

# Birmingham Local Plan

Focused Preferred Options Consultation Changes (Interim SA Report)

Birmingham City Council

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## Quality information

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# 1. Introduction

- 1.1.1 Birmingham City Council is in the process of preparing a Local Plan, which will set out a strategy for land use over the next 19 years across the city. Significant work has already been undertaken, culminating in consultation on a Preferred Options (Regulation 18) in summer 2024. This set out a spatial strategy with accompanying site allocations and a range of supporting plan policies.
- 1.1.2 Since this consultation, there have been significant developments in national planning policy and local evidence gathering. The most notable change was the publication of a revised National Planning Policy Framework (NPPF) in December 2024. This introduced a new standard method for calculating housing need, which removed the 35% uplift previously applied to Core Cities. As a result, Birmingham's housing requirement has been substantially reduced, although the city remains under pressure to accommodate growth.
- 1.1.3 The updated NPPF also requires local authorities to review their Green Belt and consider the role of grey belt land in meeting housing needs. In response, the City Council commissioned a Green Belt Assessment, and the Council has also updated its wider evidence base, including work on housing and economic needs, land availability and viability.
- 1.1.4 Taking this new evidence into account, the Council has refined the growth strategy and updated site allocations and 'site opportunities'. It is now undertaking focused consultation on these matters.
- 1.1.5 Sustainability Appraisal is an iterative process, with further work being undertaken in support of the focused consultation. This interim SA Report updates the appraisal of the Preferred Options Document to take account of the focused changes to strategy, site allocations and relevant growth zone policies. Further work has also been undertaken in relation to reasonable alternatives, drawing upon the latest position with regards to housing and employment needs and the outputs from the Green Belt Assessment.

## 2. Methods

### 2.1 The appraisal framework

- 2.1.1 A framework for the SA was established at the Scoping Stage of the SA process and finalised following consultation with a range of stakeholders (including the statutory consultation bodies).
- 2.1.2 Table 2-1 below lists the headline topics and objectives that set the structure for the appraisals.

**Table 2-1 The SA Topics and Objectives**

| SA Topic                                                | SA Objectives                                                                                                                                                         |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Housing</b>                                       | 1a) To meet housing needs of the current and future resident and by providing decent affordable homes of right quality and type.                                      |
| <b>2. Equality, diversity and community development</b> | 2a) To promote safer communities and reduce the fear of crime and antisocial behaviour.                                                                               |
| <b>2. Equality, diversity and community development</b> | 2b) To reduce Index of Multiple Deprivation (IMD) to address poverty and help improve access to facilities and services for disadvantaged individuals and communities |
| <b>2. Equality, diversity and community development</b> | 2c) Ensure easy and equitable access to services, facilities and opportunities.                                                                                       |
| <b>2. Equality, diversity and community development</b> | 2d) Support, empower and connect communities to create a healthier and just society.                                                                                  |
| <b>3. Health and wellbeing</b>                          | 3a) To improve the health of the population and reduce health inequalities.                                                                                           |
| <b>3. Health and wellbeing</b>                          | 3b) To improve access and availability of sports and recreation facilities.                                                                                           |
| <b>3. Health and wellbeing</b>                          | 3c). To improve access and availability to open spaces.                                                                                                               |
| <b>4. Waste and resource use</b>                        | 4a) Encourage and enable waste minimisation, reuse, recycling and recovery.                                                                                           |
|                                                         | 4b) To ensure efficient use of natural resources such as water and minerals.                                                                                          |
| <b>5. Economy and employment</b>                        | 5a). Achieve a strong, stable and sustainable economy and prosperity for the benefit of all of Birmingham's inhabitants.                                              |
| <b>5. Economy and employment</b>                        | 5b) To achieve sustainable levels of prosperity and growth throughout the city.                                                                                       |

| <b>SA Topic</b>                          | <b>SA Objectives</b>                                                                                                                                                                                                               |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>5. Economy and employment</b>         | 5c) To improve educational skills of the overall population                                                                                                                                                                        |
| <b>5. Economy and employment</b>         | 5d) To maintain and enhance the vitality and viability of town and retail centres                                                                                                                                                  |
| <b>7. Air quality</b>                    | 7a). Minimise air pollution levels and create good quality air.                                                                                                                                                                    |
| <b>7. Air quality</b>                    | 7b) Increase use of public transport, cycling and walking as a proportion of total travel and ensure development is primarily focused in the major urban areas, making efficient use of existing physical transport infrastructure |
| <b>8. Water quality</b>                  | 8a) Minimise water pollution levels and create good quality water.                                                                                                                                                                 |
| <b>9. Land and soil</b>                  | 9a) Minimise soil pollution levels and create good quality soil.                                                                                                                                                                   |
| <b>9. Land and soil</b>                  | 9b) Encourage land use and development that creates and sustain well-designed, high quality distinctive and sustainable places.                                                                                                    |
| <b>9. Land and soil</b>                  | 9c) Encourage the efficient use of previously developed land and buildings and encourage efficient use of land.                                                                                                                    |
| <b>10. Achieving zero carbon living</b>  | 10a) Minimise Birmingham's contribution to the cause of climate change by reducing emissions of greenhouse gases from transport, domestic commercial and industrial sources.                                                       |
| <b>10. Achieving zero carbon living</b>  | 10b) Promote and ensure high standards of sustainable resource efficient design, construction and maintenance of buildings                                                                                                         |
| <b>10. Achieving zero carbon living</b>  | 10c) Urgently and drastically reduce carbon emissions from transport to contribute to the Council's decarbonisation commitment.                                                                                                    |
| <b>11. Flooding</b>                      | 11a) To reduce vulnerability to climatic events and flooding.                                                                                                                                                                      |
| <b>12. Historic environment</b>          | 12a) Value, conserve, enhance and restore Birmingham's built and historic and archaeological environment and landscape.                                                                                                            |
| <b>13. Natural landscape</b>             | 13a) Value, protect, enhance and restore Birmingham's natural landscape.                                                                                                                                                           |
| <b>14. Biodiversity and geodiversity</b> | 14a) To conserve and enhance biodiversity and geodiversity.                                                                                                                                                                        |

| SA Topic                               | SA Objectives                                                                                                                                                                                                                        |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>15. Accessibility and transport</b> | 15a) Increase use of public transport, cycling and walking as a proportion of total travel and ensure development is primarily focused in the major urban areas, making efficient use of existing physical transport infrastructure. |
| <b>15. Accessibility and transport</b> | 15b) Ensure development reduces the need to travel and reduce the negative impacts of transport on the environment                                                                                                                   |
| <b>15. Accessibility and transport</b> | 15c). Urgently and drastically reduce carbon emissions from transport to contribute to the Council's decarbonisation commitment.                                                                                                     |

## 2.2 What is being appraised at this stage?

- 2.2.1 The Preferred Options Document was appraised at the previous consultation stage in summer 2024. That appraisal was undertaken on a 'whole plan' basis, taking into account the potential for effects associated with new development (primarily the allocations) but accounting for all the policies within the Plan.
- 2.2.2 Notwithstanding the fact that policies may be amended as the plan moves forward (or removed in light of national policies), the majority of the draft policies remain unchanged at this stage and should still be factored into the appraisal when determining effects.
- 2.2.3 The appraisal set out in this interim SA Report therefore concentrates on changes to the site allocations and the growth zone policies (i.e. the focused changes) and seeks to identify how this affects the whole plan appraisal.

## 2.3 Why a 'whole plan' appraisal?

- 2.3.1 It is important to consider the Plan as a whole for several reasons:
- Plan policies can help to mitigate negative effects and enhance positives.
  - Policies within the Plan work together and can have cumulative/ synergistic effects that need to be identified within the SA.
  - Whilst all the policies have been considered individually, their effects are discussed in overall terms, rather than on a policy-by-policy basis. However, references have been made to specific policies where it is considered that they make a particular contribution to the SA topics.
  - The SEA Regulations are clear that the 'draft plan' (and any reasonable alternatives to this) should be appraised.

## 2.4 Reasonable alternatives

- 2.4.1 As the SA has progressed it has considered the implications of a range of options for housing and employment strategy.
- 2.4.2 At issues and options stage, a range of individual options were tested as to how housing and employment land could be delivered. In practice, several of these options were deemed to be appropriate and contributed to the build-up of a preferred strategy.
- 2.4.3 At the draft Plan / preferred strategy stage the Council sought to deliver 103,027 homes through a brownfield-led growth strategy, making use of higher densities, regeneration opportunities, partial open space redevelopment and the repurposing of employment land for housing.
- 2.4.4 The Council contended that there were no exceptional circumstances to release Green Belt at this stage, and that unmet needs in Birmingham and the wider region would be best dealt with through collaboration with authorities in the housing market area. Nonetheless, it was noted that there remained a considerable amount of unmet housing need, and several consultees expressed support for a strategy that included a mix of both urban intensification and partial Green Belt release in sustainable locations.
- 2.4.5 As a result, an alternative strategy was established and tested within the SA that would utilise Green Belt land in addition to the supply identified within the urban areas. At this time, it was considered premature to identify specific parcels of Green Belt land, and so a 'high-level' appraisal was undertaken based on broad locations for growth.
- 2.4.6 Following the preferred options stage, changes to the evidence and national policy has changed the context within which the Birmingham Local Plan is being prepared.
- 2.4.7 The Council's position on housing is that Birmingham can now meet its own identified needs within the plan period. The revised requirement is 4,513 dwellings per year, equating to 85,747 homes between 2025 and 2044. With a supply pipeline of just over 99,000 dwellings, the city is confident in its ability to deliver.
- 2.4.8 However, under the Duty to Cooperate, Birmingham must consider the wider Housing Market Area (HMA), where several neighbouring authorities face increased housing pressures. There are different approaches that could be taken in this respect.
1. **Defer decisions on Green Belt / grey belt** - Given that Green Belt / grey belt land is likely to be required to meet housing needs in the wider HMA, it could be argued that a strategic, collaborative approach should be taken to identify where unmet needs might best be accommodated (i.e. through a joint plan / strategic development strategy). This alternative is reflected by the focused preferred options version of the Plan at this stage, but without the addition of grey belt land.
  2. **Take a proactive approach to addressing unmet needs** – The Council could incorporate Green Belt / grey belt release into the Local Plan in anticipation that unmet needs will likely arise across the HMA.

**2a - *Selected grey belt opportunities*** – The Council has identified two broad areas of search for potential grey belt allocations: the north-east of Birmingham, including Fox Hill, Withy Hill and Bassets Pole, and the Frankley Area. Together these could accommodate around 5,600 dwellings. These locations are informed by the findings of the Green Belt Assessment.

**2b – All identified grey belt land** – A broader range of sites have been identified as potentially being grey belt within the Green Belt Assessment. Another strategy would be to seek to maximise the release of all potential grey belt. This approach would involve all the sites identified as potential grey belt in the Green Belt Assessment with a combined capacity of approximately 10,000 dwellings.

- 2.4.9 These three approaches are considered to be reasonable alternatives at the current stage. Each presents a different version of the 'draft Plan' and they have been appraised consistently on this basis. The key difference relates to the amount of housing (and employment) to be delivered and the locations of additional growth in potential 'grey belt' locations.

## 2.5 Determining significance

- 2.5.1 In determining the significance of effects, professional judgement has been applied, being mindful of key effect characteristics including: magnitude, likelihood, duration, timeframe and cumulative effects. A range of information sources have been utilised to inform judgements:
- Geographical Information Systems data (which sets out a high-level appraisal of each reasonable site option).
  - Inputs from technical studies.
  - Reference to the Scoping Report and Interim SA Reports.
- 2.5.2 Whilst every effort is taken to predict effects accurately, there is a degree of uncertainty that must be acknowledged given the strategic nature of the appraisal. In particular, the level of detail is less granular with regards to specific on-site characteristics, so there is a reliance on higher level datasets (for example; the presence of designated environmental assets).
- 2.5.3 It is important to ensure a consistent comparison between reasonable alternatives. For this reason, the same high-level assumptions are made with regards to mitigation and enhancement. The policies (as currently drafted) within the Plan have been taken into account when determining the significance of effects for the options at this stage. However, rather than taking into account specific scheme details (which may be available for some locations and not others), the appraisal identifies the baseline situation and how development could affect this.
- 2.5.4 This is not to say that such effects could not be different when mitigation and enhancement considerations are fully appreciated.
- 2.5.5 The following significance scores are used to describe the effects of the Plan (and the reasonable alternatives). The effects are identified by an appraisal

team and informed by the baseline data and evidence gathered as part of the Scoping Report (and any subsequent updates).

| <b>Score</b>                     | <b>Symbol</b> |
|----------------------------------|---------------|
| Major positive effect            | +++           |
| Moderate positive effect         | ++            |
| Minor positive effect            | +             |
| Neutral effect / no relationship | 0             |
| Minor negative effect            | -             |
| Moderate negative effect         | --            |
| Major negative effect            | ---           |
| Uncertainty                      | ?             |

## 3. Appraisal of the Plan

### 3.1 SA Findings: Housing

#### Appraisal of the Focused Preferred Options

- 3.1.1 One of the key issues emerging in relation to the Local Plan is housing. Previously, the forecasted housing needs (demand) exceeded the available land supply within the city – and a housing shortfall of 36,435 dwellings was identified. However, the latest revision of the NPPF (December 2024) introduced a new standard methodology for calculating housing need. This significantly reduced Birmingham's overall housing need for the emerging Local Plan period – to 4,513 dwellings per annum, or 85,747 across the whole plan period.
- 3.1.2 The Council have sought to maximise growth in the urban areas on deliverable brownfield sites. This strategy has involved increasing densities (particularly within the City Centre) identifying further opportunities for housing estate regeneration, and the repurposing of some employment land for residential uses. Sufficient land has been identified within the trajectory to meet identified housing needs, and additional 'opportunity sites' have been identified where growth could be boosted further should the conditions be favourable.
- 3.1.3 In relation to the current proposed strategy, a concern is the need to accommodate families and larger homes in areas of significantly high densities, but Policy HN3 seeks to ensure an appropriate housing mix, which should help to reduce these concerns. Several of the growth zone policies also include stipulations relating to housing, including (but not limited to) ensuring new homes are delivered through the redevelopment of existing housing stock. Family homes will also be a key feature of the Langley Sustainable Urban Extension.
- 3.1.4 It is noted that four open spaces are identified for re-development. However, this is only partial redevelopment, with the aim of improving the quality of remaining open space. Additionally, whilst employment land is being released for housing development, this contributes to the problem in addressing employment needs, for which there is an identified shortage (though acknowledging that the type of employment land required may be better delivered elsewhere).
- 3.1.5 Ultimately, the Council have demonstrated a proactive approach to identifying the required land supply and the measures identified to date to boost housing supply are likely to be beneficial for local communities. The housing land supply demonstrates a sound strategy of accessible and well-connected housing development, which promotes sustainable transport options, inclusiveness, and community cohesion.
- 3.1.6 This will be of particular benefit to more vulnerable groups, and a strong focus on regeneration and central development should support existing communities by reducing deprivation (in relation to housing indicators).

- 3.1.7 The supporting policy framework should ensure that housing development within the City boundaries is high-quality, with place-making principles identified (Policy PG3), and that a wide range of housing types, sizes, and tenures are delivered to meet the identified needs (with a suite of dedicated housing policies – Policies HN1 – HN12). This includes meeting the needs of older people, disabled people, students, and Gypsies, Travellers and Travelling Showpeople, and appropriate rates of affordable housing delivery.
- 3.1.8 It is recognised that viability can affect the delivery of affordable housing, and this is reflected by a zone-based approach to targets. Despite this, the Council is seeking a minimum of 20% affordable homes in the 'Lower Value Zone' and the 'Core Zone' (Policy HN2), which should help contribute homes in areas of need.
- 3.1.9 To conclude, the strategy positively seeks to accommodate accessible, high-quality, and well-connected new housing development that will meet Birmingham's local needs. **Major positive effects** are anticipated as a result.

## Appraisal of the alternatives

- 3.1.10 At this stage, it is anticipated that growth through the identified Growth Zones, Centres for Change, Major Development Areas, Housing Regeneration Areas, and 'Other Allocations' will deliver approximately 57,049 homes across the plan period. The development of identified grey belt land would ultimately increase the level of additional housing brought forward within the Birmingham City area; including more affordable housing (at least 50% according to the 'Golden Rules' and more family homes, and a wider range of homes in terms of size and location).
- 3.1.11 On this basis, it is anticipated that Option 2 (developing all available grey belt land) would perform better than Option 1 (allocating better performing grey belt land parcels). This is due to Option 2 providing a greater amount of land in the north-east and the south, which could allow for a greater variety of housing types and tenures to come forward.
- 3.1.12 On this basis, both alternatives have the potential to enhance positive effects in relation to housing objectives, but Option 2 is the more favourable of the two. Overall, **significant positive effects** are predicted for both options.

## 3.2 Equality, diversity, and community development

### Appraisal of the Focused Preferred Options

- 3.2.1 The proposed growth strategy focuses a significant amount of future development within the city centre and most accessible areas of the city. In particular, a significant increase in city centre densities should enable more people to live in an area which significantly reduces the need to travel (linking them with services, facilities, and employment opportunities) and provides accessible sustainable transport connections. This is supported by affordable housing delivery and continued employment and economic development.
- 3.2.2 These factors ultimately support the efforts to reduce deprivation across the city, for which the most acute problems are largely found centrally and relate to the 'income', 'living environment', 'barriers to housing and services', and 'employment' domains. In relation to overall deprivation (Index of Multiple Deprivation, or IMD), most of the growth zone regions experience high deprivation levels, with regions surrounding the central city centre experiencing slightly higher levels of deprivation than others. The IMD indicates that the Hagley Road Corridor growth zone region experiences the least amount of overall deprivation across the 15 zones. Lower levels of deprivation cover most of the zone, with land adjacent to the northern, eastern, and western boundaries experiencing higher deprivation. There is not much variability in deprivation within the growth zone regions themselves, except for the Western Gateway, Cultural Quarter, and Hagley Road Corridor growth zone regions – which experience areas of both higher and lower deprivation within their boundaries.
- 3.2.3 Reducing experienced deprivation is anticipated to be particularly beneficial for more vulnerable groups – for example, through delivering built environment enhancements that support the elderly and disabled, delivering development to meet the needs of minority groups, and ensuring suitable access to educational facilities (e.g., Policies HN5, HN10, and HN11). It will also be important to ensure adequate provisions for families and children – for example, ensuring access to affordable housing of the right size and type, and supporting access to open spaces, parks, play and sports provisions (e.g., Policies CE13 and CE14).
- 3.2.4 Increasing housing densities should help communities to grow local community groups and active participation opportunities, and support inclusiveness in this respect. In addition, the increased densities should support communities through higher levels of natural surveillance that in turn reduce both crime and the fear of crime. This is likely to be supported by place-making principles through the emerging Local Plan (e.g., Policies PG2 and PG3), as well as standards for healthy neighbourhoods (e.g., Policy HN12), to improve safety, design out crime, and encourage social interaction in new development.
- 3.2.5 The Plan seeks to achieve regeneration and renewal in multiple locations that overlap with deprived communities, which in some instances also overlap with ethnic minority communities.

- 3.2.6 Where this involves the repurposing of employment land, this presents the opportunity to create new high-quality communities that are well served by a range of facilities. This should have positive effects upon communities and help to reduce inequalities. Where there are plans to regenerate existing housing estates, there could be mixed effects.
- 3.2.7 On one hand, the quality of homes and the local environment would be improved, as would transport connections, access to local facilities and green infrastructure. For residents that remain or move into the area, this is likely to have positive effects on wellbeing and life chances. However, in some of the renewal areas, there has been concern from existing residents that regeneration activities could potentially have detrimental effects by splitting up existing communities, a loss of identity, and displacing residents permanently (especially those that are renting). This poses a risk of gentrification in some locations and needs to be managed to ensure negative effects are avoided.
- 3.2.8 It is further anticipated that the Local Plan will seek to ensure that communities are not affected negatively by regeneration and renewal schemes. This could be achieved by setting out the need for masterplanning, to ensure that existing communities benefit from developments and are involved in design and scheme details. It could also include the need for new development to achieve social value (e.g., Policy EC7) and recognising the importance of the city's diverse places of worship and protecting and enhancing these where possible. It is assumed that policies to this effect will be included in the Local Plan, and the following appraisal has been undertaken in the context of these being in place – though it is recognised that there could be more changes prior to Regulation 19 consultation.
- 3.2.9 The continued regeneration and investment into the urban areas of Birmingham and the need to deliver mixed-use communities with an appropriate mix of affordable homes should help to support the diversity of Birmingham.
- 3.2.10 Despite these measures, the potential for negative effects on some residents and communities should be acknowledged (both temporary and permanent). It is possible that the affordability of market homes will increase, making it more difficult for less affluent groups to live in these locations, and it could drive out certain minorities if community ties are broken. Overall, the potential for minor negative effects is concluded in this respect, though this is uncertain. As mentioned above, there are plan measures seeking to implement affordable homes, and to consult with communities to ensure that such effects are minimised.
- 3.2.11 Much development is taking place in the central area which suffers from poor air quality linked to traffic emissions. This ultimately affects residents and can disproportionately affect more vulnerable groups. This is in some way reflected by the high levels of deprivation in relation to the 'living environment' domain. Notably, the strategy for accessible development seeks to reduce reliance on private vehicles which in turn should support improved air quality in the central area.

- 3.2.12 This is also supported by Policy CY1 which seeks improved access to sustainable transport options, and improvements to the road network, as well as Policy CE9 which seeks to extend and improve green infrastructure networks (which in turn support air quality objectives) and Policy HN12 which recognises improving air quality as a key aspect for planning for healthy neighbourhoods.
- 3.2.13 Overall, the growth strategy focuses housing and employment development and regeneration in the most accessible areas of the city, connecting new residents with services, facilities, employment opportunities, sustainable transport options, and recreational opportunities. In this respect the growth strategy contributes towards efforts to reduce inequalities. This is supported by the policy framework which seeks to ensure the needs of different groups, including groups with protected characteristics, are met, and the built and natural environment is enhanced in ways which support cohesion, resident health, and healthy lifestyles. On this basis, the potential for **major positive effects** is identified. However, it is recognised that there is potential for some communities to be displaced by renewal schemes, despite the plan seeking to minimise such effects.

### Appraisal of the alternatives

- 3.2.14 The development of grey belt land through either alternative will accommodate additional housing growth, which is anticipated to contribute to reducing deprivation linked to the 'barriers to housing and services' domain. This is likely to be experienced more through Alternative 2b (developing all available grey belt land), given more land will be available to develop in the north-east and south of the Birmingham City area compared to Alternative 2a (allocating better performing grey belt land parcels within the Broad Areas of Search for Potential Grey Belt Site Allocations)
- 3.2.15 Should employment land be released on potential Grey belt land, this would also generate opportunities to connect new (and existing) communities to new jobs and would help to address the significant shortfall in employment land that has been identified. The indicative location of employment (Bassets Pole) is somewhat distant to the areas of highest deprivation in Birmingham but nonetheless would bring some positive effects.
- 3.2.16 Growth through Alternative 2b would promote greater levels of growth in less accessible and less connected areas, which could cement inequalities in some locations. In contrast, the development of grey belt land through Option 2a is likely to have a less negative impact in terms of accessibility and connectivity, given that the grey belt land areas identified are located in 'more sustainable' areas in relation to infrastructure, services, facilities and transport networks.
- 3.2.17 There is also a possibility that the release and development of grey belt land could slow down or reduce investment in the planned regeneration of brownfield sites in the inner urban locations (which would be more likely to help address inequalities on balance). However, it is also noted that there could be an opportunity to utilise grey belt sites to help provide investment in the release of more problematic brownfield sites.

- 3.2.18 Therefore, overall, both options would be likely to generate mixed effects; with **major positive effects** anticipated alongside **minor negative effects**. Alternative 2a is the more favourable option, given that it focuses development on more sustainably located grey belt sites, thus reducing the potential for the exacerbation of inequalities.

## 3.3 Health and wellbeing

### Appraisal of the Focused Preferred Options

- 3.3.1 The spatial strategy targets housing growth at the most accessible and well-connected areas of the city, connecting future residents with services, facilities, employment and recreational opportunities. This includes significant density increases within the city centre, as well as targeted efforts to develop more council owned city centre sites, and regenerate existing housing estates. This is alongside the identification of employment land for development to meet the economic needs outlined by the HEDNA – though it is noted that the HEDNA identifies a need for 322.56 hectares of employment land to 2044, and this is currently a shortfall of approximately 59 hectares of industrial development land.
- 3.3.2 Overall, the spatial strategy provides a solid foundation to support residents with good access to existing health services, active travel opportunities, and recreational opportunities. This can ultimately support healthy lifestyle choices (tackling the recognised high levels of obesity and physical inactivity found in the city) and reduce health inequalities.
- 3.3.3 With regards to employment opportunities, the Plan seeks to supply an appropriate amount of land to support economic growth in key sectors and this is directed to locations that are accessible to deprived communities. Indeed, a key aim of the Plan is to focus on ‘levelling-up economically disadvantaged communities’ and this ought to help improve life chances and ultimately help to reduce health inequalities across the City.
- 3.3.4 Part of the spatial strategy includes the partial redevelopment of six existing open spaces. Two of these sites will result in significant loss of the open space areas, but open space will be retained as much as possible through reconfiguration (Gib Heath Park) and / or the reduction in size of the developable area (St. Georges, Newtown (Phase 1)).
- 3.3.5 The remaining sites will not result in the complete loss of these areas (ranging from 1-17%), and the supporting policy framework seeks to ensure that the quality of the remaining open spaces is improved as a result of this development. This ‘trade-off’ is not considered likely to lead to significant effects.
- 3.3.6 The spatial strategy is supported by the policy framework, in particular Policy HN12 which sets design standards for development that seek to reduce negative health impacts and enable and support healthy lifestyles and address health and wellbeing needs. Given the significant development increases (Policy PG3), it will be important to ensure that healthcare facilities are able to accommodate, and grow as necessary to support, the increased population. Policy HN12 further identifies the need to assess health impacts arising from new developments through Health Impact Assessments, as well as ensuring new and improved services and facilities are provided in accessible locations.
- 3.3.7 Of the additional sites identified for growth being promoted through the strategy) over 25% are within 800m of a natural green space and 90% are within 800m of a park or garden.

- 3.3.8 There is also relatively good access to public and private playing fields, public open space and other recreational facilities.
- 3.3.9 This ought to ensure that the population is able to benefit from opportunities for recreation. This is further supported by efforts to extend and enhance green infrastructure networks (Policy CE9), improve access to nature, parks, and open spaces (Policies CE12 and CE14), and deliver enhanced urban greening measures (Policy CE12), recognising that access to nature and recreational opportunities support healthy lifestyles.
- 3.3.10 Fuel poverty is also a significant concern within Birmingham, acutely affecting lower income households who reside in older homes that are problematic (and expensive) to heat. This is an increasing health concern for residents that is being addressed predominantly through design requirements (ensuring high levels of energy efficiency in new development) and ensuring connected development that provides residents with local, accessible employment opportunities and affordable housing options (to tackle low incomes). In addition to policy CE4, which encourages efficiency when retrofitting buildings, Policy HN9 and several growth zone policies also reinforce the need to improve energy performance of homes through retrofit programmes and new development. In this respect the plan performs positively and should complement actions to support those residents most acutely affected by fuel poverty (which ultimately will lead to improved health and wellbeing).
- 3.3.11 Additionally, all the identified growth zones are located within the central area – which is designated as an AQMA and suffers from poor air quality linked to traffic emissions. This ultimately affects resident health, particularly in more vulnerable groups such as the young and elderly. Notably, the strategy for accessible development seeks to reduce reliance on private vehicles which in turn should support improved air quality in the central area. This is also supported by Policy CY1 which seeks improved access to sustainable transport options, and improvements to the road network, as well as Policy CE9 which seeks to extend and improve green infrastructure networks (which in turn support air quality objectives) and Policy HN12 which recognises improving air quality as a key aspect for planning for healthy neighbourhoods.
- 3.3.12 Wider plan policies which seek to move towards net zero and improve climate resilience (Policy CE1), improve flood risk (Policy CE7), increase biodiversity (Policy CE9, CE10, CE11), protect the historic environment and local character (Policy CE16), and deliver new jobs, new open spaces, improved active travel opportunities, new services and facilities, and wider economic growth (including retail and tourism growth) will also contribute to wider determinants of health and deliver positive effects in this respect.
- 3.3.13 With regards to healthcare facilities, the Plan acknowledges that development should contribute funding towards new and enhanced facilities. In some locations, the need for facilities is specified, for example:
- Growth Zone Policy GZ9 mentions the need for new healthcare facilities to support residential development in the Rea Valley Urban Quarter.

- There are policy requirements for new health care facilities to meet the significant growth in new homes as part of the Ladywood Regeneration Initiative.
- 3.3.14 Furthermore, it is recognised the health and wellbeing is a key focus of the Bordesley Park Growth Zone (Policy GZ11), which seeks to bring forward a new Sports Quarter led regeneration scheme. This is anticipated to include delivering major sports and community facilities, and a new stadium for Birmingham City Football Club. It could also include enhancing pedestrian and cycling facilities. As such, development in this growth zone is anticipated to positively impact upon health and wellbeing by encouraging an uptake in sport and healthy lifestyle choices (as well as delivering new homes and employment opportunities).
- 3.3.15 It is further noted that the Central Cultural Quarter Growth Zone (Policy GZ6) is a new edition to the Local Plan. Pedestrian and cycle connectivity is a focus within this growth zone, as are leisure facilities and improvements to the public realm to promote safe and connected places. This is also anticipated to contribute to health and wellbeing, through supporting infrastructure that contributes to healthy lifestyles.
- 3.3.16 It is recognised that the specific growth zone policies are likely to be updated as the Local Plan progresses. As such, specific provisions like those included above may change and these factors will be addressed in the final SA Report.
- 3.3.17 Overall, the spatial strategy seeks connected development that supports healthy lifestyles and active travel opportunities, and provides residents with good access to healthcare services, employment and recreational opportunities, affordable housing, and nature. The policy framework seeks to ensure that future development is designed to standards that support high levels of energy efficiency, design out crime, and encourage active travel and social interaction. On this basis, **moderate positive effects** are considered most likely. Tackling the issue of unmet employment land needs within this Plan would help to bolster positive effects upon health and wellbeing, as it will provide a boost to the economy within Birmingham and surrounding authorities (with jobs being a major determinant of good health).

### Appraisal of the alternatives

- 3.3.18 Both alternatives relating to grey belt land will allow for greater levels of housing development. Both would likely provide residents with good access to the surrounding countryside or areas of open landscape and the recreational opportunities associated with this. In particular, development to the north-east would likely have good access to Sutton Park and / or could create new areas of open space as part of strategic development. Growth in the Frankley area could also potentially benefit from facilities, infrastructure and open space enhancement should strategic development be realised in Bromsgrove (being promoted at FRA01 through the current draft Plan).
- 3.3.19 There is uncertainty related to the provision of health, education and sustainable transport infrastructure associated with the release of Green Belt land in Birmingham, and this is exacerbated where there are potential strategic developments in neighbouring authorities (such as FRA01 in

Bromsgrove). In the Frankley location, it is vital that a comprehensive approach is taken that considers how growth would be linked in both authorities and help to address potential issues associated with social infrastructure provision and accessibility. With such an approach, there could be potential to achieve positive effects if improvements can be secured. However, an uncoordinated approach could see developments that are not well serviced and do not promote healthy, active lifestyles.

- 3.3.20 Whilst strategic growth in grey belt locations could include open space improvements (and would need to reflect the 'Golden Rules'), there is potential that land that is used informally by communities would be negatively affected, and negative effects could be felt by certain groups. For example, Genners Field is used informally by local residents, and whilst it is not officially designated, its loss could be perceived negatively. Impacts would depend upon design and the extent that development encroaches upon the Bartley Reservoir and its environs. Likewise, the open countryside associated with Withy Hill / Fox Hill could also be valued for its current informal and natural character, rather than for formal recreation associated with new developments. There is therefore potential for mixed effects on health and wellbeing in this regard.
- 3.3.21 Additional housing development on grey belt land would ultimately secure the delivery of more affordable housing within the city boundary, which is likely to benefit resident health in the long-term (though this might not overlap with areas that are suffering most from health inequalities). They would also present the opportunity to create new communities that are served with a range of community facilities. Potential major positive effects are therefore associated with both alternatives at this stage, with Option 2b potentially performing more favourably, reflecting the greater level of growth and potential to deliver a greater range / amount of social infrastructure improvements. Alongside this, minor negative effects are highlighted given that there will be a loss of informal open space that is valued by communities. There is also the potential that communities could be delivered that are somewhat isolated, particularly for Option 2b, which includes grey belt in less optimal locations. At this stage a precautionary approach is taken in relation to the delivery of new open space, community facilities and public service provision with grey belt development. There will be a need to consider viability and the phasing of infrastructure enhancements, which could affect the extent and timing of positive effects. In this regard, uncertainties are recorded for the positive effects and negative effects are identified as well (With these being potentially more significant for wider grey belt release (Alternative 2b).

## 3.4 Waste and resource use

### Appraisal of the Focused Preferred Options

- 3.4.1 The proposed spatial strategy places strong emphasis on both urban intensification and regeneration to meet housing needs (with significant increases in city centre densities, targeted release of council owned city centre sites, and estate renewal schemes), making the most of brownfield land opportunities and performing positively in respect of efficient land use. The estate regeneration plans (Policy HN9) and continued council efforts to bring empty homes back into use (Policy HN6) should also contribute to

- improving the sustainability performance of the existing housing stock and reducing the embodied energy / resources required for new buildings and associated infrastructure.
- 3.4.2 Coupled with this strong emphasis on brownfield development, Policy CE3 identifies a presumption against demolition of buildings and structures with the aim of increasing the reuse and repurposing of the established built environment. In any demolition, or in developments of five or more homes, Whole Lifecycle (WLC) assessments are required, and development proposals are required to demonstrate a WLC approach. This means these developments will need to demonstrate how they comply with waste hierarchies, retain structures and materials, and improve use of resources. This should ultimately lead to increased resource efficiency and waste management benefits.
- 3.4.3 Policy CE1 more broadly captures all development proposals, requiring more efficient use of energy and materials, and Policy CE2 requires all development proposals to minimise use of materials and creation of waste and promote opportunities for a circular economy. Measures to contribute to a circular economy include the use of previously developed land and buildings, reuse and recycling of materials during construction and at the end of development lifetime, prioritising the use of locally sourced and/ or sustainable materials and construction techniques, and providing adequate space to encourage greater levels of re-use and recycling by residents and occupiers.
- 3.4.4 In terms of the handling of waste, part of the overall strategy (Policy PG1) is to deliver new waste facilities to increase recycling and disposal capacity and minimise the amount of waste sent to landfill. Policy CE8 outlines the parameters for sustainable waste management, including development design parameters, appropriate locations for waste treatment facilities, and expectations for new or extended facilities. Of note, the policy aligns its approach with the waste hierarchy and requires major new developments to submit a Waste Strategy Statement as part of their proposals. The Plan also identifies areas that are locationally suitable for waste treatment, which should help to ensure that waste can be managed in the City.
- 3.4.5 Policy mitigation is also provided for developments known to often lead to waste impacts locally (e.g., Gypsy and Traveller sites (Policy HN10) and hot food takeaways (Policy EC4).
- 3.4.6 In relation to mineral resources, Policy CE18 identifies an approach to extract all workable minerals from development sites of greater than 5ha prior to development.
- 3.4.7 Whilst there are no active mineral workings in Birmingham, the policy further protects existing minerals infrastructure to ensure that minerals operations supporting the city can continue. Given this approach, any further sterilisation of mineral resources can be avoided, and no significant effects are anticipated.
- 3.4.8 Overall, the spatial strategy is deemed to perform particularly well in respect of efficient land use. Whilst there are some sites that are greenfield, it is a brownfield-led plan, supported by the policy framework which seeks high levels of efficiency, recycling, and reuse. The Local Plan seeks to align with

the waste hierarchy and promotes a circular economy. Overall, **minor positive effects** are considered likely in relation to this SA topic.

## Appraisal of alternatives

- 3.4.9 Growth through either alternative has the potential to result in the loss of greenfield land, given that the grey belt land parcels taken forward are undeveloped to some degree. However, by choosing to focus growth on these grey belt sites, land is anticipated to be used more efficiently – as development is more likely to come forward where other uses (such as agriculture) would not be as well supported.
- 3.4.10 Growth through either alternative is anticipated to result in a greater requirement for materials and resources, to support both new development and the supporting infrastructure that would likely be necessary for growth in these grey belt sites. Additionally, there would be a need to expand waste collection services. It is anticipated that growth through Alternative 2b (delivering all available grey belt land) would have greater impacts in terms of number and magnitude, given that it would likely promote a higher level of growth. As such, more materials and supporting infrastructure would need to be supplied under this option in comparison to Alternative 2a.)
- 3.4.11 Overall, Alternative 2a is considered to be more favourable than Alternative 2b, due to the likelihood of growth requiring less materials and lower amounts of supporting infrastructure to be constructed. Given that both alternatives would somewhat offset the benefits associated with regeneration and land efficiency strategies within the urban areas, **neutral effects** are predicted overall.

## 3.5 Economy and employment

### Appraisal of the Focused Preferred Options

- 3.5.1 Economic plans for Birmingham are largely focused on business growth, job creation, and inward investment to support a growing resident population and strong existing economic base. The existing strategy of the Birmingham Development Plan has been successful with monitoring demonstrating an average of 10ha of new or redeveloped industrial land created each year, 129ha of new industrial land delivered within the Core Employment Areas, and a five-year supply of readily available employment land.
- 3.5.2 The overall approach of focusing industrial development within core locations and resisting the loss of industrial uses outside these core areas (unless sites are isolated from other industrial areas and are considered to be non-conforming). The identified potential industrial land supply totals 264 hectares; compared to the anticipated industrial land need figure for 2020-2044 there is a 59-hectare shortfall over the plan period (322.56 hectares).
- 3.5.3 BCC has undertaken a review of Core Employment Areas, to better understand recent economic developments and changes (particularly reflecting the impacts of the pandemic) and reflect recent policy changes such as changes in the Use Classes Order. This has allowed for the release and repurposing of some land to contribute towards housing needs, without undermining the continued efforts to maintain core areas. Several Local

Plan policies are proposed to support the spatial approach and identify areas with significant growth potential.

- 3.5.4 This includes the growth zone policies, which promote mixed use developments, employment growth, new local centres and new homes. Significant opportunities are identified through four major allocated development areas: Langley Sustainable Urban Extension, Peddimore, Tyseley Energy Park, and Washwood Heath. It is anticipated that these four major development areas will deliver 73.87 hectares of industrial land.
- 3.5.5 The Plan approach ultimately ensures continued economic development within established and connected areas of the city to support continued high levels of accessibility.
- 3.5.6 Birmingham benefits from an extensive network of centres, providing residents with good access to a range of shops, community facilities, services, leisure, and cultural opportunities, as well as sustainable transport options (including HS2). These centres will remain a focus for continued retail, leisure, and community development alongside housing to provide connected development, which is anticipated to help encourage greater levels of self-containment. This should ultimately retain key industries and continue to promote inward investment, especially in light of ongoing infrastructure upgrades (HS2) enhancing connections between major cities like Birmingham and London. This will also continue to support the tourism offer and attraction, the expansion of which is permitted (as appropriate) through Policy EC6.
- 3.5.7 Further of note, higher educational institutions, such as the five main universities in Birmingham, provide an appropriately trained workforce for growth in the local economy. The plan provides a permissive framework that allows appropriate growth in higher educational facilities to ensure this continued economic support (Policy HN11). Also of note is the focus on the plan on achieving high-quality design standards, meeting climate objectives, achieving sustainability goals with economic opportunities, promoting the cultural and historic value of Birmingham, and improvements to digital infrastructure. This is also anticipated to contribute economic benefits, for example for increased investment in these areas.
- 3.5.8 With regards to housing delivery, a significant amount is proposed within the City, which should help to support the workforce needed for economic growth. It will place many new homes in accessible locations to jobs and create significant employment in construction in itself.
- 3.5.9 Overall, the plan is considered likely to lead to positive effects in respect of this SA topic, particularly given the identified continual employment land supply and policy framework that supports continued economic growth across industrial areas, retail and leisure centres, and local centres to support a growing resident population and growing local workforce. As such, **major positive effects** are predicted. It is recognised that there is a level of uncertainty linked to the shortfall in employment land.

## Appraisal of the alternatives

- 3.5.10 The release of grey belt land will have a direct positive effect in terms of the jobs in construction that will be created. Should land be released for employment land alongside housing growth, this would help to address the significant shortfall in employment land provision, as well as providing employment opportunities close to new development (though acknowledging that a greater proportion of new development may not be optimally located under Alternative 2b). In this respect, positive effects are enhanced through these alternatives.
- 3.5.11 It is recognised that additional housing growth is likely to boost the economy by creating / sustaining more jobs in construction, and also by providing a wider range of accommodation to support a diverse workforce. In this sense both alternatives perform well, though alternative 2b would likely be more favourable given it would bring forward greater levels of housing development.
- 3.5.12 Overall, both alternatives perform positively, and **major positive effects** are likely for either. However, 2b is likely to bring forward enhanced effects in comparison to 2a. This is due to the likelihood of greater levels of housing bringing forward a greater economic boost, and the potential for larger scale development to encourage supporting infrastructure to come forward.

## 3.6 Air quality

### Appraisal of the Focused Preferred Options

- 3.6.1 Birmingham notably suffers from poor air quality across the whole city area (linked to traffic emissions), and ultimately any growth strategy is likely to impact efforts to improve air quality by increased road traffic pressures. Though the whole of the City is designated as an AQMA, the central City locations tend to contain more monitoring locations where there are exceedances of pollutants recorded.
- 3.6.2 Given that all the growth zones are located within the AQMA, it is anticipated that site allocations within them will impact upon air quality in Birmingham. The same can be said of the opportunity sites, which could bring forward greater growth and air quality issues over the longer term. Some of the growth zones could lead to greater impacts than others – for example, growth in Northern Gateway (Policy GZ5), Newtown (Policy GZ7), Villa Park and Witton (Policy GZ13), and Perry Barr (Policy GZ14), would bring forward development in areas overlapping with multiple A Roads and / or motorways. As such, development could contribute to air quality and pollutants associated with vehicle movements along these routes.
- 3.6.3 It is further noted that some of the growth zones could have a greater impact on air quality than others. For example, development in Central Heart (Policy GZ1) is anticipated to bring forward mixed-use commercial development alongside new housing and will consider retail sector connectivity. This could result in more people travelling into and within the growth zone to access new employment and / or retail provision.

- 3.6.4 The same can be said of the Northern Gateway area (Policy GZ5), which is focused on strengthening the area's professional services, industrial, and retail sectors, and leisure provision. It is also anticipated that the focus on sport infrastructure and community facilities through development at Bordesley Park (Policy GZ11) will also impact upon air quality, again linked to increased activity in the growth zone and people moving from within the zone and further afield to access key services.
- 3.6.5 The proposed spatial strategy will focus development in the most accessible and well-connected areas of the city (primarily through increased densities, city centre sites, and estate renewal), which in turn can support residents with more sustainable transport choices, including active travel opportunities. By reducing reliance on the private vehicle, the plan can reduce road traffic impacts and indirectly support long-term air quality improvement objectives. This is further supported by policies such as Policies CY1 CY2, CY3, and CY6 which seek to address air quality problems and further improve sustainable transport networks, particularly active travel opportunities, public transport, and modes of transport that reduce carbon emissions and improve air quality.
- 3.6.6 Several specific improvements to public transport networks are highlighted that would be positive in terms of reducing car-based transport (with associated air pollution) including:
- Extending tram services and potential opening of new stops to help support growth zone development.
  - Reopening passenger rail services.
  - Enhancing walking and cycling routes.
  - Wayfinding enhancements.
  - Traffic management measures such as one-way streets.
  - Greater use of low and zero-carbon modes of transport for last mile deliveries.
- 3.6.7 The supporting policy framework recognises actions to improve air quality as part of planning for healthy neighbourhoods (Policy HN12), and requires appropriate assessments prior to development, including whole life cycle assessments (Policy CE3). Furthermore, the emphasis on urban greening (Policy CE12) and extended green infrastructure networks (Policy CE9) as well as the wider efforts to achieve net zero will also contribute to air quality objectives.
- 3.6.8 Despite the positive measures identified, it is important to note that a large amount of proposed growth is within the central areas of the City where monitoring data suggest that exceedances of air pollution thresholds are likely. This puts a greater number of new homes in areas at risk of poor air quality.
- 3.6.9 Overall, the actions of the local plan provide support to the air quality action plan and contribute to improving Birmingham's air quality and move to net zero. There are notable efforts through the spatial strategy to locate future growth in the most accessible locations in the city and change the travel habits that lead to deteriorating air quality in the first place.

- 3.6.10 These are positive measures, but there is a likely increase in vehicle movements and traffic as a result of continued growth, both in housing and employment development (though it should be acknowledged that this would be the case in the absence of a new plan). There is also likely to be more homes located in areas with poorer air quality, particularly in the short to medium term before measures to drive down emissions have been fully implemented. As a result, the positive elements of the Plan are considered likely to be offset, leaving **neutral effects** overall. It is also worth mentioning that trends in the use of electric vehicles and an improvement in the efficiency of internal combustion engine vehicles will help to improve air quality in the longer term, minimising the effect that additional growth in the urban areas will have.

## Appraisal of the alternatives

- 3.6.11 Additional growth on Grey belt land to the north-east and south is likely to be less well-connected to existing active travel and public transport infrastructure (compared to most sites within the urban areas), which is anticipated to result in a higher dependency on the private car. This is likely to be a bigger issue for more widespread Grey belt release (Alternative 2b), compared to the broad locations identified under Alternative 2a, which have better connections to existing transport hubs and networks.
- 3.6.12 Whilst it is recognised that development at larger sites could be accompanied by new sustainable transport infrastructure, this is unlikely to be at the same scale as that within the city centre and other established urban centres across the Plan area. There is also likely to be a greater need to travel further for work opportunities and higher order services. This would contribute to transport-based emissions along routes throughout Birmingham, which could have some negative effects in the short to medium term. With the release of employment land on grey belt land to the northeast, this would help to match up housing to employment opportunities to an extent (reducing the significance of effects in this respect).
- 3.6.13 It is worth mentioning the potential for cumulative effects upon air quality should there be significant growth in neighbouring authorities on grey belt / Green Belt land. This is a potential issue in the Frankley location, which has been proposed for growth in the draft Bromsgrove Local Plan. Without significant investment in infrastructure to support active and public transport, growth in this location could lead to increased car use and associated air quality issues.
- 3.6.14 Growth through either of these alternatives has the potential to lead to residual **minor negative effects** in relation to air quality objectives, despite other positive features of the strategy still being in place. Of the two options, Option 2a (developing better performing grey belt land parcels) is considered to be more favourable in relation to air quality, given that it will bring forward reduced development around more accessible areas in comparison to Option 2b.

## 3.7 Water quality

### Appraisal of the Focused Preferred Options

- 3.7.1 By primarily utilising previously developed land in the city centre and urban centres, the spatial strategy supports the use of brownfield land. This will lead to positive impacts for water quality, as underutilised brownfield sites can be improved in terms of their ability to sustainably manage surface runoff, including by utilising sustainable drainage systems (SuDS). However, it is recognised that there is potential for issues relating to water infrastructure capacity, particularly given the density of development proposed – especially in the city centre. Nevertheless, this will likely be considered through statutory requirements.
- 3.7.2 Policy CE7 (Flood Risk Management) outlines that all development proposals will be required to manage surface water through SuDs. Not only will this minimise flood risk, but it will also improve water quality. The policy states that surface water runoff should be managed as close to its source as possible in line with the drainage hierarchy, the details of which are set out within the policy. Notably, all SuDS must protect and enhance water quality by reducing the risk of diffuse pollution by means of treating at source and including multiple treatment trains where feasible. Policy CE7 also highlights that opportunities to increase wildlife, amenity and sporting value of natural water features and canals will be encouraged provided that there is no adverse impact on water quality.
- 3.7.3 More broadly, Policy CE17 (The Canal Network) outlines that development proposals, including development backing onto the canals, as well as residential and commercial moorings and facilities for boaters on canals, will only be supported where they do not lead to adverse impacts on water quality.
- 3.7.4 In addition, Policy CE1 (Climate Change) outlines the council's plan for increasing Birmingham's capacity for water conservation and sustainable drainage. Specifically, the policy states that new development must be accompanied by a Sustainability Statement, which must include – amongst other things – a water efficiency statement.
- 3.7.5 Finally, Policy HN10 (Gypsies, Travellers and Travelling Showpeople) states that proposals for accommodation for Gypsies, Roma, Travellers and Travelling Showpeople – outside of the sites allocated through the plan – will be permitted where they meet the criteria set out within the policy. This includes the need for the site to be served by essential services such as mains water, sewerage and power and waste disposal.
- 3.7.6 It is noted that policies that aim to increase the cover of green spaces and GI across Birmingham are likely to lead to positive impacts on water quality. In this respect, Policies CE9 (Green Infrastructure and Nature Recovery Network), CE12 (Urban Greening Factor), and CE13 (Open Spaces) perform well.
- 3.7.7 Served by both Severn Trent and South Staffs, water resources in Birmingham have been planned for over the next couple decades, to meet the resident needs of a growing population within the wider catchment areas.

- 3.7.8 To support future needs, Severn Trent are investing in new abstraction sources, South Staffs are investing in two existing major water treatment works and both water companies are maintaining efforts to improve water efficiency, reduce leakage, and improve monitoring. The Local Plan supports these efforts, particularly those to improve water efficiency, by identifying design requirements for new development. Policy CE2 states that major residential developments should aim for no more than 100 litres per person per day through the incorporation of water saving features. Furthermore, the application of sustainable drainage systems will also help to reduce surface water loadings on the existing sewerage network, reduce the risk of sewer flooding, and free up capacity in wastewater treatment works. Development proposals are expected to demonstrate how they contribute to increasing Birmingham's capacity for water conservation and sustainable drainage and prioritise nature-based solutions (maximising the potential for multiple benefits) (Policy CE7).
- 3.7.9 A number of allocated sites overlap with or are fully within at least one Groundwater Source Protection Zone. Three of the sites are fully within Zone 2 (GZ12-01, GZ12-02 and GZ12-03). Furthermore, four sites partially overlap with Zone 3 (GZ8-05, GZ1-03, GZ15-05, GZ15-04). A further 11 sites are entirely within Zone 3 (GZ12-01, MMU-06, GZ12-02, GZ1-01, GZ12-03, GZ15-02, MR-03, GZ15-07, GZ6-04, GZ2-03 and GZ2-04).
- 3.7.10 Furthermore, some of the opportunity sites overlap with or are fully within at least one Groundwater Source Protection Zone. Two sites partially overlap with Zone 1 (H&G-05 and CCQ-04). Additionally, four sites partially overlap with Zone 2 (H&G-01, H&G-02, H&G-03 and CCQ-04) and four sites are entirely within Zone 2 (H&G-04, H&G-05, CCQ-10, H&G-06). Furthermore, seven sites partially overlap with Zone 3 (H&G-01, H&G-03, CH-02, CCQ-01, CCQ-16, GI-02, GI-05), and site NG-04 is almost entirely within Zone 3. A further 14 sites are entirely within Zone 3 (H&G-02, H&G-04, H&G-05, WG-01, WG-02, WG-03, WG-04, WG-05, WG-06, CCQ-04, CCQ-10, CCQ-13, GI-01, H&G-06).
- 3.7.11 Policy CE7 includes a general requirement to ensure that water quality is not affected negatively by development, which should help to manage risks. The remediation of contaminated land on a range of sites should also reduce the risk of contaminants being mobilised due to future activity on sites. These measures should help reduce effects upon water quality, including groundwater. However, it may be beneficial to refer to the need for a proportionate hydrogeological risk assessment to be carried out where sites overlap with protection zones. This would help ensure that such issues were resolved.
- 3.7.12 To conclude, the draft Plan positively seeks to ensure that development incorporates appropriate water quality measures, such as the use of SuDS, and as a result, **minor positive effects** are anticipated under this SA topic. Despite this, it is recognised that infrastructure capacity could be put under strain, especially in the city centre, and in this respect an element of uncertainty remains.

## Appraisal of the alternatives

- 3.7.13 Development of grey belt land is assumed to lead to further adverse impacts on water quality, due to the loss of greenfield land on a relatively large scale (in the context of the majority of Birmingham being urbanised). This is because green spaces provide storage and intercept rainfall at the source and can reduce diffuse pollution.
- 3.7.14 Development of grey belt land is also anticipated to increase the overall need for water management resources, coupled with growth in the city centre, and could require enhancements to infrastructure to manage wastewater and surface water run-off (or an increase in permit headroom). Due to this, both options have the potential to lead to negative effects in relation to the water quality objectives.
- 3.7.15 It is noted that growth through either alternative would deliver development on a grey belt land parcel to the north-east which partially contains the Langley Brook watercourse in the north-east. Furthermore, both alternatives would result in development overlapping with source protection zones, given the development of grey belt land to the north-east (to a greater extent for 2b). However, growth through Option 2b (developing all available grey belt land) would result in development of a grey belt land parcel in the south that contains the Worcester and Birmingham Canal.
- 3.7.16 Both options would also involve development close to Bartley and Frankley reservoirs. Though the water source from these is via the Elan Aqueduct (rather than local watercourses), there is some risk of pollution as a result of urbanisation and construction activities.
- 3.7.17 Overall, Alternative 2a (allocating better performing grey belt land parcels) is likely to perform more favourably in relation to water quality, as it would involve development of a smaller amount of land in the north-east and south compared to Option 2b – reducing the overlap with watercourses and the potential for pollution due to urbanisation.
- 3.7.18 It is recognised that magnitude of effects could be reduced by green infrastructure enhancements and natural drainage systems being secured as part of the new development, however this is dependent on the design scheme taken forward. Overall, it is considered that the potential negative effects discussed above could potentially offset the positive effects of the urban focused approach to growth. Therefore, **neutral effects** are predicted for both alternatives, but there is uncertainty.

## 3.8 Land and soil

### Appraisal of the Focused Preferred Options

- 3.8.1 The strong focus on the regeneration of the urban area, higher densities, and reuse of land for different purposes will serve to protect the land and soil resources that remain, particularly within the Green Belt.
- 3.8.2 All of the opportunity sites are identified as having an 'urban' grade under the agricultural land classification. Additionally, all but four of the allocated sites are also given an 'urban' grade. The remaining four sites are provisionally identified as 'Grade 3' under the agricultural land classification. These are:
- Langley Sustainable Urban Extension – 98% overlap with Grade 3.
  - Longbridge West Works – 88% overlap with Grade 3.
  - Illeybrook Square – 99% overlap with Grade 3.
  - Peddimore (Remaining Phases) – 100% overlap with Grade 3.
- 3.8.3 Additionally, a further three allocated sites are identified as having an overlap with Grade 3 agricultural land, to varying degrees. These are:
- Langley Drive, Bromford – 34% overlap.
  - Kings Norton Trading Estate – 21% overlap.
  - Pool Farm Phase 1 – 4% overlap.
- 3.8.4 Across the seven allocated sites, approximately 370.74ha is 'Grade 3', which is approximately 36% of all identified available land. Whilst this is a sizeable loss of greenfield land, it should be noted that the majority of this is associated with existing site allocations, rather than further loss being proposed in the next iteration of the Plan.
- 3.8.5 It is noted that eight allocated sites overlap with historic landfill sites. These are:
- Site MDAT-01: Tyseley Energy Park – 43.07% overlap with Land In The Vicinity Of Tyseley Incinerator.
  - Site MDAL-01: Langley Sustainable Urban Extension – 3.36% overlap with Ox Leys Road Landfill Site.
  - Site MR-12: Land at Somery Road– 97.92% overlap with Barnes Hill Tip, Barnes Hill
  - Site MDAW-01: Washwood Heath - 4.73% overlap with Land Rear of Freight Rover Works.
  - Site HRAD-01: Druids Heath – 2.96% overlap with Monyhall Hospital.
  - Site MR-04: Brookmeadow Public House, Old Forest Way, Shard End - 10.74% overlap with Land South of Brook Meadow Road.
  - Site MI-02: Langley Drive, Bromford – 96.33% overlap Tameside Drive – Langley Drive Landfill Site.
  - Site GZ11-03: Sports Quarter and St Andrews Park – 36.75% overlap with Former Adderley Park Brickworks Landfill Site.

- 3.8.6 It is also noted that one of the opportunity sites overlaps with historic landfill sites. This is site H&G-06: Gib Heath, which has a 4.7% overlap with City Waste Plc's Landfill Site.
- 3.8.7 There are some sites where open space / green space will be developed, but there will be replacements and enhancements throughout the City to counteract this. Outside of the open spaces identified for partial redevelopment, Policy CE13 (Open Space) seeks to protect the remaining open space from development. It only permits development of open space in certain circumstances. For example, where the open space is demonstrated to be surplus to requirement; the open space will be replaced by a similar open space which will be of at least equivalent accessibility, quality and size; the open space is underused; the development is for alternative sport or recreational provision; the open space is small and has limited public recreational function; or it is in the public interest. In this respect, the policy framework successfully protects valued open space.
- 3.8.8 More broadly, Policy PG2 (Place-Making) outlines that new development must make best use of existing buildings and consider the efficient use of land, which will have positive implications for land and soil resources. In addition, Policy HN4 (Residential Density) states that new housing in the city centre should have a density of 400 dpa, whilst new housing in the urban centres should have a density of 70 dpa. For both the city centre and urban centres, new housing should be located in and within 400m of the centre; and for the urban centres it should be well served by public transport.
- 3.8.9 A density of 40 dpa will be expected outside of the city centre and urban centres. By delivering high density development in the existing built-up areas of the plan area, primarily utilising brownfield land, the policy framework performs very well in respect of soil and land. It is recognised that the housing densities may change as development of the Local Plan progresses. As such, impacts to land and soil resources may change.
- 3.8.10 The Plan further seeks to ensure efficient use of land and soil resources through Policy CE2, which requires the reuse and recycling of materials including those that arise from demolition and refurbishment.
- 3.8.11 To conclude, the strategy positively seeks to avoid development on greenfield land, including in the Green Belt, and as a result, **moderate positive effects** are anticipated under this SA topic. Despite this, it is recognised that the draft Local Plan fails to explicitly mention the importance of productive agricultural land, including BMV land, and in this respect, there is room for improvement.

## Appraisal of the alternatives

- 3.8.12 Development of the identified grey belt sites to the north-east and south would result in the loss of provisional 'Grade 3' agricultural land. Without a detailed assessment, it is not possible to determine whether the land is considered to be 'best and most versatile'. As such, it is assumed that development of the sites under either alternative will lead to further adverse impacts on land and soil, given it could result in the loss of productive agricultural land on a relatively large scale (in the context of there being a small amount of agricultural land within the City boundary).

- 3.8.13 Given that Option 2a would result in the development of less grey belt land than Option 2b, it is considered to be more favourable in relation to the land and soil objectives and SA theme.
- 3.8.14 Overall, either alternative has the potential to lead to permanent negative effects in relation to the land and soil objectives. However, given the focus of development on redeveloping brownfield sites and reusing existing buildings within the city area, it is anticipated that overall effect would still be positive (but to a lesser significance). Therefore, **minor positive effects** are concluded for both options.

## 3.9 Achieving zero carbon living

### Appraisal of the Focused Preferred Options

- 3.9.1 An overarching focus of the Birmingham Local Plan is a clear and strong vision and strategy for sustainable inclusive growth, aiming for a new zero carbon and climate resilient future.
- 3.9.2 It is noted that concerns have been raised over the impact housing densities and types will have on net zero carbon. However, by locating development in the urban centres, including Birmingham city centre in particular, the spatial strategy locates development in the most sustainable locations, close to active travel and public transport networks. In this respect, it is anticipated that this will help to reduce greenhouse gas (GHG) emissions associated with transport.
- 3.9.3 The strategy also involves high-density development in urban locations, which typically are less resource intensive during occupation compared to less dense, larger homes in peripheral locations. The locations for growth are also located in areas that ought to be able to capitalise on existing and potentially expanding district energy schemes, of which there are several established successful schemes in the city centre. This could help to ensure that carbon emissions associated with new development are further minimised, particularly in growth zones that are close to existing schemes at Broad Street and Birmingham New Street. It is recommended that growth zone policies recognise these opportunities and seek to proactively expand networks if feasible – especially in the GZ1 and GZ2 areas.
- 3.9.4 In terms of minimising other sources of GHG emissions, the policy framework – which is outlined below – performs well by focusing several policies on net zero, resilience and whole life cycle assessments.
- 3.9.5 Policy CE1 (Climate Change Principles) supports actions to reduce GHG emissions, with the goal of achieving significant reductions in emissions. This will be achieved by minimising embodied and operational emissions by
- i. reducing consumption of resources.
  - ii. the use of low carbon energy sources.
  - iii. adopting a whole life cycle approach and
  - iv. offsetting as a last resort.

- 3.9.6 Policy CE6 provides further detail in regard to the reduction of carbon emissions and sets the requirement for new development to be accompanied by an energy statement that demonstrates how emissions will be minimised (hopefully to zero operational emissions). This policy is also helpful in ensuring that new development explores the potential to incorporate renewable and low carbon energy generation, including by linking to heat networks and expanding networks.
- 3.9.7 Policy CE2 recognises the benefits of wider sustainable construction measures in relation to water efficiency, waste, minerals and materials. Applying targets in relation to sustainability will also help to further drive down greenhouse gas emissions.
- 3.9.8 Policy CE3 (Whole Life-Cycle Carbon) outlines that the plan presumes against the demolition of buildings and structures; instead it aims to increase the reuse and repurposing of the built environment unless it can be demonstrated that the retention of a building or structure poses a significant risk to health and safety. A whole life-cycle assessment will be required for development proposals that:
- i. involve the demolition of a building or structure over 250m<sup>2</sup>;
  - ii. will deliver 5 or more buildings and/or structures); and
  - iii. involve more than one development phase.
- 3.9.9 The assessment requires development proposals to demonstrate how its' location and design comply with energy, carbon, transport, and waste hierarchies; and how they minimise embodied emissions.
- 3.9.10 In addition to this, development proposals will be required to provide an assessment considering different design options based on the carbon hierarchy. This is to demonstrate the design stage actions taken to reduce embodied carbon and maximise opportunities for reuse of existing assets and materials rather than demolition and new built.
- 3.9.11 Policy CE4 (Retrofitting Existing Buildings) reiterates the Council's position in relation to the avoidance of demolition and is supportive of proposals that will improve the energy performance of existing buildings, provided there are no conflicts with national policy. This further demonstrates that the spatial strategy is likely to help tackle climate change mitigation rather than lead to significant increases in energy usage and carbon emissions.
- 3.9.12 The Local Plan supports the city-wide growth of local energy systems to decarbonise new development through Policy CE5 (Renewable Energy Networks and Shared Energy Schemes). This policy encourages the development of heat networks and associated infrastructure; it also addresses development proposals that fall inside and outside of future designated Heat Network Zones. Policy CE5 also encourages development proposals that support the deployment of Smart Grids and Micro Grids that meet the criteria set out within the policy; this includes enhancing energy efficiency and supporting EV infrastructure. Finally, the policy outlines its support for community-led energy schemes as a critical element of Birmingham achieving net zero.

- 3.9.13 In terms of issues related to climate change adaptation outside of flooding, (which is covered in the section below) the draft Local Plan provides sufficient coverage of this throughout the policy framework. For example, Policy CE4 (Retrofitting Existing Buildings) encourages interventions to improve the resilience of existing buildings to climate change. Similarly, Policy CE2 (Sustainable Design and Construction) outlines that proposals will be required to demonstrate an optimised approach to climate change resilience. Finally, Policy CE5, which supports the deployment of Smart Grids and Micro Grids, as outlined above, aims to enhance the resilience of the grid against climate change impacts and other potential disruptions.
- 3.9.14 The strong focus on green infrastructure enhancement across several plan policies is also likely to bring benefits in terms of resilience to heat, flooding, and resilience for the environment and species.
- 3.9.15 To conclude, the strategy positively seeks to deliver development in the most sustainable locations from a transport perspective, reducing vehicular emissions, whilst the policy framework seeks to minimise embodied and operational emissions where possible. It is also likely that per capita emissions from the built environment will be lower in denser urban locations compared to larger homes on the urban periphery which tend to be more energy intensive.
- 3.9.16 Combined with its support for renewable and low carbon energy generation and resilience to climate change, the draft Local Plan is considered likely to lead to **moderate positive effects** on climate change. Despite this, an element of uncertainty remains with respect to the potential for high density development to lead to strains on the transport and renewable energy networks if sufficient new infrastructure is not delivered.

## Appraisal of the alternatives

- 3.9.17 The development of grey belt land could lead to adverse impacts on achieving net zero carbon living, due to the distance between the identified land and urban areas and associated public transport hubs. Development here could ultimately lead to higher dependency on the private car, and could also be dependent on the delivery of new infrastructure. This is likely to generate developments with higher embodied carbon. However, it is noted that the design scheme taken forward could seek to address this issue, for example by seeking ways to reduce per capita emissions and reduce embodied carbon through material choices etc. In this way, Alternative 2a (allocating better performing grey belt land parcels) may be more favourable than Alternative 2b, as it would bring forward a lower level of grey belt land development in the north-east and south.
- 3.9.18 Whilst it is recognised that large-scale development has the potential to integrate sustainable transport networks and renewable energy schemes on-site, it is still anticipated that these locations will remain more isolated from the city centre and other urban centres.
- 3.9.19 Taking the above factors into consideration, developing on grey belt land has the potential to offset the positive effects associated with urban regeneration. This is largely linked to the likelihood of development having higher levels of embodied carbon.

- 3.9.20 As such, the significance of positive effects is reduced to **minor positive effects** for both options (acknowledging that the majority of growth will still be directed to sustainable locations in the City).

## 3.10 Flooding

### Appraisal of the Focused Preferred Options

- 3.10.1 Of all the additional sites proposed for development in the Plan, the majority (75%) fall within Flood Zone 1 in their entirety. However, there are some sites that overlap with Flood Zones 2 and / or 3. Four of these sites are proposed for employment uses and could be made suitable despite the presence of flood risk. The remaining sites are proposed for residential development. Some of these are city centre sites that are previously developed land being promoted for regeneration and will incorporate appropriate flood risk management.
- 3.10.2 This includes several major development areas/sites being brought forward by Homes England and Birmingham City Council.
- 3.10.3 The following allocated sites have at least a 20% overlap with FZ2 / 3:
- Site MDAT-01: Tyseley Energy Park.
  - Site GZ9-02: Cheapside Major Development Site.
  - Site GZ9-01: Digbeth High Street Major Development Site (Connaught Square, Rivercross).
  - Site GZ10-03: Lawley Middleway Major Development Site.
  - Site MR-07: Edgbaston Mill.
  - Site GZ13-02: Land along River Tame.
  - Site MR-12: Land at Somery Road.
  - Site GZ13-01: Corner of Witton Road and Witton Lane.
  - Site GZ13-03: Site on Witton Road adjacent to entrance to Witton railway station.
  - Site GZ7-01: Elkington Street, Newtown.
  - Site GZ10-07: Warwick Bar.
  - Site GZ10-06: Typhoo Wharf (area around new BBC building).
  - Site GZ10-04: Oval Estates Land, Digbeth.
  - Site GZ10-01: Digbeth Railway Arches.
  - Site GZ14-03: Land at Regina Drive.
  - Site GZ14-04: One Stop Shopping Centre and adjoining land.
  - Site MDAW-01: Washwood Heath.
  - Site HRAB-01: Bromford Housing Regeneration Sites.
  - Site MR-14: Park Square.

- Site MI-02: Langley Drive, Bromford.
- Site MI-04: Watson Road, Nechells.
- Site GZ6-02: Smithfield.

3.10.4 Additionally, the following opportunity sites have at least a 20% overlap with FZ2 / 3:

- Site PB-04: Perry Barr Site 7.
- Site PB-06: Perry Bar Site 36.
- Site PB-09: Perry Bar Site 11b.
- Site V&W-01: Tame Road industrial units along the River Tame.
- Site N-03: Chester Street Industrial Estate.
- Site CCQ-05: Land bounded by Sherlock Street, Macdonald Street, Bishop Street and Hurst Street.
- Site CCQ-14: Smithfield Quarter Phase 2.
- Site D-01: Phoenix yard.
- Site D-02: Birmingham Metal Co.
- Site D-07: Warwick Barr (Minerva Works).
- Site D-08: Typhoo Wharf (Fairfield School).
- Site RV-02: Land adjacent Vaughn Street.
- Site RV-03: Land at Cheapside and Birchall Street.
- Site RV-04: Land at Charles Henry Street.

3.10.5 In response to identified flood risk, Policy CE7 (Flood Risk Management) outlines that all new development should ensure that flood risk from all sources can be managed for future occupants, and that it does not contribute to increasing flood risk to surrounding land. The policy states that a Sustainable Drainage Assessment and Operation and Maintenance Plan will be required for all major developments. As part of this, developers will need to demonstrate that the disposal of surface water from the site will not exacerbate existing flooding, and that exceedance flows will be safely managed. Moreover, sustainable drainage systems (SuDS) will be required to manage surface water, to minimise flood risk and to ensure no increase in run-off rates for developments requiring a specific assessment.

3.10.6 Finally, natural flooding which occurs in the floodplains of rivers and streams will be managed in ways which do not place built development or sensitive uses at risk, and which helps to maintain natural river channels and surrounding environments.

3.10.7 There are several area specific policies that also seek to manage flood risk, with these overlapping with the areas mentioned above. For example:

- Policy GZ7 requires efforts to improve water management within the Hockley Brook Flood Zone.

- Policy GZ10 seeks to transform the River Rea to re-naturalise the river and enhance biodiversity alongside the delivery of new development opportunities.
  - GZ14 mentions the need to open-up the River Tame, with one of the benefits being improved flood management.
  - There are site specific requirements for flood risk assessments and mitigation measures to be agreed on several sites including Wheeler Street Shopping Precinct, South Parade Car Park Sutton Coldfield, Cheapside Major Development Site.
- 3.10.8 More broadly, Policy CE17 (The Canal Network) highlights that proposals that would have impacts upon flooding will not be supported. In addition, Policy HN12 (Healthy Neighbourhoods) requires buildings to ensure that the risk of flooding is effectively managed. In support of this, Policy CE1 (Climate Change) supports flood resilient buildings and infrastructure design for all developments.
- 3.10.9 To conclude, the strategy positively seeks to avoid development in areas at greatest risk of flooding, and where this is not possible, the policy framework suitably mitigates this through measures such as SuDS. Despite this, an element of uncertainty remains with respect to the potential for dense urban sites to lead to increases in surface water flooding. In this respect, there is ultimately the potential for **minor negative effects** should surface water flood risk be difficult to manage on some sites.

## Appraisal of the alternatives

- 3.10.10 Development at the grey belt sites / locations is assumed to lead to further adverse impacts on flooding given that development could lead to an increase in non-permeable surfaces (potentially increasing flood risk). However, it is noted that most of the identified grey belt sites fall predominantly within Flood Zone 1. However, growth through Alternative 2b (developing all available grey belt land) would lead to the development of more land in the south, which does overlap with Flood Zone 2 and 3.
- 3.10.11 The Environment Agency's long-term flood risk maps show that areas downstream of Bartley Reservoir have a very low probability of flooding from reservoir failure. This is because the reservoir is heavily regulated, with robust embankments and regular safety checks. Therefore, impacts in this respect are considered likely to be negligible.
- 3.10.12 Whilst areas of medium / high surface water flood risk are more prevalent across the grey belt sites, these areas of flood risk are largely contained within isolated channels and could be avoided through layout and design. Therefore, whilst new development on grey belt land is unlikely to be at risk of flooding, the overall decrease in greenfield land is still likely to affect wider flood risk without mitigation in place. Due to this, both options have the potential to lead to **minor negative effects** in relation to flooding objectives. Both alternatives are less preferable to the draft Plan approach (which currently does not include the addition of grey belt land), but ultimately, will not raise the significance of effects from minor negatives.

- 3.10.13 Alternative 2a (allocating better performing grey belt land parcels) is considered to be more favourable than Alternative 2b, given it would avoid development in the south overlapping with Flood Zone 2 and 3, and would develop a lower amount of land in total – which could lower effects. It is recognised that there is an element of uncertainty, given that measures could be implemented to take a proactive approach to flood management.

## 3.11 Historic environment

### Appraisal of the Focused Preferred Options

- 3.11.1 As the majority of allocated and opportunity sites and locations identified for development through the draft Plan are directed to the urban centres, with most being directed to the City Centre, there is potential for significant effects under this SA topic. Significant increases in densities are proposed in the historic City Centre, which contains numerous designated and non-designated heritage assets. Whilst the largest sites are most likely to lead to the most significant effects on heritage assets over a wider area, this depends to a degree on topography and screening, as well as the detailed design and layout of development.
- 3.11.2 One allocated site (GZ6-02) overlaps with the De Birmingham Moated Site Scheduled Monument. This site is proposed for residential, commercial and community uses, and as such development could give rise to negative effects. For example, changes to the setting of the scheduled monument linked to new growth and supporting infrastructure could impact upon how the scheduled monument is interpreted in the wider historic landscape, and development could increase access to the site which could lead to potential degradation. It is worth noting that planning permission has been granted on this site and in the current proposals, heritage matters have been explored extensively, with a solution proposed that Historic England are content with.
- 3.11.3 The majority of the remaining sites are over 120m from a Scheduled Monument, and as such are likely to be screened by existing development given the built-up nature of the City Centre and urban environment. However, the allocated site MR-12 is 14m from Weoley Castle and as such development at this site (albeit a lower level of growth of 22 dwellings) could lead to negative effects to the setting of the designation.
- 3.11.4 Additionally, there are 24 sites that overlap with Conservation Areas. These are:
- Lozells and Soho Hill Conservation Area: H&G-01 (opportunity site), H&G-03 (opportunity site) and GZ12-03 (allocated site).
  - Jewellery Quarter Conservation Area: NG-01 (opportunity site), HRAL-01 (allocated site), MMU-02 (allocated site) and MR-13 (allocated site).
  - Warwick Bar Conservation Area: CG-01 (opportunity site), CG-03 (opportunity site), CG-04 (opportunity site), D-07 (opportunity site), D-08 (opportunity site) and GZ10-07 (allocated site).
  - Colmore Row Conservation Area: CCQ-04 (opportunity site) and GZ1-01 (allocated site).

- Digbeth, Deritend and Bordesley High Street Conservation Area: D-01 (opportunity site), GZ10-06 (allocated site), GZ10-04 (allocated site) and GZ10-01 (allocated site).
  - Barnsley Road Conservation Area: HR-01 (opportunity site).
  - Edgbaston Conservation Area: GZ8-05 (allocated site) and GZ8-01 (allocated site).
  - High Street Sutton Coldfield Conservation Area: CCSC-5 (allocated site).
  - Bournville Village Conservation Area: MMU-04 (allocated site).
- 3.11.5 Development in these locations has the potential to affect the character of the Conservation Areas, particularly if new large buildings are proposed and / or current buildings are cleared. It is equally likely that many sites will involve the retention of current buildings and that development will offer the potential to enhance the built environment.
- 3.11.6 The allocated site MR-07 is partially within the Grade II\* listed Cannon Hill Park Registered Park and Garden. The site is currently vacant land and it is anticipated that development will likely improve the amenity and public realm between Cannon Hill Park and surrounding areas, which would bring forward positive effects.
- 3.11.7 None of the allocated or opportunity sites contain Grade I listed buildings, structures or features, nor are any sites within proximity to such assets (within 30m). However, 44 sites (a mix of allocated and opportunity) are within proximity to a Grade II or Grade II\* listed building, structure or feature. It is possible that the setting and / or significance of these assets would be impacted by development (either positively or negatively).
- 3.11.8 A number of sites contain at least one Grade II or Grade II\* listed asset. It is likely the setting and / or significance of these assets would be impacted by development. The listed assets within the sites are:
- Grade II Former Brandauer Works is within opportunity site NT-01, which is located within the Newtown growth zone. The building currently appears to be in good condition with minor wear and tear, and it is anticipated that growth on the site would likely lead to positive effects on the fabric and setting of the designated feature (for example, through reusing the building).
  - The Grade II East Block to Birmingham Accident Hospital; and the Grade II West Block to Birmingham Accident Hospital (Excluding Later Rear Extensions) are within opportunity site WG-05, which is located within the Western Gateway growth zone. Both listed buildings appear to be in good condition, with the West Block in current use as student halls. Growth through this opportunity site is anticipated to lead to neutral effects, reflecting the existing activity and use on the site and the condition of these designations.
  - The Grade II Clements Arms Public House is within opportunity site D-06, which is located within the Digbeth growth zone. The building is currently in use as a drink and dessert bar, and whilst it is in reasonable condition there is visible wear in the upper floors of the building.

- Development of the wider site could bring forward positive effects to the designation through improvements to its setting, as development is likely to come forward on the visual approach to the building.
- The Grade II 122, Fazeley Street B5; the Grade II Canal Side Warehouse With Stop Lock and Dock, Warwick Bar, Warwick and Birmingham Canal; and the Grade II Ringway Engineering Service Company are all within opportunity site D-07, which is located within the Digbeth growth zone. It is anticipated that growth on this opportunity site would have neutral to minor positive effects on these designated structures, given that they appear to be in good condition at present. Sensitive development of the site for residential, commercial and community use could lead to positive effects on the setting on these designations, and improve their contribution to the understanding of heritage in the area.
- The Grade II Premises of the Christopher Wray's Lighting Company is within the opportunity site CG-06, which is located within the Curzon Gateway and Birmingham Knowledge Quarter growth zone. The building is currently being regenerated for use as a boutique hotel, and as such the disrepair it has experienced in the past has been remedied. Development of the site is anticipated to have neutral effects on the designated structure, linked to the level of existing development on the site.
- The Grade II 204-207, Monument Road B16; the Grade II 214-218, Monument Road; the Grade II The Ivy Bush Public House; the Grade II Windsor Terrace; and the Grade II\* The Church Of The Immaculate Conception (The Oratory), The Oratory Priests' House And The Former Oratory School Buildings are all within the opportunity site HR-05, which is located within the Hagley Road Corridor growth zone. The opportunity site would likely have a focus on residential intensification, which is not anticipated to impact upon the fabric or setting of these structures. This reflects the current level of development in the site. As such, neutral effects are anticipated.
- The Grade II 110, 112 and 114, Moseley Road B12; and the 116, 120 and 120A, Moseley Road B12 are within opportunity site RV-01, which is located within the Rea Valley Urban Quarter growth zone. The opportunity site is likely to focus on providing improvements to the park, with the potential to bring forward additional residential growth. As such, neutral effects on the listed structures would be anticipated – due to the distance between the designations and the park, and the level of existing development between them, which reduces the potential for changes to views (either positive or negative).
- The Grade II Market Tavern Public House is located within opportunity site RV-03, which is located within the Rea Valley Urban Quarter growth zone. The designated building appears externally to be in good condition but is permanently closed; development through the opportunity site is not anticipated to bring forward negative effects upon its fabric or setting. It is likely that neutral effects would come forward in relation to new development, given the existing growth on the site. Positive effects could come forward if development seeks to bring the building back into use.

- The Grade II Samuel Heath and Sons Head Offices is located within opportunity area RV-05, which is located within the Rea Valley Urban Quarter growth zone. Effects are likely to be neutral for this designation, reflecting its current use as an office, and the level of existing development surrounding it which is anticipated to act as a visual buffer between new growth and the structure.
- The Grade II Brockhouse Chatwin Precision Limited; and the Grade II Men's Urinal are located within the allocated site HRAL-01, which is part of the Ladywood Estate Housing Regeneration Area. The Brockhouse Chatwin Precision Limited structure appears to be in a level of disrepair (smashed windows, graffiti etc). Development in the regeneration area is unlikely to impact upon the fabric and setting of this structure, but given it is unlikely to lead to its demolition, neutral effects are considered likely. There may be an opportunity to restore these features through wider development efforts across the area.
- The Grade II Fox Hollies; the Grade II Langley Hall; and the Grade II Langley Heath Farmhouse are within allocated site MDAL-01 – the Langley Sustainable Urban Extension Major Development Area. It is anticipated that growth through this major development area will impact negatively upon the setting of these listed buildings, given that they are surrounded by largely open countryside. As such, it is recommended that this policy includes stipulations to reduce the impacts on these designated structures and the wider historic landscape (though acknowledging that the SUE is already allocated in the current adopted Plan).
- The Grade II Royal College of Nursing Education Centre; and the Grade II Garden Hotel are within the allocated site GZ8-07, which is located within the Hagley Road Corridor growth zone. It is anticipated that growth in this allocated area will have neutral to positive effects, given that it is unlikely to result in the demolition of these designated assets.
- The Grade II\* Berrow Court Hotel is within allocated site GZ8-04, which is located within the Hagley Road Corridor growth zone. It is anticipated that neutral effects would come forward for this designation in relation to new growth, due to the surrounding residential development providing a visual buffer, which would likely ensure the setting and significance of the designation is retained.
- The Grade II Witton Lane Tramway Depot is within allocated site GZ13-01, which is located within the Villa Park and Witton growth zone. Much of the development site is a surface level car park, which does not contribute positively to the setting of the listed building. Development of a suitable scale and design in this location should therefore have neutral effects. It is likely that the Depot itself would be retained as part of development, but it would be beneficial to provide policy direction to ensure this.
- The Grade II Lodge to Rotton Park Reservoir is within allocated site GZ15-03, which is located within the Greater Icknield growth zone. Much of the land on site is vacant / derelict and the former buildings are in a poor state.

- Provided that the building is retained as part of redevelopment, it is likely that effects on its setting would be limited/positive. It is recommended that visibility toward the reservoir should be maintained, and green infrastructure is integral to site design.
- The Grade II 5, Bell Lane B31; and the Grade II 7, Bell Lane B31 are within allocated site CCN-01, which is the Northfield Centre for Change area. It is likely that these buildings would be retained as part of any redevelopment, but it would be beneficial to provide policy direction to ensure this.
- The Grade II Former Chapel to St Edmunds Boys Home; the Grade II Public Toilets Attached to Corner of 54 Liverpool Street / Great Barr Street; the Grade II St Basil's Centre for Detached Youth Work; and the Grade II\* Old Crown Public House are all within allocated site GZ10-04, which is located within the Digbeth growth zone. Given the level of existing growth in the site, it is anticipated that regeneration for residential and commercial uses will have limited effects on these historic environment designations. It is possible that positive effects could come forward linked to enhancing the setting of these structures – for example, potentially redeveloping the car park outside the Former Chapel to St Edmunds Boys Home. However, it will be important to consider what types of development come forward; for example, avoiding tall buildings within proximity to the chapel bell tower / steeple, to reduce negative visual impacts.
- The Grade II Roving Bridge Just West of Rotton Park West and Soho Loop East Entrance, Over Birmingham Wolverhampton Canal is within the allocated site GZ15-05, which is located within the Greater Icknield growth zone. Neutral effects are likely for this designation – reflecting the level of existing development surrounding it, and its likelihood of being maintained to allow for easy access through the site.
- The Grade II 97-100, Albion Street; and the Grade II Gwenda Works are within the allocated site MR-13 – the Land between Camden Street, Camden Grove, Camden Drive and Albion Street, Jewellery Quarter Major Residential Site. It is likely that the buildings would be maintained, rather than demolished, at the very least facades would be maintained and restored. Therefore, effects would likely be neutral or positive.
- The Grade II Dovecote And Stable at Wiggins Hill Farm; the Grade II Old Barn Cottage; the Grade II Old Barn; and the grade II Wiggins Hill Farmhouse are all within the allocated site MDAP-01 – the Peddimore Major Development Area. It is anticipated that growth through this major development area will impact negatively upon the setting of these listed buildings, given that they are surrounded mostly by open countryside. As such, it is recommended that this policy includes stipulations to reduce the impacts on these designated structures and the wider historic landscape (though acknowledging that this site is already allocated in the current adopted Plan).

3.11.9 Though there are strategic / broad policies that seek to protect heritage and a presumption against demolition, it may be useful to develop site specific requirements for the sites identified above to address potential impacts on buildings and their settings.

- 3.11.10 It is recognised that whilst most sites are not within proximity to designated heritage assets, there are cumulative effects to consider, such as increased traffic, tall buildings and a change in character.
- 3.11.11 In this context, the plan sets out a range of measures to avoid negative effects and maximise positives, which are discussed below.
- 3.11.12 CE16 (Historic Environment) is the principal policy for managing effects on heritage. It builds upon requirements in the NPPF to set out a range of locally specific features that need to be considered, protected and enhanced through development. This should help to protect a wider range of features that are important to Birmingham's history and its 'story', rather than simply protecting designated heritage assets.
- 3.11.13 It is also important to protect the identity of neighbourhoods beyond their physical appearance. For example, the Jewellery Quarter's character is partly based upon the presence of small-scale industries and small workshops. It is important to ensure that land use changes do not lead to such uses being permanently displaced and changing the dynamic of locations negatively. In this respect, PG3 is positive as it mentions the importance of the Jewellery Quarter, and outlines that it provides an opportunity for heritage-led regeneration. Policy EC4 is also positive as it states that independent and niche businesses which define certain locations are to have their support continued.
- 3.11.14 Several Growth Zone policy aims and Site-Specific Requirements provide further direction for development across the City, to build upon the principles of CE16 and other general plan policies. For example:
- GZ3 sets out the potential for the locally listed Former Duddeston Wagon Works to be brought back into use as part of development.
  - GZ5 requires that development respects and celebrates the historic parts of the Gun Quarter.
  - GZ7 sets out the need for wider development across the Newtown area to re-purpose existing heritage assets including listed and locally important buildings and features.
  - GZ9 seeks for development to build on Cheapside's historic character and identity.
  - GZ13 recognises the importance of Aston Park and Aston Hall and seeks to enhance the role of Aston Park as an integral part of the areas character. Likewise, it will be important to protect the role of important historic buildings on Witton Road.
  - GZ12 highlights the need to repurpose the locally listed former Hare of the Dog public house. Community or commercial uses will be supported, which also ensures that the building retains its role as an important focal point. GZ12 also highlights the need to protect the unique character, history and natural environment of Edgbaston Reservoir and to re-use listed and locally important buildings in an appropriate way.

- The Hockley Port Canal Basin site requirements recognise the importance of non-designated heritage assets and require a number of measures to ensure that development respects Hockley's industrial heritage.
- Bill House Site Requirements (opportunity site in the GZ12 area) will help to ensure that enhancements to the environment within the gateway of Soho and Lozells Conservation Area respects and retains important historic features.
- City Hospital Site Requirements (proposed site allocation in GZ15 area) highlights the need for the Gothic Infirmary frontage building to be retained.
- Site Requirements for Tame Road Industrial Units (opportunity site in the GZ13 area) along the River Tame stipulate that proposals should positively incorporate the non-designated heritage assets within the site.
- Great Brook Street Site Requirements (proposed site allocation in GZ3 area) highlight the need for proposals to take account of identified local heritage assets.
- Site Requirements for H-Suite Edgbaston (proposed site allocation in GZ15 area) states that all development must be of high-quality, contemporary design to protect and enhance the character of the reservoir and dam, and the setting of heritage assets.
- Site Requirements for the Former Muhammed Ali Sports Centre and Surroundings (opportunity site in the GZ12 area) state that the Grade II Listed heritage assets of Icknield Street School and Albion Place need to be protected and enhanced.
- Site Requirements for Holland Road West Industrial Units (opportunity site in the GZ3 area) must include the retention of the former Post Office locally listed building.
- Site Requirements for Nechells Community Centre require consideration to be given to the setting of adjacent locally important buildings.

3.11.15 It is noted that the final Birmingham Local Plan will include site allocation policies, which are anticipated to include further details and stipulations relating to maintaining and enhancing the historic environment in Birmingham. This will likely include protecting specific designated heritage assets and their wider settings.

3.11.16 There is a presumption against the demolition of buildings, and this is reiterated in Policy CE2, which prioritises the use of previously developed land and buildings and also seeks to retain local character. Also of relevance, Policy CE17 (The Canal Network) acknowledges the historic importance of canals, with protection provided for important groups of canal buildings and features, especially where they are listed or in a conservation area.

3.11.17 More broadly, Policy PG3 (Place-Making) outlines that new development must enhance local identity and sense of place through design that responds to the historical characteristics of the site and local area. In addition, Policy HN1 (New Residential Development) supports development that is sympathetic to historic assets.

- 3.11.18 Finally, Policy CE4 (Retrofitting Existing Buildings) states that the council will encourage improvements in energy efficiency where it is demonstrated that it will not lead to adverse impacts on the special characteristics of heritage assets.
- 3.11.19 To conclude, the strategy delivers development in sensitive locations from a heritage perspective, and this is likely to affect the character of the urban area in much of 'inner' Birmingham. There could be some negative effects where increased densities and taller buildings affect the setting of heritage assets and the character of areas. However, these would likely be minor and in many instances positive effects would be predicted as redevelopment ought to lead to a reduction of unused buildings and spaces and an improved public realm.
- 3.11.20 It is unlikely that important heritage features would be permanently lost, as there are a range of policy measures designed to avoid negative effects. In particular, there is a presumption against demolition, a need to respect local and designated heritage assets, and several location specific policies guiding development. Several listed buildings that fall within development sites are also in a poor condition, and therefore repurposing for residential will likely lead to positive effects by securing a long-term productive use (and through physical improvements to the buildings). Without regeneration, heritage assets and their settings could continue to decline in appearance and use / condition.
- 3.11.21 The important thing is to ensure that development is respectful of character and history – which the plan seeks to achieve through a range of policies. In this respect, it is considered that cumulatively, there will be **moderate positive effects** on the historic environment.

## Appraisal of the alternatives

- 3.11.22 The majority of grey belt sites / locations identified do not contain designated heritage assets. However, it is noted that land in the south is within proximity to scheduled monuments (Moated site of Frankley Hall; and Standing Cross in St Leonards churchyard), and some land in the north-east contains listed buildings – Grade II\* Vesey Cottage; Grade II Wheatmoor Farmhouse; Grade II Kiln About 100 Metres West South West Of Foxhill; and Grade II Fox Hill Farmhouse.
- 3.11.23 These specific land parcels form part of Alternative 2a (allocating better performing grey belt land parcels) and Alternative 2b (developing all available grey belt land), and as such impacts are anticipated under both approaches – linked largely to changes to the setting of these designated heritage assets.
- 3.11.24 This could change how they are viewed in relation to the surrounding area and could impact upon their contribution to the wider historic landscape – for example, through potential changes to access.
- 3.11.25 However, it is recognised that increased levels of growth in the north-east and the south under Alternative 2b could have a greater impact on the historic environment.

- 3.11.26 This is due to the likelihood of more widespread growth having greater impacts to the setting of designated and non-designated heritage assets (both in terms of the number of assets affected, and the level of impact), and the potential for growth to lead to cumulative effects. For example, there are historic field systems and records of archaeological interest across the areas involved to the north of Birmingham, which could be impacted through greater levels of growth. Additionally, growth including grey belt land to the south under Alternative 2b would bring forward development in an area with a listed building – the Grade II listed Lilycroft Farmhouse, Attached Coach House / Stabling and Barn.
- 3.11.27 In addition, substantial development to the north of Birmingham has the potential to put additional recreational pressure on nearby Sutton Park, which is a Grade II Registered Park and Garden. Whilst the identified grey belt land to the north-east is not within close proximity to this, it is possible increased levels of growth through Alternative 2b could have a greater impact upon the designation.
- 3.11.28 On balance, additional development on grey belt sites is considered most likely to give rise to **minor negative effects**. The positive effects identified for the urban areas associated with regeneration would also still arise, but there could be some increased uncertainty should grey belt development mean that brownfield opportunities are not prioritised. Of the two alternatives, 2a is concluded to be more favourable in relation to the historic environment, as it would have a reduced level of growth. This is anticipated to have a lower cumulative effect on the wider historic environment, and a reduced impact on designated and non-designated heritage assets through changes to their settings and significance.

## 3.12 Natural landscape

### Appraisal of the Focused Preferred Options

- 3.12.1 The spatial strategy performs well by delivering high amounts and densities of development in the City Centre and other urban centres within the plan area. This will hugely help avoid impacts on landscape character, particularly within and within proximity to the Green Belt (which is limited in extent). Nevertheless, it is noted that the spatial strategy has the potential to lead to impacts on townscape character in the smaller urban centres outside of Birmingham city centre. However, it is noted that this will be mitigated to some degree through site design and layout.
- 3.12.2 It is recognised that a Green Belt Assessment has been undertaken, which assesses the performance of the Green Belt in Birmingham against the five purposes of the designation, and considering the potential of grey belt sites. This will help the City Council to make robust decisions related to planning applications within the Green Belt. The Green Belt is considered through Policy CE15 (Green Belt), which states that inappropriate development within the Green Belt will only be permitted in exceptional circumstances. The exception to this is development proposals concerning previously developed land and buildings in the Green Belt; such proposals will be assessed in relation to national planning policy.

- 3.12.3 Policy CE9 (Green Infrastructure and Nature Recovery Network) outlines the City Council's intention to maintain and expand Birmingham's Green Infrastructure (GI) Network, which includes the city's urban forest.
- 3.12.4 Notably, new development will be required to protect the integrity of the GI Network and contribute to its enhancement and expansion where possible. The city's Blue Infrastructure (BI) Network, including urban water infrastructure and habitats, will also be protected and enhanced.
- 3.12.5 Policy CE13 (Open Space) performs well from a landscape perspective as it seeks to protect open space from development. It only permits development of open space in certain circumstances. For example, where the lost site will be replaced by a similar open space which will be of at least equivalent accessibility, quality and size.
- 3.12.6 More broadly, Policy PG3 (Place-Making) outlines that new development must make multi-functional landscape and GI integral to scheme design. This is important given the urban locations of sites within the spatial strategy.
- 3.12.7 Additional detail is provided in area specific policies (e.g. growth zone policies and site requirements) which broadly seek to:
- Ensure that development is in-keeping with the current landscape.
  - Create linear parks / green corridors in the growth zones with accessible landscaped walkways.
  - Retention of existing trees.
  - Controlling developable areas on large strategic sites and implementing landscape buffer zones.
- 3.12.8 To conclude, the strategy positively seeks to avoid development in the most sensitive locations from a landscape perspective, and positive effects are anticipated as a result. There could potentially be some minor negative effects as a result of intensification in urban areas, but a range of policies in the Plan seek to ensure that these are avoided, mitigated and wherever possible for enhancements to be secured. As such, a residual **neutral effect** is predicted.

## Appraisal of the alternatives

- 3.12.9 Development of the sites / locations that have been identified as being grey belt land has the potential to lead to adverse impacts on the landscape. For example, these areas could contribute to landscape character, provide key views to and from nearby settlements, maintain separation between built up areas, and provide open space in areas that are mostly urban. As such, development of these grey belt sites could lead to a deterioration in the landscape character in these locations, and the wider area, even with high quality design utilising GI and other landscape-enhancing measures.
- 3.12.10 In 2013 a landscape character assessment was undertaken for the Birmingham Green Belt, which focused on land to the north-east. It identifies that this land has a mix of high, medium, and low overall sensitivity – based on:

- Landscape sensitivity – direct and indirect effect on landscape resources and receptors (i.e., specific features), as well as its condition and value.
- Visual sensitivity – linked to the area’s visual amenity and its contribution to views (into and out of the area).
- Relative sensitivity to development - based on the type of development proposed for the area and the particular aspects of the landscape that are likely to be impacted by the change.

3.12.11 There are two distinct areas of high overall sensitivity. The first is around Wheatmoor Farm, Ashfurlong Hall and High Heath to the north-east of Whitehouse Common, and the second area is to the north of Roughley. The assessment indicates that growth in these two areas would likely result in significant landscape and visual effects that may not be able to be satisfactorily mitigated.

3.12.12 The assessment indicates that land to the east of Sutton Coldfield (around Langley Hall and southwards towards Minworth) has a relatively lower sensitivity than the northern half of the assessed area, and as such could accommodate greater levels of growth.

3.12.13 Reflecting this, development through Alternative 2a (allocating better performing grey belt land parcels) would be preferable to Alternative 2b (developing all available grey belt land). This is due to a reduced land take and the subsequent potential for reduced impacts to landscape character and quality in comparison to developing all available grey belt land. This conclusion is also reached due to the landscape sensitivity.

3.12.14 Whilst development would likely come forward in the northern half of the land assessed in the 2013 assessment, which demonstrated it had a largely medium-high landscape sensitivity, a smaller amount of this area would be developed under Alternative 2a.

3.12.15 It is noted that there would remain large amounts of Green Belt beyond the Birmingham administrative boundary, but release of Green Belt in Birmingham (and the subsequent development of grey belt land) could mean that there are limited areas of open green space left between Birmingham and other neighbouring authorities.

3.12.16 With regards to growth to the south near Frankley, the 2013 landscape assessment did not cover this location. The area around the reservoirs is currently open in nature and provides a ‘green buffer’ around the water body that contributes to local character. It is likely that development that encroaches into this green buffer would have a negative effect on landscape character and visual amenity. There is also the potential for cumulative effects on landscape character in the wider area should a strategic development be brought forward in the Frankley area of Bromsgrove.

3.12.17 Overall, both alternatives have the potential to deliver negative effects on landscape and townscape objectives – with Alternative 2a having the potential for moderate **negative effects** on landscape and townscape objectives, and Alternative 2b having the potential for **moderate negative effects**.

## 3.13 Biodiversity and geodiversity

### Appraisal of the Focused Preferred Options

- 3.13.1 The majority of sites proposed to be allocated through the current draft of the Local Plan are directed to the urban centres, with the majority being located in the City Centre. Only a small proportion of sites are allocated elsewhere. The urban centres are not within close proximity to any internationally designated sites for biodiversity, including European protected sites. In terms of cumulative effects; it is considered unlikely that there will be significant effects on European sites, but this will need to be confirmed through the HRA.
- 3.13.2 In relation to nationally designated sites for biodiversity, only GZ8 (Hagley Road Corridor) is within proximity to a Site of Special Scientific Interest (SSSI) - Edgbaston Pool is approximately 350m to the south-east of the boundary. Furthermore, the Boldmere Centre for Change and the Sutton Coldfield Centre for Change are within proximity to the Sutton Park SSSI and National Nature Reserve (NNR) – with the Boldmere Centre for Change being located approximately 400m to the south, and Sutton Coldfield Centre for Change located approximately 500m to the east. It is recognised that none of the identified Major Development Areas, Housing Regeneration Areas, Growth Zone Opportunity Sites are within 800m from a SSSI. In total, seven sites are within 1km of a SSSI; six are within proximity to Sutton Park SSSI (and NNR), and one within proximity to Edgbaston Pool SSSI.
- 3.13.3 The six sites within proximity to the Sutton Park designations have a combined land area of approximately 9.4ha (with an approximate 836 dwelling capacity). Residents from homes located on these sites should have good access to use the park regularly for recreation. This could cause additional potential for littering and pollution, and disturbance to wildlife. There are already measures in place to manage such impacts (outside of the planning process), so it is considered unlikely that a small increase in local population would lead to significant effects (given the substantial number of visitors the park already attracts). Such effects should also be addressed through the planning policy framework in the Plan, which requires new development to protect and enhance biodiversity. It is also noted that the sites involved are urban, and as such there is unlikely to be any displacement of existing natural greenspaces that are used for recreation or by species directly.
- 3.13.4 The one site within 1km of the Edgbaston Pool SSSI is 0.99ha in size (with an approximate 400 dwelling capacity). It is currently in urban use, and as such is not anticipated to lead to the displacement of any existing natural greenspaces used for recreation. Whilst growth on the site could lead to a recreational draw to the SSSI, there is a charge to access the site, and it is therefore unlikely to see a significant increase in local visitation linked to new housing development.
- 3.13.5 In relation to locally designated sites for biodiversity, GZ15 (Greater Icknield) contains the Edgbaston Reservoir Local Nature Reserve (LNR). This designation is also within 500m to the west of the identified Ladywood Housing Regeneration Area, and within 500m of several Growth Zone Opportunity Sites (Spring Hill; Icknield Port Loop Phase 4; Icknield Port Loop

Phase 3; Icknield Square; and Tower Mount). Additionally, the Illeybrook Square Housing Regeneration Area is within 100m to the east of the Woodgate Valley LNR.

- 3.13.6 Overall, there are 37 sites within 1km of a LNR; two within proximity to Woodgate Valley LNR, two within proximity to Kings Norton LNR, 26 within proximity to Edgbaston Reservoir LNR, three within proximity to Plantsbrook Reservoir LNR, two within proximity to Beechcroft LNR, one within proximity to Kingfisher LNR, and one within proximity to Balaams Wood SSSI.
- 3.13.7 It is noted that two of the sites overlap with the Edgbaston Reservoir LNR boundary. As such, residential development within these growth zones has the potential for adverse impacts on biodiversity, linked to the likely increase in recreational pressure. Nevertheless, Policy CE10 (Biodiversity and Geodiversity) seeks to maintain, enhance and restore sites of national and local importance for biodiversity and geodiversity in line with the mitigation hierarchy. The policy outlines that habitats should be protected by appropriate buffers and, if necessary, barriers in order to prevent adverse impacts, including those arising from recreational use. It also highlights the importance of ecological connectivity by ensuring that development that would lead to habitat fragmentation does not take place.
- 3.13.8 No sites overlap with ancient woodland, but it is noted that eight sites fall within 800m of such habitat. These sites have a combined land area of approximately 362.3ha (with an approximate dwelling capacity of 7,920 – note two of the sites are for industrial use only). The sites are not sufficiently close to cause direct damage to the ancient woodlands through construction, or a permanent change to land use that would directly disturb species using the habitats. However, it is likely there would be some increased recreational pressures that could have some minor negative effects. Though the wooded areas in question are publicly accessible, the amount of additional pressure likely to arise in one location is very low given the dispersed nature of the housing sites. Therefore, significant effects are considered unlikely.
- 3.13.9 Sites of importance for nature conservation (SINCs) are widespread across Birmingham, but the majority of development opportunities do not directly overlap with such areas (i.e. over 98% of sites). Where there is overlap with new housing allocations / growth zone opportunities, it is open space / playing fields. There is likely to be some biodiversity value here, but policies in the Plan require mitigation and enhancement, so effects are unlikely to be significant in this respect.
- 3.13.10 A larger proportion of the sites proposed for housing or employment overlap with 'Sites of Local Importance for Nature Conservation', with the following locations seeing multiple sites overlapping or directly adjacent to these sites.
- Birmingham Canal.
  - Rea Valley / River Rea.
  - Tame Valley.
  - Birmingham and Fazeley Canal.
  - Project Kingfisher.

- Worcester and Birmingham Canal.

3.13.11 The land involved for development is mostly cleared vacant land and / or former industrial uses, and there is unlikely to be a direct loss of habitat. There could be some disturbance to wildlife along these wider corridors, but more likely is that development could lead to enhancements in the environment (given that this is a focus and requirement of several policies in the Plan).

3.13.12 The potential for Biodiversity Net Gain (BNG) on dense urban sites is unclear at this stage. However, Policy CE10 outlines that all development proposals, including those that are exempt from mandatory BNG requirements, must provide biodiversity and geodiversity enhancement measures that are appropriate to the nature and scale of the development.

3.13.13 In support of this, Policy CE11 (Biodiversity Net Gain) states that new developments must provide a minimum of 10% BNG. This will be established using DEFRA's Biodiversity Metric. Notably, new developments must deliver BNG on site, unless there is robust evidence that this is not feasible. In this case, BNG will need to be delivered off site as an alternative (which could present benefits for strategic opportunity sites).

3.13.14 There is also a need for watercourses to be protected and enhanced and the need to apply appropriate buffer zones and barriers between new development and important habitats.

3.13.15 More broadly, urban greening at major developments will be achieved through Policy CE12 (Urban Greening Factor). Residential developments will be required to achieve a minimum urban greening factor score of 0.4, whilst Class E, B2, B8, F or sui generis uses will be required to achieve a minimum score of 0.3. In addition, Policy PG3 (Place-Making) outlines that new development must maximise the restoration and enhancement of biodiversity and the delivery of BNG.

3.13.16 CE9 is also an important policy with regards to biodiversity as it seeks to protect and enhance green and blue infrastructure networks. This will involve consideration of the biodiversity value of green infrastructure and makes specific reference for the need to re-naturalise watercourses, which is particularly beneficial for water quality and any reliant species.

3.13.17 In addition to the broad policies that cover development in all locations, there are several spatially specific policies that also mention the need to secure enhancements to biodiversity. Of note are the growth zone policies that seek to secure green infrastructure improvements, which could help to strengthen wildlife corridors. For example:

- PG3 (Central Birmingham), seeks to deliver a greener, biodiverse, and climate resilient environment.
- GZ5 seeks to provide green spaces along the canal corridor and opening out onto the towpaths, to contribute to biodiversity connectivity.
- GZ15 indicates there is an opportunity for corridor-wide biodiversity enhanced focussed on the canals – which could include establishing marginal vegetation and / or the installation of flowering islands.

- Green infrastructure needs to be incorporated into development through site specific requirements. This is anticipated to include measures such as tree planting, landscaping, etc.

3.13.18 To conclude, the strategy positively seeks to avoid development in the most sensitive locations from a biodiversity perspective, and there are several policies promoting / requiring enhancements to biodiversity features and networks. Where growth is relatively close to biodiversity habitats, the potential for negative effects is considered to be low due to the mitigation measures outlined within the policy framework and the low magnitude of impacts. As a result, it is predicted that **neutral effects** would arise as a result of the draft plan. Despite this, an element of uncertainty remains with respect to the potential for dense urban sites to deliver the required level of BNG. In this respect, there is ultimately the potential for the positive effects to be diluted and / or delivered outside of the urban areas (though benefits for Birmingham overall would still be achieved).

## Appraisal of the alternatives

- 3.13.19 Development of grey belt sites has the potential to lead to adverse impacts on biodiversity and geodiversity, given that these sites would be released from the Green Belt, which contributes to local biodiversity. As such, the development of grey belt land under either Alternative could disrupt wider habitat connectivity, even if it is already developed or partially developed (as it is recognised that previously developed land can support biodiversity and geodiversity).
- 3.13.20 Release of grey belt land from the Green Belt in the north-east could also lead to an increase in residents close to the Sutton Park designations, which would likely bring substantial recreational pressure to an already busy location. This could bring forward negative effects – which would likely be more significant and / or widely experienced under Alternative 2b (developing all available grey belt land), given more grey belt land would be developed in the north-east than under Alternative 2a (allocating grey belt land parcels). However, on the other hand growth through Alternative 2b could bring forward a greater opportunity for a new recreational space to be delivered as part of a strategic development – given the level of growth it would bring forward in the north-east. This could help to alleviate pressure on the designations, as well as provide space for new habitats. It is also worth noting that there are potential ecological corridors running through the broad location for growth to the northeast, which could be affected by development (perhaps enhanced with suitable measures in place).
- 3.13.21 Development of parcels of land to the south near to Bartley Reservoir also present the potential for negative effects upon biodiversity. Site parcels contain substantial priority habitat and locally important sites for woodland and grassland to the north of Bartley reservoir. There are also ecological features and a green buffer surrounding the reservoirs that is likely to support biodiversity. Development here is likely to have negative effects in terms of disturbance to species and a loss of ecological features.

- 3.13.22 Whilst mitigation and biodiversity net gain will be required, it is unclear what this would involve and whether it would be delivered on site. Therefore, at this stage negative effects are recorded.
- 3.13.23 Overall, whilst potential effects on biodiversity and geodiversity are largely linked to the design schemes taken forward and the level of green infrastructure implemented, the development of grey belt land has the potential to deliver positive and / or negative effects.
- 3.13.24 On balance, both options are anticipated to deliver **minor negative effects**, factoring into account the potential negative effects of development, but these being offset to an extent by good opportunities for mitigation and enhancement. At this time, both options are ranked equally – reflecting the likelihood of Alternative 2a having a lesser impact on biodiversity connectivity, and Alternative 2b having a greater likelihood of delivering development of a wider scale that could provide land opportunities for biodiversity net gain.

## 3.14 Accessibility and transport

### Appraisal of the Focused Preferred Options

- 3.14.1 As noted in the current draft Local Plan, the A4540 orbital ‘ring road’ forms a boundary to the city centre. The radial routes provide areas prime for corridors of sustainable higher density development and links to many of the city’s local centres. The spatial strategy performs well in this respect, locating a significant proportion of development both within this ring road, and along its radial routes. This part of the city is best served by public transport, with many services and facilities accessible via active travel (walking and cycling). This should reduce the use of the private car, with positive knock-on effects for the health of residents in the city centre.
- 3.14.2 The City’s Strategic Highway Network comprises the M6 and A38(M) Aston Expressway, which connects road users directly to the City Centre (via the Tame Valley Viaduct and the Spaghetti Junction) and the A road primary route network, which is generally characterized by key corridors radiating out from the City Centre. These link the City to the national motorway network via the M5, M6 and M42 (which form the Birmingham Motorway Box / Orbital) as well as the M6 Toll and M40. The Preferred Options Document outlines that these roads will continue to be managed in ways to maintain their capacity so that longer distance travel can use A-roads to their destination (or from their origin) within the plan area. It is anticipated that these types of trips include HGV / LGV / van deliveries, commuters and visitors.
- 3.14.3 The Local Plan seeks to achieve a substantial increase in development in the central parts of the City and along key transport corridors. This could potentially increase congestion, but the supporting Plan policies are likely to encourage and enable increased use of public transport, walking and cycling (offsetting increases in traffic and congestion). The key policies are discussed below.
- 3.14.4 Policy CY1 (A Sustainable Transport Network) forms the basis of the policy framework with regards to transport. It aims to deliver a sustainable, high

quality, integrated transport system, where the most sustainable modes offer the most convenient means of travel, which should encourage its uptake.

- 3.14.5 The policy outlines the four principles of the Birmingham Transport Plan, which will underpin the policy, and lists what will be required to deliver a sustainable transport network. This includes working with national, regional and local partners to lobby for interventions and policies outside of the council's control. The policy performs well in this respect.
- 3.14.6 Active travel is addressed through Policy CY2 (Active Travel), which prioritises the provision of safe and pleasant walking environments throughout Birmingham. The policy also encourages cycling and outlines plans for a city-wide programme of cycling infrastructure improvements. It seeks to achieve this through training and behavioural change initiatives, which are proven ways of encouraging a modal shift from the private car to more sustainable modes of transport such as cycling. The policy also outlines the requirement for developments to achieve 15-minute neighbourhoods, which incorporate the principles of healthy streets, pedestrianisation, safe and pleasant walking environments and accessible services.
- 3.14.7 Public transport is addressed through Policy CY3 (Public Transport), which recognises the importance of the bus as a mode of public transport. The council outlines their plan to continue to work alongside Transport for West Midlands and bus operators to improve the bus network, working under the principles of Bus Back Better – National Bus Strategy for England (2021). In terms of rail, the policy supports the Midlands Rail Hub, which is the region's biggest and most ambitious rail improvement scheme: a £900m – £1.5bn blueprint for faster, better and more frequent connections across the Midlands<sup>1</sup>. The scheme will add more than 14 million seats to the rail network each year and provide faster, more frequent or new rail links for over 30 locations, including Birmingham. Policy CY3 also supports the development and extension of metro / bus rapid transit. It is also worth noting that significant housing delivery is proposed in locations that have good access to HS2 in Digbeth. This ought to ensure that accessibility to longer distance destinations is good for many residents. Freight is addressed through policy CY4 (Freight), which supports freight decarbonisation; freight consolidation and last mile deliveries; sustainably located freight hubs; and modal controls (i.e. restrictions on the size and type of vehicles that can access residential areas).
- 3.14.8 Policy CY5 (Network Management) encourages the optimum use of existing highway infrastructure across all modes. The policy also prioritises investment in the highway network to support the city's sustainable transport network.
- 3.14.9 More broadly, Policy PG2 (Place-Making) outlines that new developments must create environments that are legible, accessible, permeable and well-connected to local services and facilities, especially through walking and cycling, and provide the necessary infrastructure to promote active travel and public transport use. In support of this, Policy HN1 (New Residential

<sup>1</sup> Midlands Connect (2023): 'Midlands Rail Hub', [online] available to access via [this link](#)

Development) supports development where it is accessible to local facilities by modes of transport other than the car.

- 3.14.10 Moreover, Policy HN8 (Large-Scale Shared Accommodation) supports development proposals for large scale shared accommodation where it is located within central Birmingham where car free development is expected; has excellent public transport, walking and cycling connectivity; and is well served by local services and facilities.
- 3.14.11 Policies that outline similar criteria include Policy HN7 (Purpose Built Student Accommodation); Policy HN11 (Educational Facilities); Policy HN12 (Healthy Neighbourhoods); and Policy CE14 (Playing Pitches and Sports Facilities).
- 3.14.12 In relation to the spatial strategy, Policy HN4 (Residential Densities) outlines that new housing in the city centre should have a density of 400 dpa, whilst new housing in the urban centres should have a density of 70 dpa. For both the city centre and urban centres, new housing should be located in and within 400m of the centre; and for the urban centres it should be well served by public transport. A density of 40 dpa will be expected outside of the city centre and urban centres. Whilst this is positive in terms of active travel and public transport uptake, it could lead to capacity issues on some services, and this will need to be considered in advance.
- 3.14.13 In addition, Policy EC2 (Core Industrial Areas) outlines that transport infrastructure (including the movement of freight by rail) improvements will be sought.
- 3.14.14 In support of the broad principles for sustainable transport discussed above, the growth zone policies set out the need for new development to:
- Improve pedestrian connectivity
  - Accommodate metro, bus and sprint services
  - Enhance public transport infrastructure
  - Support green and active travel corridors
  - Improve signage, provide clear walking and cycling routes, and improve cycle facilities/
- 3.14.15 To conclude, the strategy positively seeks to deliver development in the most sustainable locations from an accessibility and transport perspective. There is also a strong policy framework that promotes the enhancement and expansion of sustainable and active travel routes. As a result, significant positive effects are anticipated. Despite this, an element of uncertainty remains with respect to the potential for high density development to lead to strains on the existing transport network. Overall, the majority of growth is likely to be sustainably located, but this is offset slightly by the likely increase in car trips. Therefore, **moderate positive effects** are concluded on balance.

## Appraisal of the alternatives

- 3.14.16 Development on grey belt sites is assumed to lead to adverse impacts on accessibility and transport, given the sites are located on the periphery of the

urban areas. Whilst the broad locations for growth have been chosen as they could potentially be better served by public transport, accessibility is poorer than within the central urban areas that are extremely well connected.

- 3.14.17 It is worth noting that growth in locations beyond the identified broad locations is likely to be less well connected and would require significant investment to improve connectivity and sustainable modes of transport.
- 3.14.18 It is worth noting that a major development has been proposed through the draft Bromsgrove Local Plan at Frankley. Though this is still moving through the plan making process and may ultimately not come forward, it is useful to highlight what impact this could have in relation to development on land potentially identified as grey belt to the south of Birmingham. Significant upgrades to transport infrastructure would be necessary to support growth in this location, and this could be exacerbated with additional development in Birmingham without a well-planned approach to growth across boundaries. Development could lead to increased car dependencies and congestion on local roads without investment in capacity on roads and supporting public transport expansion. Conversely, a well-planned approach to strategic growth could allow for wider infrastructure improvements that allow for better connections toward services and facilities in the Birmingham urban area.
- 3.14.19 It is recognised that grey belt release could be accompanied by sustainable transport infrastructure, but this is unlikely to be at the same scale as that within the city centre and other established urban centres across the plan area. Due to this, both alternatives are likely to give rise to increased negative effects in terms of accessibility and car trips.
- 3.14.20 Overall, **moderate positive effects** are predicted, reflecting that the majority of development will still be within the urban area. It is also noted that some grey belt development may be located within proximity to sustainable and active travel opportunities. However, it is likely that grey belt development will lead to a greater reliance on private vehicles. This is largely due to the distance of grey belt land from the city centre. This could lead to a level of **minor negative effects**. Alternative 2a is considered more favourable than Alternative 2b in relation to this SA theme, due to a lesser level of growth. Additionally, developing only a selection of more sustainable grey belt sites could result in new growth having better access to sustainable and active travel opportunities. For this reason, Alternative 2b gives rise to potential **moderate negative effects** with regards to increased car trips.

## 3.15 Summary

| Appraisal topic                                | 1.The Focused Preferred Options  | 2a Focused grey belt release        | 2b. Wider release of grey belt          |
|------------------------------------------------|----------------------------------|-------------------------------------|-----------------------------------------|
| Housing                                        | Major positive                   | Major positive                      | Major positive                          |
| Equality, diversity, and community development | Major positive<br>Minor negative | Major positive<br>Minor negative    | Major positive<br>Minor negative        |
| Health and wellbeing                           | Moderate positive                | Major positive?<br>Minor negative   | Major positive?<br>Moderate negative?   |
| Waste and resource use                         | Minor positive                   | Neutral                             | Neutral                                 |
| Economy and employment                         | Major positive                   | Major positive                      | Major positive                          |
| Air quality                                    | Neutral                          | Minor negative                      | Minor negative                          |
| Water quality                                  | Minor positive                   | Neutral                             | Neutral                                 |
| Land and soil                                  | Moderate positive                | Minor positive                      | Minor positive                          |
| Achieving zero carbon living                   | Moderate positive                | Minor positive                      | Minor positive                          |
| Flooding                                       | Minor negative                   | Minor negative                      | Minor negative                          |
| Historic environment                           | Moderate positive                | Moderate positive<br>Minor negative | Moderate positive<br>Minor negative     |
| Natural landscape                              | Neutral                          | Moderate negative                   | Moderate negative?                      |
| Biodiversity and geodiversity                  | Neutral                          | Minor negative                      | Minor negative                          |
| Accessibility and transport                    | Moderate positive                | Moderate positive<br>Minor negative | Moderate positive<br>Moderate negative? |

3.15.1 With regards to the draft Local Plan, a range of neutral and positive effects are identified for the SA themes – though it is recognised that levels of uncertainty are noted within some of the themes at this stage. Minor negative effects are identified for just two SA topics (Flooding and Equality Diversity and Community development).

3.15.2 The plan places a strong emphasis on regeneration and renewal, with a largely brownfield-led plan that is supported by increased densities and estate renewal. This means future residents will benefit from growth in the most accessible and connected areas of the city, with targeted efforts to improve some of the most deprived areas of the city. As such, major positive effects are anticipated in relation to the Housing SA theme.

- 3.15.3 The focus on brownfield development also contributes to the positive effects anticipated for Waste and resource use (minor), Water quality (minor) and Land and soil (moderate) SA themes, reflecting the reduced potential for development to impact upon important resources.
- 3.15.4 The supporting policy framework provides a proactive approach to supporting sustainable development in the right locations and should ensure that development delivers wider benefits such as high-quality design, an improved green infrastructure network, new open spaces, job creation, improved flood defences and increased biodiversity and access to nature. Though there is a focus on regeneration and reducing inequalities, there is the potential for regeneration in existing communities to have negative effects on residents and small businesses if they are displaced. The Plan policies seek to avoid such impacts, by stating that communities will need to be involved in plans for development in their areas. Therefore, it is predicted that any residual effects would be minor. Overall, major positive effects are anticipated in relation to the Equality, diversity and community development SA theme.
- 3.15.5 Additionally, moderate positive effects are considered likely in relation to the Health and wellbeing SA theme, reflecting that the Plan seeks sustainable development in the most appropriate locations – including healthcare services, employment and recreational opportunities, and nature, which supports physical and mental health and wellbeing. Major positive effects are considered likely for the Economy and employment SA theme as well, again reflecting the focus of the Plan on bringing forward growth in sustainable locations with access to existing services and facilities.
- 3.15.6 A number of locations and sites pinpointed for development are at risk of surface water flooding and / or falling within flood zones 2 / 3. The strategy therefore raises the potential for an increased number of new homes being at risk of flooding. This is mainly the case where industrial land is being proposed for re-purposing as residential. However, the policy provisions do seek to direct growth to areas at lower risk of flooding, and where this is not possible the Plan seeks to mitigate effects. This contributes to the conclusion of only minor negative effects for the Flooding SA theme.
- 3.15.7 Air quality, transportation and congestion are key issues within Birmingham. Whilst the strategy places development in very accessible locations, there is a danger that intensification could exacerbate traffic and air quality issues in the central areas. The Plan seeks to minimise negative effects through demand management, promoting sustainable transport enhancements and through environmental improvements. There are likely to be some residual negative effects though, particularly whilst developments are being built, and infrastructure improvements are not finalised. Overall, neutral effects are anticipated in relation to the Air quality SA theme, and moderate positive effects for the Accessibility and transport SA theme.
- 3.15.8 With regards to heritage, the Plan has the potential for mixed effects. The majority of growth is directed towards locations that have historic and cultural value, which is likely to lead to changes to the built environment. It is considered unlikely that development will lead to a direct loss or damage to heritage features, particularly as there is a presumption against demolition and a need for high quality design.

- 3.15.9 Several developments will also lead to the productive use of buildings and land that may otherwise face further decline. In this respect, positive effects are predicted. Where there are substantial increases in density and the repurposing of the built environment, there is potential for the character and identity of areas to be negatively affected, but the Plan seeks to minimise such issues, and so residual effects are considered minor. Overall, moderate positive effects are anticipated in relation to the Historic environment SA theme.
- 3.15.10 The Plan is predicted to have a positive impact in terms of addressing climate change mitigation. Increased densities and urban concentration provide the opportunity for growth to be less resource intensive, as well as taking advantage of opportunities to expand district energy schemes. There is also a presumption against demolition and the need to deliver high standards of sustainable design. With regards to climate change resilience, it is acknowledged that there may be an increase in homes placed in areas at risk of flooding. However, development will need to mitigate potential impacts. There is also a strong focus on green infrastructure improvements throughout Birmingham, which should help to improve resilience to increased heating and flooding in the longer term. As such, moderate positive effects are considered likely for the Achieving zero carbon living SA theme.
- 3.15.11 The Plan is also anticipated to have neutral effects in relation to the Natural landscape SA theme, and neutral effects in relation to the Biodiversity and geodiversity SA theme. These conclusions reflect the focus of the Plan on avoiding development in the most landscape sensitive locations, and the policy stipulations that will improve landscape and visual amenity as well as enhance biodiversity features and networks.
- 3.15.12 Some uncertainties remain, which should be explored in greater detail and potential negative effects addressed. This includes the following:
- It is recommended that significant increases in growth are supported by infrastructure enhancements prior to development being completed (to ensure that pressures upon services, facilities and transport networks are managed through careful phasing).
  - It would be beneficial to identify areas that could support biodiversity net gain contributions (should it not be possible for developments to achieve net gain on site). This could help to feed into a Local Nature Recovery Strategy.
  - Though much of the City is urban, it would be helpful to reiterate the importance of protecting best and most versatile agricultural land where it remains.
  - It may be beneficial to refer to the need for a proportionate hydrogeological risk assessment to be carried out where development sites overlap with groundwater source protection zones.

## Effects of grey belt release

- 3.15.13 It is noted that both approaches to grey belt land will have significant positive effects in relation to the Housing SA theme, reflecting that additional development will likely result in an increase in housing stock and a greater variety on housing types and tenures. Alternative 2b is considered to be the most favourable in relation to this SA theme, due to bringing forward additional land for development.
- 3.15.14 Both alternatives are also anticipated to bring forward significant positive effects in relation to the Economy and employment SA theme, reflecting the likely economic boost additional growth will have, as well as potential new employment opportunities. Both alternatives perform better than the draft plan in this respect but could be enhanced further through the release of grey belt land for employment land.
- 3.15.15 Both alternatives are anticipated to be more favourable in relation to the Health and wellbeing SA theme, due to a greater level of growth having the potential to bring forward enhanced levels of supporting infrastructure that contributes to physical and mental health and wellbeing. However, grey belt release is also likely to bring some minor negative effects alongside the positives.
- 3.15.16 Both approaches to grey belt release are anticipated to result in mixed effects in relation to the Equality, diversity, and community development SA theme. There is potential for development to either contribute to reductions in experienced deprivation or to exacerbate it.
- 3.15.17 The grey belt release alternatives are less favourable (than the Preferred Options) in relation to the Waste and resource SA theme, due to the likelihood of growth requiring additional materials and supporting infrastructure. Having said this, the effects are recorded as neutral for both alternatives as significant effects are unlikely.
- 3.15.18 The grey belt alternatives are likely to be less favourable in relation to Air Quality with both recording minor negative effects due to a likely increase in car-based travel. The significance of effects is minor for both options, but alternative 2b is likely to increase the potential for less accessible growth.
- 3.15.19 The release of grey belt offsets the positive effects recorded in relation to water quality, but again, the significance of the effects is not major, and thus overall, neutral effects are predicted for both approaches. The more widespread increase in grey belt is not considered likely to be generate significantly different effects compared to focused grey belt release.
- 3.15.20 In terms of the zero carbon SA Theme, both alternatives are likely to lead to increased per capita emissions in relation to the grey belt growth, as it is likely to be less well connected to sustainable transport (more-so for 2b) and will also increase embodied carbon. The overall effects would still be positive for both approaches but would be of minor significance.
- 3.15.21 Both alternatives are predicted to have minor negative effects with regards to the Flooding SA theme, which is the same as the draft Plan. It should be possible to avoid areas at risk of flooding, whilst also managing the decrease in greenfield land by implementing sustainable drainage.

- 3.15.22 With this being said, Alternative 2a is more favourable than 2b as it involves less greenfield land release and avoids flood zones more effectively.
- 3.15.23 in relation to the Historic Environment SA theme, grey belt release introduces the potential for negative effects on the setting of numerous heritage assets, and this would be more-so for the higher growth alternative 2b. The effects are identified as minor negative, with the assumption that mitigation would help to avoid major effects and a presumption against demolition of buildings.
- 3.15.24 The landscape SA Theme presents a similar picture with moderate negative effects arising due to impacts on local landscape character. The effects could potentially be of greater significance with more widespread release of grey belt land, (with potential for cumulative effects) but there is uncertainty in this respect.
- 3.15.25 For the Accessibility and transport SA theme, there is the potential for increased car dependency in grey belt locations, and this could cause congestion issues without significant improvements to infrastructure. Both options perform less favourably than the draft Plan in this respect, but Alternative 2a is more favourable as it would limit development to locations that have a better 'baseline' level of accessibility to sustainable modes of travel.
- 3.15.26 In relation to the Biodiversity and geodiversity SA theme, both grey belt release alternatives are ranked equally with minor negative effects. However, both options have the capacity to employ mitigation and enhancement techniques to reduce potential negative effects.

## 3.16 High level commentary on potential policy changes

### Urban Greening Factor

3.16.1 The following consultation questions have been addressed through the lens of the SA Framework to provide a high-level indication of the implications of making such changes:

- To assist with viability, should the Urban Greening Factor (UGF) requirement be used for Major schemes in the City Centre and development within Growth Zones only, rather than across the whole city?
- Should the UGF requirement be extended to include smaller scale development within the City Centre and Growth Zones?
- Should the UGF requirement for high-density schemes be reduced?
- Would the option to pay a contribution rather than deliver the required UGF score on site, provide a degree of flexibility in the policy?

3.16.2 The use of the Urban Greening Factor (UGF) across the whole city will maximise greenspace cover. However, this may adversely impact viability as the complexities and cost associated with it may deter developers. Therefore, focusing on major schemes and growth zones only may be a more appropriate approach, particularly as delivery at a large-scale may be more cost-effective and result in higher-quality greenspaces due to economies of scale.

3.16.3 If the UGF requirement were to be reduced for high-density schemes, this may enable a higher number of homes to be delivered. However, this could negatively affect the quantity and quality of the greenspaces within these developments, which could negatively impact the health and wellbeing of residents. As such, it is important that an appropriate balance is struck.

3.16.4 The option to pay a contribution, rather than deliver the required UGF score on site, could increase flexibility by allowing for green infrastructure to come forward in areas that could benefit from it more, or provide greater enhancements / positive effects. For example, by paying a contribution, developers could help to fund projects in areas of important green space or important habitat areas, which could bring forward enhanced benefits in these areas (for example, enhanced biodiversity quality and connectivity). However, it will be important to ensure that greening effects on sites are not ignored – these should be integrated into development design wherever possible.

## Biodiversity

### 3.16.5 What SA implications would the following changes have?

- Should Policy CE9: Green Infrastructure and Nature Recovery be broadened in terms of blue infrastructure, to eradicate invasive species and obsolete weirs?
- Are there any other blue infrastructure challenges we need to address through this policy?
- Should Policy CE9: Green Infrastructure and Nature Recovery be broadened to include additional safeguarding for ancient trees and woodland?

3.16.6 As the policy stands, it is anticipated to work well towards supporting green infrastructure and nature recovery, and the consideration and inclusion of blue infrastructure is encouraging to see. Expanding the policy to eradicate obsolete weirs could be a welcome addition, but it would likely be necessary to include stipulations relating to determining whether a weir should be completely removed or restored. This is due to the potential for weirs to contribute towards water quality. The eradication of invasive species could also be beneficial; however, this may be better suited as an inclusion under a different biodiversity policy – potentially Policy CE10?

3.16.7 In terms of blue infrastructure challenges, it will be important to ensure all features that contribute to the network are considered, for example including natural and semi-natural water features and ponds etc. The Natural England 'Green Infrastructure Map' is a key resource to determine the location of contributing features. In relation to challenges associated with blue infrastructure, this can include pollution, poor maintenance, and policy gaps. It is considered that the policy (and wider policies relating to flooding and water quality) works well to maintain and enhance blue infrastructure in Birmingham.

3.16.8 Ancient trees and woodland are typically considered alongside habitats and are protected through the NPPF. As such, it would likely be more appropriate to consider these under Policy CE10.

3.16.9 Overall, these changes would likely be positive for several SA topics without adding a significant burden upon developers.

## Climate change principles

### 3.16.10 What SA implications would the following changes have?

- Revised water target of 110 litres/person/day?
- Revised approach around embodied carbon (CE3)?
- Should the presumption to demolition section of Policy CE3 (which allows for reasonable exemptions) apply to all applications or only to Majors?
- Do you agree with the proposed removal of emissions offsetting through policies (CE1-6)?

- Do you agree with the proposed reference to building facades and parking areas as ways to maximise solar power generation?
- Do you agree with the requirement for Householders to undertake a PAS2035 assessment, to identify other opportunities to improve energy efficiency in their homes?
- Do you agree with swapping the operational carbon RIBA targets for operational energy use (kWh/sqm/annum) targets in accordance with the 'UK Net Zero Carbon Buildings Standard Energy Use Intensity Limits'?

3.16.11 Currently the policy provision is for 95 litres of water per person per day for residential schemes, and for non-residential schemes there is a target of 13 litres per person per day. Changing the residential water target to 110 litres per person per day would not align the Local Plan with the RIBA 2030 climate challenge and would move further away from the target of 75 litres per person per day in residential developments.

3.16.12 A whole life cycle approach considers both embodied carbon and operational carbon, in order to optimise a building's carbon footprint and reduce its overall environmental impact. Removing reference to this and the associated RICS Whole life Carbon Professional Statement and replacing this with a focus on ensuring major development proposals submit information on how embodied carbon emissions have been considered and reduced, would likely have impacts. For example, there could be reduced attention to emissions linked to operational carbon, which could result in greater levels of carbon emissions being emitted (for example, through domestic activities). Additionally, proposals for smaller developments may not fully consider their anticipated emissions, or information on how they've considered and reduced embodied emissions may not be shared. This could lead to best practice / knowledge not being shared.

3.16.13 Currently Policy CE3 does not include a presumption against demolition. Revising the policy to include such a stipulation is anticipated to bring forward benefits, as it will help to ensure existing embodied carbon is maintained. It is recommended that this principle is applied to all development levels as opposed to solely major development applications, as this will ensure embodied carbon is retained through all growth. However, it is acknowledged that some development could be hindered where buildings cannot feasibly be retained and / or their retention would result in a higher carbon impact across the building lifecycle. As such, listing exemptions to the presumption against demolition would be a useful and welcome tool – to ensure development fully considers its impacts on carbon.

3.16.14 Carbon offsetting is an important tool for the management of carbon, as it allows for the compensation of greenhouse gases by providing for an emission reduction elsewhere. It is considered a crucial process for achieving carbon neutrality. Whilst it is acknowledged that there is concern over administrative complexity, the removal of carbon offsetting could lead to negative effects. For example, development proposals may not be able to facilitate a reduction in carbon emissions in line with the established carbon hierarchy.

- 3.16.15 The inclusion of facades and parking areas as ways to maximise solar power generation would be a welcome inclusion, as it will help to further integrate renewable energy infrastructure and technologies into development.
- 3.16.16 Requiring all households to undertake a PAS2035 assessment to identify opportunities to improve energy efficiency is a good idea in principle. However, in practice it may not be feasible. For example, a PAS2035 retrofitting assessment can cost between £120 and £240 – and is the first step in retrofitting installation. Depending on what work may need to be done, this could be a costly exercise that homeowners cannot commit to or afford – especially given the levels of income deprivation across Birmingham. It may be more appropriate to ensure that new builds are constructed to Passivhaus standards to ensure energy efficiency. Including support for homeowners to undertake a PAS2035 assessment may be a more appropriate way to seek energy efficiency.
- 3.16.17 The UK Net Zero Carbon Buildings Standard builds on guidance from a number of organisations, including the RIBA 2030 challenge. The Standard sets out mandatory requirements for net zero carbon aligned buildings that could enable the UK real estate sector to stay within the national carbon and energy budgets. As such, switching from RIBA targets for operational energy use to the UK Net Zero Carbon Buildings Standard Energy Use Intensity Limits could demonstrate a change to a more updated / current approach to carbon management. As such, switching could be a beneficial change.

## 4. Next Steps

- 4.1.1 Looking ahead, the next stage will be the preparation of the Publication Plan under Regulation 19, scheduled for June 2026. This will be followed by a six-week statutory consultation before the plan is submitted for independent examination. Adoption will take place after the Inspector's report and any required modifications.
- 4.1.2 A full SA Report will be prepared alongside the Publication Plan, reflecting any further changes to the Plan that are made as it is finalised for Regulation 19 consultation.

