flatted model is viable within the Core, generating strong RLV's, ranging from £2,587,336 (150-units) to £6,572,557 (60-units) per acre, with an average RLV of £4,597,229 per acre across the core.

ES 36 Based on our appraisals and overall observation of the market, we recommend that 35% affordable housing is required on BtR schemes (based on Discounted Market Rent with a 20% discount from market rents).

ES 37 Furthermore, our appraisal of the co-living scheme typology was viable. This demonstrates the impact of smaller unit sizes and higher rental values (for quality of amenities). We note that the average unit size for a co-living flat is 25 sqm at a 70% net to gross, but achieves a similar rent £ pcm to a 1-bedroom flat in the core (50 sqm).

ES 38 Co-Living should therefore be treated differently to BtR as it generates a much higher price psm. We recommend that co-living is treated similarly to PBSA; our appraisals indicate that a co-living scheme is viable at 50% affordable housing.

ES 39 On this basis we recommend an affordable housing target of 50% for co-living schemes.

ES 40 Both BtR and co-living appraisals include full policy-on costs including Biodiversity Net Gain, Net Zero costs, and Urban Greening Factor allowances. These policies can therefore be applied on these typologies.

Purpose Built Student Accommodation

ES 41 Similar to the Co-Living typology, we have found that PBSA is viable in the higher value / core locations close to the universities.

ES 42 On this basis we also recommend that the affordable housing is set at 50% in line with the maximum policy requirement set out in the draft policy.

ES 43 Again, the PBSA appraisals include full policy-on costs including Biodiversity Net Gain, Net Zero costs, and Urban Greening Factor allowances. These policies can therefore be applied on PBSA.

Overall Plan Viability Conclusion

ES 44 Based on the assumptions, appraisals and sensitivity analyses contained herein, the proposed Local Plan Policies (Preferred Options Local Plan) do cumulatively have an impact on the viability of development on the whole within the Borough area.

ES 45 Consequently, it is important that Birmingham City Council continues to consult and refine the policy requirements (and may need to make difficult choices) as to what is viable and deliverable.

It is also important that BCC continues to work with all agencies (national and regional) to tackle market failure in the regeneration areas.

Best Practice

ES 46 We recommend that, in accordance with best practice, the plan viability is reviewed on a regular basis by Birmingham City Council to ensure it remains relevant as the property market cycle(s) change. We recommend the Plan viability is reviewed simultaneously and that steps are made towards aligning the Birmingham Plan and the various CIL charging schedules.

ES 47 Furthermore, to facilitate the process of review, we recommend that Birmingham City Council monitor the development appraisal parameters herein, but particularly data on land values/ value zones, delivery rates and grant funding within their areas.

1 Introduction

1.1 AspinallVerdi have been instructed by Birmingham City Council (BCC) to provide an evidence base to assist in identifying the viability impacts of emerging planning policies in its draft Local Plan (Preferred Options Local Plan). The study is an important part of the evidence base for BCC.

1.2 The primary aim of the commission is to produce an up-to-date viability assessment, which will form a robust and sound evidence base for the Local Plan Review. The current plan covers the period up to 2031, which was adopted in 2017. This plan had allocated enough housing and employment land to meet Birmingham's need up until 2031. The new Birmingham Local Plan seeks to allocate the maximum amount of land to meet Birmingham's needs up to 2042 (assuming the plan is adopted in 2026).

1.3 The overarching objective of the study is to provide a robust evidence base upon which BCC can make informed decisions regarding their policies and site allocations. This is particularly relevant in the context of the large amount of previously developed land (brownfield land) across Birmingham.

1.4 This is a full viability assessment of the draft policies and proposed site allocations in the emerging Birmingham Local Plan (which will replace the Birmingham Development Plan 2017).

1.5 The viability assessment also forms the basis for a review of the Community Infrastructure Levy (CIL) within Birmingham. Albeit, it should be noted that an interim review of Birmingham's CIL which was to be implemented alongside the current adopted Birmingham Development Plan is on hold pending the adoption of the new Local Plan.

1.2 In carrying out our review of the Local Plan we have had regard to the cumulative impact on development of the Local Plan policies.

Local Plan Viability Context

1.3 The key context for the Local Plan Viability Assessment is that the Plan needs to be informed by a consideration of viability. The PPG states that:

"The role for viability assessment is primarily at the plan making stage. Viability assessment should not compromise sustainable development but should be used to ensure that policies are realistic, and that the total cumulative cost of all relevant policies will not undermine deliverability of the plan." (Paragraph: 002 Reference ID: 10-002-20190509)

1.4 The viability assessment is not intended to be a pass/fail test for a Local Plan, especially where key national and local imperatives exist to promote regeneration of brownfield land.

1.5 The Plan must be positively prepared to contribute towards the achievement of sustainable development in a way that is aspirational but deliverable. According to the NPPF sites or broad

locations for growth in the NPPF should be developable in years 6 plus of the plan period. To be considered developable, sites should be in a suitable location for housing development with a reasonable prospect that they will be available and could be viably developed at the point envisaged (see NPPG Glossary). This is a lower test than the deliverability test for sites in years 0-5 of the plan period. The evidence does not need to provide a detailed assessment of everything and all sites – recognising that conditions will fluctuate over the course of the Plan period.

RICS Practice Statement

1.6 Our viability assessment has been carried out in accordance with the RICS[1] Financial Viability in Planning: Conduct and Reporting Professional Standard (1st Edition, May 2019).

1.7 Our FVA has also been carried out in accordance with the RICS Assessing Viability in Planning under the National Planning Policy Framework 2019 for England Professional Standard (1st edition, March 2021) having regard to the latest revisions to the National Planning Policy Framework (NPPF, last updated December 2023) and the Planning Practice Guidance (PPG).

Objectivity, Impartiality and Reasonableness

1.8 We have carried out our review in collaboration with the Council as LPA and in consultation with industry (Registered Providers, developers and landowners). At all times we have acted with objectivity, impartially and without interference when carrying out our viability assessment and review.

1.9 At all stages of the viability process, we have advocated reasonable, transparent and appropriate engagement between the parties.

Conflicts of Interest

1.10 We confirm that we have no conflict of interest in providing this advice and we have acted independently and impartially.

[1] Royal Institution of Chartered Surveyors

1.11 The remainder of this report is structured as follows:

Section:	Contents:
Section 2 – National Policy Context	This section sets out the statutory requirements for the Local Plan and CIL viability including the NPPF, CIL Regulations and PPG website.
Section 3 – Local Plan Context	This section sets out the details of the existing evidence base and the Local Plan policies which will have a direct impact on viability.
Section 4 – Viability Assessment Method	This section describes our generic methodology for appraising the viability of development which is based on the residual approach as required by guidance and best practice. Please note the Benchmark Land Value (BLV) caveats for future site-specific appraisals.
Section 5 – Residential Typologies	This chapter summarise the evidence base, property market context, development monitoring and viability for the residential sector.
Section 6 – Stakeholder Consultation	Sets out the various consultation and industry engagement that has taken place as part of this study.
Section 7 – Viability Results	This section sets out the detailed appraisal results with commentary.
Section 8 – Conclusions and Recommendations	Finally, we make our recommendations in respect of the Local Plan Review. This discusses the implications of this for the overall Plan viability and delivery.

2 National Policy Context

2.1 Our financial viability assessment has been carried out having regard to the various statutory requirements comprising primary legislation, planning policy, statutory regulations and guidance.

2.2 We identify below the key cross-references in the NPPF and PPG and our comments in respect of viability and deliverability. This is not meant to be exhaustive and reference should be directly made to the relevant sections of the NPPF and PPG.

National Planning Policy Framework

2.3 The NPPF confirms the Government's planning policies for England and how these should be applied and provides a framework within which locally-prepared plans for housing and other development can be produced[2].

2.4 It confirms the primacy of the development plan in determining planning applications. It confirms that the NPPF must be taken into account in preparing the development plan, and is a material consideration in planning decisions[3].

2.5 It is important to note that within the new NPPF, paragraph 173 of the original 2012 NPPF has been deleted. The old paragraph 173 referred to viability and required '*competitive returns to a willing land owner and willing developer to enable the development to be deliverable*'.

2.6 The new NPPF refers increasingly to *deliverability* as well as *viability*.

2.7 We draw your attention to the following key paragraphs (Table 2.1).

Table 2.1 - NPPF Key Cross-References

Paragraph Number - Item	Quote / Comments
Para 34 - Development contributions	Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan.

[2] National Planning Policy Framework, December 2023, para 1
[3] National Planning Policy Framework, December 2023, para 2

Para 57 – Planning obligations [tests]	Planning obligations must only be sought where they meet all of the following tests[4]: a) necessary to make the development acceptable in planning terms; b) directly related to the development; and c) fairly and reasonably related in scale and kind to the development. Notwithstanding the latest changes to the CIL Regulations (2015) which do away with the requirements for a Regulation 123 list of infrastructure, these tests ensure that Local Authorities cannot charge S106 or CIL twice for the same infrastructure (as this would not be fair and reasonable).

[4] Set out in Regulation 122(2) of the Community Infrastructure Levy Regulations 2010.

Para 58 – Presumption of viability	Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The *weight to be given to a viability assessment is a matter for the decision maker*, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force. All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available. (Our emphasis) We understand that the Government's objective is to reduce the delays to delivery of new housing due to the site-specific viability process that was created as a result of the previous paragraph 173. Once a new Local Plan is adopted no site-specific viability assessment should be required (except in exceptional circumstances) and developers should factor into their land buying decisions the cost of planning obligations (including affordable housing).
Para 64 – 10 Unit Threshold	Provision of affordable housing should not be sought for residential developments that are not major[5] developments, other than in designated rural areas (where policies may set out a lower threshold of 5 units or fewer).
Para 64 – Vacant Building Credit (VBC)	To support the re-use of brownfield land, where vacant buildings are being reused or redeveloped, any affordable housing contribution due should be reduced by a proportionate amount. The VBC provides another layer of contingency on brownfield site typologies.

[5] Major development: For housing, development where 10 or more homes will be provided, or the site has an area of 0.5 hectares or more. For non-residential development it means additional floorspace of 1,000m2 or more, or a site of 1 hectare or more, or as otherwise provided in the Town and Country Planning (Development Management Procedure) (England) Order 2015.

Para 65 – 10% affordable home ownership	Where major development involving the provision of housing is proposed, planning policies … should expect at least 10% of the total number of homes to be available for affordable home ownership unless this would exceed the level of affordable housing required in the area, or significantly prejudice the ability to meet the identified affordable housing needs of specific groups. Exemptions to this 10% requirement should also be made where the site or proposed development: a) provides solely for Build to Rent homes; b) provides specialist accommodation for a group of people with specific needs (such as purpose-built accommodation for the elderly or students); c) is proposed to be developed by people who wish to build or commission their own homes; or d) is exclusively for affordable housing, an entry-level exception site or a rural exception site.

Source: NPPF (last updated December 2023) and AspinallVerdi

2.8 We understand that the viability assessment is not intended to be a pass/fail test for a Local Plan, especially where key national and local imperatives exist to promote regeneration of brownfield land. The Plan must be positively prepared to contribute towards the achievement of sustainable development in a way that is aspirational but deliverable.

Planning Practice Guidance for Viability

2.9 The Planning Practice Guidance for Viability was first published in March 2014 and substantially updated in line with the NPPF. This has subsequently been updated on numerous[6] occasions and latterly 1 September 2019.

2.10 Below we summarise some key aspects of the PPG for this study (Table 2.2).

Table 2.2 - PPG Viability Key Cross-References

[6] PPG Viability has been updated in February 2019, May 2019 and 1 September 2019

Paragraph Number - Item	Quote / Comments
Para 001 – Setting Policy requirements	Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). These policy requirements should be informed by evidence of infrastructure and affordable housing need, and a *proportionate assessment* of viability that takes into account all relevant policies, and local and national standards, including the cost implications of the Community Infrastructure Levy (CIL) and section 106. *Policy requirements should be clear* so that they can be accurately accounted for in the price paid for land. To provide this certainty, affordable housing requirements should be expressed as a single figure rather than a range. Different requirements may be set for different types or location of site or types of development. (Our emphasis) This confirms that Local Authorities can set different levels of CIL and/or affordable housing by greenfield or brownfield typologies (see below also).

Paragraph Number - Item	Quote / Comments
Para 002 - Deliverability	It is the responsibility of plan makers in collaboration with the local community, developers and other stakeholders, to create realistic, deliverable policies. Drafting of plan policies should be iterative and informed by engagement with developers, landowners, and infrastructure and affordable housing providers. And, policy requirements, particularly for affordable housing, should be set at a level that takes account of affordable housing and infrastructure needs and allows for the planned types of sites and development to be deliverable, *without the need for further viability assessment* at the decision-making stage. Also, it is the *responsibility of site promoters to engage in plan making*, take into account any costs including their own profit expectations and risks, and ensure that proposals for development are policy compliant. (Our emphasis) In this respect we have carried out a stakeholder workshop to consult with industry (Registered Providers, developers and landowners) in respect of the cost, value and BLV assumptions of the site allocations (in March 2024).
Para 003/4 - Typologies	Plan makers can use site typologies to determine viability at the plan making stage. A typology approach is a process plan makers can follow to ensure that they are creating realistic, deliverable policies based on the type of sites that are likely to come forward for development over the plan period. Plan makers can group sites by shared characteristics such as location, whether brownfield or greenfield, size of site and current and proposed use or type of development. The characteristics used to group sites should reflect the nature of typical sites that may be developed within the plan area and the type of development proposed for allocation in the plan.

Paragraph Number - Item	Quote / Comments
Para 005 – Strategic Sites testing	Plan makers can undertake *site specific viability assessment for sites that are critical to delivering the strategic priorities* of the plan. This could include, for example, large sites, sites that provide a significant proportion of planned supply, sites that enable or unlock other development sites or sites within priority regeneration areas.
Para 010 - Principles for carrying out a viability assessment (strike a balance)	Viability assessment is a process of assessing whether a site is financially viable, by looking at whether the value generated by a development is more than the cost of developing it. This includes looking at the key elements of gross development value, costs, land value, landowner premium, and developer return – i.e., a residual land value approach. In plan making and decision-making viability helps *to strike a balance* between the aspirations of developers and landowners, in terms of returns against risk, and the aims of the planning system to secure maximum benefits in the public interest through the granting of planning permission. (Our emphasis)
Para 011 – Gross Development Value	For residential development, this may be total sales and/or capitalised net rental income from developments. Grant and other external sources of funding should be considered. For commercial development a broad assessment of value in line with industry practice may be necessary. For broad area-wide or site typology assessment at the plan making stage, *average figures can be used*, with adjustment to take into account land use, form, scale, location, rents and yields, disregarding outliers in the data. (Our emphasis)

Paragraph Number - Item	Quote / Comments
Para 012 – Development costs	Assessment of costs should be based on evidence which is reflective of local market conditions. Costs include: - build costs - e.g., Building Cost Information Service (BCIS) - abnormal costs* - site-specific infrastructure costs* - the total cost of all relevant policy requirements* - general finance - professional*, project management, sales, marketing and legal costs incorporating organisational overheads associated with the site - project contingency costs should be included in circumstances where scheme specific assessment is deemed necessary, with a justification for contingency relative to project risk and developers return *PPG suggests that these costs should be taken into account when defining benchmark land value.
Para 013 – Benchmark Land Value (BLV)	A benchmark land value should be established on the basis of the *existing use value (EUV) of the land, plus a premium* for the landowner. (Our emphasis)
Para 014 - What factors should be considered to establish BLV?	Benchmark land value should: - be based upon existing use value (EUV) - allow for a premium to landowners - reflect the implications of abnormal costs; site-specific infrastructure costs; and professional site fees.

Paragraph Number - Item	Quote / Comments
Para 014 – Market evidence in BLV	Market evidence can also be used as a cross-check of benchmark land value but should not be used in place of benchmark land value. There *may be a divergence between benchmark land values and market evidence;* and plan makers should be aware that this could be due to different assumptions and methodologies used by individual developers, site promoters and landowners. (Our emphasis)
Para 014 – Circularity of land values	[Market] evidence should be based on developments which are *fully compliant with emerging or up to date plan policies*, including affordable housing requirements at the relevant levels set out in the plan. Where this evidence is not available plan makers and applicants should identify and *evidence any adjustments* to reflect the cost of policy compliance. This is so that *historic benchmark land values of non-policy compliant developments are not used to inflate values over time*. (Our emphasis)
Para 015 – Existing Use Value (EUV)	EUV is the value of the land in its existing use. Existing use value is not the price paid and should *disregard hope value.* Existing use values will vary depending on the type of site and development types. EUV can be established in collaboration between plan makers, developers and landowners by assessing the value of the specific site or type of site using published sources of information such as agricultural or industrial land values, or if appropriate capitalised rental levels at an appropriate yield (excluding any hope value for development).

Paragraph Number - Item	Quote / Comments
Para 016 – Premium	[The premium] is the amount above existing use value (EUV) that goes to the landowner. The premium should provide a *reasonable incentive for a land owner to bring forward land for development* while *allowing a sufficient contribution to fully comply with policy* requirements. Plan makers should establish a reasonable premium to the landowner for the purpose of assessing the viability of their plan. This will be an iterative process informed *by professional judgement* and must be based upon the best available evidence informed by cross sector collaboration. Market evidence can include benchmark land values from other viability assessments. Land transactions can be used but *only as a cross check* to the other evidence. Any data used should reasonably identify any adjustments necessary to reflect the cost of policy compliance (including for affordable housing), or differences in the quality of land, site scale, market performance of different building use types and reasonable expectations of local landowners. Policy compliance means that the development complies fully with up-to-date plan policies including any policy requirements for contributions towards affordable housing requirements at the relevant levels set out in the plan.

Paragraph Number - Item	Quote / Comments
Para 016 – Price paid evidence	Local authorities can request data on the price paid for land (or the price expected to be paid through an option or promotion agreement). The PPG emphasises throughout (para 2, 3, 6, 11, 14, 18) that the price paid for land is not a relevant justification for failing to accord with relevant policies in the plan. However, data on actual price paid (or the price expected to be paid through an option or promotion agreement) is particularly relevant for strategic sites to ensure that they are deliverable over-time.
Para 017 – Alternative Use Value (AUV)	This is more at the decision-making stage as our site typologies herein are all for broadly defined uses.
Para 018 – Profit (return to developers)	For the purpose of plan making an *assumption of 15-20% of gross development value (GDV)* may be considered a suitable return to developers in order to establish the viability of plan policies. Plan makers may choose to apply alternative figures where there is evidence to support this according to the type, scale and risk profile of planned development. A *lower figure may be more appropriate in consideration of delivery of affordable housing* in circumstances where this guarantees an end sale at a known value and reduces risk. Alternative figures may also be appropriate for different development types. (Our emphasis) In this respect we have assumed profit at the top end of the range (i.e. worst-case scenario) and provided sensitivities on the profit margin between 15 and 20%.

Paragraph Number - Item	Quote / Comments
Para 019 – Build to rent (BTR)	The *economics of build to rent schemes differ* from build for sale as they depend on a long-term income stream. For build to rent, it is expected that *the normal form of affordable housing provision will be affordable private rent*. Where plan makers wish to set affordable private rent proportions or discount levels at a level differing from national planning policy and guidance, this can be justified through a viability assessment at the plan making stage. (Our emphasis)

Source: PPG Viability (last updated 1 September 2019) and AspinallVerdi

Planning Practice Guidance for CIL

2.11 There is a separate section of the PPG for CIL (Community Infrastructure Levy).

2.12 The CIL PPG guidance was first published in June 2014 and last updated in January 2023. The PPG is intended to provide clarity on the CIL Statutory Regulations which were first introduced in April 2010 and amended in February 2011, November 2012, April 2013, February 2014, March 2015, September 2019[7], April 2022 and most recently January 2023. The Regulations have never been consolidated.

2.13 We draw your attention to the following key paragraphs (Table 2.3).

Table 2.3 PPG CIL Key Cross-References

Paragraph Number - Item	Quote / Comments
Para 010 – Appropriate balance	When deciding the levy rates, an authority *must strike an appropriate balance* between additional investment to support development and the potential effect on the viability of developments. (Our emphasis)
Para 017 – Infrastructure Funding Statement	The infrastructure funding statement should identify infrastructure needs, the total cost of this infrastructure, anticipated funding from developer contributions, and the choices the authority has made about how these contributions will be used.

[7] https://www.local.gov.uk/pas/pas-topics/infrastructure/cil-regulations-and-dclg-documents

Paragraph Number - Item	Quote / Comments
Para 019 – Proportionate evidence to support a levy charge	Viability assessments should be *proportionate, simple, transparent* and publicly available in accordance with the viability guidance. (Our emphasis) Viability assessments can be prepared jointly for the purposes of both plan making and preparing charging schedules. This evidence should be presented in a document (separate from the charging schedule) that shows the potential effects of the proposed levy rate or rates on the viability of development across the authority's area. Where the levy is introduced after a plan has been made, it may be appropriate for a local authority to supplement plan viability evidence with assessments of recent economic and development trends, and through working with developers (e.g. through local developer forums), rather than by procuring new evidence.
Para 020 - How should development be valued for the purposes of the levy?	Charging authorities should use evidence in accordance with planning practice guidance on viability (see **Table 2.2**).
Para 020 - 'Appropriate available evidence'	A charging authority must use '*appropriate available evidence'* (as defined in the section 211(7A) of the Planning Act 2008) to inform the preparation of their draft charging schedule. It is recognised that the available data is *unlikely to be fully comprehensive.* Charging authorities need to demonstrate that their proposed levy rate or rates are informed by 'appropriate available' evidence and *consistent* with that evidence across their area as a whole. (Our emphasis)

Paragraph Number - Item	Quote / Comments
Para 020 – Sampling [typologies]	A charging authority should directly sample an appropriate range of types of sites across its area. Charging authorities that decide to set differential rates may need to undertake more fine-grained sampling. The sampling exercise should provide a robust evidence base about the potential effects of the rates proposed*, balanced against the need to avoid excessive detail*. (Our emphasis)
Para 020 – Viability buffer	A charging authority's proposed rate or rates should be *reasonable,* given the available evidence, but there is *no requirement for a proposed rate to exactly mirror the evidence*. For example, this might *not be appropriate if the evidence pointed to setting a charge right at the margins of viability*. There is room for some pragmatism. It would be appropriate to *ensure that a 'buffer' or margin is included*, so that the levy rate is able to support development when economic circumstances adjust. (Our emphasis) Note that the PPG does not specify what the appropriate buffer should be.

Paragraph Number - Item	Quote / Comments
Para 022 – Differential rates	Charging authorities should consider how they could use differential rates to optimise the funding they can receive through the levy. Differences in rates need to be justified by reference to the viability of development. Differential rates should *not* be used as a means to deliver policy objectives. (Our emphasis) Differential rates may be appropriate in relation to: • geographical zones; • types of development; and/or; • scales of development. A charging authority that plans to set differential rates should seek to *avoid undue complexity*. Charging schedules with differential rates should *not have a disproportionate impact on particular sectors* or specialist forms of development. (Our emphasis) In all cases, differential rates must not be set in such a way that they constitute a notifiable State aid [now referred to a subsidy control since leaving the EU].
Para 023 – Differential rates by use	Charging authorities may also set differential rates by reference to different intended uses of development. The definition of "use" for this purpose is not tied to the classes of the Use Classes Order although that Order does provide a useful reference point. (Para 201 describes how changes to the Use Classes Order affect charging schedules that set differential rates according to use classes that no longer exist).
Para 024 – Differential rates by scale	Rates can be set by reference to either floor area or the number of units or dwellings in a development.

Paragraph Number - Item	Quote / Comments
Para 025 – Differential rates by land value uplift [greenfield / brownfield]	The uplift in land value that development creates is affected by the existing use of land and proposed use. For example, *viability may be different if high value uses [e.g., residential] are created on land in an existing low value area* [e.g., agricultural-greenfield area] compared to the creation of *lower value uses or development on land already in a higher value area [e.g., urban brownfield area]*. Charging authorities can take these factors into account in the evidence used to set differential levy rates, in order to optimise the funding received through the levy. Given the increasing emphasis in the NPPF and PPG on certainty in respect of policy obligations; innovation in respect of best practice; and the wisdom of bringing Local Plan and CIL viability reviews into synchronisation, we have long advocated differentiating CIL (and affordable housing targets) by greenfield and brownfield (previously developed land) typologies based on the evidence. This, together with PPG Viability paragraph 001, therefore confirms that CIL and affordable housing can be differentiated by greenfield and brownfield existing site typologies. This should make the process of planning and development (land value capture) much simpler and more efficient.
Para 026 – Differential rates for zones	Differential rates for geographic zones can be used across a charging authority's area. Authorities may wish to align zonal rates for strategic development sites.

Paragraph Number - Item	Quote / Comments
Para 026 – Differential rates for Strategic Sites	Charging authorities may want to consider how zonal rates can ensure that the levy compliments plan policies for Strategic Sites. This may include setting *specific rates for strategic sites* that reflect the land value uplift their development creates. *Low or zero rates may be appropriate* where plan policies require significant contributions towards housing or infrastructure through planning obligations. (Our emphasis) See also the comments above in respect of the S106 tests and double-dipping. (NPPF Para 57 – Planning obligations)
Para 065 – Social Housing relief [inc. First Homes]	Social housing relief is a mandatory discount that can be applied to most *social rent, affordable rent, and intermediate rent dwellings, provided by a local authority or private registered provider, and shared ownership dwellings*. Subject to meeting specific conditions, social housing relief can also apply to *discounted rental properties* provided by bodies which are neither a local authority nor a private registered provider. Mandatory social housing relief can also apply to dwellings where the first and subsequent sales are for no more than 70% of their market value ("*First Homes*"). (Our emphasis)
Para 128 - Can payment be made in instalments?	'Yes' - Where a charging authority wishes to allow payment by instalments, they must have published an instalment policy on their website. An instalment policy can assist the viability and delivery of development by taking account of financial restrictions, for example in areas such as development of homes within the buy to let sector. For the purposes of our appraisals herein, we have assumed that the payment of CIL is phased.

Source: PPG CIL (last updated 4 January 2023) and AspinallVerdi, 2023

PPG for First Homes

2.14 On 24 May 2021 MHCLG (now DLUHC) issued guidance on First Homes and was updated on 23 December 2021. This is as follows (Table 2.4).

Table 2.4 - PPG for First Homes Key Cross-References

Paragraph Number - Item	Quote / Comments
Para 001 - What is a First Home?	First Homes are a specific kind of discounted market sale housing and should be considered to meet the definition of 'affordable housing' for planning purposes. Specifically, First Homes are discounted market sale units which: a) must be *discounted by a minimum of 30%* against the market value; b) are sold to a person or persons meeting the First Homes eligibility criteria [Para 002]; c) on their first sale, will have a restriction registered on the title at HM Land Registry to ensure this discount (as a percentage of current market value) and certain other restrictions are passed on at each subsequent title transfer; and, d) after the discount has been applied, the first sale must be at a price *no higher than £250,000 (or £420,000 in Greater London*). First Homes are the government's preferred discounted market tenure and *should account for at least 25% of all affordable housing units* delivered by developers through planning obligations. (our emphasis)
Para 004 – Minimum discount	In order to qualify as a First Home, a property must be sold *at least 30% below the open market value*. Therefore, the required minimum discount cannot be below 30%. However, local authorities [have] the discretion to require a higher minimum discount of either 40% or 50% if they can demonstrate a need for this. As part of their plan-making process, local planning authorities should undertake a housing need assessment to take into account the need for a range of housing types and tenures, including various affordable housing tenures (such as First Homes).

Paragraph Number - Item	Quote / Comments
Para 013 – 25% tenure mix	Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required. Policies for First Homes should reflect the requirement that a *minimum of 25% of all affordable housing units secured through developer contributions should be First Homes*. (Our emphasis)
Para 016 – First Homes and CIL	The Community Infrastructure Levy (CIL) Regulations 2010 (as amended) make provisions for charging authorities to give relief or grant exemptions from the levy. These regulations *allow developers of First Homes to obtain an exemption* from the requirement to pay CIL. This is the same for all affordable housing tenures.
Para 023 - 10% of affordable homes should be available for affordable home ownership	The 25% expected First Homes contribution for any affordable product can make up or contribute to the 10% of the overall number of homes expected to be an affordable home ownership product on major developments as set out in the NPPF.

Source: PPG First Homes (Published 24 May 2021) and AspinallVerdi

2.15 The next section of the report sets out the emerging local planning policies which impact viability.

Written Ministerial Statement – Local Energy Efficiency Standards

2.16 On 13 December 2023 the Minister of State for Housing gave a written ministerial statement (WMS) to parliament in order to clarify the priorities between building standards and particularly the net zero goal [, viability] and housing delivery. This is required due to the changing national policies including Code for Sustainable Homes and the 2021 Part L Building Regulations.

2.17 The WMS states:

there is a legitimate consideration for the Government to want to strike the best balance between making progress on improving the efficiency and performance of homes whilst still wanting to ensure housing is built in sufficient numbers to support those who wish to own or rent their own home.

2.18 The WMS goes on:

the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned buildings regulations. The proliferation of multiple, local standards by local authority area can add further costs to building new homes by adding complexity and undermining economies of scale.

2.19 The exception to this statement is where local polices have:

a well-reasoned and robustly costed rationale that ensures:

- *That development remains viable, and the impact on housing supply and affordability is considered in accordance with the National Planning Policy Framework.*
- *The additional requirement is expressed as a percentage uplift of a dwelling's Target Emissions Rate (TER) calculated using a specified version of the Standard Assessment Procedure (SAP).*

3 Local Policy Context

3.1 In order to appraise the emerging Birmingham Local Plan (Preferred Options Local Plan), we have reviewed the cumulative impact of Birmingham's draft Local Plan strategic policies, alongside any current policies which are proposed to retain. We have analysed each of the policies contained within the plan to determine which policies have a direct or indirect impact on development viability. The policies with a direct impact on viability have been factored into our economic assessment below. Note that all policies have an indirect impact on viability and these have been incorporated into the viability study indirectly through the property market cost and value assumptions adopted.

3.2 The adopted 2017 – 2031 Birmingham Development Plan set the current 'framework' for the property market to operate within and the new Local Plan (together with retained Local Plan documents) will form the new framework. All the policies have an indirect impact on viability through the operation of the property market and via site allocations which shape supply over time (the price mechanism). The real estate market will also have to adjust to changes to the emerging planning policy through the new Birmingham Local Plan.

3.3 Before reviewing the Draft Birmingham Local Plan, we set out the current affordable housing policy under the Adopted Local Plan

Birmingham Development Plan 2031, Adopted 2017

3.4 The Birmingham Development Plan includes Affordable Housing policy TP31 This requires a range of housing types, tenures, densities and affordability to create sustainable communities and to ensure the delivery of [the] Strategic Objectives.

3.5 The policy requires that:

*The City Council will seek **35% affordable** homes as a developer contribution on residential developments of **15 dwellings or more.***

Where the applicant considers that a development proposal cannot provide affordable housing in accordance with the percentages set out above, for example due to abnormal costs or changing economic conditions, the viability of the proposal will be assessed using a viability assessment tool as specified by the City Council. The use of a standard assessment tool will ensure that viability is assessed in a transparent and consistent way.

Birmingham CIL Charging Schedule

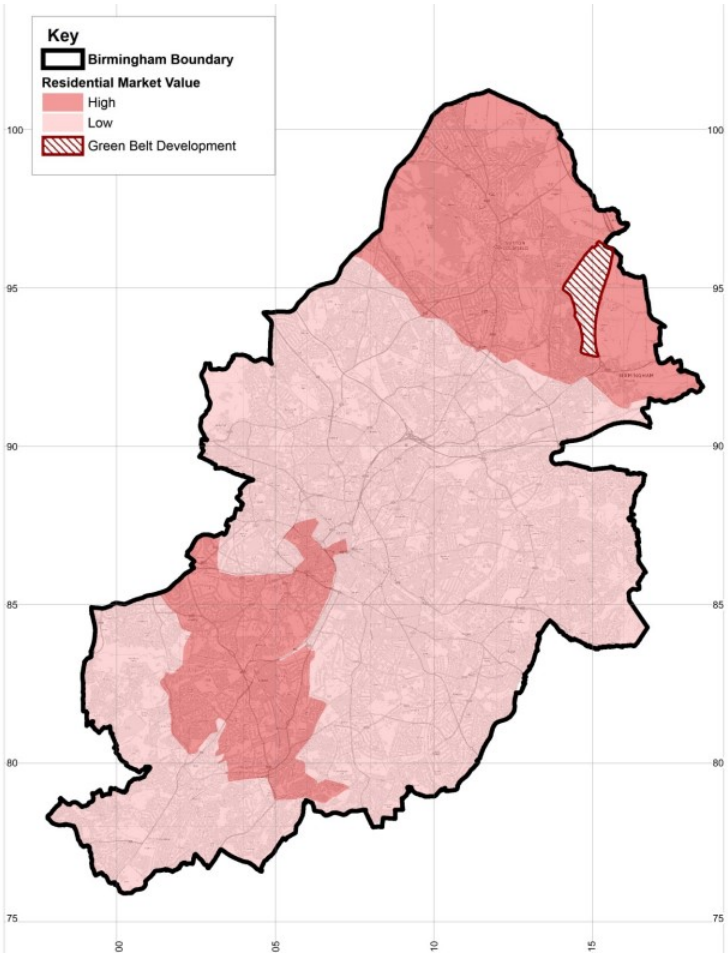
3.6 Birmingham's Community Infrastructure Levy Charging Schedule was approved and publish in July 2015, it was adopted in January 2016. See Table 3.1.

Table 3.1 - Birmingham CIL Charging Schedule (2015)

		CIL Charge 2015	Index Linked Charge (2023)
Residential	Value Zones 1,2 and 3 (high value area)	£69 psm	£90.39 psm
Residential	Value Zones 4,5,6 and 7 (low value area)	£0	
Residential	Green belt development (sustainable urban extension)	£0	
Residential	Social housing providers registered with HCA and Birmingham Municipal Housing Trust developments	£0	
Student Housing	All areas except Green Belt Development (sustainable urban extension)	£69 psm	£90.39 psm
Student Housing	Green Belt Development (sustainable urban extension)	£0	

Source: Birmingham CIL Charging Schedule, 2015.

Figure 3.1 - Birmingham CIL Charging Zones



Source: Birmingham CIL Charging Zones, 2015

3.7 Within our appraisals we have adopted the 2023 indexed rates (current at the time of preparation) which are £90.39 for all typologies in the medium, higher value, and core zones.

Birmingham Local Plan 2042

3.8 We have reviewed the Birmingham Local Plan 2042 (Reg 18 Draft). A detailed matrix of all the planning policies is appended (see Appendix 1 – Policies Matrix), and this outlines how the directly influential policies have both shaped the typologies and the assumptions adopted within the appraisals. We highlight the directly influential policies below.

3.9 The policies considered to have a direct impact on viability are set out on the following table:

Table 3.2 - Birmingham Local Plan Policies with a Direct Impact on Viability

Policy	Implications for Local Plan and CIL Viability Assessment
Policy PG3: Place making	This policy sets out design principles that new developments should follow in order to ensure that Brimingham's difference characteristics and qualities are maintained. There is therefore a direct impact on the construction cost. Notwithstanding this, the minimum design standard is the Building Regulations and therefore the cost of compliance is reflected in the BCIS costs that we have used within our appraisals. Note also that good design leads to high quality environments which are reflected in the value of real estate. We have used current values (and costs) within our appraisals. Costs may include expenses related to architectural design, quality materials additional amenity provisions, access and parking infrastructure, and compliance with highway safety standards.
Policy HN2: Affordable Housing	Our typologies will adopt the affordable housing rates and tenure expressed in policy HN2 Our scheme Typologies Matrix and viability appraisals are specifically designed to test the viability of this policy in the context of the cumulative impact of all of the new policies herein. The drafting of this policy is an iterative process having regard to the results of the viability appraisals and specifically the sensitivity appraisals. See our additional comments on draft policy HN2 below.
Policy HN3: Housing type and size mix	This policy will have a direct impact through affecting the maximum achievable GDV on a development site. This is impacted by the tenure/ dwelling no. and range of property types achieving different values. This will also have a cost implication as delivering a range of different property types will likely result in varying levels of construction cost. The scheme mix and relevant density assumption(s) are set out within the Typologies Matrix. We have had regard to the requirements of this policy in determining the relevant scheme typologies.
Policy HN4: Residential Density	We have had regard to the requirements of this policy in determining the relevant scheme typologies. We have sought to research the market in Birmingham for density and have reflected this in our BCIS build cost assumptions. The relevant density assumption and unit mix is set out on the Typologies Matrix.

Policy	Implications for Local Plan and CIL Viability Assessment
Policy HN5: Housing for older people and other with support and care needs	This policy will have a direct impact on the plan viability assessment as retirement housing typologies will need to be assessed. There will be informed by what is currently being developed/ offered in the Birmingham area. This policy will then affect the wider retirement housing market within the Birmingham area through the provision of additional supply, by meeting the demand for older persons housing and freeing up other second-hand family housing.. There is an implication as this requires the provision of specialist accommodation for older people and people who require other care needs. The provision of specialist accommodation is typically more costly to build than typical dwellings. We have carried out separate analysis and appraisals for older persons housing.
Policy HN7: Purpose built student accommodation	This policy will have a direct impact through affecting the maximum achievable GDV on a development site. Impacted by the tenure and no. of dwellings and the range of property types achieving different values and varying levels of construction costs. We have tested the viability through a specific student housing typology.
Policy HN8: Large scale shared accommodation	This policy will have a direct impact through affecting the maximum achievable GDV on a development site. Impacted by the tenure and no. of dwellings and the range of property types achieving different values and varying levels of construction costs. We have tested the viability through a specific co-living typology.
Policy HN11: Education Facilities	This policy will have an impact on viability as the provision of these educational facilities will need to be funded through a combination of Section 106 and Community Infrastructure Levy receipts, both of which are collected from developers and have to be costed into their viability appraisals. This policy has a direct impact on the development costs. We have explicitly factored into the appraisals all the relevant infrastructure costs for the various typologies. The explicit costs have been provided by the Council and can be seen in the Typologies Matrix. These have been the subject of consultation at the stakeholder workshop. This will be reflected in the typologies we appraise through a £ per unit / £ psm cost allowed for these items.
Policy HN12: Healthy neighbourhoods	We have included appropriate allowances for Health Impact Assessments (HIA) or Health Impact Assessment Screening Report within the pre-planning and professional fees cost allowances. Any negative impacts that are identified (and the costs of mitigation) should be deducted from the price paid for the land.

Policy	Implications for Local Plan and CIL Viability Assessment
Policy CE1: Climate Change	Within the Jacobs net zero report commissioned by BCC it is stated that: 'The 2025 operational carbon targets can be met by adding heat pumps, with an investment between £10,000-15,000 (depending on the dwelling archetype). Complementing heat pumps with a maximised PV system would increase these costs to approximately £30,000, achieving near net zero operational emissions' On this basis we have applied a cost of **£10,000 per unit** to be in line with the 2025 operational carbon targets. We have run sensitivities from £0 - £30,000 to assess the impact on viability across the range of costs.
Policy CE3: Sustainable design and construction	See comment above in respect of Policy CE1: Climate Change. We have also used current costs based on the BCIS and rebased them to Birmingham which take into consideration costs of 'typical' development across Birmingham. We acknowledge that incorporated within the BCIS costs are the 2021 Part L building regulations costs.
Policy CE5: Renewable and Low Carbon Energy	This policy will have a direct impact on viability through the cost of achieving Future Homes Standard – this will be reflected in the typologies / appraisals through the inclusion of cost allowance for Part L (building regulations) costs for achieving greater energy efficiencies. The viability and delivery of the strategic energy infrastructure projects is not part of the scope of the plan viability. We have made appropriate allowances for EV charging points etc.
Policy CE7: Flood Risk Management	For the purposes of our viability assessment, we have assumed that the cost of professional fees for the relevant flood risk assessments and drainage strategy reports etc are included in our overall professional fee budget. This policy is to ensure the appropriate management and treatment of surface water runoff and foul water disposal to reduce the flood risk. Wherever possible, the natural drainage of surface water from new developments will be preferred. There are associated costs with this policy and therefore it has a direct impact on viability. It is important to stress that developers should consider sustainable drainage solutions and demonstrate that they reduce flood risk. The cost of SUDs is factored into our viability appraisals through: - The net to gross site area assumptions – particularly for larger sites which have more landscaping areas and buffer; - External works costs.

Policy	Implications for Local Plan and CIL Viability Assessment
Policy CE11: Biodiversity and Geodiversity	For the purposes of our viability assessment, we have assumed that the relevant cost of professional reports (e.g., Biodiversity Action Plans (BAPs) and / or Geodiversity Action Plans (GAPs) and mitigation strategies etc.) is included in the professional fee budget. We have assumed that the cost of relevant mitigation is included in: • the net-to-gross site area assumption in terms of land take; • the external works cost and • the specific net-biodiversity gain costs (see below); Where there are particularly nature conservation issues that arise from particularly sensitive development sites, that this is known to the developer as part of their site due diligence, the costs of mitigation should be factored into the price paid for the land.
Policy CE12: Biodiversity Net Gain	This policy will have a direct implication on the plan viability as there is a financial cost associated with delivering biodiversity net gain within a scheme. These costs are reflected in the typologies we appraised where we allow for a cost per unit / £ psm for biodiversity. Costs associated with these requirements are included based on the DEFRA biodiversity net gain and local nature recovery strategies impact assessment (15/10/2019) (Ref no: RPC-4277(1)-DEFRA-EA). This allows £1,003 per unit for greenfield and £287 per unit for brownfield sites.
Policy CE13: Urban Greening Factor	This policy identifies the need for major developments to achieve a minimum greening factor. This has a direct impact on viability as green infrastructure has an additional cost to development. We have associated a cost of £100 psm of roof space for the implementation of green roofs. We have used a bespoke calculator to assume the floorplates for each typology.
Policy CE14: Open Space	This policy is to promote the retention of, safeguarding of and improving open space. It outlines the need for a contribution from new residential development towards the provision of open space. This has been taken into consideration within our viability appraisals through: - the net-to-gross developable area assumptions as part of the BLV calculations; - the density assumption (dph) which is to allow for the relevant open space; - external works costs which allow for the relevant open space costs; - site specific S106 contributions (see Typologies Matrix) This is captured within the cost of £4,300 per unit for s106 costs.

Policy	Implications for Local Plan and CIL Viability Assessment
Policy CE15: Playing pitches and sports facilities	This policy requires developers to consider the retention of existing playing fields and sports facilities unless specific conditions are met. This can influence the layout and design of a development, potentially affecting its overall viability. In terms of assessing costs, it would typically involve evaluating the financial implications of implementing the policy requirements. This may include determining the costs associated with retaining or replacing existing playing fields, providing new sports facilities, or making financial contributions. A thorough cost assessment would involve considering factors such as construction costs, land acquisition expenses, ongoing management and maintenance costs, and any potential revenue generation from the facilities. The assessment should be conducted in a comprehensive and transparent manner, considering both short-term and long-term financial implications for the local plan. To assess the direct cost, we consider this would need to be dealt with on a site-specific basis, we have therefore not applied a cost in our appraisals.
Policy CE16: Green Belt	Green Belt land is currently constrained by the green belt policy. Green Belt land therefore has a very low Existing Use Value (EUV) as agricultural land etc. Where green belt sites are released for development, there is a significant uplift in land value for the proposed use (e.g., residential development). The loss mitigation is to be paid for out of this land value uplift. For the purpose of this study, we have not applied a specific cost for the green belt policy as this should be assessed on an individual basis, should special circumstances for development be made.
Policy CE17: Historic Environment	Birmingham City Council, through planning and development decisions, will work with partners to proactively preserve, protect and enhance the character, appearance, archaeological and historic value and significance of Birmingham's designated and undesignated heritage assets and their settings. This is to be achieved to various mechanisms listed in the policy. We have used current costs based on the BCIS and rebased them to Birmingham which take into consideration costs of 'typical' development across Birmingham. We acknowledge that construction costs are likely to be higher within designated heritage environments, but values are also likely to be higher. Furthermore, developments involving heritage assets are likely to require a bespoke approach to viability e.g. enabling development and/or grants. Similarly, site specific assessments are a recommended to assess the nuances of the historic environment associated to the development, to assign an appropriate cost.
Policy IM7: Developer Contributions and Community Infrastructure Levy	We have applied a cost of £90.39 for CIL contributions across the medium, higher and core value zones. We have also incorporated a S106 cost of £4,300 per unit based on development monitoring data from BCC. These costs can be seen in our Typologies Matrix.

3.10 The above policies have all been factored directly into the appraisal models. The cost assumptions applied can be found later in this report within Section 5.

Emerging Affordable Housing Policy HN2

3.11 The draft Birmingham Local Plan includes affordable housing policy HN2, which requires that:

*Developments of **10 or more** dwellings will be required to provide **35%** of dwellings as affordable homes.*

Affordable housing will be required on other forms of residential development outside of Use Class C3 such as purpose-built student accommodation (Policy HN7), large scale shared housing (Policy HN8) and housing for older people and others with support and care needs (Policy HN5).

The size and tenure of affordable homes provided on individual sites should reflect local need and will be determined by negotiation, guided by Birmingham's Housing and Economic Development Needs Assessment 2022 (HEDNA) (or any subsequent equivalent), other up to date evidence of need, the Council's housing waiting list and site characteristics.

*The tenure mix of affordable housing provided should comprise **70% social or affordable rent** and **30% affordable home ownership (including First Homes)**.*

Affordable housing provision should be met on site and indistinguishable from that of open market homes. Off-site provision or financial contributions in lieu of on-site provision will only be accepted in exceptional circumstances where it is robustly justified and contributes to mixed and sustainable communities. The commuted sum will be equivalent to the uplift in value resulting from the floorspace/units that would have been provided as affordable housing being delivered as unrestricted market housing.

*In accordance with national planning guidance, Build to Rent schemes should provide **20% of units as Affordable Private Rent** at a **minimum rent discount of 20% of local market rents**. Rents should also not exceed the Local Housing Allowance level.*

*Where a development proposal **cannot provide the percentage of affordable housing set out above**, a **financial viability assessment undertaken in accordance with national planning guidance must be submitted**. The Council will instruct an appropriate professional to examine the financial viability assessment, the cost of which will be met by the applicant. Where provision of reduced rates of affordable housing has been accepted, the Council reserves the right to require review mechanisms/ overage clauses.*

3.12 These are the affordable housing policy inputs that we have tested in our baseline appraisals.

4 Viability Assessment Method

4.1 In this section of the report, we set out our methodology to establish the viability of the various land uses and development typologies described in the following sections.

4.2 Cross-reference should be made back to the Viability PPG guidance in section 2 and specifically the guidance in respect of EUV, premium and profit.

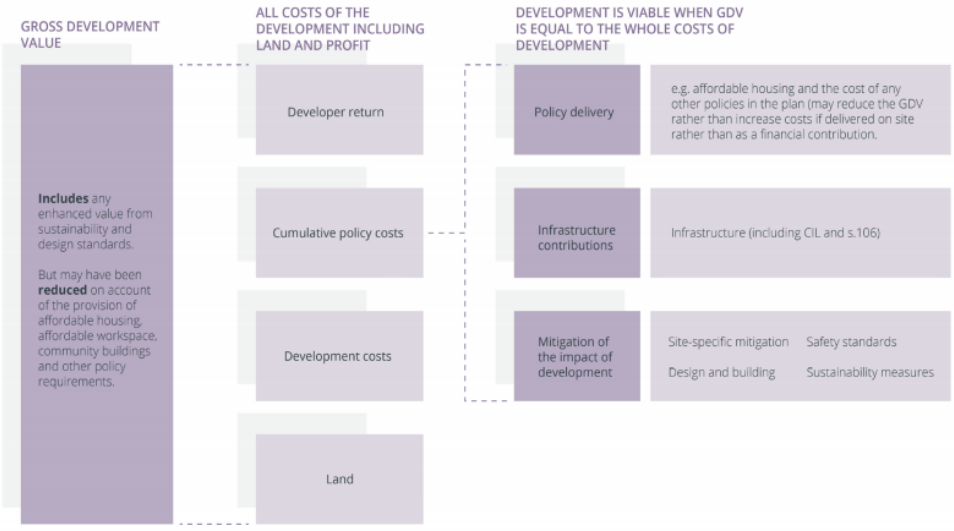
4.3 We also set out the professional guidance that we have had regard to in undertaking the financial viability appraisals and some important principles of land economics.

Viability Modelling Best Practice

4.4 The general principle is that planning obligations including affordable housing (etc.) will be levied on the increase in land value resulting from the grant of planning permission. However, there are fundamental differences between the land economics of brownfield and greenfield sites and every development scheme is different. Therefore, in order to derive the potential planning obligations and understand the 'appropriate balance' it is important to understand the micro-economic principles which underpin the viability analysis.

4.5 The uplift in value is calculated using a residual land value (RLV) appraisal. Figure 4.1 below, illustrates the principles of a RLV appraisal.

Figure 4.1 - The Residual Land Valuation Framework

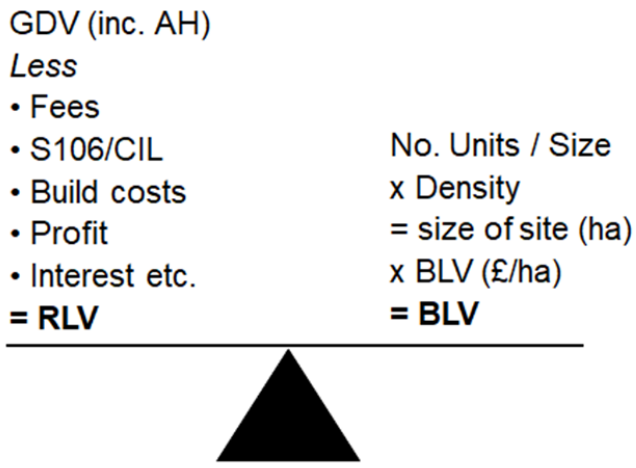


Source: RICS Assessing viability in planning under the National Planning Policy Framework 2019 for England, Guidance Note, 1st edition, March 2021

4.6 In the above diagram, a scheme is viable if the Gross Development Value (GDV) of the scheme is greater than the total of all the costs of development including land, development costs, cumulative policy costs and profit (developers return). Conversely, if the GDV is less than the total costs of development, the scheme will be unviable.

4.7 In accordance with the PPG, to advise on the ability of the proposed uses/scheme to support affordable housing and CIL/planning obligations we have benchmarked the residual land values (RLV) from the viability analysis against existing or alternative land use relevant to the particular typology – the Benchmark Land Value (BLV). This is illustrated in Figure 4.2 below.

Figure 4.2 - Balance between RLV and BLV



Source: AspinallVerdi © Copyright

4.8 If the balance is positive, then the policy is viable. If the balance is negative, then the policy is not viable and the CIL and/or affordable housing rates should be reviewed.

4.9 Our specific appraisals for each for the land uses and typologies are set out in the relevant section below.

Benchmark Land Value (BLV) Approach

4.10 Benchmark land value has been subject to much debate in recent years due to trying to establish the most appropriate method to determine it for planning purposes. The two most common approaches have been Existing Use plus and Market Value adjusted for policy. The latter, although a more market facing approach, has faced criticism because practitioners have not necessarily been adjusting land values fully for policy. The PPG now provides a clear single method (Existing Use plus Premium) in determining land value.

4.11 Paragraph: 013 Reference ID: 10-013-20190509 of the Viability PPG states that,

To define land value for any viability assessment, a benchmark land value should be established on the basis of the ***existing use value (EUV)*** *of the land,* ***plus a premium*** *for the landowner. The premium for the landowner should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The premium should provide a reasonable incentive, in comparison with other options available, for the landowner to sell land for development while allowing a sufficient contribution to fully comply with policy requirements. Landowners and site purchasers should consider policy requirements when agreeing land transactions. This approach is often called 'existing use value plus' (EUV+)*.

4.12 See Table 2.2 - PPG Viability Key **Cross-References** above for the relevant references to the PPG for the definition of EUV and the premium.

4.13 The RICS also supports the EUV plus method when determining land value for planning purposes. The RICS Assessing Viability in Planning under the National Planning Policy Framework, Professoinal Statement, March 2021 states that '*the PPG is unambiguous that EUV+ is the primary approach*.'[8] Land transaction evidence should only be used as a cross-check to the EUV plus premium. The RICS guidance emphasises the PPG paragraph 016 which states that '*any data used should reasonably identify any adjustments necessary to reflect the cost of policy compliance (including for affordable housing), or differences in the quality of land, site scale, market performance of different building use types and reasonable expectations of local landowners*'[9].

4.14 The RICS defines '*EUV for the purposes of FVAs as the value in the existing use, ignoring any prospect of future change to that use. This may however include permitted development or change of use within the same planning use class, but only where this does not necessitate any refurbishment or redevelopment works to the existing buildings or site works*.'[10]

4.15 The RICS International Valuation Standards, November 2019, defines EUV as:

'Current use/existing use is the current way an asset, liability, or group of assets and/or liabilities is used. The current use may be, but is not necessarily, also the highest and best use.'[11]

Guidance on Premiums/Land Value Adjustments

4.16 The PPG requires the existing use value plus premium approach to land value. However, there is no specific guidance on the premium. One therefore one has to 'triangulate' the BLV based on evidence.

[8] RICS, March 2021 (effective from 01 July 2021), Assessing viability in planning under the National Planning Policy Framework 2019 for England, paragraph 5.7.7
[9] Ibid, paragraph 5.7.6
[10] Ibid, paragraph B.1.2
[11] RICS Valuation – Global Standards Incorporating the IVSC International Valuation Standards Issued November 2019, effective from 31 January 2020, Paragraph 150.1

4.17 A number of reports have commented upon the critical issue of land value, as set out below. These inform the relationship between the 'premium' and 'hope value' (see below) in the context of market value. The PPG is explicit that hope value should be disregarded for the purposes or arriving at the EUV[12]. However, hope value is a fundamental part of the market mechanism and therefore is relevant in the context of the premium.

4.18 We set out on the following table our consideration of suitable premiums to apply - Table 4.1 - Premium for BLV Considerations.

Table 4.1 - Premium for BLV Considerations

Evidence / Source	Quote / Comments
RICS, Assessing Viability in Planning under the National Planning Policy Framework 2019 for England, March 2021 (effective from 01 July 2021)	The RICS acknowledge that *'there is no standard amount for the premium and the setting of realistic policy requirements that satisfy the reasonable incentive test behind the setting of the premium is a very difficult judgement'*.[13] The RICS guidance further explains that '*for a plan-making FVA, the EUV and the premium is likely to be the same for the same development typology, but it would be expected that a site that required higher costs to enable development would achieve a lower residual value. This should be taken account of in different site typologies at the plan-making stage*.'[14]

[12] Paragraph: 015 Reference ID: 10-015-20190509, Revision date: 09 05 2019
[13] RICS, March 2021 (effective from 01 July 2021), Assessing viability in planning under the National Planning Policy Framework 2019 for England, paragraph 5.3.3
[14] Ibid, paragraph 5.3.7

Evidence / Source	Quote / Comments
Local Housing Delivery Group Chaired by Sir John Harman, 20 June 2012, Viability Testing Local Plans, Advice for planning practitioners (The Harman Report)	The Harman Report was published in response to the introduction of viability becoming more prominent in the planning system post the introduction of the NPPF. The Harman report refers to the concept of 'Threshold Land Value' (TLV). Harman states that the '*Threshold Land Value should represent the value at which a typical willing landowner is likely to release land for development.*'[15] While this is an accurate description of the important value concept, we adopt the Benchmark Land Value (BLV) terminology throughout this report in-line with the terminology in the PPG. Although the Harman Report pre-dates the current iteration of the PPG on viability it does recommend the EUV plus approach to determine land value for planning purposes. The Harman report also advocates that when assessing an appropriate Benchmark Land Value, consideration should be given to '*the fact that future plan policy requirements will have an impact on land values and owners' expectations*.'[16] Harman, does acknowledge that reference to market values will provide a useful 'sense check' on the Benchmark Land Values that are being used in the appraisal model; however, '*it is not recommended that these are used as the basis for input into a model*.'[17] It also acknowledges that for large greenfield sites, '*land owners are rarely forced or distressed sellers, and generally take a much longer term view over the merits or otherwise of disposing of their asset*.'[18] It refers to these 'prospective sellers' as '*potentially making a once in a lifetime decision over whether to sell an asset that may have been in the family, trust or institution's ownership for many generations*.'[19] In these circumstances, Harman states that for these greenfield sites that, '*the uplift to current use value sought by the landowner will invariably be significantly higher than in an urban context and requires very careful consideration.*'[20]

Evidence / Source	Quote / Comments
HCA Transparent Viability Assumptions (August 2010)	In terms of the EUV + premium approach, the Homes and Communities Agency (now Homes England) published a consultation paper on transparent assumptions for Area Wide Viability Modelling. This notes that, 'typically, this gap or premium will be expressed as a percentage over EUV for previously developed land and as a multiple of agricultural value for greenfield land'. It also notes that benchmarks and evidence from planning appeals tend to be in a range of '***10% to 30% above EUV*** *in urban areas. For greenfield land, benchmarks tend to be in a range of* ***10 to 20 times*** *agricultural value*'.[21] (Our emphasis)

[15] Local Housing Delivery Group Chaired by Sir John Harman, 20 June 2012, Viability Testing Local Plans, Advice for planning practitioners, page 28
[16] Ibid, page 29
[17] Ibid
[18] Ibid, page 30
[19] Ibid
[20] Ibid
[21] HCA, August 2010, Area Wide Viability Model (Annex 1 Transparent Viability Assumptions)

Evidence / Source	Quote / Comments
Inspector's Post-Hearing Letter to North Essex Authorities	The Inspector's letter is in relation to, amongst other things, the viability evidence of three proposed garden communities in North Essex. The three Garden Communities would provide up to 43,000 dwellings in total. The majority of land for the Garden Communities is in agricultural use, and the Inspector recognised that the EUV for this use would be around £10,000 per gross acre. In this case, the Inspector was of the opinion that around a **x10 multiple** (£100,000 per gross acre) would provide sufficient incentive for a landowner to sell. But given '*the necessarily substantial requirements of the Plan's policies' a price 'below £100,000/acre could be capable of providing a competitive return to a willing landowner'*.[22] The Inspector, however, judged that '*it is extremely doubtful that, for the proposed GCs, a land price below £50,000/acre – half the figure that appears likely to reflect current market expectations – would provide a sufficient incentive to a landowner. The margin of viability is therefore likely to lie somewhere between a price of £50,000 and £100,000 per acre*.'[23]

[22] Planning Inspectorate,15 May 2020, Examination of the Shared Strategic Section 1 Plan - North Essex Authorities, Paragraph 204
[23] Ibid, Paragraph 205

Evidence / Source	Quote / Comments
Parkhurst Road v SSCLG & LBI (2018)[24]	The High Court case between Parkhurst Road Limited (Claimant) and Secretary of State for Communities and Local Government and The Council of the London Borough of Islington (Defendant(s)) addresses the issue of land valuation and the circularity of land values which are not appraised on a policy compliant basis. In this case it was common ground that the existing use was redundant and so the existing use value ("EUV") was "negligible". There was no alternative form of development which could generate a higher value for an alternative use ("AUV") than the development proposed by Parkhurst. The site did not suffer from abnormal constraints or costs. LBI contended that there was considerable "headroom" in the valuation of such a site enabling it to provide a substantial amount of affordable housing in accordance with policy requirements. Furthermore, that the achievement of that objective was being frustrated by Parkhurt's use of a 'greatly inflated' BLV for the site which failed properly to reflect those requirements. Mr Justice Holgate dismissed the challenge and agreed with LBI that what is to be regarded as comparable market evidence, or a "market norm", should "reflect policy requirements" in order to avoid the "circularity" problem[25].

[24] Parkhurst Road v SSCLG & LBI, Before MR JUSTICE HOLGATE Between: Parkhurst Road Limited Claimant - and - Secretary of State for Communities and Local Government and The Council of the London Borough of Islington Defendant/s, Case No: CO/3528/2017
[25] Ibid, paragraph 39

Evidence / Source	Quote / Comments
Land Value Capture report (Sept 2018)[26]	The House of Commons - Housing, Communities and Local Government Committee has published a report into the principles of land value capture. This defines land value capture, the scope for capturing additional land value and the lessons learned from past attempts to capture uplifts in land value. It reviews improving existing mechanisms, potential legislative reforms and alternative approaches to land value capture. Paragraph 109 of the report states, *'[…] the extent to which the 'no-scheme' principle would reduce value "very much depends on the circumstances". For land in the middle of the countryside, which would not otherwise receive planning permission for housing, the entire development value could be attributed to the scheme. However, […] most work was undertaken within constrained urban areas—such as town extensions and redevelopments—where the hope value was much higher'*. Hence it is important to consider the policy context for infrastructure and investment when considering land values. For example, where existing agricultural land in the green belt is being considered for housing allocations, the entire uplift in value is attributable to the policy decision (without which there can be no development).

[26] House of Commons Housing, Communities and Local Government Committee Land Value Capture Tenth Report of Session 2017–19 HC 766 Published on 13 September 2018 by authority of the House of Commons

Evidence / Source	Quote / Comments
Land at Warburton Lane, Trafford (Appeal Ref: APP/Q4245/W/19/3243720)[27]	Planning appeal for up to 400 dwellings, appeal dismissed. The Inspector preferred the Council's approach to land value. The Council used agricultural land value of £8,000 per acre. They applied a x10 premium to the net developable area of 33.75 acres and £8,000 per acre to the remainder of the site. The total benchmark land value of £2,900,000. The total site area was 62 acres (25 hectares). The benchmark land value equated to £116,000 per gross hectare (£46,945 per gross acre) / 5.87 multiplier on the agricultural land value of £8,000 per acre. In considering the premium the Inspector noted that, '*there is no evidence that I have seen that says the premium should be any particular value. The important point is that it should be sufficient to incentivise the landowner to sell the land and should also be the minimum incentive for such a sale to take place'*.[28] It was relevant to note that, '*in this case one of the two landowners had agreed in the option agreement to sell the land for whatever is left after a standard residual assessment'*[29] and therefore had accepted lower minimum / BLV requirements.

[27] Appeal Decision, Appeal Ref: APP/Q4245/W/19/3243720, Land at Warburton Lane, Trafford by Christina Downes BSc DipTP MRTPI an Inspector appointed by the Secretary of State for Communities and Local Government Decision date: 25th January 2021
[28] Appeal Decision, Appeal Ref: APP/Q4245/W/19/3243720, Land at Warburton Lane, Trafford by Christina Downes BSc DipTP MRTPI an Inspector appointed by the Secretary of State for Communities and Local Government Decision date: 25th January 2021, para 118
[29] Ibid, para 119

Evidence / Source	Quote / Comments
Mayor of London CIL (Jan 2012)	The impact on land value of future planning policy requirements e.g. CIL [or revised Affordable Housing targets] was contemplated in the Examiner's report to the Mayor of London CIL (January 2012).[30] Paragraph 32 of the Examiner's report states: *the price paid for development land may be reduced. As with profit levels there may be cries that this is unrealistic, but a* ***reduction in development land value is an inherent part of the CIL concept****. It may be argued that such a reduction may be all very well in the medium to long term but it is impossible in the short term because of the price already paid/agreed for development land. The difficulty with that argument is that if accepted the prospect of raising funds for infrastructure would be forever receding into the future… (our emphasis).* This is important because land values in Birmingham are high. It was recognised in 2012 (which was at a time of similarly challenging economic circumstances post credit-crunch as it is currently) that land values would have to soften in order to allow the necessary infrastructure to be delivered in accordance with public policy.
Greater Norwich CIL (Dec 2012)	The Greater Norwich Development Partnership's CIL Examiner's report adds to this - *Bearing in mind that the cost of* ***CIL needs to largely come out of the land value,*** *it is necessary to establish a threshold land value i.e. the value at which a typical willing landowner is likely to release land for development. Based on market experience in the Norwich area the Councils' viability work assumed that* ***a landowner would expect to receive at least 75% of the benchmark value.***[31]*. (our emphasis)*

[30] Holland, K (27 January 2012) Report on the Examination of the Draft Mayoral Community Infrastructure Levy Charging Schedule, The Planning Inspectorate, PINS/K5030/429/3
[31] Report to the Greater Norwich Development Partnership – for Broadland District Council, Norwich City Council and South Norfolk Council, by Keith Holland BA (Hons) Dip TP, MRTPI ARICS, 4 December 2012, File Ref: PINS/G2625/429/6 – paragraph 9

Evidence / Source	Quote / Comments
Sandwell CIL (Dec 2014)	Furthermore, the Examiner's report for the Sandwell CIL states - *The TLV is calculated in the VAs [Viability Assessments] as being **75% of market land values** for each typology. According to the CA, this way of calculating TLVs is based on the conclusions of Examiners in the Mayor of London CIL Report January 2012 and the Greater Norwich Development Partnership CIL Report December 2012. **This methodology was uncontested**[32].* This VA was prepared by AspinallVerdi for Sandwell MBC which was predicated on a reduction in land values to accommodate the CIL [policy costs].

Source: AspinallVerdi, 2024

4.19 In light of various Examiner's reports, such as those for the Mayor of London CIL (January 2012), the Greater Norwich CIL (December 2012), and the Sandwell CIL (December 2014), it becomes evident that landowners must consider reducing their land values for schemes to be both viable and deliverable, particularly in the context of providing affordable housing. Paragraph 32 of the Mayor of London CIL Examiner's report explicitly acknowledges that the price of development land may need to decrease, emphasising that this reduction is intrinsic to the land value capture concept. Similarly, the Greater Norwich Development Partnership's CIL Examiner's report underscores the necessity of establishing a threshold land value [/benchmark land value], which is derived from a reasonable reduction in benchmark values to ensure viability, a factor crucial for meeting affordable housing targets. These findings collectively emphasise the importance of land value adjustments to facilitate the realisation of development schemes, including those aimed at providing policy compliant affordable housing.

Land Market for Development in Practice

4.20 A very important aspect when considering area-wide viability is an appreciation of how the property market for development land works in practice.

4.21 Developers have to secure sites and premises in a competitive environment and therefore have to equal or exceed the landowners' aspirations as to value for the landowner to sell. From the

[32] Report to Sandwell Metropolitan Borough Council by Diana Fitzsimons MA MSc FRICS MRTPI an Examiner appointed by the Council, 16 December 2014, File Ref: PINS/G4620/429/9 - paragraph 16

developers' perspective, this price has to be agreed often many years before commencement of the development. The developer has to subsume all the risk of: acquiring the site, ground conditions; obtaining planning permission; funding the development; finding a tenant/occupier; increases in construction costs; and changes to the economy and market demand etc. This is a significant amount of work for the developer to manage; but this is the role of the developer and to do so the developer is entitled to a normal developer's profit.

4.22 The developer will appraise all of the above costs and risks to arrive at their view of the residual site value of a particular site.

4.23 To mitigate some of these risks, developers and landowners often agree to share some of these risks by entering into arrangements such as: Market Value options based on a planning outcome; 'subject to planning' land purchases; promotion agreements; and / or overage agreements whereby the developer shares any 'super-profit' over the normal benchmark.

4.24 From the landowners' perspective, they will have a preconceived concept of the value or worth of their site. This could be fairly straight-forward to value, for example, in the case of greenfield agricultural land which is subject to per hectare benchmarks. However, in the case of brownfield sites, the existing use value could be a lot more subjective depending upon: the previous use of the property; the condition of the premises; contamination; and/or any income from temporary lets, car parking and advertising hoardings etc. Also, whilst (say) a former manufacturing building could have been state-of-the-art when it was first purchased by the landowner, in a redevelopment context it might now be the subject of depreciation and obsolescence which the landowner finds difficult to reconcile. Accordingly, the existing use value is much more subjective in a brownfield context.

Brownfield / Greenfield Land Economics

4.25 CIL has its roots in the perceived windfall profit arising from the release of greenfield land by the planning system to accommodate new residential sites and urban extensions[33]. However, lessons from previous attempts to tax betterment[34] show that this is particularly difficult to achieve effectively without stymieing development. It is even harder to apply the concept to brownfield redevelopment schemes with all attendant costs and risks. The difference between greenfield and brownfield scheme economics is usually important to understand for affordable housing targets; plan viability and CIL rate setting.

4.26 The timing of redevelopment and regeneration of brownfield land particularly is determined by the relationship between the value of the site in its current [low value] use ("Existing Use Value")

[33] See Barker Review (2004) and Housing Green Paper (2007)

[34] the 2007 Planning Gain Supplement, 1947 'Development Charge', 1967 'Betterment Levy' and the 1973 'Development Gains Tax' have all ended in repeal

and the value of the site in its redeveloped [higher value] use – less the costs of redevelopment. Any planning gain which impacts on these costs will have an effect on the timing of redevelopment. This is relevant to consider when setting the 'appropriate balance'.

4.27 Fundamentally, S106, CIL etc. is a form of 'tax' on development as a contribution to infrastructure. By definition, any differential rate of CIL/S106 will have a distorting effect on the pattern of land uses. The question as to how this will distort the market will depend upon how the S106/CIL is applied.

4.28 Also, consideration must be given to the 'incidence' of the tax i.e. who ultimately is responsible for paying it i.e. the developer out of profit, or the landowner out of price (or a bit from each).

4.29 This is particularly relevant in the context of brownfield sites in the town centres and built-up areas. Any S106/CIL on brownfield redevelopment sites will impact on the timing and rate of redevelopment. This will have a direct effect on economic development, jobs and growth.

4.30 In the brownfield context redevelopment takes place at a point in time when buildings are economically obsolete (as opposed to physically obsolete). Over time the existing use value of buildings falls as the operating costs increase, depreciation kicks in and the rent falls by comparison with modern equivalent buildings. In contrast the value of the next best alternative use of the site increases over time due to development pressure in the urban context (assuming there is general economic growth in the economy). Physical obsolescence occurs when the decreasing existing use value crosses the rising alternative use value.

4.31 However, this is not the trigger for redevelopment. Redevelopment requires costs to be incurred on site demolition, clearance, remediation, and new build construction costs. These costs have to be deducted from the alternative use value 'curve'. The effect is to extend the time period to achieve the point where redevelopment is viable.

4.32 This is absolutely fundamental for the viability and redevelopment of brownfield sites. Any tariff, tax or obligation which increases the costs of redevelopment will depress the net alternative use value and simply extend the timescale to when the alternative use value exceeds the existing use value to precipitate redevelopment.

4.33 Contrast this with the situation for development on greenfield land. Greenfield sites are constrained by the planning designation. Once a site is 'released' for development there is significant step-up in development value – which makes the development economics much more accommodating than brownfield redevelopment. There is much more scope to capture development gain, without postponing the timing of development.

4.34 That said, there are some other important considerations to take into account when assessing the viability of greenfield sites. This is discussed in the Harman Report (albeit Harman is superseded by the PPG, the principles still stand)[35].

4.35 The existing use value may be only very modest for agricultural use and on the face of it the landowner stands to make a substantial windfall to residential land values. However, there will be a lower benchmark (Benchmark Land Value) where the land owner will simply not sell. This is particularly the case where a landowner *'is potentially making a once in a lifetime decision over whether to sell an asset that may have been in the family, trust or institution's ownership for many generations.'*[36] Accordingly, the 'windfall' over the existing use value will have to be a sufficient incentive to release the land and forgo the future investment returns.

4.36 Another very important consideration is the promotional cost of strategic greenfield sites (albeit this is not likely to be an issue in Birmingham which is predominantly brownfield). For example, in larger scale urban extension sites and garden communities, there will be significant investment in time and resources required to promote these sites through the development plan process. The benchmark land value therefore needs to take into account of the often-substantial planning promotion costs, option fees etc. and the return required by the promoters of such sites. *'This should be borne in mind when considering the [benchmark] land value adopted for large sites and, in turn, the risks to delivery of adopting too low a [benchmark] that does not adequately and reasonably reflect the economics of site promotion…'* [37]

4.37 This difference between the development 'gain' in the context of a greenfield windfall site and the slow-burn redevelopment of brownfield sites is absolutely fundamental to the success of any regime to capture development gain such as affordable housing, other S106 or CIL. It is also key to the 'incidence' of the tax i.e., whether the developer or the land owner carries the burden of the tax.

4.38 In the case of Birmingham there are several housing sites coming forward which are both greenfield and brownfield sites and therefore we have appraised both greenfield and brownfield scheme typologies. We note however, that the majority of housing sites coming forward are brownfield.

[35] Local Housing Delivery Group, Local Government Association / Home Builders Federation / NHBC (20 June 2012) Viability Testing Local Plans, Advice for planning practitioners, Edition 1 (the 'Harman' report) pp 29-31
[36] Local Housing Delivery Group, Local Government Association / Home Builders Federation / NHBC (20 June 2012) Viability Testing Local Plans, Advice for planning practitioners, Edition 1 (the 'Harman' report) page 30
[37] Local Housing Delivery Group, Local Government Association / Home Builders Federation / NHBC (20 June 2012) Viability Testing Local Plans, Advice for planning practitioners, Edition 1 (the 'Harman' report) page 31

Hope Value

4.39 Where there is a possibility of development the landowner will often have regard to 'hope value'. Hope value is the *element of* market value of a property in excess of the existing use value, reflecting the prospect of some more valuable future use or development. It takes account of the uncertain nature or extent of such prospects, including the time which would elapse before one could expect planning permission to be obtained or any relevant constraints overcome, so as to enable the more valuable use to be implemented. Therefore, in a rising market, landowners may often have high aspirations of value beyond that which the developer can justify in terms of risk and in a falling market the land owner may simply 'do nothing' and not sell in the prospect of a better market returning in the future. The actual amount paid in any particular transaction is the purchase price and this crystallises the value for the landowner.

4.40 Note that hope value is represented in the EUV premium and can never be in excess of policy compliant market value (RLV), given RICS guidance on the valuation of development sites (see Figure 4.1 - The Residual Land Valuation Framework above).

4.41 Hence land 'value' and 'price' are two very different concepts which need to be understood fully when formulating planning policy and CIL. The incidence of any S106 tariff or CIL to a certain extent depends on this relationship and the individual circumstances. For example, a farmer with a long-term greenfield site might have limited 'value' aspirations for agricultural land – but huge 'price' aspirations for residential development. Whereas an existing factory owner has a much higher value in terms of sunk costs and investment into the existing use and the tipping point between this and redevelopment is much more marginal.

Vacant Building Credit (VBC)

4.42 The VBC policy is intended to incentivise brownfield development, including the reuse or redevelopment of empty and redundant buildings. The incentive is applied where a vacant building is brought back into any lawful use, or is demolished to be replaced by a new building and where the building has not been abandoned. In deciding whether a use has been abandoned, account should be taken of all relevant circumstances, such as:

- the condition of the property
- the period of non-use
- whether there is an intervening use; and
- any evidence regarding the owner's intention.

4.43 For this viability assessment, we have not tested brownfield typologies which benefit from Vacant Building Credit as this is site-specific. The inclusion of VBC will however reduce affordable

housing requirements on some brownfield sites, consequently improving the viability of these sites. This is therefore an additional level of contingency for brownfield typologies.

Conclusions on BLV

4.44 Current guidance is clear that the land value assessment needs to be based on Existing Use plus premium and not a Market Value approach. Although the assessment of the Existing Use can be informed by comparable evidence the uncertainty lies in how the premium is calculated. Whatever is the resulting land value (i.e. Existing Use plus Premium) the PPG is clear that this must reflect the cost of complying with policies: '*the total cost of all relevant policy requirements including contributions towards affordable housing and infrastructure, Community Infrastructure Levy charges, and any other relevant policies or standards. These costs should be taken into account when defining benchmark land value.*'[38]

4.45 Detailed research and analysis in respect of land values (Benchmark Land Values) are set out within the Land Market paper appended (see Appendix 4 – Land Market Review).

BLV Caveats for Decision-Making

4.46 It is important to note that the BLV's contained herein are for 'high-level' plan/CIL viability purposes and the appraisals should be read in the context of the BLV sensitivity table (contained within the appraisals). The BLV's included herein are generic and include healthy premiums to provide a viability buffer for plan making purposes.

4.47 In the majority of circumstances, we would expect the RLV of a scheme on a policy compliant basis to be greater than the EUV (and also the BLV including premium) herein and therefore viable.

4.48 However, there may be site specific circumstances (e.g., brownfield sites or sites with particularly challenging demolition, contamination or other constraints) which result in a RLV which is less than the BLV herein. It is important to emphasise that the adoption of a particular BLV £ in the base-case appraisal typologies in no way implies that this figure can be used by applicants to negotiate site specific planning applications where these constraints exist. In these circumstances, the site-specific BLV should be thoroughly evidenced having regard to the EUV of the site in accordance with the PPG. This report is for plan-making purposes and is without prejudice to future site-specific planning applications.

[38] MHCLG, 24 July 2018, PPG, Paragraph: 012 Reference ID: 10-012-20180724

How to Interpret the Viability Appraisals

4.49 In development terms, the price of a site is determined by assessment of the residual land value (RLV). This is the gross development of the site (GDV) less ALL costs including planning policy requirements and developers' profit. If the RLV is positive the scheme is viable. If the RLV is negative the scheme is not viable.

4.50 Part of the skill of a developer is to identify sites that are in a lower value economic uses and purchase / option these sites to (re)develop them into a higher value uses. The landowner has a choice - to sell the site or not to sell their site, depending on their individual circumstances. Historically (pre-credit-crunch and the 2012 NPPF) this would be left to 'the market' and there would be no role for planning in this mechanism.

4.51 A scheme is viable if the RLV is positive for a given level of profit. We describe this situation herein as being 'fundamentally' viable.

4.52 However, since the credit crunch and the 2012 NPPF planning policy has sought to intervene in the land market by requiring that at [an often 'arbitrary'] 'threshold' or 'benchmark' land value (BLV) is achieved as a 'return to the landowner'. This left Local Authorities 'open' to negotiations to reduce affordable housing and other contributions on viability grounds which sets up a powerful force of escalating land values (which is prejudicial to delivery in the long term). The latest iterations of the NPPF and PPG since 2019 are seeking to redress this.

4.53 In planning viability terms, for a scheme to come forward for development the RLV for a particular scheme has to exceed the landowner's BLV.

4.54 In Development Management terms every scheme will be different (RLV) and every landowner's motivation will be different (BLV).

4.55 For Plan Making purposes it is important to benchmark the RLV's from the viability analysis against existing or alternative land use relevant to the particular typology – the Benchmark Land Value – see Figure 4.2 - Balance between RLV and BLV above.

4.56 The results of the appraisals should therefore be interpreted as follows:

- If the 'balance' is positive (RLV > BLV), then the CIL/policy is viable. We describe this as being 'viable for plan making purposes herein'.
- If the 'balance' is negative (RLV < BLV), then the CIL/policy is 'not viable for plan making purposes and the CIL rates/planning obligations and/or affordable housing targets should be reviewed.
- Thirdly, if the RLV is positive, but the appraisal is not viable due to the BLV assumed – we refer to this as being 'marginal'. In this case more scrutiny may be required of the BLV and the sensitivity analysis.

4.57 This is illustrated in the following boxes of our appraisals (appended) – see below. In this case the RLV is calculated as £2,441,938 or £2,635,304 per acre net (highlighted in blue). This is based upon the residual land value approach. The assumed BLV is £2,500,000 per acre (highlighted in green) which equals £2,316,563 overall. This is based upon the evidence in our Land Market Paper appended. The difference between the RLV and BLV is the surplus or deficit which in this example is £125,376 (£135,304 per acre) (highlighted orange). The RLV has to be greater than the BLV the meaning the balance is positive/in surplus to be viable.

Figure 4.3 - Example Hypothetical Appraisal Results

RESIDUAL LAND VALUE (RLV)								
Residual Land Value (gross)								2,843,788
SDLT			2,843,788	@	HMRC formula			(131,689)
Acquisition Agent fees			2,843,788	@	1.0%			(28,438)
Acquisition Legal fees			2,843,788	@	0.5%			(14,219)
Interest on Land			2,843,788	@	8.00%			(227,503)
Residual Land Value								**2,441,938**
RLV analysis:	16,280	£ per plot	6,511,836	£ per ha (net)	2,635,304	£ per acre (net)		
			6,511,836	£ per ha (gross)	2,635,304	£ per acre (gross)		
					6.76%	% RLV / GDV		
BENCHMARK LAND VALUE (BLV)								
Residential Density			400.0	dph (net)				
Site Area (net)			0.38	ha (net)	0.93	acres (net)		
Net to Gross ratio			100%					
Site Area (gross)			0.38	ha (gross)	0.93	acres (gross)		
Density analysis:			28,235	sqm/ha (net)	122,996	sqft/ac (net)		
			400	dph (gross)				
Benchmark Land Value (net)	15,444	£ per plot	6,177,500	£ per ha (net)	2,500,000	£ per acre (net)		**2,316,563**
BLV analysis:			6,177,500	£ per ha (gross)	2,500,000	£ per acre (gross)		
BALANCE								
Surplus/(Deficit)			**334,336**	£ per ha (net)	**135,304**	£ per acre (net)		**125,376**

Source: AspinallVerdi BETA model

Sensitivity Analysis

4.58 In addition to the above, we have also prepared a series of sensitivity scenarios for each of the typologies. This is to assist in the analysis of the viability (and particularly the viability buffer); the sensitivity of the appraisals to key variables such as planning obligations, affordable housing, BLV and profit; and to consider the impact of rising construction costs. An example of a sensitivity appraisal and how they are interpreted is shown below. Similar sensitivity tables are attached to each of our hypothetical appraisals (appended).

Figure 4.4 - Example Affordable Housing v CIL Sensitivity Analysis

Balance (RLV - BLV £ per acre (n))	135,304	10%	15%	20%	25%	30%	35%	40%
	0.00	2,333,704	2,011,121	1,688,539	1,365,663	1,042,752	719,841	396,930
	10.00	2,244,520	1,926,892	1,609,111	1,291,166	973,222	655,277	337,294
CIL £ psm	20.00	2,155,337	1,842,626	1,529,648	1,216,670	903,692	590,713	277,544
90.39	30.00	2,066,154	1,758,197	1,450,185	1,142,173	834,162	526,150	217,794
	40.00	1,976,813	1,673,768	1,370,722	1,067,677	764,632	461,477	158,044
	50.00	1,887,417	1,589,338	1,291,259	993,180	695,102	396,747	98,294
	60.00	1,798,021	1,504,909	1,211,796	918,684	625,492	332,018	38,544
	70.00	1,708,626	1,420,480	1,132,334	844,188	555,783	267,289	(21,206)
	80.00	1,619,230	1,336,050	1,052,871	769,591	486,075	202,559	(80,956)
	90.00	1,529,834	1,251,621	973,408	694,903	416,367	137,830	(140,706)
	100.00	1,440,439	1,167,192	893,773	620,215	346,658	73,101	(200,582)
	110.00	1,351,043	1,082,684	814,106	545,528	276,950	8,372	(260,497)
	120.00	1,261,637	998,038	734,439	470,840	207,241	(56,429)	(320,411)
	130.00	1,172,012	913,392	654,772	396,153	137,533	(121,336)	(380,326)
	140.00	1,082,387	828,746	575,105	321,465	67,754	(186,243)	(440,240)
	150.00	992,762	744,100	495,439	246,777	(2,147)	(251,151)	(500,155)
	160.00	903,136	659,454	415,772	171,964	(72,047)	(316,058)	(560,069)
	170.00	813,511	574,808	336,089	97,071	(141,947)	(380,966)	(620,044)
	180.00	723,886	490,162	256,203	22,178	(211,848)	(445,873)	(680,135)
	190.00	634,261	405,350	176,317	(52,715)	(281,748)	(510,812)	(740,225)
	200.00	544,511	320,471	96,431	(127,609)	(351,648)	(575,910)	(800,316)
	210.00	454,639	235,592	16,545	(202,502)	(421,610)	(641,008)	(860,406)
	220.00	364,767	150,713	(63,341)	(277,395)	(491,716)	(706,106)	(920,497)
	230.00	274,895	65,834	(143,227)	(352,439)	(561,822)	(771,204)	(980,587)
	240.00	185,023	(19,045)	(223,177)	(427,552)	(631,927)	(836,302)	(1,040,827)
	250.00	95,152	(103,929)	(303,297)	(502,665)	(702,033)	(901,401)	(1,101,105)

Source: AspinallVerdi

4.59 This sensitivity table shows the balance (RLV – BLV) for different combinations of Affordable Housing (AH %) across the columns and different amounts of CIL (£ psm) down the rows. Thus:

- You should be able to find the appraisal balance by looking up the base case AH% (e.g., 35%) and the base case CIL (e.g. £90.39 psm – between £90 and £100 psm).
- Higher % levels of CIL will reduce the 'balance' and if the balance is negative the scheme is 'not viable' for Plan Making purposes (note that it may still be viable in absolute RLV terms and viable in Plan Making terms depending on other sensitivities (e.g. BLV, Profit (see below)).
- Lower % levels of CIL will increase the 'balance' and if the balance is positive then the scheme is viable in Plan Making terms.
- Similarly, higher levels of AH (%) will reduce the 'balance'.
- And, lower levels of AH (%) will increase the 'balance'.
- So, for example, one can read-across the recommended level of CIL (e.g., £90.39 psm) to the relevant affordable housing column (35%), and still find that the scheme is viable.

4.60 Please note that this appraisal is purely hypothetical.

4.61 We have carried out the following sensitivity analysis herein (see appraisals):

- Table 1 – CIL v Affordable Housing %
- Table 2 – Site Specific S106 v Affordable Housing %
- Table 3 – Profit v Affordable Housing %
- Table 4 – BLV v Affordable Housing %
- Table 5 – Net Zero Costs v Affordable Housing %
- Table 6 – Build Cost v Affordable Housing %
- Table 7 – Market Values v Affordable Housing %
- Table 8 – Grant v Affordable Housing %

5 Residential Typologies

5.1 The residential section of the report sets out our assumptions and results in respect of the general needs residential typologies (see Appendix 2).

5.2 In terms of values, we append our Residential Market Paper which reviews the existing evidence base and provides a detailed market analysis setting out how we have arrived at our assumptions (Appendix 3).

5.3 We also append our Land Market Paper which reviews the evidence base and assumptions in respect of Benchmark Land Values (BLV). (Appendix 4).

5.4 Our detailed residential appraisals for each site and scheme typology and sensitivity analysis are contained at Appendix 7.

5.5 We provide a summary of the assumptions and results below.

Existing Evidence Base

5.6 We have undertaken a review of the existing evidence base which comprises the following studies. This is to provide a baseline of assumptions for us to build-upon.

5.7 Existing evidence reviewed:

- Birmingham CIL Viability Review, BNP Paribas, 2022
- Birmingham Financial Viability Assessment, BNP Paribas, 2019
- Birmingham CIL Economic Viability Assessment, GVA, 2012
- Strategic Housing Market Assessment, Revised 2013
- Birmingham City Council Community Infrastructure Levy (CIL), July 2015
- Development Management in Birmingham: DPD – Financial Viability Assessment, November 2019
- GBBCHMA Housing Need and Housing Land Supply Position Statement, July 2020
- Birmingham Community Infrastructure Levy Viability Review, August 2020 (reissued March 2022)
- Birmingham Housing and Economic Development Needs Assessment (HEDNA) April 2022
- Birmingham Housing and Economic Land Availability Assessment (October 2022)

5.8 In terms of values, we append our residential market paper which reviews the existing evidence base and provides a detailed residential market analysis setting out how we have arrived at our assumptions. We provide a summary of the findings of this research paper herein (see Appendix 3 – Residential Market Paper).

5.9 We have also reviewed the existing evidence base in terms of land value evidence base which is outlined in the Land Market Paper at Appendix 4.

Residential Typology Assumptions

5.10 We have developed a comprehensive set of Typologies to appraise. These comprise specific Site (e.g., greenfield / brownfield) and Scheme typologies (e.g., number of units, estate housing, flats etc.)

5.11 The detailed Typologies Matrix is contained in Appendix 2.

5.12 The Typologies Matrix has been developed to provide a representative sample of sites and schemes that are likely to come forward in Birmingham over the Plan period. The Typologies Matrix is derived from:

- Database of the Council's preferred site allocations;
- Comprehensive database of 'new' potential site allocations contained within the HELAA.
- Analysis of the typical size and capacity;
- Density assumptions from the Birmingham Local Plan and house type analysis from the HELAA Assessment 2022;
- Assessment of those sites which are greenfield and brownfield;
- We have allowed for typologies in the high / medium / lower value zones as identifies in our housing market research.
- Market and affordable Housing Mixes derived from Birmingham's Housing and Economic Needs Assessment (HEDNA) April 2022 as well as draft policy HN2.

5.13 The detailed typologies are set out in the matrix appended (see Appendix 2).

5.14 There are a number of assumptions within the Typologies Matrix which are evidenced below.

Number of Units

5.15 The typologies have been formulated with Birmingham City Council to reflect the nature of proposed allocated housing sites in terms of size (number of units and density), greenfield / brownfield and location, taking into consideration the housing market areas set out above.

Mix

5.16 The Birmingham Housing and Economic Development Needs Assessment (HEDNA 2022) recommended the following housing mix in terms of number of beds and property type, depending upon housing tenure.

Table 5.1 - Birmingham HEDNA Housing Mix (2022)

	1-bedroom	2-bedrooms	3-bedrooms	4+-bedrooms
Market	5%	35%	40%	20%
Affordable home ownership	20%	40%	30%	10%
Affordable housing (rented)	20%	35%	25%	20%

Source: Birmingham Housing and Economic Development Needs Assessment (2022)

5.17 This has informed the starting point for the housing mix shown in our Typologies Matrix; however, this has had to be adjusted for the incorporation of flatted and mixed typologies (houses and flats).

5.18 The table below summarises the *typical* housing mix assumed across all site typologies.

Table 5.2 - Housing Mix Assumptions

Type	Market sale	Affordable
1-Bed House	-	-
2-Bed House	20.0%	20.0%
3-Bed House	40.0%	40.0%
4-Bed House	20.0%	20.0%
1-Bed Apartment	10.0%	10.0%
2-Bed Apartment	10.0%	10.0%
Total	**100.0%**	**100.0%**

Source: AspinallVerdi 2024 (see AspinallVerdi Typologies Matrix)

5.19 It should be noted that in the Typologies Matrix (Appendix 2) there are some nuances for particular scheme typologies e.g., 100% flatted typologies (Greenfield and Brownfield also differentiated).

5.20 Please see the Typologies Matrix for the specific mix assumed for each typology (Appendix 2).

Unit Size Assumptions

5.21 For the purposes of our appraisals, we have ensured that our assumptions meet or exceed the nationally described housing standards by DLUHC as required by local policy (see Table 5.3).

Table 5.3 - Nationally Described Space Standards

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37)[2]			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

Source: Technical housing standards – Nationally Described Space Standard (March 2015)

5.22 The DLUHC standards are a matrix and therefore we have had to make assumptions from this, and these are summarised in the table below. This has been established by cross-referencing the DLUHC standards with our sales values evidence for new-builds. There is some ambiguity with this due to the fact that the Land Registry does not specify the number of beds in a property. However, these assumptions have been consulted upon with stakeholders.

Table 5.4 - Floorspace Assumptions

Property Type	Floor Area (Sqm)	**Net to Gross Assumption (%)**
1-Bed House	62	
2-Bed House	79	-
3-Bed House	100	-
4 Bed House	128	-
5+ Bed House	160	-
1-Bed Apartment	50	85%
2-Bed Apartment	70	85%
1-Bed Apartment (retirement)	55	75%
2-Bed Apartment (retirement)	75	75%
1-Bed Apartment (extra care)	60	65%
2-Bed Apartment (extra care)	80	65%
Cluster Flat (PBSA)	15	70%
Studio (PBSA)	27	85%
Co-Living Flat	25	70%

Density

5.23 The Typologies Matrix (see Appendix 2) sets out our density assumptions specific to each typology.

5.24 Based on the evidence presented in the Housing Background Paper and HELAA October 2022, the preferred policy approach is to increase the minimum residential density standards to:

- 400 dwellings per ha in and within 400m from the City Centre.
- 70 dwellings per ha in and within 400m from town, district and local centres.
- 40 dwellings per ha elsewhere.

Table 5.5 - Birmingham HELAA Density Assumptions

Area	Sample Size	Average Net Density (dwellings per hectare)
City Centre	69 sites	400
In and around Urban Centres	55 sites	70
Suburban	215 sites	40

Source: Birmingham HELAA (October 2022) Table 2

5.25 We note that for city core typologies we have in incorporated a more nuanced range of densities which is based on the HELAA assessment of approved sites 2017-2021. The densities range from 400 – 850 dwellings per hectare (see Typologies Matrix).

Site Net to Gross Ratio

5.26 The table below sets out our site net to gross assumptions.

Table 5.6 - Birmingham HELAA (2022) Net to Gross Assumptions

Site Size (hectares)	Gross to Net Ratio
Up to 0.25 or City Centre	100%
0.25 to 1.0	95%
1.0 to 3.0	85%
3.0 and above	80%

Source: Birmingham HELAA (2022) Table A6.2

Housing Value Zones

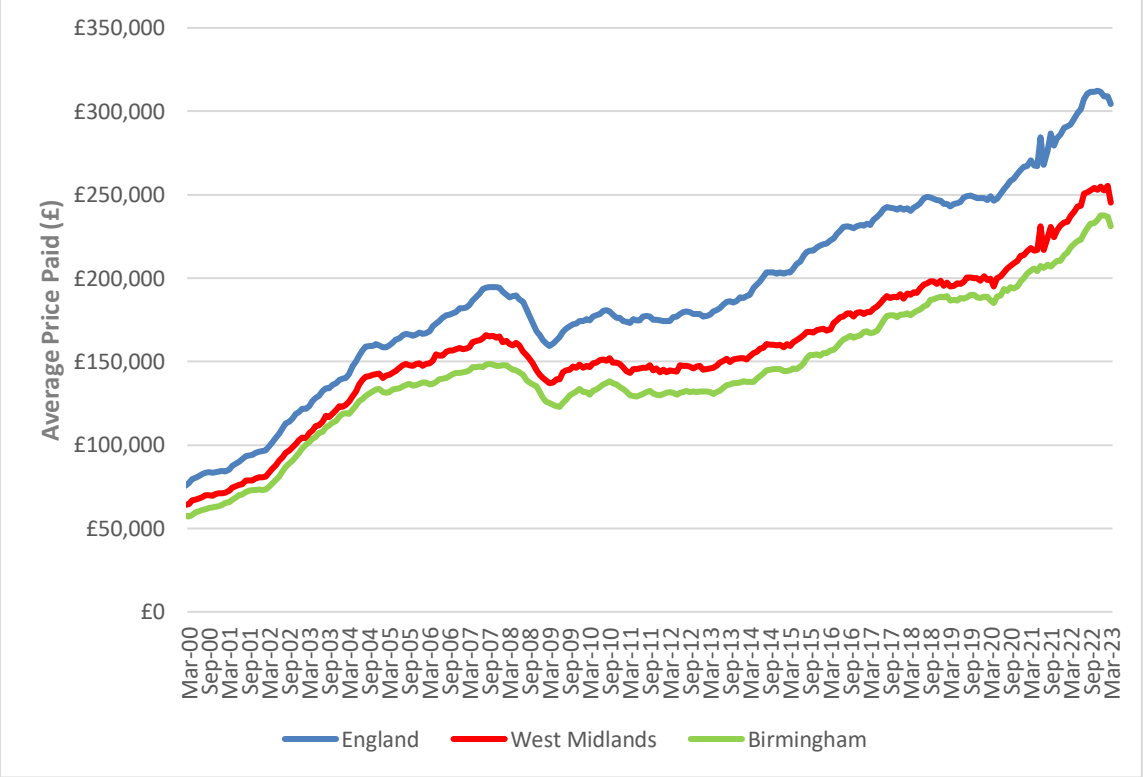
5.27 We have carried out comprehensive market research which is set out in our Residential Market Paper (Appendix 3).

5.28 This includes a wider UK and Regional market overview; details for the existing evidence base on residential sales values; our own market research in respect of new build achieved values; new build asking prices; second-hand achieved values; site-specific viability assessments etc.

5.29 Working with Birmingham City Council we have developed a Housing Value Zones map comprising high, medium and lower value areas together with market housing value assumptions and affordable housing transfer value assumptions. These assumptions have been the subject of stakeholder consultation on 1st March 2024.

5.30 By way of context Figure 5.1 shows the average house prices since 2000 across Birmingham. The chart shows that the values in the Birmingham are lower those for the wider West Midlands and England. The chart also shows the price fall in 2008 following the Global Financial Crisis (GFC), but that prices have now generally recovered to their pre-crash levels.

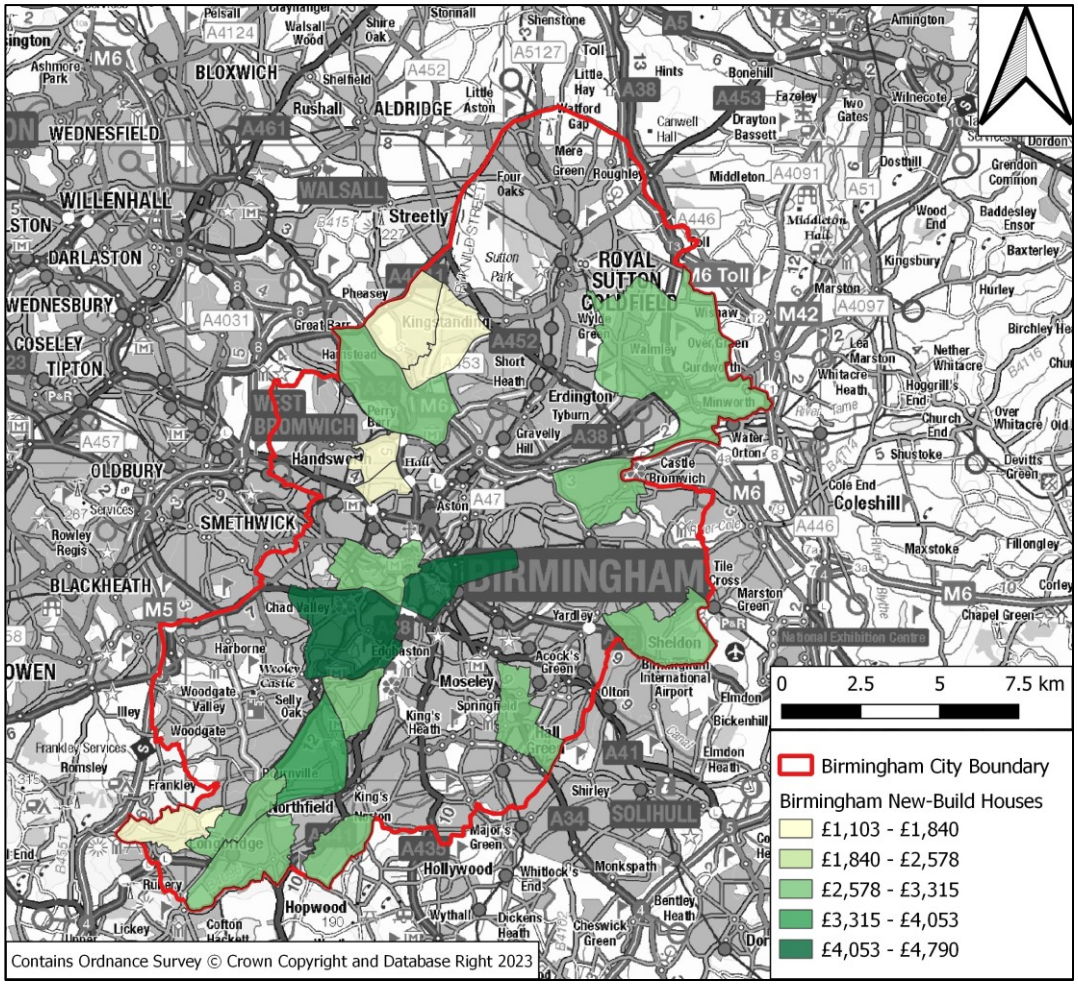
Figure 5.1 - Average House Prices 2000-2023



Source: Land Registry, November 2023

5.31 Figure 5.2 below illustrates the average achieved values for new build houses across Birmingham by ward on a £ psm basis.

Figure 5.2 - New Build Achieved Value – Houses – (Average £ psm) 2021 - 2023



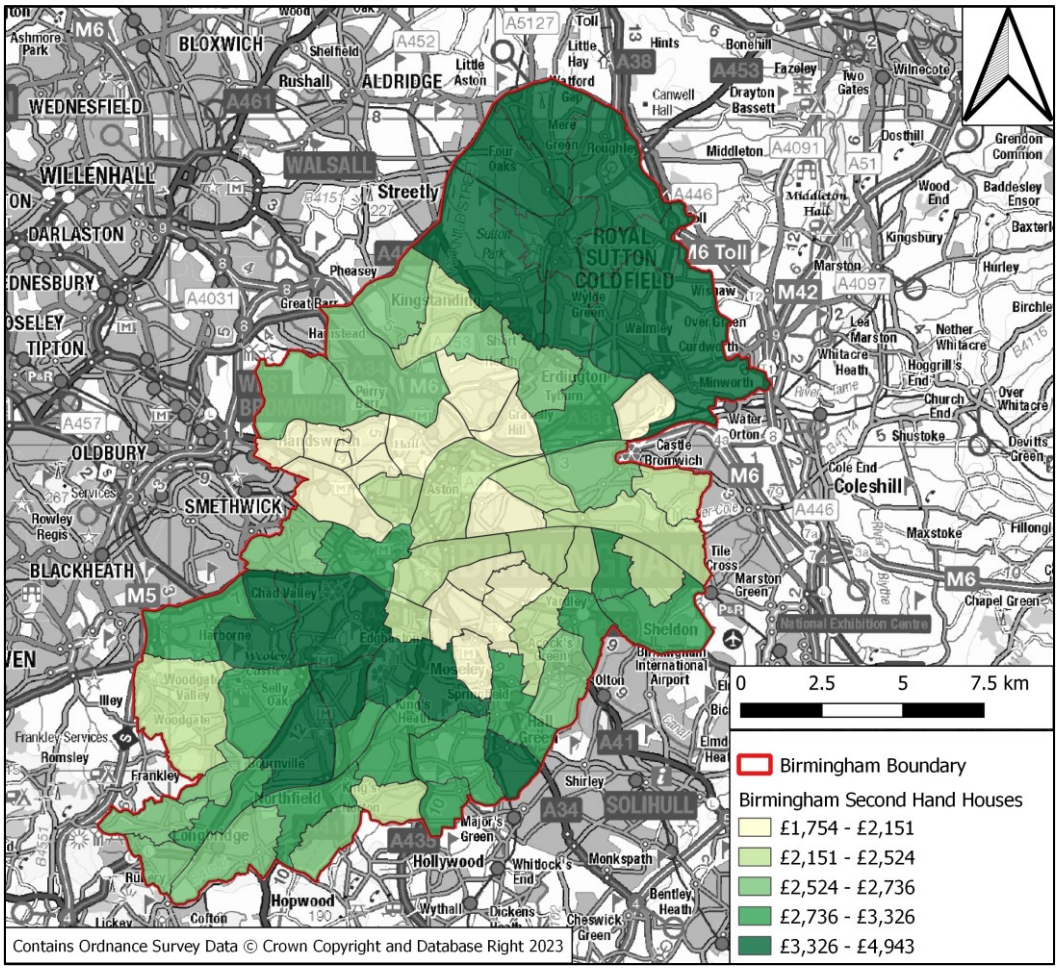
Source: Aspinall Verdi (QGIS, September 2023)

5.32 The map above shows the range of achieved values for new build houses across the Borough. From this, it can be seen that Edgbaston and Bordesley & Highgate express the highest values, whilst Birchfield, Lozells, Kindgstanding, Oscott and Frankley Great Park express the lowest values.

5.33 Our search of the Land Registry data identified c. 153no. transactions for new-build houses within the Borough over the last 2 years. Due to the limited number and locations of the transactions, there is no data for a large part of the Borough. To strengthen our dataset and provide a comprehensive spatial analysis of values, we have also evaluated second-hand transactions within the Borough.

5.34 Figure 5.3 below illustrates the average achieved values for second-hand property on a per sqm basis across Birmingham for houses (Semi-Detached, Detached, and Terrace) during the same period.

Figure 5.3 - Second Hand Houses - Achieved Value (Average £ psm)



Source: Aspinall Verdi (QGIS, September 2023)

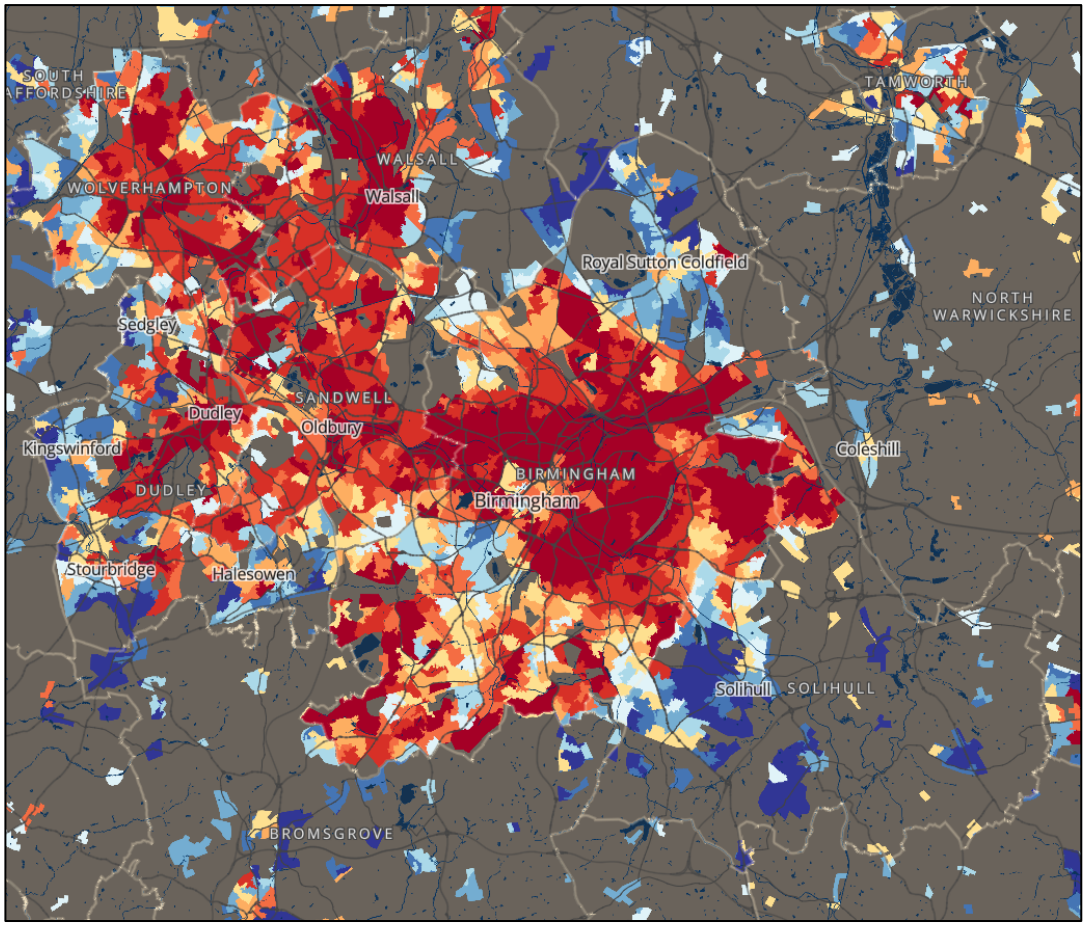
5.35 This is useful as it shows a more complete picture of the 'tone' of values between areas across Birmingham.

5.36 From this we have identified higher value areas including Sutton Coldfield, Edgbaston, Moseley and Harborne to name a few. These areas express an average price of £3,326 - £4,943 psm. On the opposite end of the spectrum, we have identified the lowest values which range from £1,754 - £2,151 psm in areas such as Alum Rock, Bordesley Green, Lozells and Aston.

5.37 When preparing our Housing Value Zones, we have also had regard to the Index of Multiple Deprivation (IMD). The IMD provides a metric for which multiple datapoints, such as average income, health, education, crime, unemployment etc., are all amalgamated into a single rating

which shows the level of deprivation that an area is experiencing, this is illustrated on a map (See Figure 5.4).

Figure 5.4 – Index of Multiple Deprivation Map for Birmingham



Source: Index of Multiple Deprivation (2019)

5.38 The Index of Multiple Deprivation map shows that areas such as Sutton Coldfield and Edgbaston are less deprived, Similarly, the more deprived areas are closer to the urban core(s) as signified in red. Although this is not a direct comparison to housing values, it is a very good proxy. In our experience, higher values tend to be found in areas of least deprivation and values are lower in areas where there is greater deprivation. The IMD map shown above is considered a good proxy for the Housing Zones Map.

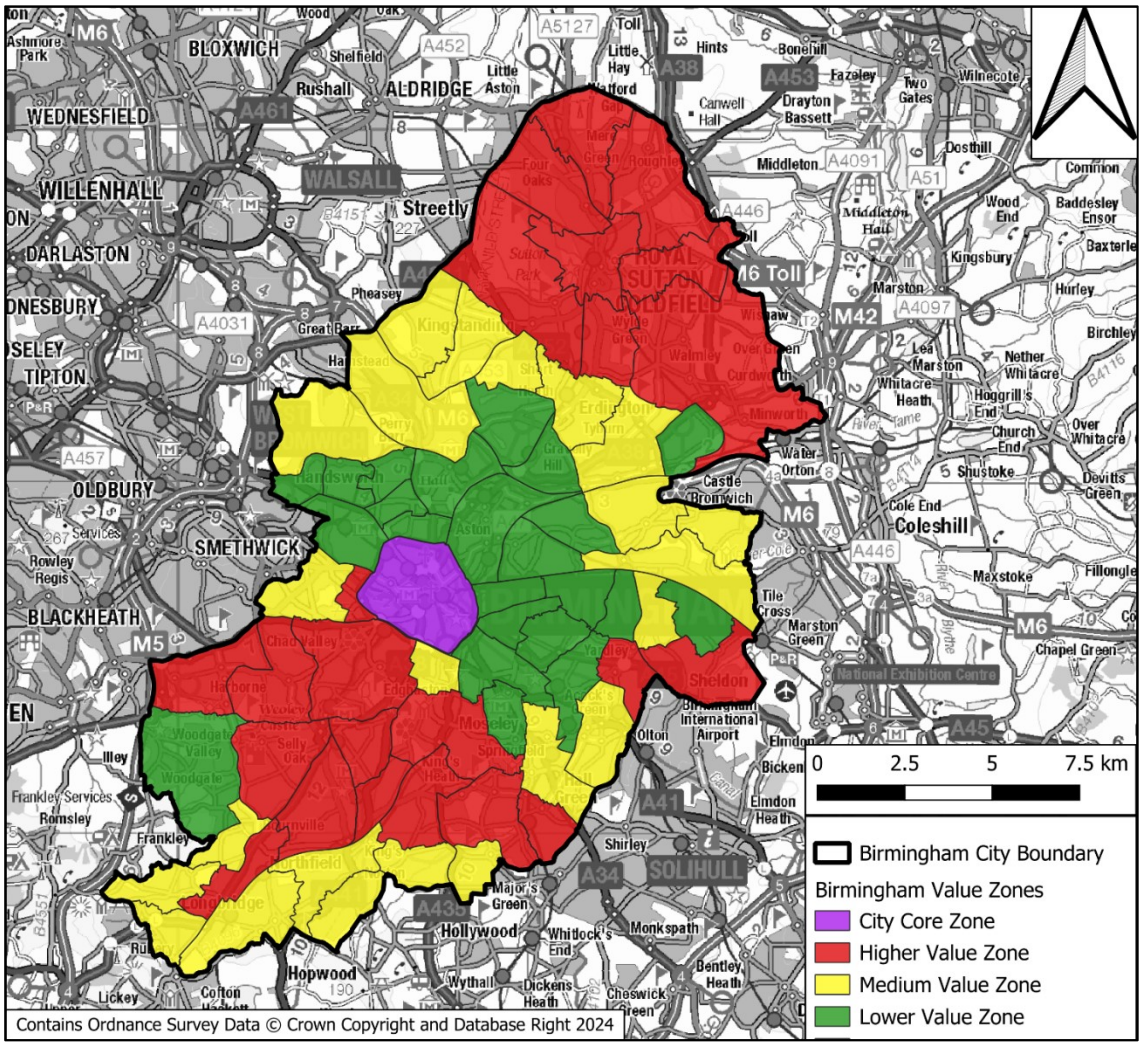
5.39 In order to derive our Housing Market Zones, we have had regard to:

- Existing evidence base, particularly the heat maps and choropleth maps within previous market research;
- Current new-build achieved values;
- Second-hand achieved values; and

- The index of multiple deprivation.

5.40 Figure 5.5 shows the result of our analysis of the data listed above. We set out three value zones in this map. These are the 'lower', 'medium' and 'higher' and 'Core' value zones – which mapped on a ward basis across Birmingham. This forms the basis of our Typologies Matrix with which we have modelled different site typologies (e.g., greenfield and brownfield) together with current policy requirements (i.e., Affordable Housing, CIL charges and S106) with a view for future alignment.

Figure 5.5 - AspinallVerdi Birmingham Housing Market Zones



Source: AspinallVerdi, 2024

5.41 The aim is to produce a map that is evidence based and transparent; and logical for ease of implementation. It will never be perfect. There will always be a particularly high value scheme in a lower value area and vice-versa depending on particular local and site circumstances.

5.42 We have also identified a 'core zone' shown in purple, which is contained within the inner ring road. This has allowed us to alleviate disparities across the wards which run through the city centre such as Ladywood which has both high values within the inner ring road and low values as you head further out.

5.43 The core zone has the highest values out of all zones and functions differently in the respect that the new build housing developments are almost exclusively apartments and our typologies reflect this.

Residential Value Assumptions

5.44 The residential market paper (see Appendix 3) provides the background to the market housing value assumptions shown in the table below.

5.45 Our value assumptions have had regard to both new-build achieved values and asking prices. The achieved values provide a benchmark for the assumptions whilst the asking prices allow us to 'sense check' our assumptions. We are mindful that they are often aspirational and therefore the asking prices aren't always achieved.

5.46 For the purposes of our area wide viability assessment, we have applied the following values and floor areas within our financial appraisals.

5.47 Table 5.7summarises our assumptions for Absolute Market Values within the 4 defined value areas.

Table 5.7 - Absolute Market Value Assumptions (£)

Property type	Lower Value area	Medium Value Area	Higher Value Area	Core Zone
1 Bed Flat	£115,000	£150,000	£185,000	£220,000
2 Bed Flat	£165,000	£200,000	£265,000	£305,000
1 Bed House	-	-	-	-
2 Bed House	£180,000	£250,000	£325,000	-
3 Bed House	£285,000	£365,000	£415,000	-
4 Bed House	£375,000	£425,000	£525,000	-
5 Bed House	£400,000	£475,000	£580,000	-

Source: AspinallVerdi '2402 Residential Market Research Master Data v0.4'

5.48 Table 5.8 summarises our assumptions for £ per square meter values within the 4 defined value areas.

Table 5.8 - £ psm Value Assumptions

Property type	Floor Area	Lower Value Area	Medium Value Area	Higher Value Area	Core Zone
1 Bed Flat		£2,300	£3,000	£3,700	£4,400
2 Bed Flat		£2,357	£2,857	£3,786	£4,357
1 Bed House		-	-	-	-
2 Bed House		£2,278	£3,165	£4,114	-
3 Bed House		£3,000	£3,842	£4,368	-
4 Bed House		£3,125	£3,542	£4,375	-
5 Bed House		£2,857	£3,393	£4,143	-

Source: AspinallVerdi '2402 Residential Market Research Master Data v0.4'

5.49 The above values have been the subject of stakeholder consultation on 1st March 2024.

Older Persons Housing Value Assumptions

5.50 The following tables set out our assumptions in respect of retirement flats and extra-care units.

Table 5.9 - Older Persons Housing / Retirement Living Value Assumptions

No of beds	High Value Zone	Medium Value Zone	Lower Value Zone
1 - Bed Apartment	£196,000	£168,000	£144,000
2 - Bed Apartment	£278,000	£240,000	£208,000

Source: AspinallVerdi '231016_Older Persons Housing_v0.2

Table 5.10 - Extra Care Value Assumptions

No of beds	High Value Zone	Medium Value Zone	Lower Value Zone
1 - Bed Apartment	£245,000	£210,000	£180,000
2 - Bed Apartment	£347,500	£300,000	£260,000

Source: AspinallVerdi '231016_Older Persons Housing_v0.2

BTR/Co-Living Value Assumptions

5.51 The table below sets out our value assumptions for the Build to Rent / Co-Living scheme typologies.

Table 5.11 - BTR / Co-Living Assumptions

	Higher Value Zone	Medium Value Zone	Lower Value Zone	City Centre Core
Co-living cluster (£ pcm)				£1,150
1-Bed rent (£ pcm)	£1050	£900	£600	£1,250
2-Bed rent (£ pcm)	£1450	£1225	£900	£1,750
3-Bed Rent (£ pcm)	£1600	£1400	£1125	£2,150
Management costs (%) (Leakage)	25%	25%	25%	25%
Yield (%)	5%	6.5%	8%	4.5%

Source: AspinallVerdi '230911 Asking Prices New Build Developments / BtR v0.2' 2023

PBSA

5.52 The following table sets out our assumptions for Purpose Built Student Accommodation (PBSA) scheme typologies.

Table 5.12 - PBSA Value Assumptions

Unit Type	Unit Size Sqm	Gross Rent £ pcm	Mix (%)
Cluster flat w/ Shared Bathroom	13	£650 pcm	-
Cluster flat w/ Ensuite	15	£825 pcm	70%
Studio	27	£1,100 pcm	30%

Source: 240325 PBSA Comparable Analysis_v1

Transfer Values

5.53 For the purposes of our appraisals, we have assumed the following Transfer Values for affordable housing.

Table 5.13 - Affordable Housing Transfer Values

Tenure	Tenure Mix	AH Value (% of MV)
Affordable Ownership (Including First Homes)	25%	70% (30% discount capped at £250,000 for first homes)
Affordable Rent	60%	55% OMV
Social Rent	10%	45% OMV
Other / Intermediate	5%	75% OMV

Source: Birmingham City Council (March, 2024)

5.54 These figures have been provided in consultation with the relevant housing teams. The Transfer Values have also been the subject of stakeholder consultation on 1st March 2024.

Residential Cost Assumptions

5.55 The development costs adopted within our appraisals are evidenced (where necessary) and set out below. Note that we consulted with stakeholders on the assumptions at the workshop and we have updated these assumptions to have regard to the feedback. The feedback from the stakeholder workshop and how we have addressed this is contained in the Feedback Matrix appended (Appendix 5).

Initial Payments

5.56 The table below set out our initial development cost assumptions. These are generally payments in respect of site feasibility and planning prior to start-on-site.

Table 5.14 - Initial Payments Cost Assumptions

Item	Baseline Assumption
Statutory Planning Fees	Based on national formula.
Planning Application Professional Fees and Reports	Allowance for typology, generally 3 times statutory planning fees.

S106 / CIL Cost Assumptions

5.57 The table below sets out our cost assumptions in respect of S106 and CIL. These are also set out explicitly for each Typology on the Typologies Matrix (Appendix 2).

Table 5.15 - S106 / CIL Cost Assumptions

Item	Baseline Assumption
Existing CIL Birmingham	CIL charges on residential developments are **£90.39 psm (Medium, Higher and Core Value Zones)**
S106	Cost of **£4,300 per unit** – based on existing contributions provided by BCC. This was previously £1,650 per unit, but we have revisited this following the stakeholder consultation and further engagement from BCC's Planning Contributions Officer. We have allowed for a s106 cost of **£15,000** per unit for strategic typologies.

Construction Cost Assumptions

5.58 The table below set out our construction cost assumptions for residential typologies.

Table 5.16 Construction Cost Assumptions

Item	Baseline Assumption	Comments
Site Clearance, Demolition & Remediation	£123,550 per hectare (£50,000 per acre)	Brownfield site clearance / remediation allowance (as for local plan viability)
Biodiversity Net Gain	£287 per home Brownfield typologies £1,003 per home Greenfield typologies	DEFRA Biodiversity net gain and local nature recovery strategies Impact Assessment 15/10/2019 (Tables 16 and 17)
Estate Housing	£ 1,260 – £1,423 psm	Lower – Median BCIS, Birmingham (last 5 years) We have used median BCIS cost in our baseline assumptions. For larger sites of over 100 units, we have adopted the lower quartile.
Flats 3-5 storey	£1,638 psm	Median BCIS
Flats 6+ storey (Core Zone) / BtR	£2,045 psm	This is a blended rate using the BCIS and also feedback from stakeholders.
Older Persons (Sheltered Housing)	£1,638 psm	Median BCIS for flats 3-5 storey
Older Persons (Extra Care)	£1,638 psm	Median BCIS for flats 3-5 storey
BtR	£1,638 psm	Median BCIS for flats 3-5 storey
BtR (6+Storey)	£2,045 psm	This is a blended rate using the BCIS and also feedback from stakeholders.
PBSA	£2,045 psm	This is a blended rate using the BCIS and also feedback from stakeholders.
External Works	15%	Inc. SUDs / drainage; estate roads etc.

Externals & Infrastructure (Strategic typologies)	20%	We have increased the external works & infrastructure costs up to 20% from 15% to allow for the additional infrastructure costs associated with strategic sites.
Category M4(2) (Mkt. Housing)	£521 per unit	100% of units. DCLG housing Standards Review, Final Implementation Impact Assessment, March 2015, paragraphs 153 and 157. All new dwellings should meet the requirements of Building Regulations Part M4(2) dwelling standard (Accessible and Adaptable Dwellings)
Category M4(3) (Mkt. Housing)	£10,111 per unit	10% of units and 100% of Older Persons
Net Zero Carbon / FHS	£10,000 per unit	Based on the 2025 operational carbon targets, this has come from the Jacobs Net Zero report commissioned by BCC. This is to comply with the 2025 Part L in accordance with the WMS on Local Energy Efficiency Standards.
Urban Green Factor	£100 psm	Applied to the total roof space of each typology.
EV Charging	£1,000 per unit house £2,500 per 4 flats	From HM Government (Department for Transport), Electric Vehicle Charging in Residential and Non-Residential Building, July 2019
Contingency	Greenfield 3% Brownfield 5%	Greenfield / Brownfield

5.59 The above costs are considered to be 'worst-case' scenario. Many of the assumptions are considered to be cumulatively negative and there is scope for some flexibility and pragmatism to the application of the policies in the Plan. For example, the worst-case scenario appraisals do not take into account the growth in values created by local energy homes and new markets as a result of regeneration masterplans. Neither do they take into account construction cost savings as new low-carbon/energy building technologies become embedded in the construction sector.

Other Cost Assumptions

5.60 The table below sets out the remaining fees and marketing cost assumptions for residential typologies.

Table 5.17 Other Cost Assumptions

Item	Baseline Assumption	Comments
Professional Fees	6.5% 7.5%	of construction cost 7.5% in Core.
OMS Marketing and Promotion	3%	for sales discounts and incentives
Investment Sale Agent	1%	% of GDV
Investment Sale Legal	0.50%	% of GDV
Marketing and promotion (BTR / PBSA / Co-Living)	0.15%	% of OMS GDV
Sales Agent	1%	% of OMS GDV
Sales Legal	0.35%	% of OMS GDV
AH Legal	£10,000	
Debit Interest	8%	Applies to 100% of cashflow to include Finance Fees etc.

5.61 All of the above costs have been the subject of stakeholder consultation on the 1st March 2024.

Profit Assumptions

5.62 We have adopted a baseline profit of 20% on the Gross Development Value of the open market sale housing (OMS) - with a sensitivity analysis which shows the impact of profit between 15-20%. This is consistent with the PPG (May 2019) which refers to profit of 15-20%[39] being '*considered a suitable return to developers in order to establish the viability of plan policies*.'

5.63 Our baseline assumption of 20% profit is at the top end of the range and we have included sensitivities down to 15% profit within the appraisals. However, we consider this to be a generous margin and allows for 'buffer' in addition to the contingency allowance (3% - 5% included).

5.64 For the affordable tenure types, we have used 6% profit on value (where applicable). This is considered to be an industry accepted standard and the PPG states a lower percentage than 15-

[39] Paragraph: 018 Reference ID: 10-018-201 90509, Revision date: 09 05 2019

20% is more appropriate for affordable housing as it carries less risk when there is a guaranteed, known end value[40].

5.65 For BtR typologies we have adopted a profit on cost of 10% to reflect the level of market risk and return for a forward funded BtR development.

5.66 It is important to note that it is good practice for policy obligations not to be set right up to the margins of viability. However, in certain circumstances developers will agree lower profit margins in order to secure planning permission and generate turnover. The sensitivity analyses within the appendices show the 'balance' (i.e., RLV – BLV) for developer's profit from 20% on private housing down to 15%. This clearly shows the significant impact of profit on viability (especially for larger schemes).

Residential Land Value Assumptions

5.67 The Land Market paper (see Appendix 4) sets out our approach and analysis of available evidence. Within this section we outline the key assumptions around residential land values. Our benchmark land value (BLV) assumptions are set out below. Land value is one of the key variables (together with profit) which determines the viability and deliverability or otherwise of a scheme.

5.68 Within the revised NPPF (from 2019) government policy has changed to ensure that planning policies are tested and viable at a Plan level; the developer has planning certainty to agree the land price with the landowner; and the scheme is delivered on a policy compliant basis.

5.69 For greenfield typologies we adopt a bottom-up approach based on the net value per acre / hectare for agricultural land (existing use value (EUV)). This EUV is 'grossed up' to reflect a net developable to gross site area ratio.

5.70 The evidence that we have gathered has indicated that paddock land and greenfield land that is contained within strategic allocation achieves a rate of £100,000 per acre. This price per acre is consistent across the Borough with the transactions that are evidenced. This value does not reflect agricultural values (EUV) for farming and includes higher value use such as paddock land and urban fringe leisure uses. Hence the analysis of the uplift multiplier cannot be considered equivalent to agricultural land (i.e. as a multiplier) and should be considered also in the context of percentage uplifts (similar to brownfield land which has a higher starting EUV).

5.71 Based on existing evidence of greenfield land transactions within Birmingham we have applied an EUV of £100,000 per acre across all the zones, with an uplift of 20% (or 1.2 multiplier) resulting in a BLV of £275,00 per acre.

[40] Paragraph: 018 Reference ID: 10-018-20190509, Revision date: 09 05 2019

5.72 For larger ‘strategic sites’ we have established the BLV at £250,000 per acre. This equates to £125,000 per acre gross (@50% net to gross ratio). Based on EUV for agricultural land of £12,000 per acre this equates to 10x (9.4x) EUV which is sufficient net premium.

5.73 For brownfield typologies the starting EUV is higher than for greenfield site. The working assumption is that all of the brownfield land is redeveloped (100% - net to gross). The uplift multiplier, expressed as a percentage, is 10% - 25% depending on zone (low to core).

5.74 These are the benchmark values that we would assume for the purpose of our hypothetical viability appraisals, and they act as the benchmark to test the RLV’s of schemes to determine whether sites would come forward for development. Please see the BLV Caveats section (at the end of chapter 4) with respect to site-specific negotiations and premiums.

5.75 For the residential typologies on brownfield land, the benchmark land value is based on comparable evidence of sales for brownfield land. Note that EUVs for brownfield sites are sensitive to the particular use (i.e. the EUV could be lower if the site is not in an existing lawful use for industrial / commercial) and any legacy costs of contamination, site remediation and demolition.

Table 5.18 - Benchmark Land Value Assumptions

Typology	Location	Greenfield /Brownfield	EUV -					Uplift Multiplier	BLV -	
			(per acre) (gross)	(per ha) (gross)	Net: Gross (%)	(per acre) (net)	(per ha) (net)	x [X] x [Y]%	(per acre) (net developable) (rounded)	(per ha) (net developable) (rounded)
Residential/Commercial	Low Value Area	Brownfield	£775,000	£1,915,025	100%	£775,000	£1,915,025	10.0%	£852,500	£2,106,528
Residential/Commercial	Medium Value Area	Brownfield	£1,100,000	£2,718,100	100%	£1,100,000	£2,718,100	15.0%	£1,265,000	£3,125,815
Residential/Commercial	High Value Area	Brownfield	£1,525,000	£3,768,275	100%	£1,525,000	£3,768,275	20.0%	£1,830,000	£4,521,930
Residential/Commercial	Core Zone	Brownfield	£2,000,000	£4,942,000	100%	£2,000,000	£4,942,000	25.0%	£2,500,000	£6,177,500
Residential (Paddock Land)	All Areas	Greenfield	£100,000	£247,100	80%	£125,000	£308,875	1.2	£275,000	£679,525
Residential (Strategic Site)	All Areas	Greenfield	£12,000	£29,652	50%	£24,000	£59,304	9.4	£250,000	£617,750
The above values are for Plan-making purposes only. This table should be read in conjunction with our Financial Viability Assessment Report and the caveats therein. No responsibility is accepted to any other party in respect of the whole or any part of its contents.										

Source: AspinallVerdi '230724_Birmingham BLV Database_v1'

5.76 The BLVs in the above table represent substantial sums – per acre and in absolute terms within our appraisals.

5.77 Part of the planning process is to access 'land value capture' for the provision of infrastructure, affordable housing and other policy objectives e.g. climate change. It may be that landowners do have to accept lower land values in order to deliver the required objectives (in the absence of other funding opportunities). It is recognised that landowners do need to achieve a premium to sell their land for development (particularly in the context of high value brownfield land in the city centre), but it must also be recognised that there are a range of motivations for selling – including forced sellers when a bank forecloses and/or where redundant sites become liabilities. This does enable some opportunities for land to be acquired at below the above headline BLVs.

6 Stakeholder Consultation

6.1 We have consulted with industry by way of a stakeholder consultation workshop held on Friday 1st March 2024.

6.2 A copy of the slide presentation is attached at Appendix 6.

6.3 As part of the consultation, we requested written feedback on the appraisal assumptions.

6.4 We received 11 response letters of feedback in additions raised during the consultation. The responses have been reviewed and analysed in the Feedback Matrix (Appendix 5). Relevant changes have been incorporated into the assumptions above.

7 Viability Results

7.1 In this section we draw together the results from the viability modelling.

Residential Viability Results:

7.2 This section sets out the viability results of our financial appraisals for the residential typologies.

7.3 Our viability assessments, have been through an iterative process with Birmingham City Council, to inform our recommendations about the scope to align the affordable housing in the context of the emerging Birmingham Local Plan policies and infrastructure requirements across the Borough.

7.4 We have appraised the typologies based upon the baseline assumptions described above and included extensive sensitivity testing for each appraisal.

7.5 As described above in section 4, the appraisals are fully policy compliant where all the policy costs are 'layered-on'. They also include generous allowances for land value and profit. In this respect they could be considered to be '*worst-case scenarios'.*

7.6 We set out the results in the order of the Typologies Matrix from low value zone - brownfield; to high value zone greenfield, followed by the specialist housing and strategic typologies. The residential appraisals are appended in full at Appendix 7. These include a summary table at the end of each batch of appraisals.

7.7 Particular attention should be paid to the sensitivity tables across all typologies. These are shown at the bottom of each appraisal at Appendix 7. We have provided sensitivity analysis for:

- Table 1 – CIL v Affordable Housing %
- Table 2 – Site Specific S106 v Affordable Housing %
- Table 3 – Profit v Affordable Housing %
- Table 4 – BLV v Affordable Housing %
- Table 5 – Net Zero Costs v Affordable Housing %
- Table 6 – Build Cost v Affordable Housing %
- Table 7 – Market Values v Affordable Housing %
- Table 8 – Grant v Affordable Housing %

7.8 We set out below the results of viability appraisal scenarios. These are appraised in batches. The full appraisals are provided in Appendix 7. The results tables should be read in conjunction with the Typologies Matrix (Appendix 2). It is important to note that the sensitivity tables are 2-way sensitivities based on various parameters and affordable housing. Further multi-layered scenario testing could be undertaken to show the impact of multiple 'pragmatic' changes such as reduced land value and profit.

Birmingham Brownfield

7.9 The following tables summarise the viability results of the brownfield typologies in Birmingham (Typologies 1-25). The tables indicate viability using a RAG rating system as indicated below.

Table 7.1 - Viability RAG rating

Viable	if RLV > BLV
Marginal	if RLV < BLV, but RLV is positive
Not Viable	if RLV < BLV, and RLV is negative

Source: AspinallVerdi, 2024

7.10 We have conducted viability testing across the lower, medium, higher and core zones. Across the zones we have appraised schemes of the following sizes:

- 8 units
- 15 units
- 30 units
- 45 units
- 75 units
- 125 units
- 200 units

7.11 Within the core zone we have appraised schemes of the following sizes:

- 25 units
- 50 units
- 150 units
- 300 units

Table 7.2 - Lower Value Zone Brownfield Typology Summary

Appraisal Ref:	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Scheme Typology:	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone
No Units:	8	15	30	45	75	125	200
Location / Value Zone:	Lower Value	Lower Value	Lower Value	Lower Value	Lower Value	Lower Value	Lower Value
Greenfield/Brownfield:	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield
Notes:							
Total GDV (£)	2,166,000	3,470,805	6,941,611	10,412,416	16,219,078	27,031,797	43,250,875
Policy Assumptions	-	-	-	-	-	-	-
AH Target % (& mix):	0%	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%	5%
CIL (£ psm)	-	-	-	-	-	-	-
CIL (£ per unit)	-	-	-	-	-	-	-
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Site Infrastructure (£ per unit)	-	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Profit KPI's	-	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	20.00%	16.65%	16.65%	16.65%	16.65%	16.65%	16.65%
Developers Profit (% on costs)	24.63%	17.84%	17.70%	17.80%	17.10%	18.50%	18.66%
Developers Profit Total (£)	433,200	577,822	1,155,644	1,733,466	2,699,870	4,499,783	7,199,653
Land Value KPI's	-	-	-	-	-	-	-
RLV (£/acre (net))	(52,177)	(373,971)	(401,230)	(380,587)	(489,596)	(231,473)	(205,586)
RLV (£/ha (net))	(128,930)	(924,082)	(991,439)	(940,430)	(1,209,791)	(571,970)	(508,002)
RLV (% of GDV)	-1.19%	-9.98%	-10.71%	-10.16%	-13.99%	-6.61%	-5.87%
RLV Total (£)	(25,786)	(346,531)	(743,579)	(1,057,984)	(2,268,358)	(1,787,407)	(2,540,012)
BLV (£/acre (net))	852,500	852,500	852,500	852,500	852,500	852,500	852,500
BLV (£/ha (net))	2,106,528	2,106,528	2,106,528	2,106,528	2,106,528	2,106,528	2,106,528
BLV Total (£)	421,306	789,948	1,579,896	2,369,843	3,949,739	6,582,898	10,532,638
Surplus/Deficit (£/acre) [RLV-BLV]	(904,677)	(1,226,471)	(1,253,730)	(1,233,087)	(1,342,096)	(1,083,973)	(1,058,086)
Surplus/Deficit (£/ha)	(2,235,457)	(3,030,610)	(3,097,966)	(3,046,958)	(3,316,318)	(2,678,498)	(2,614,530)
Surplus/Deficit Total (£)	(447,091)	(1,136,479)	(2,323,475)	(3,427,828)	(6,218,097)	(8,370,305)	(13,072,650)
Plan Viability comments	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable

Source: 240306_BCC Appraisal_LVBF_v0.2

Table 7.3 - Medium Value Zone Brownfield Typology Summary

Appraisal Ref:	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Scheme Typology:	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone
No Units:	8	15	30	45	75	125	200
Location / Value Zone:	Medium Value	Medium Value	Medium Value	Medium Value	Medium Value	Medium Value	Medium Value
Greenfield/Brownfield:	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield
Notes:							
Total GDV (£)	2,718,000	4,342,005	8,684,011	13,026,016	20,201,531	33,669,219	53,870,750
Policy Assumptions	-	-	-	-	-	-	-
AH Target % (& mix):	0%	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%	5%
CIL (£ psm)	90.39	90.39	90.39	90.39	90.39	90.39	90.39
CIL (£ per unit)	9,276	6,030	6,030	6,030	5,771	5,771	5,771
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Site Infrastructure (£ per unit)	-	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Profit KPI's	-	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	20.00%	16.68%	16.68%	16.68%	16.68%	16.68%	16.68%
Developers Profit (% on costs)	29.28%	21.61%	21.53%	21.58%	20.63%	22.33%	22.40%
Developers Profit Total (£)	543,600	724,279	1,448,558	2,172,837	3,368,792	5,614,653	8,983,445
Land Value KPI's	-	-	-	-	-	-	-
RLV (£/acre (net))	570,702	256,424	239,711	244,635	95,027	323,773	332,303
RLV (£/ha (net))	1,410,205	633,623	592,326	604,493	234,813	800,044	821,122
RLV (% of GDV)	10.38%	5.47%	5.12%	5.22%	2.18%	7.43%	7.62%
RLV Total (£)	282,041	237,609	444,245	680,054	440,273	2,500,138	4,105,608
BLV (£/acre (net))	1,265,000	1,265,000	1,265,000	1,265,000	1,265,000	1,265,000	1,265,000
BLV (£/ha (net))	3,125,815	3,125,815	3,125,815	3,125,815	3,125,815	3,125,815	3,125,815
BLV Total (£)	625,163	1,172,181	2,344,361	3,516,542	5,860,903	9,768,172	15,629,075
Surplus/Deficit (£/acre) [RLV-BLV]	(694,298)	(1,008,576)	(1,025,289)	(1,020,365)	(1,169,973)	(941,227)	(932,697)
Surplus/Deficit (£/ha)	(1,715,610)	(2,492,192)	(2,533,489)	(2,521,322)	(2,891,002)	(2,325,771)	(2,304,693)
Surplus/Deficit Total (£)	(343,122)	(934,572)	(1,900,117)	(2,836,488)	(5,420,630)	(7,268,034)	(11,523,467)
Plan Viability comments	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal

Source: 240306_BCC Appraisal_MVBF_v0.2

Table 7.4 - Higher Value Zone Brownfield Typology Summary

Appraisal Ref:	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Scheme Typology:	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone
No Units:	8	15	30	45	75	125	200
Location / Value Zone:	Higher Value	Higher Value	Higher Value	Higher Value	Higher Value	Higher Value	Higher Value
Greenfield/Brownfield:	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield
Notes:							
Total GDV (£)	3,288,000	5,215,111	10,430,222	15,645,333	24,188,953	40,314,922	64,503,875
Policy Assumptions	-	-	-	-	-	-	-
AH Target % (& mix):	0%	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%	5%
CIL (£ psm)	90.39	90.39	90.39	90.39	90.39	90.39	90.39
CIL (£ per unit)	9,276	6,030	6,030	6,030	5,771	5,771	5,771
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Site Infrastructure (£ per unit)	-	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Profit KPI's	-	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	20.00%	16.76%	16.76%	16.76%	16.75%	16.75%	16.75%
Developers Profit (% on costs)	34.95%	25.86%	25.82%	25.83%	24.62%	26.64%	26.70%
Developers Profit Total (£)	657,600	873,922	1,747,843	2,621,765	4,051,662	6,752,770	10,804,433
Land Value KPI's	-	-	-	-	-	-	-
RLV (£/acre (net))	1,316,717	899,293	887,754	887,445	681,367	911,287	916,740
RLV (£/ha (net))	3,253,607	2,222,154	2,193,639	2,192,877	1,683,657	2,251,791	2,265,265
RLV (% of GDV)	19.79%	15.98%	15.77%	15.77%	13.05%	17.45%	17.56%
RLV Total (£)	650,721	833,308	1,645,230	2,466,987	3,156,857	7,036,846	11,326,326
BLV (£/acre (net))	1,830,000	1,830,000	1,830,000	1,830,000	1,830,000	1,830,000	1,830,000
BLV (£/ha (net))	4,521,930	4,521,930	4,521,930	4,521,930	4,521,930	4,521,930	4,521,930
BLV Total (£)	904,386	1,695,724	3,391,448	5,087,171	8,478,619	14,131,031	22,609,650
Surplus/Deficit (£/acre) [RLV-BLV]	(513,283)	(930,707)	(942,246)	(942,555)	(1,148,633)	(918,713)	(913,260)
Surplus/Deficit (£/ha)	(1,268,323)	(2,299,776)	(2,328,291)	(2,329,053)	(2,838,273)	(2,270,139)	(2,256,665)
Surplus/Deficit Total (£)	(253,665)	(862,416)	(1,746,218)	(2,620,184)	(5,321,762)	(7,094,185)	(11,283,324)
Plan Viability comments	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal

Source: 240306_BCC Appraisal_HVBF_v0.2

Table 7.5 - Core Typology Summary

Appraisal Ref:	**22**	**23**	**24**	**25**
Scheme Typology:	Core Zone	Core	0	Core
No Units:	25	75	150	300
Location / Value Zone:	Core Zone	Core Zone	Core Zone	Core Zone
Greenfield/Brownfield:	Brownfield	Brownfield	Brownfield	Brownfield
Notes:				
Total GDV (£)	5,615,039	16,845,117	34,235,695	66,551,719
Policy Assumptions	-	-	-	-
AH Target % (& mix):	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%
CIL (£ psm)	90.39	90.39	90.39	90.39
CIL (£ per unit)	4,147	4,147	4,216	4,078
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	8,447	8,447	8,516	8,378
Site Infrastructure (£ per unit)	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	8,447	8,447	8,516	8,378
Profit KPI's	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	16.64%	16.64%	16.64%	16.59%
Developers Profit (% on costs)	19.24%	18.82%	15.79%	15.41%
Developers Profit Total (£)	934,090	2,802,270	5,695,279	11,043,328
Land Value KPI's	-	-	-	-
RLV (£/acre (net))	(1,118,905)	(2,734,051)	(16,257,008)	(18,500,005)
RLV (£/ha (net))	(2,764,814)	(6,755,839)	(40,171,068)	(45,713,512)
RLV (% of GDV)	-3.08%	-5.01%	-22.00%	-24.24%
RLV Total (£)	(172,801)	(844,480)	(7,532,075)	(16,134,181)
BLV (£/acre (net))	2,500,000	2,500,000	2,500,000	2,500,000
BLV (£/ha (net))	6,177,500	6,177,500	6,177,500	6,177,500
BLV Total (£)	386,094	772,188	1,158,281	2,180,294
Surplus/Deficit (£/acre) [RLV-BLV]	(3,618,905)	(5,234,051)	(18,757,008)	(21,000,005)
Surplus/Deficit (£/ha)	(8,942,314)	(12,933,339)	(46,348,568)	(51,891,012)
Surplus/Deficit Total (£)	(558,895)	(1,616,667)	(8,690,356)	(18,314,475)
Plan Viability comments	Not Viable	Not Viable	Not Viable	Not Viable

Source: 240403_BCC Appraisals_CORE_v0.5

Lower Value Zone (Brownfield)

7.12 Table 7.2 summarises the appraisal results for lower value brownfield typologies.

7.13 It can be seen that across the lower value zone there are significant viability issues at 35% affordable housing with the full layered on policy costs.

7.14 All the schemes in the lower value zone (Typologies 1-7) result in negative residual land values.

7.15 Sensitivities across the appraisals within the lower value zone indicate that even at a BLV of £100,000 per acre schemes are not viable, even at 0% affordable housing. Sensitivities also suggest that an increase in market value greater than 20% and a reduction in build costs of greater than 30% schemes are still unviable.

7.16 Across all the schemes, the sensitivity analysis (Table 5) shows that even with zero extra-over cost for net zero carbon policies the scheme would not be viable. Even with only 10% affordable housing and zero costs for net zero there is a deficit. Further analysis to extend the range of affordable housing down to 0% still shows a deficit with £0 net zero costs across all the typologies.

7.17 There is no scenario in which any affordable housing can be viably accommodated without grant funding. i.e they would still be unviable with 0% affordable housing.

7.18 Viability issues arise from a mix of factors. The current economic climate, with its rising interest rates and high construction costs. This is coupled with additional policy expenses, such as Biodiversity Net Gain, Net Zero initiatives, and Urban Greening factors, further increasing the already high construction expenses. This puts added strain on areas with lower market values, making it harder for the lower value zone to deliver housing whilst also implementing affordable housing. There is a cumulative impact of the above additional policy expense and, in accordance with the Written Ministerial Statement, we recommend the minimum policy requirements to be imposed for development not to be stymied on brownfield land in the lower value zone.

Medium Value Zone (Brownfield)

7.19 Table 7.3 summarises the appraisal results for medium value brownfield typologies.

7.20 Across the medium value zone all schemes (Typologies 8-14) result in positive RLV's and express marginal viability. Accordingly, the policies do not make development fundamentally unviable, but landowners return and developers profit would need to be checked in order to deliver the scheme typologies.

7.21 RLV's range from £95,000 - £570,000 per acre, averaging £295,000 per acre across all the medium value brownfield typologies. We note that an average RLV of £295,000 per acre across the schemes is a healthy residual. The typology with the lowest RLV is the 75-unit typology

where we have left the build costs at BCIS Median and introduced flats into the mix. Reducing the mix of flats and applying economies of scale (lower quartile BCIS) would increase the RLV.

7.22 On the upper end of this range at £570,000 per acre is Typology 8 which is an 8-unit scheme. This scheme does not include any affordable housing or S106 costs and its purpose it to be used as a comparison tool, to indicate its viability without affordable housing or S106 costs. The RLV of £570,000 per acre is a healthy residual. However, due to the RLV not exceeding the BLV of £1,265,000 per acre, the scheme is still marginal. Viability is shown on typology 8 at 35% affordable housing when BLV is reduced to £200,000 per acre.

7.23 Across typologies 9-14, our sensitivities indicate that a reduction in the BLV to £200,000 - £300,000 per acre will make the schemes viable at 35% affordable housing.

7.24 The policy costs within the medium value zone are £16,522 per unit, which is high and will have more of an impact on the medium and lower value zones which and is just too much for schemes in the medium value to support at 35% affordable housing.

7.25 As with the lower value zone, the sensitivity analysis (Table 5) for the medium value zone shows that even with zero extra-over cost for net zero carbon policies, the typologies would not be viable (based on the headline profit and BLV assumptions). Even with only 10% affordable housing and zero costs for net zero policies there is still a deficit. Further analysis to extend the range of affordable housing down to 0% still shows a deficit with £0 net zero costs across all the typologies.

7.26 We recommend a reduction in the affordable housing within the medium value brownfield zones to no more than 15%. We note that even at 15% affordable housing, the Benchmark Land Values would still need to be reduced to £400,000 - £500,000 per acre within this zone. There is a cumulative impact of the Net Zero, Biodiversity Net Gain and Urban Greening factors above additional policy expense and, in accordance with the Written Ministerial Statement, we recommend that only minimum policy requirements are reflected from national policy.

Higher Value Zone (Brownfield)

7.27 Table 7.4 summarises the appraisal results for medium value brownfield typologies.

7.28 Across the Higher value zone all schemes (Typologies 15-21) result in positive RLV's and express marginal viability due to the strength of the BLV assumptions. As with the medium value zone, the policies do not make development fundamentally unviable, but other input assumptions (e.g. landowners return and developers profit) would need to be checked in order to deliver the scheme typologies.

7.29 RLV's range from £681,367 - £1,316,717 per acre, averaging £928,658 per acre across all the higher value brownfield typologies. The average RLV of £928,658 is a very strong residual across

the typologies, however schemes are still marginal as this value is positive, but less than the BLV of £1,830,000 per acre.

7.30 As with the lower and medium value zones, the sensitivity analysis (Table 5) for the medium value zone shows that even with zero extra-over cost for net zero carbon policies, the typologies would not be viable (based on the headline profit and BLV assumptions). Even with only 10% affordable housing and zero costs for net zero policies there is still a deficit. Further analysis to extend the range of affordable housing down to 0% still shows a deficit with £0 net zero costs across all the typologies.

7.31 For viability to be achieved at 35% affordable housing within the higher value zones, our sensitivities suggest that BLV's need to be reduced to £700,000 - £1,000,000 per acre. This is not unrealistic, but does require some pragmatic responses from developers and landowners. At 25% affordable housing the BLV would need to be £1,000,000 - £1,100,000 per acre. Accordingly, we recommend that only minimum energy efficiency, carbon and other policy requirements are imposed in accordance with the Written Ministerial Statement.

Core Value Zone (Brownfield)

7.32 Table 7.5 summarises the appraisal results for the core value zone brownfield typologies.

7.33 Across the core, all schemes (Typologies 22-25) are shown to be unviable, this is due to a number of factors. The most significant issue is the increased build costs for 6+ storey developments.

7.34 Sensitivities show that a decrease in build costs of 20% is required to show viability at 35% affordable housing across the 25 and 75-unit schemes. The 150 and 300-unit schemes are viable at 10% affordable housing and a 30% reduction in build costs. The larger (150- and 300-unit) schemes have higher build costs of £2,045 psm compared to £1,677 psm for the smaller (25- and 75- unit typologies) based on height and massing assumptions.

7.35 Table 5 of the sensitivities shows that for the smaller typologies with lower build costs these could be viable with zero extra over cost allowance for net zero carbon policies and 5-10% affordable housing.

7.36 We note that the BLV's in the core are at £2,500,000 per acre which is very high and is having a significant effect on the viability schemes and the delivery of affordable housing.

Birmingham Greenfield

7.37 The following tables summarise the viability results of the greenfield typologies in Birmingham (Typologies 26-46).

7.38 We have conducted viability testing across the lower, medium, higher value zones. Across the zones we have appraised schemes of the following sizes:

- 8 units
- 15 units
- 30 units
- 45 units
- 75 units
- 125 units
- 200 units

7.39 In addition to the generic Greenfield typologies, we have also developed a set of typologies for strategic greenfield sites which are 450 units in size, which represents the strategic nature of the sites.

Table 7.6 - Lower Value Greenfield Typology Summary

Appraisal Ref:	**26**	**27**	**28**	**29**	**30**	**31**	**32**
Scheme Typology:	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone	Lower Value Zone
No Units:	8	15	30	45	75	125	200
Location / Value Zone:	Lower Value	Lower Value	Lower Value	Lower Value	Lower Value	Lower Value	Lower Value
Greenfield/Brownfield:	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield
Notes:							
Total GDV (£)	2,166,000	3,470,805	6,941,611	10,412,416	16,219,078	27,031,797	44,164,813
Policy Assumptions	-	-	-	-	-	-	-
AH Target % (& mix):	0%	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%	5%
CIL (£ psm)	-	-	-	-	-	-	-
CIL (£ per unit)	-	-	-	-	-	-	-
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Site Infrastructure (£ per unit)	-	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Profit KPI's	-	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	20.00%	16.65%	16.65%	16.65%	16.65%	16.65%	16.43%
Developers Profit (% on costs)	25.36%	18.39%	18.26%	18.36%	17.63%	19.14%	19.18%
Developers Profit Total (£)	433,200	577,822	1,155,644	1,733,466	2,699,870	4,499,783	7,254,489
Land Value KPI's	-	-	-	-	-	-	-
RLV (£/acre (net))	45,239	(269,159)	(293,253)	(274,900)	(386,672)	(126,633)	(73,110)
RLV (£/ha (net))	111,785	(665,092)	(724,628)	(679,277)	(955,466)	(312,909)	(180,655)
RLV (% of GDV)	1.03%	-7.19%	-7.83%	-7.34%	-11.05%	-3.62%	-2.05%
RLV Total (£)	22,357	(249,409)	(543,471)	(764,187)	(1,791,498)	(977,840)	(903,275)
BLV (£/acre (net))	275,000	275,000	275,000	275,000	275,000	275,000	275,000
BLV (£/ha (net))	679,525	679,525	679,525	679,525	679,525	679,525	679,525
BLV Total (£)	135,905	254,822	509,644	764,466	1,274,109	2,123,516	3,397,625
Surplus/Deficit (£/acre) [RLV-BLV]	(229,761)	(544,159)	(568,253)	(549,900)	(661,672)	(401,633)	(348,110)
Surplus/Deficit (£/ha)	(567,740)	(1,344,617)	(1,404,153)	(1,358,802)	(1,634,991)	(992,434)	(860,180)
Surplus/Deficit Total (£)	(113,548)	(504,231)	(1,053,114)	(1,528,652)	(3,065,608)	(3,101,356)	(4,300,900)
Plan Viability comments	Marginal	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable

Source: 240306_BCC Appraisal_LVGF_v0.2

Table 7.7 - Medium Value Greenfield Typology Summary

Appraisal Ref:	**33**	**34**	**35**	**36**	**37**	**38**	**39**
Scheme Typology:	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone	Medium Value Zone
No Units:	8	15	30	45	75	125	200
Location / Value Zone:	Medium Value	Medium Value	Medium Value	Medium Value	Medium Value	Medium Value	Medium Value
Greenfield/Brownfield:	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield
Notes:							
Total GDV (£)	2,718,000	4,342,005	8,684,011	13,026,016	20,201,531	33,669,219	53,870,750
Policy Assumptions	-	-	-	-	-	-	-
AH Target % (& mix):	0%	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%	5%
CIL (£ psm)	90.39	90.39	90.39	90.39	90.39	90.39	90.39
CIL (£ per unit)	9,276	6,030	6,030	6,030	5,771	5,771	5,771
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Site Infrastructure (£ per unit)	-	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Profit KPI's	-	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	20.00%	16.68%	16.68%	16.68%	16.68%	16.68%	16.68%
Developers Profit (% on costs)	30.09%	22.24%	22.18%	22.21%	21.24%	23.03%	23.09%
Developers Profit Total (£)	543,600	724,279	1,448,558	2,172,837	3,368,792	5,614,653	8,983,445
Land Value KPI's	-	-	-	-	-	-	-
RLV (£/acre (net))	658,053	344,844	330,351	333,244	181,943	407,782	414,464
RLV (£/ha (net))	1,626,049	852,110	816,297	823,446	449,581	1,007,628	1,024,140
RLV (% of GDV)	11.97%	7.36%	7.05%	7.11%	4.17%	9.35%	9.51%
RLV Total (£)	325,210	319,541	612,223	926,376	842,965	3,148,838	5,120,702
BLV (£/acre (net))	275,000	275,000	275,000	275,000	275,000	275,000	275,000
BLV (£/ha (net))	679,525	679,525	679,525	679,525	679,525	679,525	679,525
BLV Total (£)	135,905	254,822	509,644	764,466	1,274,109	2,123,516	3,397,625
Surplus/Deficit (£/acre) [RLV-BLV]	383,053	69,844	55,351	58,244	(93,057)	132,782	139,464
Surplus/Deficit (£/ha)	946,524	172,585	136,772	143,921	(229,944)	328,103	344,615
Surplus/Deficit Total (£)	189,305	64,719	102,579	161,911	(431,145)	1,025,323	1,723,077
Plan Viability comments	Viable	Viable	Viable	Viable	Marginal	Viable	Viable

Source: 240306_BCC Appraisal_MVGF_v0.2

Table 7.8 – Higher Value Greenfield Typology Summary

Appraisal Ref:	**40**	**41**	**42**	**43**	**44**	**45**	**46**
Scheme Typology:	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone	Higher Value Zone
No Units:	8	15	30	45	75	125	200
Location / Value Zone:	Higher Value	Higher Value	Higher Value	Higher Value	Higher Value	Higher Value	Higher Value
Greenfield/Brownfield:	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield	Greenfield
Notes:							
Total GDV (£)	3,288,000	5,215,111	10,430,222	15,645,333	24,188,953	40,314,922	64,503,875
Policy Assumptions							
AH Target % (& mix):	0%	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%	5%
CIL (£ psm)	90.39	90.39	90.39	90.39	90.39	90.39	90.39
CIL (£ per unit)	9,276	6,030	6,030	6,030	5,771	5,771	5,771
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Site Infrastructure (£ per unit)	-	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	13,576	10,330	10,330	10,330	10,071	10,071	10,071
Profit KPI's	-	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	20.00%	16.76%	16.76%	16.76%	16.75%	16.75%	16.75%
Developers Profit (% on costs)	35.91%	26.62%	26.57%	26.58%	25.34%	27.46%	27.51%
Developers Profit Total (£)	657,600	873,922	1,747,843	2,621,765	4,051,662	6,752,770	10,804,433
Land Value KPI's	-	-	-	-	-	-	-
RLV (£/acre (net))	1,404,067	987,256	976,592	975,626	767,906	994,183	998,901
RLV (£/ha (net))	3,469,450	2,439,508	2,413,160	2,410,771	1,897,495	2,456,627	2,468,284
RLV (% of GDV)	21.10%	17.54%	17.35%	17.33%	14.71%	19.04%	19.13%
RLV Total (£)	693,890	914,816	1,809,870	2,712,118	3,557,804	7,676,959	12,341,420
BLV (£/acre (net))	275,000	275,000	275,000	275,000	275,000	275,000	275,000
BLV (£/ha (net))	679,525	679,525	679,525	679,525	679,525	679,525	679,525
BLV Total (£)	135,905	254,822	509,644	764,466	1,274,109	2,123,516	3,397,625
Surplus/Deficit (£/acre) [RLV-BLV]	1,129,067	712,256	701,592	700,626	492,906	719,183	723,901
Surplus/Deficit (£/ha)	2,789,925	1,759,983	1,733,635	1,731,246	1,217,970	1,777,102	1,788,759
Surplus/Deficit Total (£)	557,985	659,994	1,300,226	1,947,652	2,283,694	5,553,444	8,943,795
Plan Viability comments	Viable	Viable	Viable	Viable	Viable	Viable	Viable

Source: 240306_BCC Appraisal_HVGF_v0.2

Table 7.9 - Strategic Appraisal Summary

Appraisal Ref:	**STRAT1**	**STRAT2**	**STRAT 3**
Scheme Typology:	Lower Value Zone	Medium Value Zone	Higher Value Zone
No Units:	450	450	450
Location / Value Zone:	Lower Value	Medium Value	Higher Value
Greenfield/Brownfield:	Greenfield	Greenfield	Greenfield
Notes:	0	0	0
Total GDV (£)	97,314,469	121,209,188	145,133,719
Policy Assumptions	-	-	-
AH Target % (& mix):	35%	35%	35%
Affordable Rent:	60%	60%	60%
Social Rent:	10%	10%	10%
First Homes:	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%
CIL (£ psm)	-	90.39	90.39
CIL (£ per unit)	-	5,771	5,771
Site Specific S106 (£ per unit)	15,000	15,000	15,000
Sub-total CIL+S106 (£ per unit)	15,000	20,771	20,771
Site Infrastructure (£ per unit)*	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	15,000	20,771	20,771
Profit KPI's	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%
Developers Profit (% blended)	16.65%	16.68%	16.75%
Developers Profit (% on costs)	17.00%	20.81%	24.94%
Developers Profit Total (£)	16,199,218	20,212,751	24,309,973
Land Value KPI's	-	-	-
RLV (£/acre (net))	(510,279)	118,918	718,628
RLV (£/ha (net))	(1,260,898)	293,846	1,775,729
RLV (% of GDV)	-14.58%	2.73%	13.76%
RLV Total (£)	(14,185,106)	3,305,771	19,976,954
BLV (£/acre (net))	250,000	250,000	250,000
BLV (£/ha (net))	617,750	617,750	617,750
BLV Total (£)	6,949,688	6,949,688	6,949,688
Surplus/Deficit (£/acre) [RLV-BLV]	(760,279)	(131,082)	468,628
Surplus/Deficit (£/ha)	(1,878,648)	(323,904)	1,157,979
Surplus/Deficit Total (£)	(21,134,793)	(3,643,917)	13,027,267
Plan Viability comments	Not Viable	Marginal	Viable

Source: 240321_BCC Appraisal_STRATEGIC_v0.1

Lower Value Zone (Greenfield)

7.40 Table 7.6 summarises the appraisal results for the lower value zone greenfield typologies.

7.41 The appraisal results indicate that typologies 27-32 are all unviable, generating a negative RLV of -£386,672 to -£73,110 per acre.

7.42 Typology 26, which is an 8-unit scheme, which does not include affordable housing generates marginal viability, expressing a positive RLV of £45,239 per acre. Viability surplus above the BLV of £275,000 per acre is shown on this scheme at 35% affordable housing with a reduction of build costs of 20%. Across all the lower value greenfield typologies, viability is shown with a 15-25% decrease in build costs, or a 15-25% increase in market values.

7.43 Table 5 of the sensitivities shows that that the Net Zero cost and affordable housing alone are not sufficient to make the schemes viable except for the two largest typologies for 125- and 200-units. In both these schemes there is a small viability surplus with full BLV and developers profit, but no affordable housing or Net Zero costs allowance. This is due to the larger schemes using lower quartile BCIS costs for the housing construction costs.

7.44 Net Zero costs and Urban Green Factor have a larger negative effect on viability in the lower value zone. For example, the 30-unit scheme has a Net Zero cost of £300,000 and an urban greening cost of £143,475. This is in addition to BNG which in total costs £30,000, putting the overall cost for sustainability / climate change at close to £500,000 for a 30-unit scheme. For viability to occur in the lower value zones a reduction in the build quality may be required (still in line with future homes standard 2023) such as the additional net zero costs, and the exclusion of urban greening factor within these areas. There is a cumulative impact of the above additional policy expense and, in accordance with the Written Ministerial Statement, we recommend the minimum policy requirements to be imposed for development not to be stymied in the lower value zone.

Medium Value Zone (Greenfield)

7.45 Table 7.7 summarises the appraisal results for the medium value zone greenfield typologies.

7.46 The appraisal results indicate that all the typologies are viable within the medium value zone, apart from typology 37 which is the 75-unit scheme, shown to be marginal, generating an RLV of £181,943 per acre, which is lower than the BLV of £275,000 per acre.

7.47 We note that this scheme incorporates flats into the mix and uses median BCIS, however this could be lower quartile depending on the developer, which would push this scheme into viable territory. Our appraisals also indicate that just a 5% reduction in build costs would result in viability, as well as a 6% increase in market values or a reduction in profit to 16%.

7.48 These appraisals include full policy-on costs including Biodiversity Net Gain, Net Zero costs, and Urban Greening Factor allowances. These policies can therefore be applied on greenfield sites in the medium value zone.

7.49 Across the medium value zone, our appraisals show residual land values which range from £181,943 - £658,053 per acre, averaging £381,526 per acre.

Higher Value Zone (Greenfield)

7.50 Table 7.8 summarises the appraisal results for the higher value zone greenfield typologies.

7.51 The appraisal results show that all the higher value typologies (typologies 40-46) are viable on an emerging policy compliant basis.

7.52 These appraisals include full policy-on costs including Biodiversity Net Gain, Net Zero costs, and Urban Greening Factor allowances. These policies can therefore be applied on greenfield sites in the high value zone.

7.53 The schemes generate RLV's ranging from £767,906 - £1,404,067 per acre, averaging £1,014,933 per acre, which is significantly higher than the BLV of £275,000 per acre.

Strategic Greenfield Appraisals

7.54 Table 7.9 summarises the appraisal results for the strategic typologies STRAT1, STRAT2 & STRAT3 (See Typologies Matrix).

7.55 The strategic typologies are all larger in size (450 units) to reflect the strategic nature of the development.

7.56 The strategic typologies are inclusive of a 20% externals and infrastructure cost, up from 15% in generic typologies, the strategic typologies also include a S106 cost of £15,000 per unit and a lower Benchmark Land Value (BLV) of £250,000 per acre.

Lower Value Zone

7.57 STRAT1 is in the lower value zone, and is shown as unviable in our appraisals, generating a deficit of £510,279 per acre, against a BLV of £250,000 per acre.

7.58 We with the smaller greenfield schemes in the lower value zone, Table 5 of the sensitivities shows that that the Net Zero cost and affordable housing alone are not sufficient to make the schemes viable except for the two largest typologies for 125- and 200- units. This is due to the lower value assumptions and the additional S106 costs for strategic infrastructure.

7.59 The sensitivities show this scheme is shown to be viable at 35% affordable housing with a decrease of approximately 30% in build costs.

Medium Value Zone

7.60 STRAT2 is in the medium value zone and is shown to be marginally viable, generating a RLV of £118,918 against the BLV of £250,000 per acre.

7.61 The sensitivity analysis shows that a 10% reduction in build costs would enable this scheme to be viable at 35% affordable housing. Conversely, a 6% increase in market values indicates a viable scheme on the sensitivities.

7.62 Table 5 of the sensitivity tables shows that without any extra over cost of Net Zero policies, the strategic scheme could incorporate 35% affordable housing (similar to a 10% reduction in construction cost). Allowing up to £12,000 per unit for Net Zero results in a 10% affordable housing requirement to remain viable (all other things remaining equal in terms of land value and profit).

7.63 Sensitivity Table 2 also shows that the scheme is viable with a reduced S106 cost of approximately £6,000 per unit.

Higher Value Zone

7.64 STRAT3 is in the higher value zone and is shown to be viable, generating a RLV of £718,628 per acre, against a BLV of £250,000.

7.65 Sensitivity testing shows this scheme to also be viable at a S106 cost of £30,000 per unit at 35% affordable housing.

7.66 Sensitivity Table 5 shows that the strategic site in the higher value zone can deliver both extra over cost of Net Zero policies and 35% affordable housing as well as the additional S106 costs for strategic infrastructure. There is scope in this higher value strategic site to go beyond 2025 Net Zero specifications with costs of up to £30,000 per unit still being viable. Notwithstanding this, we would recommend a cautious approach and apply the current Building Regulations in accordance with the written ministerial statement (see section 2 above).

7.67 Our sensitivity testing also shows this scheme to be viable at 50% affordable housing.

Specialist Housing:

7.69 We have conducted viability testing for older persons / extra care across the lower, medium and higher value zones, all of these typologies are for 60 units.

7.70 In addition to this we have also appraised Build to Rent (BtR) across the lower, medium, higher and core zones. Outside of the core we have appraised 60-unit BtR schemes, whilst in the core we have conducted viability testing on the following number of units:

- 60 units
- 150 units
- 300 units

7.71 As a part of the BtR analysis we have also appraised a 300 bedspace Co-Living development within the core.

7.72 Finally, we have appraised Purpose-Built Student Accommodation (PBSA), across the higher value zone (Selly Oak, Edgbaston, Harborne) and the Core Zone (City Centre), to reflect the spatial distribution of student housing in Birmingham.

Table 7.10 - Older Persons / Extra Care Appraisal Summary

Appraisal Ref:	OP1	OP2	OP3	OP4	OP5	OP6
Scheme Typology:	Retirement Living	Retirement Living	Retirement Living	Retirement Living - Extra Care	Retirement Living - Extra Care	Retirement Living - Extra Care
No Units:	60	60	60	60	60	60
Location / Value Zone:	Lower Value Zone	Medium Value Zone	Higher Value Zone	Lower Value Zone	Medium Value Zone	Higher Value Zone
Greenfield/Brownfield:	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield
Notes:	0	0	0	0	0	0
Total GDV (£)	8,776,560	10,181,340	11,834,745	10,970,700	12,726,675	14,793,431
Policy Assumptions	-	-	-	-	-	-
AH Target % (& mix):	35%	35%	35%	35%	35%	35%
Affordable Rent:	60%	60%	60%	60%	60%	60%
Social Rent:	10%	10%	10%	10%	10%	10%
First Homes:	25%	25%	25%	25%	25%	25%
Other Intermediate (LCHO/Sub-Market etc.):	5%	5%	5%	5%	5%	5%
CIL (£ psm)	-	90.39	90.39	-	90.39	90.39
CIL (£ per unit)	-	4,935	4,935	-	6,147	6,147
Site Specific S106 (£ per unit)	4,300	4,300	4,300	4,300	4,300	4,300
Sub-total CIL+S106 (£ per unit)	4,300	9,235	9,235	4,300	10,447	10,447
Site Infrastructure (£ per unit)	-	-	-	-	-	-
Sub-total CIL+S106+Infrastructure (£ per unit)	4,300	9,235	9,235	4,300	10,447	10,447
Profit KPI's	-	-	-	-	-	-
Developers Profit (% on OMS)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Developers Profit (% on AH)	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Developers Profit (% blended)	16.55%	16.55%	16.56%	16.55%	16.55%	16.56%
Developers Profit (% on costs)	9.28%	10.56%	12.35%	9.45%	10.77%	12.58%
Developers Profit Total (£)	1,452,610	1,685,408	1,959,333	1,815,762	2,106,761	2,449,166
Land Value KPI's	-	-	-	-	-	-
RLV (£/acre (net))	(5,623,359)	(5,030,649)	(4,043,335)	(5,423,163)	(4,829,552)	(3,842,238)
RLV (£/ha (net))	(13,895,319)	(12,430,733)	(9,991,082)	(13,400,635)	(11,933,822)	(9,494,171)
RLV (% of GDV)	-94.99%	-73.26%	-50.65%	-91.61%	-70.33%	-48.13%
RLV Total (£)	(8,337,191)	(7,458,440)	(5,994,649)	(10,050,476)	(8,950,366)	(7,120,628)
BLV (£/acre (net))	852,500	1,265,000	1,830,000	852,500	1,265,000	1,830,000
BLV (£/ha (net))	2,106,528	3,125,815	4,521,930	2,106,528	3,125,815	4,521,930
BLV Total (£)	1,263,917	1,875,489	2,713,158	1,579,896	2,344,361	3,391,448
Surplus/Deficit (£/acre) [RLV-BLV]	(6,475,859)	(6,295,649)	(5,873,335)	(6,275,663)	(6,094,552)	(5,672,238)
Surplus/Deficit (£/ha)	(16,001,846)	(15,556,548)	(14,513,012)	(15,507,163)	(15,059,637)	(14,016,101)
Surplus/Deficit Total (£)	(9,601,108)	(9,333,929)	(8,707,807)	(11,630,372)	(11,294,728)	(10,512,076)
Plan Viability comments	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable	Not Viable

Source: 240318_BCC Older Persons Appraisal_v0.2

Table 7.11 – BTR & Co-Living Appraisal Summary

Appraisal Ref:	**BTR1**	**BTR2**	**BTR3**	**BTR4**	**BTR5**	**BTR6**	**COLIV1**
Appraisal Ref:	Lower Value	Medium Value	Higher Value	Core Zone	Core Zone	Core Zone	Core Zone
No Units:	60	60	60	60	150	300	300
Location / Value Zone:	Lower Value	Medium Value	Higher Value	Core	Core	Core	Core
Greenfield/Brownfield:	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield	Brownfield
Notes:							
Total GDV (£)	£4,496,524	£8,277,914	£11,626,306	£15,935,393	£39,838,483	£79,676,966	£52,331,461
Policy Assumptions							
AH Target %:	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	50.00%
CIL (£ psm)	£0.00	£90.31	£90.31	£90.31	£90.31	£90.31	£90.31
CIL (£ per unit)	£0.00	£4,212.70	£4,212.70	£4,212.70	£4,212.70	£4,212.70	£1,612.68
Site Specific S106 (£ psm)	£60	£60	£60	£60	£60	£60	£120
Site Specific S106 (£ per unit)	£4,300	£4,300	£4,300	£4,300	£4,300	£4,300	£4,300
Sub-Total CIL + S106 (£ per unit)	£4,300	£8,513	£8,513	£8,513	£8,513	£8,513	£5,913
Profit KPI's							
Developers Profit (% on costs)	15.00%	15.00%	15.00%	10.00%	10.00%	10.00%	15.00%
Total Developers Profit (£)	£1,686,643.33	£1,737,404.90	£1,745,724.50	£1,190,764.81	£3,495,338.43	£6,814,974.72	£5,212,318.68
Land Value KPI's							
RLV (£/acre (net))	(£8,533,396)	(£5,101,366)	(£1,778,209)	£6,572,557	£2,587,336	£4,631,794	£8,569,122
RLV (£/ha (net))	(£21,086,021)	(£12,605,475)	(£4,393,954)	£16,240,788	£6,393,307	£11,445,162	£21,174,300
RLV (£ net)	(£8,434,408)	(£5,042,190)	(£1,757,582)	£2,436,118	£1,198,745	£4,039,469	£10,587,150
RLV (% of GDV)	-187.58%	-60.91%	-15.12%	15.29%	3.01%	5.07%	20.23%
RLV Total (£)	(£8,434,408)	(£5,042,190)	(£1,757,582)	£2,436,118	£1,198,745	£4,039,469	£10,587,150
BLV (£/acre (net))	£852,500	£1,265,000	£1,830,000	£2,500,000	£2,500,000	£2,500,000	£2,500,000
BLV (£/ha (net))	£2,106,528	£3,125,815	£4,521,930	£6,177,500	£6,177,500	£6,177,500	£6,177,500
BLV Total (£)	£842,611	£1,250,326	£1,808,772	£926,625	£1,158,281	£2,180,294	£3,088,750
Surplus/Deficit (£/acre) [RLV-BLV]	(£9,385,896)	(£6,366,366)	(£3,608,209)	£4,072,557	£87,336	£2,131,794	£6,069,122
Surplus/Deficit (£/ha)	(£23,192,548)	(£15,731,290)	(£8,915,884)	£10,063,288	£215,807	£5,267,662	£14,996,800
Surplus/Deficit Total (£)	(£9,277,019)	(£6,292,516)	(£3,566,354)	£1,509,493	£40,464	£1,859,175	£7,498,400
Plan Viability comments	Not Viable	Not Viable	Not Viable	Viable	Viable	Viable	Viable

Source: 240403_BCC BTR & Co-Living_ Appraisal_v0.6

Table 7.12 - PBSA Appraisal

Appraisal Ref:	**PBSA1**	**PBSA2**
Appraisal Ref:	Higher Value Zone (Edgbaston / Selly Oak / Harborne)	Core Zone (City Centre)
No Units:	250	250
Location / Value Zone:	Higher Value	Core
Greenfield/Brownfield:	Brownfield	Brownfield
Notes:		
Total GDV (£)	£28,678,020	£28,678,020
Policy Assumptions		
AH Target %:	50.00%	50.00%
CIL (£ psm)	£90.31	£90.31
CIL (£ per unit)	£1,107.63	£1,107.63
Site Specific S106 (£ psm)	£175	£175
Site Specific S106 (£ per unit)	£4,300	£4,300
Sub-Total CIL + S106 (£ per unit)	£5,408	£5,408
Profit KPI's		
Developers Profit (% on costs)	15.00%	15.00%
Total Developers Profit (£)	£3,237,718.97	£3,237,718.97
Land Value KPI's		
RLV (£/acre (net))	£3,211,939	£3,211,939
RLV (£/ha (net))	£7,936,701	£7,936,701
RLV (£ net)	£3,306,959	£3,306,959
RLV (% of GDV)	11.53%	11.53%
RLV Total (£)	£3,306,959	£3,306,959
BLV (£/acre (net))	£1,830,000	£2,500,000
BLV (£/ha (net))	£4,521,930	£6,177,500
BLV Total (£)	£1,884,138	£2,573,958
Surplus/Deficit (£/acre) [RLV-BLV]	£1,381,939	£711,939
Surplus/Deficit (£/ha)	£3,414,771	£1,759,201
Surplus/Deficit Total (£)	£1,422,821	£733,001
Plan Viability comments	Viable	Viable

Source: 240403_BCC PBSA_ Appraisal_v0.2

Older Persons / Extra Care

7.73 Table 7.10 summarises the appraisal results for older persons housing / extra care within Birmingham. We have not included this typology in the core zone, as this typology / format has not traditionally been deliverable within the city centre. Note that all our older persons housing appraisals assume brownfield site typologies.

Lower Value

7.74 Our appraisals show that both sheltered housing and extra care schemes (Typologies OP1 and OP4) are unviable, generating a negative RLV of -£5,623,359 per acre (sheltered housing) and -£5,423,163 (extra care) respectively. In order for these schemes to become viable, a significant decrease in build costs would be required >30% as well as a reduction in affordable units to 0%.

7.75 A scheme in the lower value zone would require significant grant funding to be delivered.

Medium Value

7.76 Across the medium value zone, both sheltered housing and extra care schemes (Typologies OP2 and OP5) are shown to be unviable generating a negative RLV of -£5,030,649 per acre (sheltered housing) and -£4,829,552 per acre (extra care) respectively.

7.77 Again, the scheme is not viable and would require a significant decrease in build costs as well as affordable housing, coupled with grant funding to be delivered.

7.78 The unviable nature of this scheme is due to the policy costs, high interest rates (8%) as well as the high Benchmark Land Value at £1,265,000 per acre.

Higher Value

7.79 Across the higher value zone, for both extra care and sheltered housing schemes (Typologies OP3 and OP6) are shown to be unviable generating a negative RLV of -£4,043,335 per acre (sheltered housing) and -£3,842,238 per acre (extra care). We are mindful that older person's housing is currently being developed in the higher value areas and our appraisals are on a full emerging 'policy-on' basis i.e. worst-case scenario.

7.80 Similarly to the schemes in the lower and medium value zone, there are viability issues within the higher value zone. In order for a scheme of this nature to be viable then again, a significant decrease in build / policy costs, BLV and also an increase in market values will be necessary to push the scheme into viable territory.

7.81 Part of the viability challenges with older persons housing are:

- The high net-to-gross ratio compared to C3 apartment typologies which reduces the saleable area;
- The larger unit sizes which reduce the number of units that can be accommodated within a particular sales area;
- The higher build cost based on the gross area and BCIS data;
- Extended sales period based on the decision-making process of older people downsizing who like to 'see' the completed product before buying;
- Empty property costs and service charge shortfalls during the sales process.

Build To Rent / Co – Living

7.82 Table 7.11 summarises the appraisal results for the Build to Rent and Co-Living Typologies (BTR1-6 and COLIV1). The discounted market rents are based on 80% of market rent.

Lower Value

7.83 We have appraised a 60-unit build to rent scheme within the lower value zone and this is shown to be unviable, generating a negative RLV of -£8,533,396 per acre.

7.84 We note that we do not expect there to be a demand from Build to Rent developers within the lower value zone, thus this typology is for comparative purposes.

Medium Value

7.85 We have also appraised a 60-unit build to rent scheme within the medium value zone and this is also shown to be unviable, generating a negative RLV of -£5,101,366 per acre.

7.86 Again, we do not expect there to be a demand from Build to Rent developers within the medium value zone, this this typology is for comparative purposes. BtR developers are likely to be attracted to those areas where the rents are higher and can achieve rental growth.

Higher Value

7.87 Similarly, we have also appraised a 60-unit build to rent scheme within the higher value zone. Our appraisal has generated a negative RLV of -£1,778,209 per acre, indicating a substantial deficit against the BLV of £1,830,000 per acre. The viability issues presented within the higher value zone exist due to a number of factors, such as the high build costs experienced in the current markets, as well as high interest rates and the high Benchmark Land Values within the zone.

7.88 Birmingham is delivering a large quantum of BTR, with the predominant focus in the city's core.

Core

7.89 Within the city core zone, we have appraised 60 units, 150 units and 300 units, (Typologies BTR4-6). The 150-unit and 300-unit scheme are assumed to be 7 storeys and 15 storeys respectively.

7.90 We have found herein that the traditional build to rent flatted model is viable within the Core, generating strong RLV's, ranging from £2,587,336 (150-units) to £6,572,557 (60-units) per acre, with an average RLV of £4,597,229 per acre across the core.

7.91 Both typologies BTR5 and BTR6 are using the higher build rates for 6+ storey apartments which amounts to £2,045 psm, which is significantly higher than BTR4 (60-units), which is £1,638 psm.

7.92 BTR4 (60-units) is shown to be the most viable generating a strong RLV of £6,572,557 per acre and can comfortably support affordable housing at 35+%. The greatest viability is seen on this scheme because BCIS rates for 3-5 storey flats are being used, as opposed to the higher cost associated with 6+ storey flats.

7.93 BTR5 (150-units) is also shown to be viable generating a positive RLV of £2,587,336 per acre, against a BLV of £2,500,000 per acre. As highlighted on sensitivity table 6, just a 2% decrease in sales values would make the scheme marginal at 35% affordable housing. Similarly, a 5% increase in build costs would also make the scheme marginal. This scheme is also still viable when profit on cost is increased from 10% to 12%.

7.94 BTR6 (300-units) is shown to be viable generating a positive RLV of £4,631,794 per acre, which is a strong RLV. Our sensitivities show that this scheme is also viable at 40% affordable housing.

7.95 For the BTR typologies within the core we have adopted a profit rate of 10% on cost. The 300-unit scheme is also shown to be viable when profit on cost is increased from 10% to 12% (at 35% affordable housing)

Co-Living

7.96 We have also undertaken an appraisal of a co-living scheme (COLIV1) within the core, consisting of 300 bedspaces. This scheme is shown to be viable, generating a strong RLV of £8,569,122 per acre at 50% affordable housing. This is viable due to the relatively higher rents for the size of the units (more akin to student accommodation).

7.97 We note that the affordable units are assumed to be let at 80% of the market rent. There is a large margin within this scheme to incorporate a larger discount to make the affordable units more affordable.

7.98 We also highlight that at the time of writing (April 2024) there have been no co-living schemes delivered in the city, and this model is still very new. Our market evidence has been based on our experience of schemes in different cities, this is the best proxy we have at present.

Purpose Built Student Accommodation

7.99 Table 7.12 summarises the PBSA appraisals.

7.100 We have developed two typologies (PBSA1 & PBSA2) in both the higher value zone (Edgbaston / Harborne / Selly Oak) and the City Core, which are the areas which have the highest proportion of student accommodation.

7.101 Our typologies (PBSA1 & PBSA2) are comprised of 250 bedspaces, in which 70% are cluster flats and 30% are studios.

7.102 Our appraisals have tested 50% affordable housing at the maximum 50% discount of market rent. This is the maximum position as noted in the draft policy.

Higher Value

7.103 Within the higher value zone, the PBSA appraisal generates a positive RLV of £3,211,939 per acre which is a healthy amount higher than the BLV of £1,830,000 in the higher value zone, making the scheme viable at 50% affordable housing.

Core Zone

7.104 Within the higher value zone, the PBSA appraisal generates a positive RLV of £3,211,939 per acre which is a healthy amount higher than the BLV of £2,500,000 in the higher value zone, making the scheme viable at 50% affordable housing.

8 Conclusions and Recommendations

8.1 In this section we draw together the recommendations from the viability modelling.

Residential (General Needs)

8.2 The affordable housing targets are derived from the viability analysis herein. For each of the value zones and site typologies, the table below maps the current adopted policy requirements against the maximum potential.

Table 8.1 - Residential Viability Results Summary

Value Zone (new Zones)	Greenfield	Brownfield
Core Zone	Not applicable	Core Brownfield Typologies cannot support affordable housing at the proposed affordable housing rate (35%). We recommend an affordable housing rate of **10%.***
High Value Zone	High Value / Greenfield typologies can support affordable housing at the proposed affordable housing rate **35%.**	High Value / Brownfield typologies cannot support affordable housing at the proposed affordable housing rate (35%). We recommend an affordable housing rate of 25%.
Medium Value Zone	High Value / Greenfield typologies can support affordable housing at the proposed affordable housing rate **35%.**	Medium Value / Brownfield typologies cannot support affordable housing at the proposed affordable housing rate (35%). We would recommend targeting a rate of **15%** affordable housing in the Medium Value Zone (on brownfield sites).
Lower Value Zone	For lower value / Greenfield typologies we would recommend a rate of **10%*** affordable housing.	We would recommend targeting a rate of **10%*** affordable housing in the Lower Value Zone (on brownfield sites).

*Based on the NPPF paragraph 64 (February 2019) which requires that, 'where major development involving the provision of housing is proposed planning policies… should expect at least 10% of the homes to be available for affordable home ownership'; and the Council pursuing a strategy of proactive interventions in the market to deliver the housing in the lower value zones.

8.3 The table above shows the *maximum potential* affordable housing which has the potential to be viable for the majority of scheme sizes (based upon the appraisal assumptions herein) on both greenfield and brownfield sites in core, higher, medium and low value zones.

8.4 In the Core Zone and Lower Value zones where the affordable housing threshold for viability is below 10% the Council could rely on the NPPF paragraph 64 (February 2019) which requires that, '*planning policies… should expect at least 10% of the homes to be available for affordable home ownership'* (subject to exemptions for: a) Build to Rent homes (see below); b) specialist accommodation for specific needs (such as purpose-built accommodation for the elderly or students); c) custom self-build; or d) is exclusively for affordable housing, an entry-level exception site or a rural exception site). Birmingham City Council could therefore set the affordable housing target to 10% in-line with the minimum in national policy and consider other proactive interventions in the market to support the delivery of housing and affordable housing. The recent changes to PPG confirm that this 10% requirement will continue alongside the policy in respect of First Homes.

8.5 We highlight that the unviable nature in the core is largely down to the high Benchmark Land Value of £2,500,000 per acre as well as the higher build costs 6+ storey developments are experiencing. We note, that across the plan period, both land values and build costs are likely to experience changes, which may lead to a shift in the viability position within the core. All things being equal, if costs increase due to (say,) higher design standards then the value of the land on a residual basis should reduce. To a certain extent this is an inevitable consequence of higher building standards. However, if the cost is too great or not phased-in over an appropriate time frame the impact on the land value could be too great and stymie development.

8.6 Based on the residential viability results in section 7, we recommend that the policy should be differentiated by housing market zone and greenfield/brownfield land. This reflects the range of values across Birmingham and the different risks/costs associated with greenfield and brownfield development. This approach optimises the ability of Birmingham City Council to deliver affordable housing and fund infrastructure (through land value capture) without undermining delivery.

8.7 We also recommend that the policies in respect of Net Zero energy and other design costs e.g. Urban Greening Factor are set at a minimum Building Regulations / national policy level. This is in accordance with the written ministerial statement (WMS). The WMS states that, *'the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned buildings regulations. The proliferation of multiple, local standards by local authority area can add further costs to building new homes by adding complexity and undermining economies of scale*' and we concur with these finding herein.

8.8 Developers are currently facing multiple challenges of high land value expectations in Birmingham, high interest rates (which impacts both development finance and mortgage rates) and mandatory policy costs (e.g. CIL and BNG). We therefore recommend that any discretionary requirements are minimised in order to focus on the delivery of housing generally and affordable housing specifically.

8.9 The above recommended rates are based upon: the detailed research and analysis here-in; consultation with industry and Birmingham City Council Officers; the appraisal results and particularly the series of sensitivity scenarios which we have prepared for each of the typologies. The sensitivity tables (see Viability Modelling Best Practice and 'How to Interpret the Viability Appraisals in Section 4 above) in particular assist in the analysis of viability and to appreciate the sensitivity of the appraisals to key variables such as: Affordable Housing %; S106 Costs; BLV and profit; and, to consider the impact of rising construction costs. This is to de-emphasise the BLV in each typology and help consider viability 'in-the-round' i.e., in the context of sales values, development costs, contingency, developer's profit which make up the appraisal inputs. One has to appreciate that the typologies cannot possibly model every single actual development scheme that may come forward, and the sensitivity tables show where the margins of viability are (based on the baseline appraisal assumptions) and where buffers can be found e.g., developer profit, BLV, contingency etc.

8.10 In the Lower Value zones and the core where the affordable housing threshold for viability is below 10% the Council could rely on the NPPF paragraph 64 (February 2019) which requires that, '*planning policies… should expect at least 10% of the homes to be available for affordable home ownership'.*

8.11 Birmingham City Council could maintain the minimum affordable housing target at **10%** in-line with national policy and consider other proactive interventions in the market to deliver the housing. Birmingham City Council will need to be more proactive to deliver housing and regeneration in these areas. In this respect consideration could be given to, inter alia:

- facilitating development on Authority owned land e.g., with deferred land payments and/or overage;
- direct development of housing by Birmingham City Council (for lower profit margins);
- partnering with Registered Providers;
- establishing an Urban Development Company to act as master-developer and de-risk sites;
- delivery of brownfield/regeneration sites (e.g., in the strategic centres) through partnership and delivery funding schemes;
- use of grant and soft-loans e.g. Brownfield Housing Fund; Brownfield Infrastructure Land Fund etc. This could be linked to targets for lower carbon homes as well as affordable housing.

Older Persons Housing

8.12 In addition to the above we make the following recommendations in respect of specialist accommodation for older people (C3 self-contained Supported Living typologies).

8.13 Due to the specific viability challenges of delivering older persons housing we recommend that it is not set the same affordable housing targets as general needs housing. On the basis of our market research, appraisal inputs and policy requirements herein we recommend that older person's housing is exempted from affordable housing (0%).

8.14 We also note that there is a cumulative impact of the Net Zero, Biodiversity Net Gain and Urban Greening factors additional policy expense and, in accordance with the Written Ministerial Statement, we recommend that only minimum policy requirements are reflected from national policy for older persons housing.

8.15 Due to the aging population, it is important that policy obligations do not styme the delivery of more specialist housing for older people. This in turn has other policy benefits in terms of freeing-up family homes from households who are downsizing.

Build to Rent / Co Living

8.16 The build to rent sectors is burgeoning with new development and operating models developing continuously.

8.17 We have found herein that the traditional build to rent flatted model is viable within the Core, generating strong RLV's, ranging from £2,587,336 (150-units) to £6,572,557 (60-units) per acre, with an average RLV of £4,597,229 per acre across the core.

8.18 We are observing in the market currently that BtR is continuing to be developed in the city Core (more so that apartments for sale). This is based on: careful value engineering of schemes; negotiation of land agreements; longer-term profit measures (based on IRRs etc); anticipation of future rental growth (yield compression).

8.19 Based on our appraisals and overall observation of the market, we recommend that 35% affordable housing is required on BtR schemes (based on Discounted Market Rent).

8.20 Furthermore, our appraisal of the co-living scheme typology was viable. This demonstrates the impact of smaller unit sizes and higher rental values (for quality of amenities). We note that the average unit size for a co-living flat is 25 sqm at a 70% net to gross, but achieves a similar rent £ pcm to a 1-bedroom flat in the core (50 sqm).

8.21 Co-Living should therefore be treated differently to BtR as it generates a much higher price psm. We recommend that co-living is treated similarly to PBSA; our appraisals indicate that a co-living scheme is viable at 50% affordable housing.

8.22 On this basis we recommend an affordable housing target of 50% for co-living schemes.

8.23 Both BtR and co-living appraisals include full policy-on costs including Biodiversity Net Gain, Net Zero costs, and Urban Greening Factor allowances. These policies can therefore be applied on these typologies.

Purpose Built Student Accommodation

8.24 Similar to the Co-Living typology, we have found that PBSA is viable in the higher value / core locations close to the universities.

8.25 On this basis we also recommend that the affordable housing is set at 50% in line with the maximum policy requirement set out in the draft policy.

8.26 Again, the PBSA appraisals include full policy-on costs including Biodiversity Net Gain, Net Zero costs, and Urban Greening Factor allowances. These policies can therefore be applied on PBSA.

Overall Plan Viability Conclusion

8.27 Based on the assumptions, appraisals and sensitivity analyses contained herein, the proposed Local Plan Policies (Preferred Options Local Plan) do cumulatively have an impact on the viability of development on the whole within the Borough area.

8.28 Consequently, it is important that Birmingham City Council continues to consult and refine the policy requirements (and may need to make difficult choices) as to what is viable and deliverable. It is also important that BCC continues to work with all agencies (national and regional) to tackle market failure in the regeneration areas.

Best Practice

8.29 In addition, we recommend that, in accordance with best practice, the Birmingham plan wide/CIL viability is reviewed on a regular basis to ensure that the Plan/CIL remains relevant as the property market cycle(s) change. We recommend that the Plan and CIL viability is reviewed simultaneously and that steps are made towards aligning the Birmingham Local Plan and the CIL charging schedule

8.30 Furthermore, to facilitate the process of review, we recommend that the Birmingham City Council monitor the development appraisal parameters herein, but particularly data on land values, delivery rates and grant funding within the Borough.

Appendix 1 – Policies Matrix

Appendix 2 – Residential Typologies Matrix

Appendix 3 – Residential Market Paper

Appendix 4 – Land Market Paper

Appendix 5 – Stakeholder Consultation and Feedback Matrix

Appendix 6 – Stakeholder Consultation Presentation

Appendix 7 – Residential Appraisals

Appendix 8 – BCIS Costs

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