

Framework Plan **Evidence Base Report**

September 2024

hemelgardencommunities.co.uk







The Hemel Garden Communities (HGC) Framework Plan Evidence Base Report is a technical document to support the Regulation 19 Local Plans consultations for St Albans City and District Council (SADC) and Dacorum Borough Council (DBC).

The Framework Plan Evidence Base Report forms part of a suite of evidence documents. Further detail about different HGC workstreams and evidence can be found in the HGC Delivery Statement.

The HGC Framework Plan Evidence Report has been prepared by David Lock Associates on behalf of the HGC Partners: St Albans City & District Council, Dacorum Borough Council and Hertfordshire County Council with Hertfordshire Futures (Formerly Hertfordshire Local Enterprise Partnership - Herts LEP) and Hertfordshire Innovation Quarter (Herts IQ).

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Version	Date	Version	Prepared by
1.0	24/09/2024	Supporting document to SADC and DBC Regulation 19 Local Plans	JC
		Consultation	

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1.0 BACKGROUND, PURPOSE OF THIS STUDY AND SCOPE

Hemel Garden Communities

- 1.1 The Hemel Garden Communities (HGC) Programme is an ambitious proposal which will transform and grow Hemel Hempstead and create attractive, sustainable new neighbourhoods to its north and east by 2050.
- 1.2 Collaborating as a partnership St Albans City and District Council (SADC), Dacorum Borough Council (DBC), Hertfordshire County Council (HCC), Hertfordshire Futures (Formerly the Hertfordshire Local Enterprise Partnership (Herts LEP)) and the Hertfordshire Enviro-Tech Enterprise Zone, known as Hertfordshire Innovation Quarter (Herts IQ), are working together, alongside stakeholders and landowners.
- 1.3 The HGC Programme area covers the town of Hemel Hempstead, within the borough of Dacorum, as well as proposed growth areas straddling both Dacorum and St Albans district to the north and east of the town and wider movement routes beyond. The partnership is working to develop a strategic approach to ensure the homes, employment opportunities and new infrastructure is transformative to the whole town of Hemel Hempstead and the wider area.

Garden Town Status

- 1.4 In November 2018 a Hemel Garden Communities bid was submitted to the Ministry for Housing, Communities and Local Government. The bid was prepared by the three authorities, alongside the former Herts LEP, Herts IQ and The Crown Estate who are a major landowner within the Growth Area. The bid was successful, and Hemel Hempstead was awarded 'Garden Town' status to develop HGC. The HGC Programme looks beyond the emerging Local Plan period to a longer timeframe of 2050.
- 1.5 The HGC proposal is recognised by Government and a grant was awarded in 2019 to help develop garden communities of the future.
- The programme is supported by the HGC Memorandum of Understanding and the HGC Charter, which sets out nine place-making principles based on the Town and Country Planning Association (TCPA) Garden City Principles and is driven by a mission statement to 'take the best of the New Town heritage into the 21st century...anchoring the transformation of Hemel Hempstead and the wider area'. The nine principles are set in Chapter 4.

Hemel Garden Communities Programme Area

- 1.7 The Hemel Garden Communities Programme area has been defined through work on the HGC Spatial Vision¹. The programme area map shows the area of influence of the Hemel Garden Communities programme which includes:
 - The existing Hemel Hempstead Town Centre Opportunity Area and the wider town of Hemel Hempstead.
 - The proposed growth area to the north and east of the town which falls within both Dacorum and St Albans Local Authority administrative boundaries. This includes the permitted schemes at Spencer's Park and Marchmont Farm.
 - The employment areas of Maylands Business Park and the proposed employment land which forms part of the Hertfordshire Innovation Quarter (Herts IQ) and is located to the East of Maylands Business Park.
 - Two Waters Opportunity Area.

¹ The Spatial Vision was published in 2021. It is a high level document that provides a series of aspirations for the future of HGC.

Hemel Garden Communities Programme Area

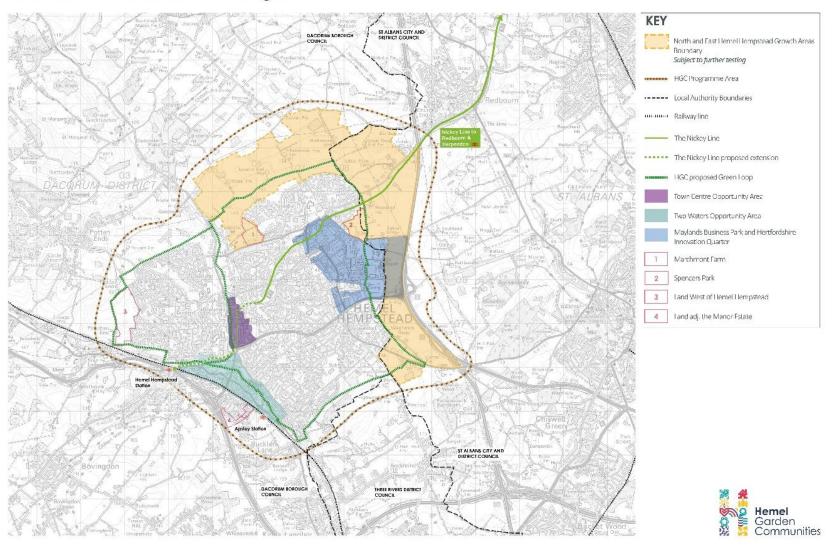


Figure 1: Hemel Garden Communities Programme Area

Purpose of this Study

- Dacorum Borough Council and St Albans City & District Council are each in the process of producing a new local plan for the period to 2041. The local plans will establish a formal policy framework to support the delivery of the HGC Programme. Each authority's Draft Local Plan (DLP) was subject to public consultation during 2023 under Regulation 18 of the Town & Country Planning (Local Planning) (England) Regulations 2012. Consultation under Regulation 19 will take place during 2024. This report forms part of the evidence base for the DLPs and relates to the northern and eastern Growth Area. The growth locations are contiguous (see Figure 1).
- 1.9 The majority of the proposed allocation sites are being promoted by several separate landowners and national housebuilders including The Crown Estate, Bloor Homes, Kitewood and Pigeon Investment Management.
- 1.10 The Growth Area is substantial, with initial allocation areas measuring 866ha. The study described in this report has considered a further c.140ha of land to ensure appropriate levels of Suitable Alternative Natural Greenspace (SANG) can be provided. HGC has an ambition to deliver up to 11,000 new homes and around 10,000 new jobs here. A comprehensive approach to development planning for the entire site is considered appropriate at the local plan stage given its scale, and in view of the fact that it crosses administrative boundaries and is in multiple landownerships.
- 1.11 Planning for 'good growth' puts the exercise beyond the considerations of a normal urban extension, and requires fundamental thinking about the spatial, environmental, social and economic issues to ensure that the expanded town of Hemel Hempstead reads as 'one place'. The Framework Plan is a key component in this endeavour, embedding best practice in sustainable growth planning at the earliest stages of the planning process. It has been prepared on an ownership-blind basis to identify the optimum solution for the Growth Area. The Framework Plan exercise is being undertaken in order to:
 - i. Prepare a single, holistic spatial Framework Plan for the Growth Area, drawing on best practice in masterplanning and guided by garden community principles.
 - ii. Test the capacity of the site and any reasonable options to deliver up to 11,000 homes and around 10,000 jobs along with other relevant and/or emerging policy requirements including appropriate standards of open space,

- sustainable drainage, biodiversity net gain, Suitable Alternative Natural Greenspace (SANG), primary and secondary schools, and transport and highway infrastructure.
- iii. Prepare an Infrastructure Framework which quantifies the Growth Area infrastructure requirements and uses this to inform a viability assessment in order to establish whether the emerging policy requirements are viable and deliverable.
- iv. Where appropriate, utilise the findings of i-iii above to inform the further refinement of the DLP policies relating to the draft allocations, ahead of the Regulation 19 consultation.
- v. Provide information to inform a Supplementary Planning Document, to be prepared by HGC, for the wider HGC programme area.
- 1.12 Gathering the above evidence is intended to inform Local Plan making by the Local Planning Authorities. It has been undertaken without prejudice to future decision making and does not indicate any pre-determination of the issue.
- 1.13 All of the land within the draft allocations is within the Metropolitan Green Belt. Green Belt is an important policy consideration which the local planning authorities will need to have regard to when determining their growth strategies. The Local Planning Authorities have commissioned separate studies to provide independent advice on Green Belt Matters.

Scope of the Study

- 1.14 The Framework Plan exercise has drawn upon existing evidence and HGC studies completed to date, including:
 - The wider DLPs evidence base.
 - The HGC Charter <u>hemel-garden-communities-charter.pdf</u> (<u>hemelgardencommunities.co.uk</u>)
 - The HGC Spatial Vision hemelgardencommunities.co.uk. The Vision establishes four Pillars, all of which reinforce the aspirations to promote healthy lifestyles and respond to the climate crisis. The four Pillars are captured by the following statement, which is taken from the Vision document:

"Hemel Garden Communities will be home to inclusive, integrated neighbourhoods, connected by a green network, and thoughtfully designed places with engaged communities, all underpinned by digital connectivity, a self-sustaining economy and pioneering green technology drive by Herts Innovation Quarter."

- The HGC Transport Strategy and Vision (including draft iterations).
- 1.15 Also included in the scope of the Framework Plan evidence base are:
 - Analysis of the site and its context, to inform the masterplanning
 - engagement with key stakeholders
 - · design and community review of the draft Framework Plan.
- 1.16 The Framework Plan accommodates committed developments at Marchmont Farm (DBC 19/02749/MOA) and Spencer's Park (DBC 4/02539/16/MOA, SADC 5/2016/2845 and associated applications including the reserved matters application for Spencer's Park Phase 2 East (DBC 24/01157/RES and SADC 5/2024/0927) which was submitted for consideration in May 2024).

Structure of the Report

- 1.17 This report is structured according to the stages of work undertaken to prepare the draft Framework Plan and Infrastructure Framework:
 - Chapter 2 provides an upfront explanation of the final Framework Plan;
 - Chapter 3 sets out the method for preparing the Framework Plan;
 - Chapter 4 Baseline Policy Review includes the baseline policy information that is being tested and used to inform the Framework Plan;
 - Chapter 5 provides a summary of the site context and analysis undertaken to help inform the design of the Framework Plan;
 - Chapter 6 sets out the spatial principles and conceptual thinking from the earlier stages of framework masterplanning;
 - Chapter 7 provides an account of the issues explored through the process;
 - Chapter 8 summarises the Framework Plan Scenarios;
 - Chapter 9 sets out a Draft Infrastructure Schedule to support the current Framework Plan scenario.

2.0 THE FRAMEWORK PLAN

Framework Concept Plan

- 2.1 The conclusions of the Framework Plan exercise are represented in the *Framework Concept Plan* (Figure 2), which is included in the DLPs. It adds a spatial dimension to the emerging policy framework by demonstrating the broad disposition of land uses across the Growth Area. It gives shape to neighbourhoods and the location and number of local centres, identifies key connections for different modes of travel, flags important heritage assets, confirms future green infrastructure including land expected to be retained in the Green Belt and valleys where surface water drains to, and confirms where noise attenuation adjacent to the M1 is anticipated.
- 2.2 A full account of the Concept Framework Plan and its constituent layers is provided in HGC's Framework Plan story report, which will form a component of an anticipated Supplementary Planning Document (SPD) for the wider HGC Programme Area. The HGC Framework and Transformation SPD will inform future design and masterplanning, planning applications and development delivery.



Figure 2: Framework Concept Plan (July 2024)

Masterplanning and Technical Work

- 2.3 The Concept Framework Plan is based on technical and masterplanning work undertaken to satisfy the objectives set out in paragraph 1.11 above, expressed as Framework Plan Scenarios. The methodology for that process is explained in Section 3 of this report.
- 2.4 In total, four scenarios (A-D) were considered through an iterative design process, with Scenario A-C considered first and Scenario D a further iteration. Scenario D has been identified by HGC, HCC, DBC and SADC as the most appropriate response to the Growth Area, taking account of the site characteristics, the emerging policy requirements and other Local Plan evidence. Noteworthy features of Scenario D are set out in the following paragraphs.

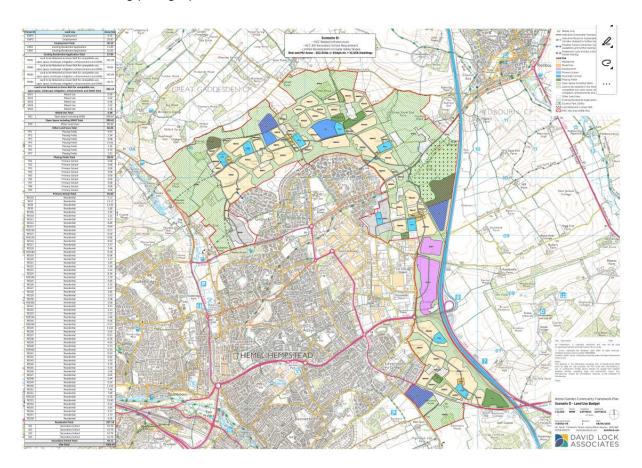


Figure 3: Framework Plan Scenario D (May 2024)

2.5 No development should occur on the Gade Valley slopes or to the east of the National Grid overhead powerlines, and a substantial green buffer to the northern and northeastern perimeter of the site is established to create a limit to built development which offers protection from coalescence with nearby rural settlements, protects the integrity of the adjacent landscape character and the Chilterns National Landscape.

- 2.6 Retention of the above land within the Green Belt, with the potential for landscape enhancements and/or use as SANG, secondary schools, playing fields and other open space, or continued agricultural use.
- 2.7 Land within this retained green space provides a substantial area of search to meet the SANG requirements arising from the Growth Area. SANG is required to mitigate the impact of new households on the nearby Chilterns Beechwoods Special Area of Conservation (CBSAC). It is complemented by further green space within and between neighbourhoods, which responds to the presence of surface water valleys on the site, the topography and landform, and other landscape features including blocks of woodland.
- 2.8 Areas best suited to playing fields and sports pitch provision to cater for formal and informal sport. The site has very few areas that are not undulating, and playing fields are located throughout the Growth Area, at points where recontouring can be minimised.
- Areas identified for built development (257.18ha) are defined by the landform and site features, generating a plan which is 'landscape led'. Within future built areas, and in line with emerging policy, an assumed average residential density of 40 dwellings per hectare has been applied to test the residential capacity of the site. In turn, this has informed the amount of open space and the level of school provision confirmed through the Framework Plan exercise. Utilising this average density, land has been identified for approximately 10,500 homes. It should be noted that no specific measure of possible future higher and lower density areas, nor the detailed consideration of specialist housing has been made during the Framework Plan exercise. There is a strong degree of confidence that the Growth Area can accommodate the level of planned growth (11,000 homes) along with appropriate levels of on-site mitigation.
- 2.10 The HGC Framework Plan has been prepared on the basis of the requirements of three 8FE secondary schools on 10.78ha sites to serve the Growth Area. The secondary schools are located to the north, north-east, and east of the Growth Area. Land is also identified to the south of the A4147 (outside the Growth Area) for a fourth secondary school to serve development in other parts of the HGC Programme Area. This arrangement will assist in balancing the provision of secondary schools across the town over the medium and longer term, ensuring easy access.
- 2.11 The HGC Framework Plan has been prepared on the basis of the requirements of eight primary school locations for the provision of 7 x three form-entry and 1 x two form-entry

- schools including early years provision. Primary schools lie at the heart of the neighbourhoods where pupils can walk to school.
- 2.12 Over the course of developing the Framework Plan, evidence which underpins the requirements for education need continues to be refined by Hertfordshire County Council. This is based upon the Pupil Yield Study which Hertfordshire County Council uses to assess expected yields from development based on data from development in Hertfordshire. The approach is set out further in the Pupil Yield Survey Methodology on Hertfordshire County Councils website². As the plans for this site continue to progress there is an expectation that education requirements would also move on taking account of pupil yield data and other external factors. Therefore, Hertfordshire County Council cannot confirm that circumstances will not change but will continue to work proactively with partners as the site develops.
- 2.13 Five local centres, located to serve their surrounding neighbourhoods and with regard to the location and accessibility of existing local centres and the range of services (including primary health care) currently on offer. HGC's intention is that new local centres complement rather than compete with existing centres, which are well used by and essential to those households living within their catchments.
- 2.14 An indicative route for a Sustainable Transport Corridor (STC), intended to afford access to and connect neighbourhoods, with priority given to sustainable modes. The alignment of the route follows the contours within the Growth Area to minimise cut and fill operations. However, the alignment of the route in the north-west of the site is subject to further detailed testing and consideration.

7

² Hertfordshire County Council Planning Obligations and developer infrastructure contributions

3.0 METHODOLOGY

Approach

- 3.1 The Framework Plan was commissioned through a public and private sector working arrangement between Hemel Garden Communities, Dacorum Borough Council, St Albans City & District Council, Hertfordshire County Council, The Crown Estate, Bloor, Pigeon Land and Kitewood.
- 3.2 The partnership represents a pooling of resources, knowledge and expertise to advance the planning of the Growth Area, as part of the wider transformation of Hemel Hempstead. Joint working has been key to the process.
- 3.3 A governance structure was put in place to oversee the process. Regular Framework Plan Steering Group meetings were held to direct the preparation of the Framework Plan and a Working Group ensured information and evidence could be shared with, and drawn from, a wider group of local authority officers and other key stakeholders. The Steering Group is chaired by the HGC Programme Director and is made up of representatives from each of the stakeholders listed in paragraph 3.1 above. The Working Group comprises representatives from each of the organisations and a consultant team appointed by the Framework Plan Steering Group.
- 3.4 The Growth Area straddles two LPA boundaries and multiple land holdings. The Framework Plan adopts a holistic view of the area and provides a single framework for growth. The work has been approached on an 'ownership blind' basis to achieve an optimum spatial / functional solution.
- 3.5 The framework planning exercise has informed the preparation of a site-specific infrastructure schedule (consistent with each Local Planning Authorities' Infrastructure Delivery Plan) to inform a coordinated approach to infrastructure delivery through individual planning applications, legal agreements and potentially, through cost sharing arrangements.

Themes

- 3.6 Throughout the process of developing the Framework Plan, three key themes have been used to structure discussions and aid design thinking. These are:
 - **Green & Blue Infrastructure:** landscape, water management, ecology and biodiversity and a network of open spaces including SANG;

- Transport & Movement: sustainable and active mobility, connectivity to the existing town, and approaches to handling and mitigating the impact of vehicle traffic; and
- Community Wellbeing: education, neighbourhoods, social infrastructure, community provision, heritage and other topics that make up the social fabric of a place.
- 3.7 Throughout the development of the Framework Plan a holistic approach to sustainability has been adopted, considering environmental, social and economic sustainability as an interlinked series of topics that play a fundamental role in the design and spatial layout of place.

Stages

3.8 The framework planning exercise has comprised four principal stages of work which have progressing in tandem with work on the DLPs: baseline informed by the draft local plans and constraints and opportunities mapping, framework masterplanning, iterative scenario testing taking account of further local plan evidence, and the infrastructure schedule, which has been subject to viability assessment.

HGC Framework Plan: Iterative Approach to Preparation

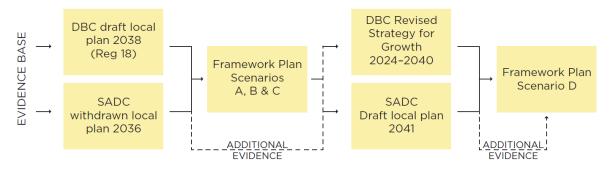


Figure 4: Approach to Framework Plan preparation

Baseline

- 3.9 The baseline stage involved the following tasks to get a full understanding of the constraints, opportunities, issues and potential options for consideration in the Framework Plan:
 - Review of draft policy requirements (including discussion on alternatives where relevant);
 - Review of Local Plan evidence base relating to the HGC context;

- Review of HGC Charter and Spatial Vision;
- Review of site studies:
- Constraints and opportunities mapping;
- Site visits to observe and understand the site features and characteristics;
- Technical stakeholder workshops;
- Liaison with utilities companies;
- Meetings with stakeholders to follow up issues raised at technical workshops.

Framework Masterplanning

- 3.10 Drawing from the findings at the Baseline stage, an initial growth concept plan was prepared and a corresponding series of high-level placemaking principles were generated in workshops run by HGC, related to the three key themes: green and blue infrastructure, community wellbeing and transport and movement.
- 3.11 Further exploration and evolution of the concept plan, guided by the high-level placemaking principles, to generate a first draft of the Framework Plan which established a clear spatial structure incorporating more refined thinking about the creation of walkable neighbourhoods, movement and connectivity and a green and blue infrastructure network.
- 3.12 The first Framework Plan indicated that in broad terms the Growth Area is capable of accommodating the level of planned growth. Subsequently it provided a vehicle for more extensive exploration of a number of issues. This included:
 - i. Gade Valley slopes work was undertaken to establish whether the Gade Valley slopes could be considered for built development given the proximity to and intervisibility with the Chilterns National Landscape, and DBC's existing policy restrictions relating to coalescence with Piccotts End.
 - ii. **Through movement** to examine the spatial requirements for improving modal share, options for connectivity with the Growth Area were explored, including whether an all vehicle connection between Leighton Buzzard Road and the A414 (as mentioned in the Hemel Garden Communities Charter) was likely to be beneficial or limiting in helping to achieve modal share.
 - iii. Connecting with existing Hemel Hempstead opportunities for active travel connections around the existing northern and eastern edges of Hemel Hempstead were examined in detail to gauge the extent to which active travel connections for onward travel beyond the Growth Area could be achieved.
 - iv. **Chiltern Beechwoods Special Area of Conservation (CBSAC)** in relation to planned growth, Natural England advised through the Habitat Regulations

Assessment (HRA) that the CBSAC was experiencing damage due to high visitor numbers. The proposed Growth Area lies within the Zone of Influence of the CBSAC, consequently, under the HRA it will be necessary for any development to mitigate its impact through the provision of SANG. As Suitable Alterative Natural Greenspace (SANG) will represent a considerable land take for a development of 11,000 homes, it became necessary for the Framework Plan to explore opportunities to accommodate this in addition to other types of public open space.

- v. Local centres review this study explored the potential for local centre facilities within the wider market context, taking into account existing nearby provision. This work helped to develop an understanding of the geographical location, and the general type and scale of local facilities which could be planned. It also informed the consideration of the most appropriate option for the location of health care provision in line with NHS requirements. A key consideration of the study was to examine the catchments of existing and proposed centre locations, with the aim of ensuring all future centres complement rather than compete with one another, and with existing local centres.
- vi. **Education requirements** The optimum location for the three secondary schools that would be needed to mitigate the impact of 11,000 new homes, and the potential to accommodate a fourth secondary school to provide further mitigation for additional growth in other parts of Hemel Hempstead. Work was undertaken to explore the catchments for each potential location, based on the potential for active travel.
- 3.13 Iterative design work to explore the potential outcomes from each of the listed issues led to three Framework Plan Scenarios (A, B and C). The scenarios are particularly helpful in understanding the impact of each issue on the ability of the Growth Area to deliver 11,000 homes and 10,000 jobs.
- 3.14 Subsequent to the Regulation 18 consultation in 2023, DBC and SADC commissioned further landscape studies to generate better understanding of the landscape sensitivities, particularly at the northern edges of the Growth Area. Findings from the North Hemel Hempstead Landscape Assessment, prepared by Hankinson Duckett Associates, helped to refine the northerly extent of built development, including the area of the Gade Valley

- slope. This evidence was a key driver in the further iteration of the Framework Plan, leading to the preparation of Scenario D.
- 3.15 Scenario D represents the agreed position between the parties. It forms the basis for the final viability assessment and the Concept Framework Plan which is carried forward into the DLPs and the future HGC Framework and Transformation SPD.

Infrastructure Framework & Viability Testing

- 3.16 A draft infrastructure schedule was prepared for each scenario. As the number of homes achievable in each Scenario differed, it was necessary to ensure that the appropriate level of infrastructure was calculated for each schedule, for example, a lower number of homes would require fewer primary school places and less green open space.
- 3.17 Cost estimates for each item of infrastructure were prepared by a quantity surveyor to inform the viability assessment.
- 3.18 A high-level approach to phasing up to 2050 was adopted, with more detail provided for the emerging Local Plan periods (to 2041) & funding sources for infrastructure considered (e.g. S106, CIL, external funding bodies, development cost).
- 3.19 The Infrastructure schedule will be subject to continual review and updates. At the time of writing, the Regulation 19 consultation for both Local Plans are soon to be underway and information and policy requirements are subject to updates. Future editions of the viability appraisal will be run.

Consultation and Engagement

- 3.20 Consultation activity has sought to gather evidence and input from a wide range of stakeholders to support the preparation of and grow understanding of the Framework Plan. This has included:
 - Technical stakeholder workshops at the baseline stage relating to green and blue infrastructure, access and movement and community wellbeing. Workshops invitees included officers from across the local authorities' departments, the Lead Local Flood Authority, the NHS, officers from statutory consultee organisations including Sport England and the Environment Agency, public transport operators, utility providers, Hertfordshire University, Herts & Middlesex Wildlife Trust, and Hertfordshire Fire & Rescue. The workshops facilitated the sharing of specialist and local knowledge, insights into the emerging DLP evidence bases, and an opportunity to discuss the spatial and infrastructure requirements arising from the Growth Area.
 - The Councillor Review Group (CRG) which is made up of elected representatives
 of HCC, DBC and SADC. Members were briefed at regular intervals on the
 progress of the Framework Plan within the context of the wider garden community
 initiative and provided with the opportunity to discuss the emerging ideas.
 - A Community Review Panel (CRP). The CRP is a group of individual members of the public selected from across Dacorum and facilitated through FRAME Projects (https://www.frame-projects.co.uk/) to provide community perspective and input into local projects. Members of the CRP were able to explain their experience of living, working and travelling around Hemel Hempstead, and provide insights uniquely from a community perspective to enrich the baseline stage of the Framework Plan.
 - The draft Framework Plan has also been subject to review by an independent Quality Review Panel (March 2022). This exercise was managed by Design South East (Home Design South East) at the request of HGC, and brought together independent experts in landscape design, transport planning, community planning, heritage and masterplanning. The role of the QRP is to provide independent advice to all parties about the direction and focus of the project and the progress to date, with the aim of achieving sustainable, well-designed places. The panel was

supportive of the approach being taken to the Framework Plan and made positive recommendations about how the work could be progressed at future stages.

- The HGC Delivery Board steers the HGC programme and comprises of an independent chair, key elected Members and Chief Officers representing the three local authorities, and a representative from Herts IQ / Herts IQ and by Homes England. The HGC Delivery Board received regular updates on the progress of the Framework Plan and other HGC activity. Board meetings provided an opportunity for the Board to provide advice and oversee progress under the agreed governance arrangements for HGC.
- 3.21 At the Regulation 18 stage, a draft Concept Framework Plan was included in the SADC draft local plan.
- 3.22 The Framework Plan suite of documents (including this evidence base report, the Concept Plan and Framework Plan story document) provides evidence to support the statutory consultation at the Regulation 19 stages of the local plans, and subsequent Local Plan examinations.
- 3.23 Any future SPD will be subject to statutory consultation.

4.0 BASELINE REVIEW

Overview

4.1 This chapter summarises the information used to progress the Framework Plan. New information has arisen during the framework planning process, which has been considered as appropriate.

HGC Charter (2018)

4.2 The Hemel Garden Communities Charter provides an insight into the strategic principles of the Garden Community, the aspirations for high-quality, innovative design, and the studies and plans, infrastructure improvements and the wider benefits planned for the town.

4.3 The themes are:

- Place and Design: HGC will respond to the pressing issues of social inclusion and climate change, provide economic opportunities, and take advantage of new and emerging technologies.
- **Engagement:** HGC will be developed through a partnership of existing and new communities, public agencies and the private sector.
- **Delivery:** The timely delivery of homes and supporting infrastructure will build communities, support a high-quality, sustainable and inclusive place.
- 4.4 Under these three themes sit nine place-making principles based on the TCPA Garden City Principles.
 - Connective Green Infrastructure
 - Transformative Mobility Improvements
 - Diverse Employment Opportunities
 - Vibrant Communities
 - Exemplary Design
 - Strong Corporate and Political Public Leadership
 - Empowering Communities
 - Innovative Approaches to Delivery
 - Active Local Stewardship

HGC Spatial Vision (2021)

- 4.5 The central guiding document for HGC is the Spatial Vision. It takes forward the TCPA and HGC Charter principles to provide a locally specific narrative and framework to guide strategic growth and the transformation of Hemel Hempstead and wider connections. This high-level, overarching document will guide all other masterplanning and design work for HGC. It has been adopted by both LPAs and HGC.
- 4.6 The Spatial Vision builds on Hemel Hempstead's strengths and explains how HGC will look and feel once the development and transformation is complete. It provides a framework of locally specific spatial principles to inform detailed masterplanning and further studies, and guide landowners and developers following the Dacorum and St Albans' joint Strategic (Sites) Design Guide. Additional Planning Guidance Documents (dacorum.gov.uk) / Strategic Sites Design Guidance
- 4.7 A series of maps and drawings have been produced to illustrate the vision, supported by best practice, local context, case studies, photography and indications of further guidance. The maps and drawings diagrammatically present different aspects of the Spatial Vision and the potential resulting built and green form. This includes visuals which draw attention to particular locations within Hemel Hempstead and the wider area as examples or to illustrate how a proposal could be developed.
- 4.8 The vision is support by four pillars, intended to reinforce the aspirations to promote healthy lifestyles and respond to the climate crisis:
 - Pillar 1 A green network: a network of green routes, travel and places will support
 healthy lifestyles, biodiversity, climate resilience, environmental sustainability and
 the wellbeing of local communities.
 - Pillar 2 Integrated neighbourhoods: a series of walkable neighbourhoods, connected to each other with individual distinct identities, exemplar design and sustainability standards, centred upon lively, inclusive local centres.
 - Pillar 3 A self-sustaining economy: innovation in sustainability, circular economy principles and digital connectivity will be key employment drivers in Hemel Garden Communities and provide a strong theme for the economic identity of the town
 - Pillar 4 Engaged communities: connected and engaged communities will be
 active participants in the transformation of Hemel Garden Communities. Cultural
 and heritage activity, public art, knowledge and skill exchange and enterprise will
 all play a role, now and in the long term.

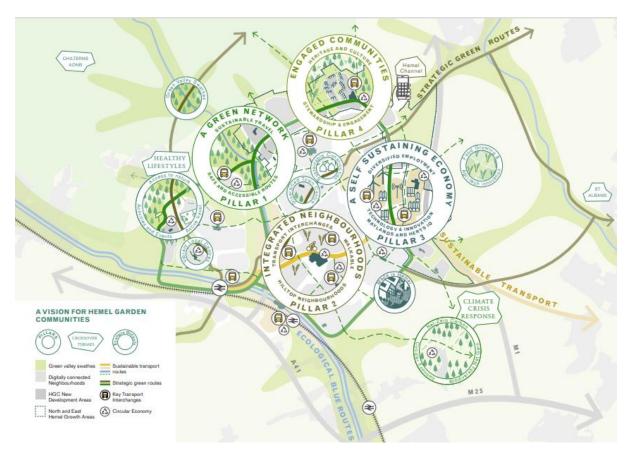


Figure 5: Spatial Vision diagram, Source: Spatial Vision (2021)

Local Plans

- 4.9 Dacorum Borough Council (DBC) consulted on the Dacorum Local Plan (Regulation 18) in late 2020 and early 2021. This consultation was on a plan for an 18-year period from 2020 to 2038. Between October and December 2024, DBC undertook a Regulation 18 consultation on a *Revised Strategy for Growth (2024-2040)*.
- 4.10 Dacorum's current development plan includes the Core Strategy (2013), Site Allocations (2017), and the Local Plan 1991-2011 (2004).
- 4.11 St Albans City and District Council (SADC) withdrew its Local Plan 2020-2036 Publication Draft 2018, which had been submitted to the Secretary of State on 29th March 2019. SADC undertook Regulation 18 consultation of a new local plan, which will replace the District Local Plan Review 1994, between July and September 2023.
- 4.12 For the purposes of the Framework Plan, the policies in the draft Dacorum Local Plan (Regulation 18) from 2020 and the withdrawn St Albans Local Plan 2020-2036 from 2018 provided the initial baseline. These were supplemented with further information/evidence and subsequent policy updates as they emerged. Appendix 1 of this report includes a full

summary of the evolution of the policy framework insofar as it is relevant to the process. A high-level account of the policy requirements accommodated in the agreed Framework Plan are set out below.

Allocations and Policy Requirements

4.13 A summary of the allocation requirements across DBC and SADC DLPs is shown in Figure 6 below, while Table 1 summarises the wider policy requirements.

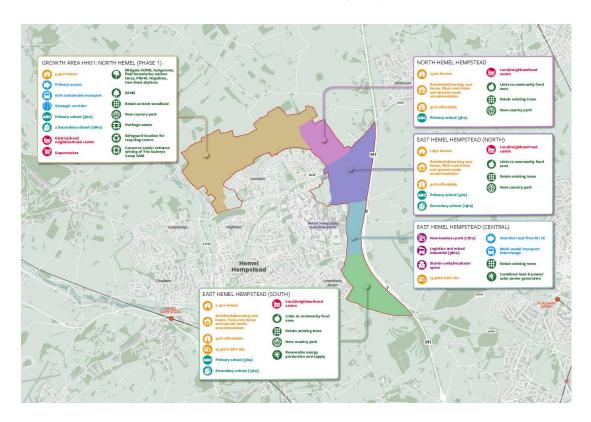


Figure 6: Summary of draft allocation requirements from 2023

Table 1: Summary of Policy Requirements

	SADC Draft Local Plan Policies from 2023 / 2024	DBC Draft Local Plan Policies from 2020 Regulation 18 - Key components
Dwellings	key components 5,500 (4,300 by 2041)	Around 1,500 homes (including provision for older people), subject to masterplanning. Around 3,500 dwellings to be delivered post 2040, subject to masterplanning.
Employment	 53 ha extension to Maylands Business Park comprising: 17 ha Business, Research and Development 36 ha logistics and mixed industrial areas. 	-
Country Park	[One country park and substantial green space] (hectarage not specified).	-
Gypsy and Traveller sites	Between 30-40 pitches	-
Strategic and local public open space including sports facilities, managed woodland and ecological network links.	Strategic and local public open space including sports facilities, managed woodland and ecological network links.	 Development will need to take account of and/or mitigate the following landscape sensitivities: The topography of the site with particular attention to those areas which are highly intervisible; areas which share characteristics with or create the setting for the Chilterns AONB; the setting of the historic settlement and conservation area of Piccotts End; the variation in landscape sensitivity within the parcel; conserving enhancing or restoring the hedgerows and field patterns and boundaries; conserving and enhancing the historic sunken lanes and PRoW; the vernacular, use of materials and setting of the existing farmsteads;

		 Retention of ancient woodland within the site; and the characteristic ridgelines and tree-lined skylines of the area.
Buffer zones to mitigate from motorway noise and air pollution and address the Buncefield oil depot and pipelines.	Buffer zones to mitigate from motorway noise and air pollution and address the Buncefield oil depot and pipelines.	-
Access and connectivity	Access and improvements to the Nickey Line, delivery of the HGC Green Loop and connection to Bunkers Park via Bunkers Lane.	 Development of the site should seek to achieve a 60% share of sustainable transport modes by 2050. Delivery of a strategic corridor route between Leighton Buzzard Road and Redbourn Road (via land in St Albans City and District Council);
Junction improvements	Land safeguarded for provision of active travel and cycle bridge across the A414 and access improvement associated with Junction 8 of the M1 Motorway. Land east of Junction 8 is safeguarded, in case it is required to come forward for junction improvements.	
Improve the understanding and setting of Aubreys Camp Scheduled Monument and the Nickey Line.	Improve the understanding and setting of Aubreys Camp Scheduled Monument and the Nickey Line.	Ensure the setting of the scheduled monument The Aubreys Camp to the east of the site (in St. Albans City and District Council) is conserved.
Minimise harm to setting and significance of listed buildings.	Minimise harm to setting and significance of listed buildings.	 Ensure the heritage assets at Piccotts End (including the Conservation Area, Listed Buildings and Scheduled Monuments) are conserved through appropriate landscape mitigation measures on land to be retained in the Green Belt. Investigate the effect of development on listed buildings within the site and ensure

		 that their setting is conserved and/or enhanced. Further guidance on how this can be achieved will be provided through the Masterplan. Retention of existing listed buildings within the site.
Improvements to Public Rights of Way.	Improvements to Public Rights of Way.	 conserving and enhancing the historic sunken lanes and PRoW;
Suitable Alternative Natural Greenspace (SANG).	Suitable Alternative Natural Greenspace (SANG).	Deliver Suitable Alternative Natural Greenspace (SANG) on-site to offset potential adverse effects on the Chilterns Beechwoods SAC arising from recreational pressure. The scale and form of this SANG will need to be agreed with Natural England in advance of the submission of an outline planning application.
Specialist housing.	 Five extra-care facilities comprising of 70-80 self-contained units in each facility Three 70-80 bed nursing home 16 supporting living units for people with disabilities 	
Primary Education	 Two 3FE Primary School inc. early years. One 2FE Primary School inc. early years. (ha not specified) 	Four new primary schools (3ha x 4).
Secondary Education	8FE secondary school. (ha not specified)	Two new Secondary schools (10.78³ha x 2).
Neighbourhood and Local Centres including commercial development opportunities.	 Two neighbourhood centres. Two local centres. (no floorspace limit specified) 	Create a network of new district/local/neighbourhood centres across the site, including retail and community facilities to serve the day-to-day needs of new and existing residents, and a medium or large supermarket if it is decided not to build this facility on site HH01.

³ The HCC representations on the 2023 DBC consultation confirmed the requirement for secondary school sites to be 10.78ha.

Remote working hubs within Local Centre	Remote working hubs within Local Centre	
Mobility Hub	Three mobility hubs.	
Medical Centre	Provision for 7 GPs	Provision for 6-7 GPs
Sports Hub	Sports Hub. (no floorspace / ha specified)	
Waste		Safeguarded land for a council depot and household waste recycling centre.
Additional Policies		
Affordable Housing	 40% on-site affordable housing with a tenure mix of the following: 30% social rented 30% affordable rented 40% affordable home ownership which includes 25% of all affordable housing as First Homes. 	40% affordable homes
Hemel Garden Communities Place Principles	[At least] 10% Biodiversity Net Gain (BNG). [HGC Growth Areas should exceed this target].	10% BNG
Self Build	3%	5%

Relevant Permitted Growth

4.14 There are two recently permitted schemes within the HGC site area: Spencer's Park Phase 2 and Marchmont Farm.

Spencer's Park Phase 2

- 4.15 Spencer's Park Phase 2 is split between Dacorum and St Albans districts and has outline planning permission. It connects the town, Maylands, Nickey Line and North and East of Hemel Hempstead Growth Areas and is adjacent to proposed strategic green routes, offering significant potential to contribute to active and sustainable travel. Spencer's Park will also include a community orchard and the largest Homes England Modern Methods of Construction (MMC) pilot which contribute to the HGC Programme's food growing and green economy objectives respectively.
- 4.16 The outline application is as follows:
 - '4/02539/16/MOA | Outline planning application to include up to 600 dwellings (c3), land for primary school (d1), land for local centre uses (a1,a3,a4,a5,d1,d2), land for up to 7,500 square metres of employment uses (b1,b2,b8), landscaping, open space and play areas, associated infrastructure, drainage and ancillary works, new roundabout access off three cherry trees lane, new priority junction off three cherry trees lane, new vehicular access to spencer's park phase 1 and an emergency access to the employment land off cherry tree lane. Detailed approval is sought for access arrangement only, with all other matters reserved'.
- 4.17 Subsequent conditions and amendments have taken place. The reserved matters application was granted in July 2021:
 - '21/01517/RES | Reserved matters application with details of Appearance, Landscaping, Layout and Scale comprising of 276 dwellings and associated works relating to application 4/02539/16/MOA (Outline planning application to include up to 600 dwellings (c3), land for primary school (d1), land for local centre uses (a1,a3,a4,a5,d1,d2), land for up to 7,500 square metres of employment uses (b1,b2,b8), landscaping, open space and play areas, associated infrastructure, drainage and ancillary works, new roundabout access off three cherry trees lane, new priority junction off three cherry trees lane, new vehicular access to spencer's park phase 1 and an emergency access to the employment land off cherry tree lane. Detailed approval is sought for access arrangement only, with all other matters reserved)'

There is a reserved matters application for Spencer's Park Phase 2 East reference (DBC 24/01157/RES and SADC 5/2024/0927) which was submitted for consideration in May 2024.

Marchmont Farm

- 4.18 Marchmont Farm, controlled by Homes England, was identified in the 2018 HGC bid to Homes England as falling within the HGC red line boundary and forming early delivery of the wider HGC proposals. As such, it will set the precedent for high quality design, although the scope for full contribution to the HGC vision is constrained by its more advanced stage of design and planning compared with the North and East Hemel Hempstead Growth Areas. As the gateway to the main HGC new development area, Marchmont Farm must also maximise the potential for sustainable and active travel north-south between the existing town and the North Hemel Growth Area.
- 4.19 The application for up to 350 homes and has resolution to grant. The description of development is as follows:

'19/02749/MOA: Outline planning for up to 350 dwellings, land for 5 gypsy & traveller pitches. Vehicular access from A4147, public open space including extension to Margaret Lloyd Park and associated landscaping, infrastructure and drainage. Detailed approval for access arrangements (Revised Scheme: Emergency Access Link to Laidon Square)'

5.0 SITE AND CONTEXT ANALYSIS

5.1 This section provides a summary of the main site constraints with respect to landscape, manmade features and access and movement. A summary of the opportunities insofar as they help shape to the main structural components of the Framework Plan is also provided. A full summary of the site and context analysis is provided in Appendix 2 of this report.

Landscape

- 5.2 The site is characterised by rolling fields, with broad shallow valleys where surface water drains to. Steeper sections rise from Leighton Buzzard Road (the Gade Valley slopes), around the northern perimeter of Woodhall Farm, and to the south of Redbourn Road, which limit the scope for development.
- 5.3 Long views out to the west and north from the Gade Valley provide visual links to the surrounding National Landscape. Views of Hemel Hempstead are restricted by the topography and tree planting in the northern part of the Growth Area, but Grovehill can be seen from nearby. To the south of Redbourn Road, Maylands industrial estate is highly visible due to the size of the buildings, and the M1 traffic can be clearly heard, highlighting the need for new measures to prevent noise disturbance. To the south of the A414, long views out are again restricted in places by tree planting, field boundaries and uneven terrain.
- 5.4 Views into the site from the surrounding countryside are particularly prevalent from the western slopes of the Gade Valley, and from some vantage points in the north. Visual and landscape assessments have, and will continue to be undertaken as the plans develop to ensure mitigation of any harm to surrounding countryside.
- To the east of the M1, there is potential for development to be visible from the Gorhambury Estate, and special regard will be paid to ensuring this is not harmful to the integrity of this important heritage asset.
- 5.6 The site is within the setting of the Chilterns National Landscape, which imposes a responsibility to carefully consider the form and limits of new development. A review of the boundary of the National Landscape by Natural England is underway. A variation order is expected to be sought from the Secretary of State in winter 2025.
- 5.7 The Chiltern Beechwoods Special Area of Conservation (SAC) lies a few kilometres to the northwest of Hemel Hempstead. To mitigate the potential impact on this habitat of additional recreation use by a growing population, Suitable Alternative Natural

- Greenspace (SANG) will need to be provided within the Growth Area, to the satisfaction of Natural England.
- 5.8 There are no permanent water features within the site. A number of dry valleys run through the site, draining the site towards the east and the River Ver. These dry valleys regularly transport surface water after heavy rainfall.

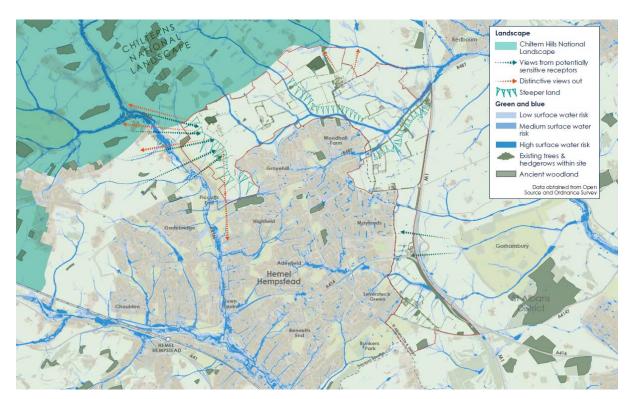


Figure 7: Landscape Features

Manmade Features

- 5.9 Whilst predominantly comprised of arable farmland, a number of historic and man-made features and activities have influenced the Framework Plan.
- 5.10 Sensitivities exist adjacent to Piccotts End, which is a conservation area with many listed buildings, and around several existing farm buildings. Many of the latter offer the opportunity to consider the creative re-use of heritage buildings as a cultural link to the Growth Area's history, and as focal places for community activity.
- 5.11 Several utility corridors cross the Growth Area. This includes underground gas pipelines crossing the northern part of the site in an east-west direction, and an oil pipeline running south to Buncefield Oil Depot. The Health and Safety Executive have imposed strict limitations on development on activities within identified 'safety zones'.
- 5.12 National Grid overhead powerlines cross the eastern most part of the Growth Area; the lines will remain as they are of national significance, and it is expected that they will inform the future extent of the Greenbelt, demarking the limit of new development.

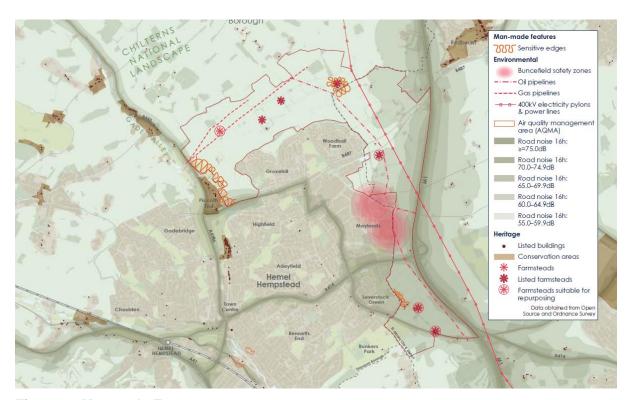


Figure 8: Manmade Features

Access and Movement

- 5.13 Several lanes and Public Rights of Way cross the site, forming a network of minor connections which should be used in the future for walking and cycling.
- 5.14 Opportunities to connect directly into nearby Grovehill and Woodhall Farm are limited because the boundaries to those neighbourhoods are formed by private back gardens. It will be important to capture those opportunities which do exist, and ensure they are woven into the movement network within the Growth Area to connect communities.
- 5.15 The Nickey Line is a former railway line that has been converted to a long-distance cycleway. It runs through the site at East Hemel Hempstead and can cater for longer journeys to Redbourn, Harpenden and Hemel Hempstead town centre. Easy access to the Nickey Line should be facilitated by adjacent development.
- 5.16 The Growth Area meets the existing highway network in several locations including the A4147 St Albans Road, Westwick Row, the A414, Green Lane, Hogg End Lane, Punchbowl Lane, Cherry Tree Lane and Three Cherry Tree Lane, B487 Redbourn Road, Holtsmere End Land, Cupid Green Lane, Dodds Lane, Link Road and B440 Leighton Buzzard Road. Some of these routes have the potential to provide principal access points into the site, whereas others can serve to enhance the network of quieter connections for walking and cycling. Punchbowl Lane, Hogg End Lane and Holtsmere End Lane each offer links to the countryside beyond the Growth Area, with opportunities for recreational access.

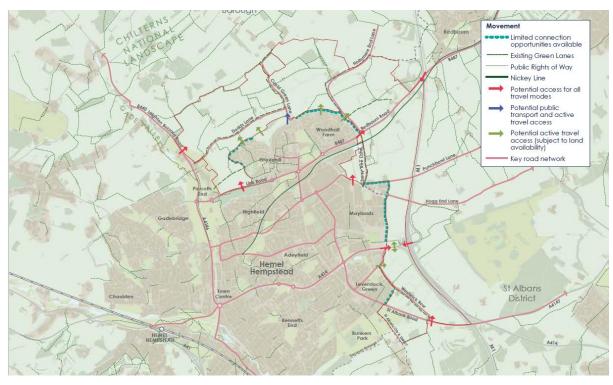


Figure 9: Movement & Access

Opportunities to Structure the Framework Plan

- 5.17 The design approach to the Framework Plan seeks to marry the physical features of the site and context with the wider aims and objectives of policy and the Hemel Garden Communities Spatial Vision. This process enabled the main structuring components to be identified to inform subsequent masterplanning, including:
 - Where and how the full ambition for a 'green network' might be achieved;
 - where and how connections can be created to help foster the ambition of creating 'one place' over time;
 - whether the Growth Area can accommodate the required quantum of development in clearly defined walkable neighbourhood units.

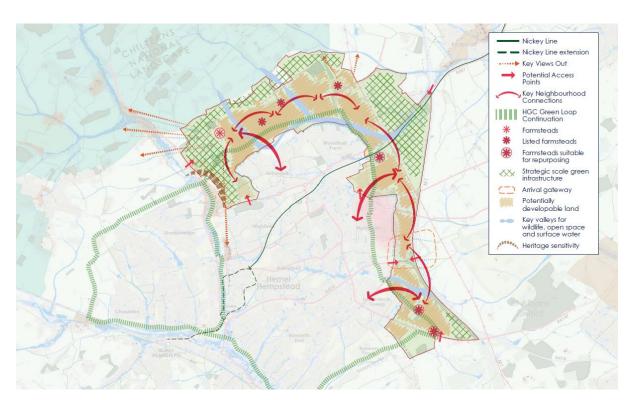


Figure 10: Summary of Structural Opportunities

6.0 SPATIAL PRINCIPLES & CONCEPTUAL APPROACH TO TRANSFORMATIIVE GROWTH

Spatial Principles

6.1 Collaborative working on the Framework Plan has generated a set of Spatial Principles which have informed the evolution of the draft Framework Plan over time and are expected to similarly inform masterplanning at the planning application stage.

Green & Blue Infrastructure

- Multifunctional Build a strong green and blue network which is multifunctional and comprises a variety of routes and environmental features that can provide a range of benefits for people, wildlife and places.
- People and Accessibility Develop an inclusive, attractive and integrated network
 of blue and green infrastructure across the Growth Areas to promote health and
 wellbeing, which is accessible to a wide range of people to help foster community
 cohesion with a connection to nature.
- Wildlife Movement The green and blue network should enable wildlife to move across the landscape, support ecosystem functions and protect and enhance habitats.
- 4. Landscape Character The siting and design of new neighbourhoods will follow the landscape-led approach of Hemel Hempstead's New Town masterplan, with development avoiding the green valleys and being placed on higher ground, whilst being sensitive to valued landscapes and views.
- 5. **Productive Landscapes** Build upon the existing network of productive landscapes to create opportunities to improve people's wellbeing and connection with nature. For example, community gardens, orchards and sustainable food production.
- 6. Long-term Management Create a resilient green network which is supported and enabled through long term stewardship, this should be explored at an early stage to ensure the management and maintenance arrangements and long-term funding requirements are set out from the start.
- 7. **Biodiversity Net Gain** The development sites within the Growth Area will aim to deliver Biodiversity Net Gain in excess of the 10% requirement.
- 8. **Play** Extend and enrich Hemel's existing network of varied play spaces throughout the green network including Hemel's existing adventure playgrounds.
- 9. Water Management The Growth Areas will consider a strategic and a local approach to sustainable water management, creating a healthy and safe water environment designed to increase resistance to flooding and drought.

- 10. SANG The Growth Area will provide Suitable Alternative Natural Greenspace (SANG) to the Chiltern Beechwood's SAC. This will be delivered upfront to create an attractive destination of a minimum size of 8ha per 1000 population and meet the quality requirements set out in Natural England's guidance.
- 11. **Park Provision** Provide a new 'principal park' as a key destination with a good range of facilities and connected by strong active travel routes to new and existing areas.
- 12. Climate Change Adaptation The green and blue infrastructure network will help to future proof communities to adapt to climate change challenges and help meet net zero carbon and air quality targets.
- 13. Urban Greening The Growth Area will provide and promote creative approaches to urban greening (e.g. street trees, living walls and green/brown roofs on nonresidential buildings) to reduce the heat island effect and provide sustainable drainage and habitat creation.
- 14. **Woodlands and Forests** Protect, enhance and expand important habitats such as woodland and chalk / acid grassland. Providing suitable buffers to development near to existing habitats such as ancient woodland where necessary.
- 15. Green Economy Design a high-quality green infrastructure network which adds social and economic value. These should be attractive to businesses and investors, create green jobs, support retail and high streets, and to help drive regeneration and prosperity.

Transport & Connectivity

- Connectivity Capture available opportunities to create active and sustainable connections between the Growth Area, its neighbourhoods, the existing town and nearby areas to support the delivery of One Place.
- Network of Transport Hubs A network of Transport Hubs will be provided with appropriate facilities to support modal share across the Growth Area and existing town. The relevant components parts of a comprehensive movement network should be delivered through each phase of development.
- Hierarchy of Transport Hubs There will be a hierarchy of Transport Hubs across
 the town, each ranging in scale and facilities related to the role it serves and
 designed to support the whole movement network and targets for modal share.
- One Place The Growth Area to the North and East of Hemel Hempstead require
 off-site interventions to support the delivery of the movement network and mode
 share targets.

- 5. **Walkable Neighbourhoods** New neighbourhoods will be walkable and designed so that local centres and facilities are normally within 15mins walk of residents.
- 6. **New Roads** New road infrastructure should be designed to only support necessary local rather than strategic journeys and include active and sustainable travel facilities to contribute towards the movement network.
- 7. **Transport Corridors** A Sustainable Transport Corridors will be provided across the Growth Area, connecting with and the wider town network to prioritise sustainable travel.
- 8. **Car Journeys** Journeys by private car to local centres and key destinations should be circuitous and take longer than by passenger transport, cycling and walking.
- Active Travel The active travel network within the new Growth Area should provide an even more comprehensive network than the wider town to enable delivery of modal share.
- Mass Rapid Transit Any Mass Rapid Transit system will be an integrated feature of the movement network to support modal share.
- 11. **Healthy Lifestyles** Build a strong, inclusive active travel network, which maximises opportunities for improved accessibility and health and well-being.

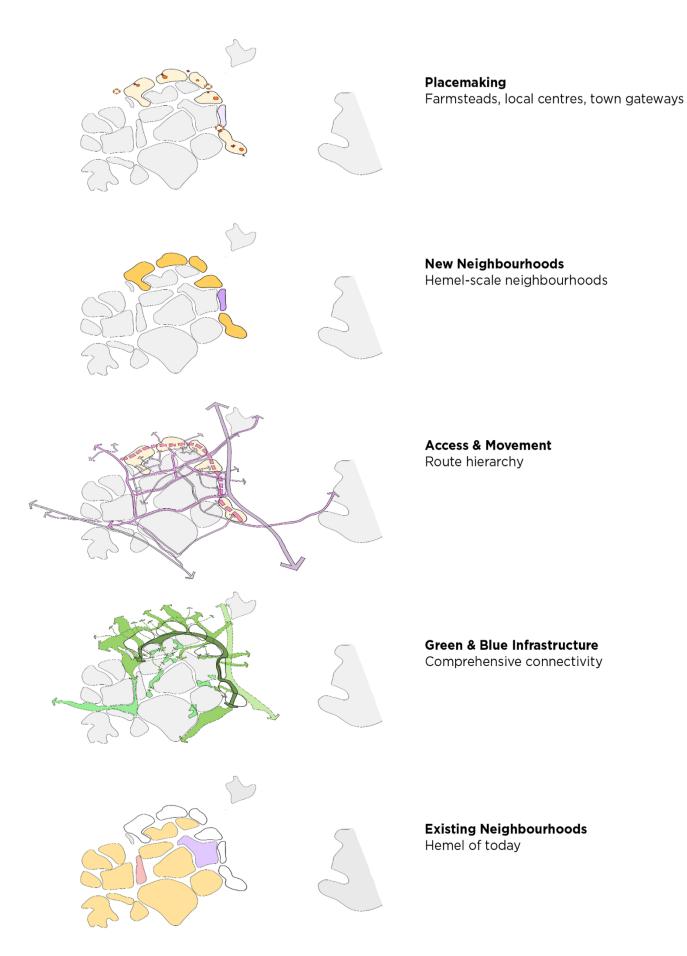
Community Wellbeing

- Hierarchy Create a hierarchy of local centres across the Growth Area, each related in scale, density, function and offer to: its place on the hierarchy; the size of the population catchment it serves; and its relationship to nearby local centres (complementing rather than competing).
- 2. Neighbourhoods Neighbourhoods will be inclusive communities designed with local centres at their heart, providing a range of housing in terms of size, tenure, character and live-work opportunities designed to support people from all socioeconomic and demographic groups, fostering community cohesion and social value.
- 3. Local Centres The form of new local centres should be designed to offer: a compact and relatively dense mix of uses; future flexibility and resilience; a range of services, facilities and employment opportunities; shared community, work, civic and cultural uses; visibly active ground floor uses; meaningful high quality public realm; a transport hub; childcare and primary schools.
- 4. **Health Provision** Health facilities should be in accessible locations, at the heart of a community and planned in co-operation with relevant health and care organisations.
- 5. **Education** Schools should make efficient use of land, be high quality and adaptable over their lifetime and designed in compliance with government guidance.

- They should be appropriately located to maximise sustainability and provide wider benefits to the community through shared use of facilities.
- 6. Connectivity Existing local centres should be prioritised for increased accessibility to and from the Growth Area by active and sustainable modes. Development opportunities should be harnessed to support and regenerate existing local centres and avoiding competing or undermining them.
- 7. **Character** Create neighbourhoods that respond to the specific constraints and opportunities of each site and nearby neighbourhoods, in order to create places with their own local character and distinctiveness.
- 8. **Heritage** Existing heritage assets should be used to help emphasise the character and form of new development linked to local history and a place identity.
- 9. Healthy Living New communities should have access to a range of sports and leisure opportunities for people to be active and socially engaged as part of their daily routine, improving the physical and mental health of its citizens.
- 10. Community Community assets within the new local centres should be designed to be flexible, of a high quality and help to support well-being or social value for workers and visitors. For example, community centres, parks and open space, or sports centres.
- 11. **Stewardship** Ensure open spaces and community assets are explored at an early stage so that the management and maintenance arrangements and long-term stewardship funding requirements are set out from the start.
- 12. **Innovation and Enterprise** The new commercial area should be designed to support the economic ecosystem and supply chains across the area, including with the rest of Maylands. It should be designed to provide the types of buildings, facilities and spaces to foster innovation, enterprise and relationship building between a wide range of business, higher education and other institutions.
- 13. Commercial Uses The commercial area should provide public realm, open spaces and other amenities and support facilities connected to the green network and sustainable transport opportunities to create a high-quality place that can attract businesses and employees in the target.

Growth Concept

The principles, together with the understanding of the site constraints, the wider context and structural opportunities set out in Chapter 5, have guided the conceptual approach to the growth of Hemel Hempstead. The conceptual diagrams shown here bring together several layers in a complementary way, recognising the importance of growing the town in a manner which responds to the Spatial Vision, builds on the legacy of the original Jellicoe masterplan, and lays the foundations for transformation and the delivery of 'One Place'.



- Existing neighbourhoods: understanding the structure, layout and character of the neighbourhoods of today
- New neighbourhoods: creating new Hemel-style and Hemel-scale neighbourhoods, based on the New Town principles
- Placemaking: identifying farmsteads, local centres and town gateways as distinctive anchors of new places
- Access & movement: a clear route hierarchy that prioritises active and sustainable networks
- Green & blue infrastructure: comprehensive connectivity for nature and people
- 6.3 When brought together, these layers informed an initial growth concept for Hemel Garden Communities.

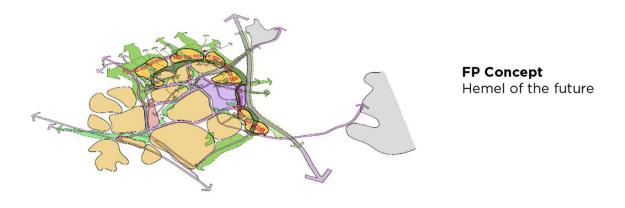


Figure 11: Early Concept Framework Plan

7.0 EXPLORING KEY ISSUES THROUGH THE FRAMEWORK PLAN

Overview

7.1 The Framework Plan process has enabled a number of notable issues to be explored and tested through a process of iterative engagement with local authority and landowner stakeholders, with specialist support from outside agencies where appropriate, leading to a more robust outcome.

Green & Blue Infrastructure

Chiltern Beechwoods and SANG Provision

- 7.2 The requirement to provide Suitable Alternative Natural Greenspace (SANG) to mitigate the impact of growth on the Chiltern Beechwoods Special Area of Conservation (CBSAC) represents a major consideration for the Growth Area. Through their Discretionary Advice Service (DAS), Natural England have confirmed that SANG should be planned for at a minimum rate of 8ha per 1,000 population. Utilising an average household size of 2.4 people, an 11,000 dwelling development would generate a requirement for 211 hectares of SANG almost one quarter of the Growth Area.
- 7.3 Natural England has published criteria for SANG design, access and management with the intention of providing places which attract users and visitors instead of using nearby CBSAC. This includes providing for circular walks of at least 5km, areas which are suitable for dog walking, 'destination' SANG with additional facilities such as a café, good quality visitor infrastructure including clear footpaths and way-marking, and a semi-natural character.
- 7.4 Exploration of the SANG potential was undertaken through pro-active engagement with Natural England through their Discretionary Advice Service (DAS). Two site visits and two workshops were held as part of an iterative design process to identify suitable locations for different types of SANG.
- 7.5 Given the scale of the land area needed for SANG, additional land under the control of the four participating landowners/promoters, beyond the initial Growth Area boundary, was brought into consideration as part of this exercise, with the aim of securing appropriate levels of SANG.
- 7.6 The exercise concluded that it is possible to achieve 211 hectares of SANG on land under the control of the participating landowners (i.e. it can be regarded as deliverable), selecting land from a larger 'area of search'. Based on the early concept planning, Natural England

have provided positive confirmation of their 'in principle' support. Natural England have identified the Growth Area as an opportunity to deliver a wide variety of SANG spaces to meet varying needs, and to offer scope for innovation in view of the scale of the SANG opportunity, which is unique within England to date.

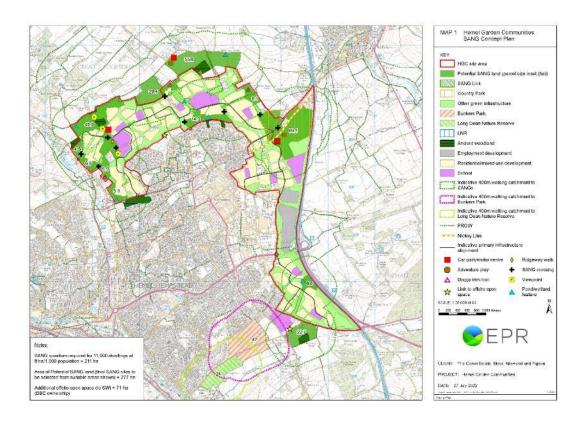


Figure 12: Early SANG Concept Plan (July 2022)

North Hemel Hempstead Landscape Assessment

7.7 Subsequent to the DAS process, evidence from the North Hemel Hempstead Landscape Assessment (NHHLA) has assisted in establishing the future limit of built development, including in relation to the Gade Valley slopes. Informed by the NHHLA, it was agreed that land beyond this limit, around the periphery of the Growth Area, is proposed to be retained in the Green Belt. Some land may be retained in countryside use or could be subject to enhancement, and some could be used as SANG. Coupled with potential SANG locations between neighbourhoods, an extensive area of search for SANG has been identified through the Framework Plan, giving confidence about the ability to mitigate the impact of development.

HGC Programme Area Green and Blue Infrastructure Concept

7.8 The landscape and green infrastructure has been a key driver of the Framework Plan, shaping the disposition of open space, access and development. The concepts of a Green

Network set out in the Spatial Vision, including the Green Loop have been considered throughout. The Green and Blue Infrastructure concept for the wider HGC Programme Area is shown below. It is aligned with the Framework Plan.

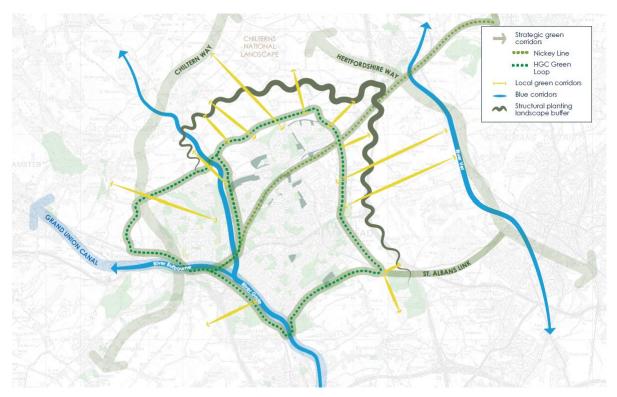


Figure 13: Green and Blue Concept diagram (2024, Source: HGC Framework Plan Story document)

Testing Open Space Typologies

7.9 Figure 14 represents the process of testing the potential of the site to accommodate the open space typologies required by the emerging DLPs. It predates input from Natural England about SANG requirements. The layout and distribution responds to the general characteristics for each typology, considering topography, ecological and recreational amenity, proximity to existing and new neighbourhoods and location within the wider HGC. Open spaces reflect the multi-functional approach set out in the HGC Charter, integrating amenity, recreation, movement, habitat provision and management of surface water flows holistically.



Figure 14: Testing Open Space Typologies



7.10 The open space network is anchored by a series of valleys between neighbourhoods, in line with Hemel Hempstead's Jellicoe master plan. These will play an important role in management of surface water as well as movement. This thinking is illustrated in the diagram at Figure 15.



Figure 15: Concept for Sustainable Urban Drainage (SuDs)

Gade Valley

- 7.11 In the northwest of the site, the high plateau area slopes down to the valley bottom of the River Gade. This part of the site is quite distinct from the rest of the Growth Area, in that it drains to the west (the Gade) rather than east to the Ver. It has some visual connectivity into Hemel Hempstead's town centre, and it is visually exposed to the north, west and south, including with views into the Chilterns National Landscape.
- 7.12 These slopes sit above the village of Piccotts End, which sits above the flood plain of the Gade. Piccotts End is protected by a Conservation Area and has a large number of listed buildings. The slopes are intermittently visible from the village, although due to the topography of the area they are more visible from some locations at a longer distance than from the village.
- 7.13 The southern part of the slopes form part of a gap between Piccotts End and the rest of Hemel Hempstead, creating a physical separation between these settlements.
- 7.14 The slopes have a mix of gradients between 1:12 to 1:30. Such gradients would require bespoke layout and masterplan solutions to ensure deliverability and access, as well as make the most of the unique landscape context.

- 7.15 As a result of these considerations, it is clear that there is significant sensitivity to development on these slopes. Early testing of any development potential was informed by a Landscape and Visual Impact (LVI) Capacity Assessment to determine key considerations and potential areas where sensitively designed development could be accommodated, and what capacity the landscape has for accommodating development without significant detriment.
- 7.16 Based on stakeholder discussions, the Framework Plan Scenarios considered two scenarios for this area:
 - No development on these slopes, and
 - Limited development in line with the findings of the landscape and visual assessment.
- 7.17 Further, more rigorous assessment through the NHHLA determined that development on the slopes would have a detrimental impact on the Chilterns National Landscape, and consequently, the final Framework Plan excludes any development in this location.

Transport & Connectivity

Sustainable Travel Corridor options

- 7.18 The draft policies set out a requirement for a link between the A414 in the vicinity of J8 of the M1, and the northwest of the site, either the Leighton Buzzard Road or Link Road. In addition, a connection between the A414 and A4147 towards St Albans is required to support the south-eastern allocation.
- 7.19 The nature of this link, and how it can support the sustainable mobility ambitions of HGC, has been a key consideration for the Framework Plan exercise. In tandem with the HGC Transport Strategy and Vision, several options were considered to refine thinking about the nature of this link, with regard to the following lines of inquiry.
 - Does the option help to achieve the modal share goals of set out in the policy baseline?
 - Does the option contribute to achieving sustainable transport goals?
 - Does the option help to achieve fundamental social and environmental goals?
 - Is the option likely to be viable and deliverable?
 - Will the option deliver the Pillars of the Spatial Vision as envisaged?

• What are the impacts of the option on existing communities?

7.20 Five options were prepared to support discussion with stakeholders.

Option	Diagram	Description
Local Links		A continuous but indirect street route running through the Growth Areas, connected to the existing network for vehicles at limited points.
No Through Route – two breaks		As Local Links above, but with breaks for vehicle movement at two points in the northern part of the site. Active travel and public transport would not be affected.
No Through Route – one break		As Local Links above, but with breaks for vehicle movement at one point in the northern part of the site. Active travel and public transport would not be affected.
Inner Spine Road		A strategic vehicle route running in some places through the middle of the Growth Areas as a spine road, and in some places around the edge of the Growth Areas, connecting the A414 and Leighton Buzzard Road. Anticipated design speed would be 40mph.
Outer Bypass		A strategic vehicle route running around the edge of the Growth Areas, connecting the A414 and Leighton Buzzard Road. In the east, options exist for running the road to the east or west of the M1. Anticipated design speed would be 40mph.

For the purposes of the Framework Plan each of these options was assessed against a range of high-level social and environmental policy goals.

Category	Criteria	Local Links	Inner Spine Road	Outer Bypass	No Through Route 1	No Through Route 2	Comment
Deliverability	Viability			ĺ			Although no detailed costs have been gathered the Inner Spine Road and Outer Bypass would cost significantly more than the other options.
	Phasing/timing						The Local Links options would provide more flexibility for delivery due to multiple access points. The Inner Spine Road and Outer Bypass, due to their scale, would have a negative effect on the phasing and timing of the development.
Environmental	Natural environment						The Inner Spine Road would impact the civic park, and the Outer Bypass would have a severing impact on wildlife corridors.
	Built environment						The Local Links and no through route options would have a positive effect on the built environment as road network would not affect the existing built environment. Heritage assets would also have minimal impact. However, the Inner Spine Road would sever the existing built environment and the Outer Bypass would potentially impact negatively on Holtsmere End Farm.
	Land consumption						The Local Links and no through route options would all have a positive impact as they would provide for the minimum use of land for the route; the Inner Spine Road and Outer Bypass, in contrast, would use more land and therefore be a negative outcome.
	Amenity						The Inner Spine Road and Outer Bypass are similar in that they provide for extra roads for increased amenity impacts in contrast to the Local Links and no through route options.
	Climate change						The Inner Spine Road and Outer Bypass are similar in that they would provide more greenhouse gas emissions and adaptation to climate change when compared with the contrast to the Local Links and no through route options.
	Resources						The Inner Spine Road and Outer Bypass would use more resources due to the nature of the routes whilst the Local Links and no through route options would use less resources.
Policy	Housing						The Inner Spine Road and Outer Bypass would potentially impact on meeting the 11,100 homes requirement.
	Employment						Land is provided to meet the employment land target.
	Open space			Ü			Land is provided to meet the open space targets.
	SANG					0	The Inner Spine Road and Outer Bypass would potentially impact on the proposed SANG area.
	Community facilities						Community facilities are identified to meet the policy requirements.
	Education			1		4	Education facilities are provided to meet the policy requirements.
	Transport						The Inner Spine Road and Outer Bypass provide for more road space which would incentivise more trips by private vehicles. The other options would provide a positive outcome to meeting the modal share targets; however, the Local Links would be better for meeting the 40% and worse for the 60% target, and the No Through Route 1 would be better for 60% target (more incentives for less car movement) and worse for 40% (due to adding more cars on existing network). Detailed design and modelling would provide more clarity on how the options fare in relation to the modal share targets.
	Biodiversity			1	71		At this stage in the Framework Plan, it is not clear how biodiversity targets will be met.
Social	Community	5					The Inner Spine Road and Outer Bypass would provide a negative outcome due to the route severing access to existing neighbourhoods.
	Health						The Inner Spine Road would result in a negative outcome to the green corridor that runs through the site, and the Outer Bypass would make it more difficult to access the countryside beyond the development.

Significance	Description	
	Positive outcome	
	Neutral outcome	
	Not clear/not relevant	
	Negative outcome	

Figure 16: Assessment of STC Options (2022)

- 7.21 Following this assessment and detailed engagement with Hertfordshire County Council and other stakeholders, the options were narrowed down to 'Local Links' or one of the 'No Through Route' options. The preferred approaches point towards the provision of a 'Sustainable Travel Corridor' (STC), which facilitates access to development but limits through movement. This could potentially be achieved either through breaks in the STC for vehicles or through bus priority at strategic locations.
- 7.22 These findings informed ongoing discussion about how the Framework Plan can best be structured to support the HGC Transport Strategy and Vision. It does not pre-determine the outcome of any other work which may be undertaken separately by HGC and HCC in relation to transport planning.

Aligning with the HGC Transport Strategy & Vision

- 7.23 The HGC Transport Strategy & Vision⁴ considers Hemel Hempstead and its new Growth Area as a single network designed to deliver more sustainable travel choices in the future. This includes:
 - A Key Network connecting origins and destinations across the town.
 - Identifying potential points of connection between the Growth Area and the existing built-up area of Hemel Hempstead; and
 - Local Networks to provide connections between local places.

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⁴ HGC Transport Vision % Strategy for 2050 – Executive Summary (2024)

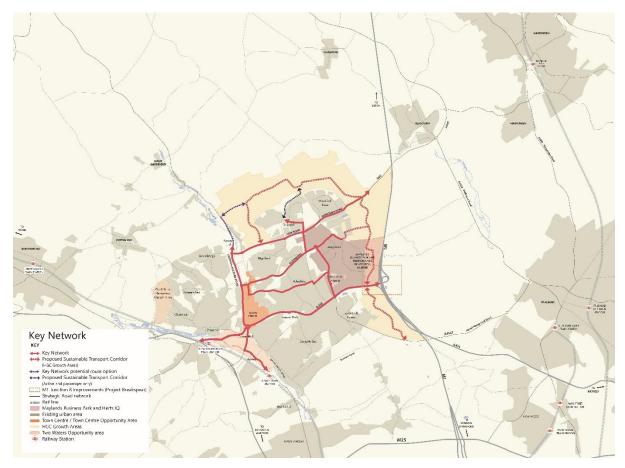


Figure 17: Key Network (Source: HGC Transport Vision Strategy, 2024)

- 7.24 The Key Network includes the Sustainable Transport Corridor (STC) which is a proposed circumferential route through the HGC Growth Area. The STC includes opportunities for future public transport network, which was also be integrated into the wider network. The STC is supplemented with radial connections towards the town centre, Maylands and the rest of Hemel Hempstead. Future bus routes could run the full length of the STC, or could use a portion of it, serving one or two neighbourhood centres and then connecting into the rest of the town at one of the main access points.
- 7.25 The STC could have fully segregated public transport provision along its entire length, or it could make use of junction prioritisation measures at key locations, with private vehicle traffic taking a more circuitous route, in order to encourage the use of more sustainable travel modes.
- 7.26 The STC in the southeast should make provision for the introduction of Hertfordshire Essex Rapid Transit (HERT) at a future date, which could be achieved through junction prioritisation measures.

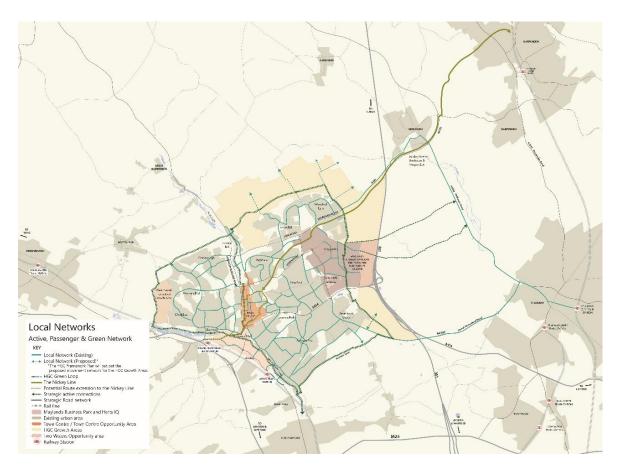


Figure 18: The Local Networks (Source: HGC Transport Vision & Strategy, 2024)

- 7.27 Consideration of a future active travel network indicates the potential for comprehensive local connectivity within the Growth Area, and connectivity to adjacent neighbourhoods and onward networks.
- 7.28 A range of different route typologies have been considered, each with a different role in the overall network:
 - Key Active and Sustainable Corridors: primary pedestrian and cycle routes, segregated from vehicles, extending along existing and proposed structural streets. These could be supplemented by Local Active Travel Networks, segregated active travel routes (as appropriate) along streets within development.
 These networks together could form the primary 'utility' active travel network.
 - Quietways: retained existing country lanes, with vehicle traffic reduced to access only, providing quiet and green connections.
 - **HGC Green Loop**: a connected green loop wrapping around the existing edge of Hemel Hempstead, providing an active travel corridor. This would be closely linked to the green infrastructure strategy set out in the previous section.

- Active connections to St Albans: potential for enhanced active travel provision on rural lanes running east under the M1, connecting to a potential Redbourn to St Albans cycleway along the A5183
- Greenways: a comprehensive web of leisure routes, including existing and extended public right of ways, linking through the Growth Area to the existing neighbourhoods of Hemel Hempstead and to the surrounding areas of countryside. These are primarily located within open space and would be fully segregated from traffic.
- The Nickey Line: a strategic active travel connection along a former railway line from Redbourn running close to the town centre of Hemel Hempstead. Greenways and other active travel networks will be designed to connect with this route.
- 7.29 An essential part of delivering sustainable travel choices and ensuring that new development will integrate effectively with the rest of Hemel Hempstead, is identifying connection points for different modes of travel, and what onward routes are needed to key destinations.
- 7.30 Despite the site having a border of over 8km with the existing settlement, there are comparatively few points connections can be achieved. This is primarily due to land ownership patterns and impermeable edges (such as the backs of houses or industrial facilities like Buncefield Terminal). Many of the existing roads that cross or border the site are rural lanes, which have been identified by HGC as future active travel links.
- 7.31 Through the site analysis, a full assessment of the existing edge conditions of the site has been undertaken to ascertain their suitability for different travel modes (vehicles, public transport, active travel).
- 7.32 Choices exist for connecting public transport and private vehicles (general traffic), primarily in the northern part of the site within Dacorum Borough.
- 7.33 For public transport access, the primary options accommodated within the Framework Plan are:
 - Access from Woodhall Farm or Grovehill. This can be either through adaptation
 of Cupid Green Lane, or through a new link delivered on the edge of the existing
 Grovehill Playing Fields.
 - Access to the northwestern part of the site from Hemel Hempstead town centre.
 This could be delivered either through a new road linking down to the Leighton
 Buzzard Road, or through a connection into the adjacent Marchmont Farm

development and onto Link Road, currently being progressed through the planning application process, or through both routes.

- 7.34 For general vehicle traffic careful consideration will need to be given at the planning application stages to ensuring that public transport retains priority over private vehicle transport, through prioritisation measures and ensuring the corridors and junctions are designed appropriately.
 - 7.35 A network of potential Mobility Hubs can be located within and between local centres.

Community Wellbeing

Neighbourhoods and Local Centres

- 7.36 The Framework Plan identifies scope for five distinct neighbourhoods, each with a recognisable centre providing a focus for community activity, local shops and services, schools, access to public transport and transport hubs and neighbourhood employment.
- 7.37 The HGC Spatial Vision sets out an ambition to build upon the New Town heritage of strong local centres within Hemel Hempstead, with new neighbourhoods anchored by such centres while ensuring that existing centres are strengthened by additional catchment, and not affected by competition.
- 7.38 The Framework Plan has carefully considered the location and catchment of neighbourhoods and their centres to ensure they serve their immediate homes within easy walking and cycling distance, but also remain accessible from other nearby centres and neighbourhoods. This has resulted in draft proposals for:
 - Five new full-size neighbourhoods.
 - Neighbourhoods with distinctive landscape characters and formed within GI networks.
 - Centres could be varied in form and context, from linear to nucleated, depending on context.
 - Links to existing neighbourhoods to strengthen existing local centres.

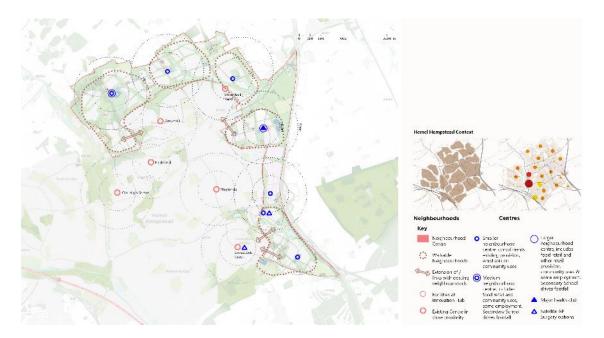


Figure 19: Early exploration of neighbourhoods and local centres (2022)

- 7.39 Provision within existing Hemel Hempstead neighbourhoods is largely good but would not support additional development on the scale proposed. Deficiencies exist for example at Maylands Avenue Local Centre, where there is no GP practice.
- 7.40 Mapping catchments for new and existing centres identified where there is potential to overlap. GIS isochrones map accessibility by planned streets and active travel connections to build an understanding of the scale of functional catchments and the accessibility of centres by bicycle and on foot. New local centres are located to minimise overlaps to avoid competition between centres.

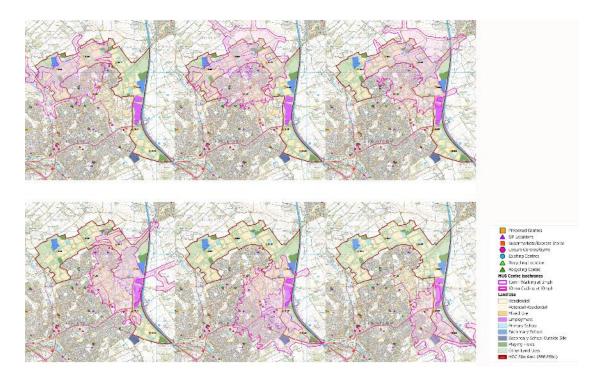


Figure 20: Exploring local centre accessibility (isochrones)

Education Provision

7.41 In line with the draft policy position, locations suitable for schools to meet HCC's initial site requirements are set out. Schools have been treated as a key placemaking ingredient, and their location has been carefully considered as part of the overall design of neighbourhoods. Locational characteristics are described below.



Figure 21: Exploration of school locations and catchments

Primary Schools

- Two locational typologies co-located with local centres, and 'in-between' neighbourhoods
- Playing fields typically located within wider GI network
- All accessible by public transport and active travel for parents' onward journeys

Secondary Schools

- Co-located with major local centres
- Located with playing fields as part of countryside edge
- Located on public transport nodes and network, and active travel nodes for student access

Further/Higher Education opportunities

- Opportunity for learning building as part of HertsIQ innovation hub
- Links to Rothamsted, BRE and wider institutions enabled by public transport

Conclusion

7.42 The exploration of issues set out above added rigour to the Framework Plan outputs and enabled the testing of the four Framework Plan Scenarios. Scenario D is explained in Chapter 2. Scenarios A, B and C, which have not been carried forward, are explained in the next Chapter.

8.0 FRAMEWORK PLAN SCENARIOS

Overview

8.1 The Framework Plan scenarios encompass the testing of alternatives, driven by the considerations and issues described in the previous chapters, to understand their impact on the residential capacity of the site. To an extent, the Scenarios acted as a 'stress test' for the full emerging policy framework and to draw out discussion and opinion with key stakeholders. Scenarios A, B and C predate the North Hemel Hempstead Landscape Assessment (NHHLA) work, and therefore only Scenario C demonstrates no development on the Gade Valley slopes.

Framework Plan Scenarios

Scenario A

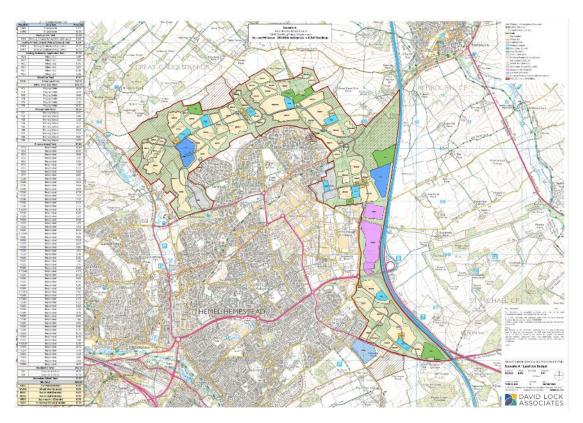


Figure 22: Scenario A (2023)

- 8.2 Scenario A represents a "maximum homes" option, which deliberately aims to achieve 11,000 dwellings in order to test its practicability. To achieve this, the following have been included:
 - Development is accommodated on the Gade Valley slopes.
 - A small parcel of development located to the east of the line of electricity pylons north of the Redbourn Road.

- Two 13ha secondary schools within the site, and one outside in the southeast
 utilising additional land. This indicates that a fourth secondary school to mitigate
 the impact of development elsewhere in Hemel Hempstead would be sited in
 another location.
- Potential SANG land accommodated within and outside the Growth Area boundary.
- 8.3 This development scenario results in an overall residential development land area of 288.66ha, with a capacity for 11,547 dwellings at the policy average density of 40 dwellings per hectare (dph).

Scenario B

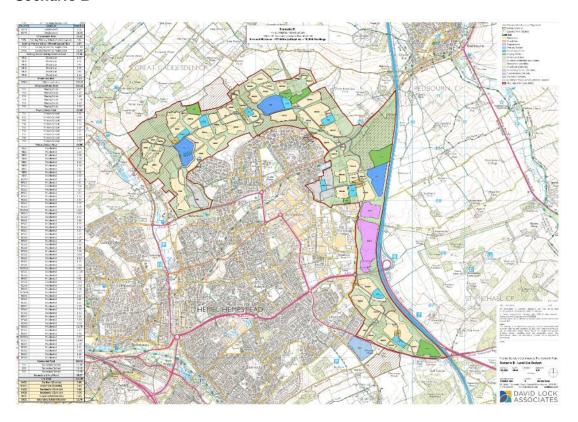


Figure 23: Scenario B (2023)

- 8.4 Scenario B is the median scenario. It examines what housing number is achievable in the event that the fourth secondary school is included:
 - Development is accommodated on the Gade Valley slopes.
 - Three 13ha secondary schools within the site, and one outside in the southeast.
 - Potential SANG land accommodated within and outside the Growth Area boundary.
- 8.5 This development scenario results in an overall residential development land area of 272.60ha, with a capacity for 10,904 dwellings at the policy average density of 40

dwellings per hectare (dph). This is slightly short of the 11,100 dwellings requirement of the draft policies being tested.

Scenario C

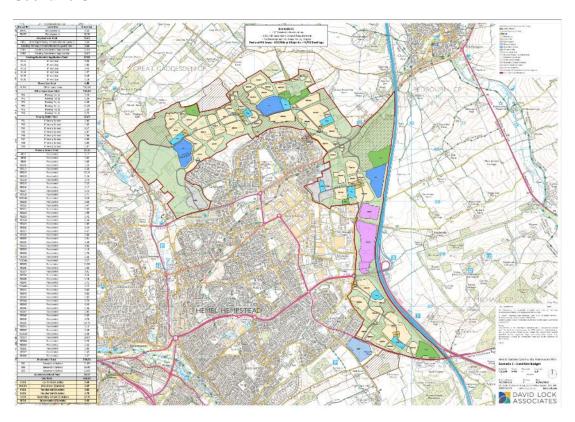


Figure 24: Scenario C (2023)

- 8.6 Scenario C is a "minimum homes" scenario. It examines the residential unit capacity in the event that four secondary schools are provided and no development is accommodated in the Gade Valley slope due to potential visibility from the Chilterns National Landscape. In summary, this Scenario includes:
 - No development accommodated to the west of the Gade Valley ridge.
 - Three 13ha secondary schools within the site, and one outside in the southeast.
 - Potential SANG land accommodated within and outside the Growth Area boundary.
 - 8.7 This development scenario results in an overall residential development land area of 243.31ha, with a capacity for 9,732 dwellings at the policy average density of 40 dwellings per hectare (dph). This is short of the 11,100 dwellings requirement of the draft policies being tested.
 - 8.8 Due to the reduced number of homes, this scenario omits one 2FE primary school from the total provision and reconfigures the location of the north western neighbourhood centre to make it more accessible.

8.9 The findings of Scenarios A, B and C indicated the importance of further testing to accommodate new evidence, in particular the North Hemel Hempstead Landscape Assessment.

Scenario D

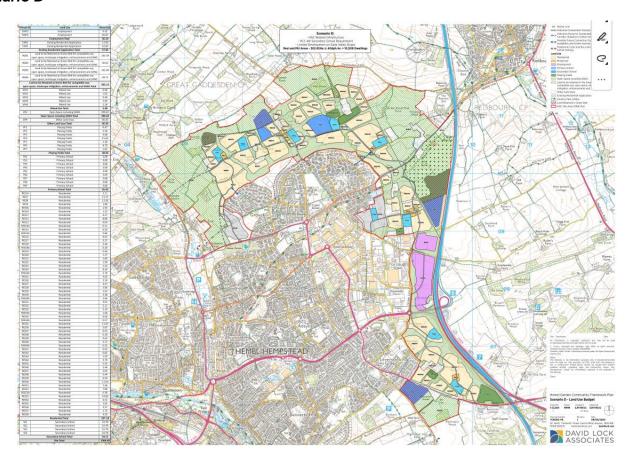


Figure 25: Scenario D (2023)

- 8.10 Scenario D presents a refined set of outcomes following further input from HGC, HCC, DBC and SADC, and evidence made available through the North Hemel Hempstead Landscape Assessment. It includes:
 - No development on the Gade Valley slopes or to the east of the National Grid overhead powerlines, and a more substantial green buffer to the northern and northeastern perimeter of the site to create a clear limit to built development.
 - Retention of the above land within the Green Belt, with the potential for use as SANG, open space, secondary schools, playing fields and other open space.
 - A substantial area of search for SANG.
 - Three 8FE secondary schools on 10.78ha sites to serve the Growth Area. Land is
 identified to the south of the A4147 for a fourth secondary school to serve development
 in other parts of Hemel Hempstead.

- Eight primary school locations.
- Five local centres in broadly acceptable locations (both accessible and unlikely to adversely compete with existing local centres).
- 8.11 This development scenario results in an overall residential development land area of 257.18ha, with a capacity for 10,506 dwellings at the policy average density of 40 dwellings per hectare (dph). It is anticipated that future masterplanning at the application stage will produce a refined plan showing variations in development density capable of supporting 11,000 homes.

9.0 DRAFT SCENARIO D INFRASTRUCTURE SCHEDULE

Overview

- 9.1 This chapter sets out the draft Infrastructure Schedule for the Framework Plan, Scenario D. The work represents a summary of the infrastructure that will be needed to support the growth of a sustainable community. The list of infrastructure items is extensive and highlights the capital-intensive nature of very large-scale strategic growth.
- 9.2 The Local Plans' Viability work (This has been prepared by BNP Paribas for SADC and Simon Drummond-Hay for DBC.), addresses the Local Plan as a whole, has found the HGC Growth Area allocations to be viable, on the basis of the IDP requirements. Further viability assessment of the Framework Plan scenario continues to monitor and understand the viability position..
- 9.3 The purpose of the viability work is to demonstrate the site is deliverable. The viability appraisal should capture the aspirations of the Garden Town principles. This viability appraisals will demonstrate that the HGC Programme is viable, without the reliance on external funding.

Methodology

- 9.4 The following infrastructure items are assumed to be required:
 - Highway Infrastructure all known strategic highway and movement infrastructure. This includes transport M1 J8 enhancements, the Sustainable Movement Corridor, access points into the site, and assumed secondary access within neighbourhoods. Detailed off-site highway infrastructure works have not been determined as the Transport Strategy & Vision remains a work in progress. Therefore, as a proxy sum will be included based on HCC's S106 Toolkit SPD.
 - Sustainable Transport anticipated items required at a strategic scale to embed sustainable transport opportunities within the Framework Plan, including Active Travel routes and multi-modal transport interchanges.
 - Drainage provision for surface water Sustainable Drainage Systems (SuDS) and drainage to major highway infrastructure.
 - Utilities including the provision of electricity, gas, telecoms, water, foul water
 and any diversions of existing utility infrastructure where these will need to be
 funded through the development.

- Groundworks anticipated, largescale ground works including noise attenuation adjacent to the M1 and earthworks associated with on-site topography.
- Sustainability an allowance is made in anticipation of future changes to the Building Regulations.
- Education secondary school and primary school provision.
- Sports and Recreation in accordance with local authority standards and Natural England requirements, including the provision of SANG, children's playgrounds, sports pitches, parks and gardens, natural and semi-natural greenspace, biodiversity and ongoing management and maintenance.
- **Community** community centre provision in line with emerging policy.
- **Health** provision of buildings for GPs and associated healthcare services.
- Non-Market Housing 40% affordable housing, gypsy and traveller sites.
- Waste a household waste recycling scheme.
- 9.5 Some infrastructure items will be delivered at a fixed quantity regardless of the number of homes, including highway infrastructure, whereas other items are determined by the number of households or population, for example schools and public open space.
- 9.6 The following table provides a summary of the infrastructure schedule for Scenario Dand confirms where the quantum of an item will vary.

Draft Scenario D Infrastructure Schedule (July 2024)

Infrastructure Item	Source
Highway Infrastructure	
Sustainable Transport Corridor (primary route, all modes) residential	Early local plan work
Secondary routes within site	Assumed necessary
Package of interventions associated with M1 Junction 8 and surrounding area	SADC / HCC/ National Highwa
M1J8 Phase 3 Overbridge	SADC / HCC/ National Highwa
Structures and retaining walls to residential areas due to land form	Site investigations

A414 pedestrian and cycle bridge	Necessary to support Active Travel
Access points into site	Assumed necessary
Works to existing Green Lane	Assumed necessary
Contribution to wider off-site highways mitigation (S106 toolkit)	HCC
Sustainable Transport	
Active Travel routes within site	DBC policy baseline
Mobility Hubs within site	DBC policy baseline
Travel Plan, including bus subsidy	HCC
Contribution to wider off-site sustainable transport (S106 toolkit)	HCC
Drainage	
SuDS Provision	NPPF
Surface water drainage Primary roads Residential	HCC
Surface water drainage Secondary roads	HCC
Surface water drainage infrastructure upgrades including balancing ponds	NPPF
Utilities	
Electricity - New Connections Residential Zone Primary	
Electricity - New Connections Residential Zone Primary Electricity - New Connections Residential Zone Secondary	
Electricity - New Connections Residential Zone Secondary	
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities	
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion	
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement	
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential)	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities Gas - Infrastructure Upgrades	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities Gas - Infrastructure Upgrades Oil Pipeline diversion	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities Gas - Infrastructure Upgrades Oil Pipeline diversion Other diversions, gas, water, communications & foul	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities Gas - Infrastructure Upgrades Oil Pipeline diversion Other diversions, gas, water, communications & foul Telecoms - New Connections Residential Zone Primary	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities Gas - Infrastructure Upgrades Oil Pipeline diversion Other diversions, gas, water, communications & foul Telecoms - New Connections Residential Zone Primary Telecoms - New Connections Residential Zone Secondary	Initial capacity assessment
Electricity - New Connections Residential Zone Secondary Electricity - Diversion of Existing Utilities Electric 33kv diversion New Electric Supply to Site & Off Site Reinforcement Gas - New Connections (non-residential) Gas - Diversion of Existing Utilities Gas - Infrastructure Upgrades Oil Pipeline diversion Other diversions, gas, water, communications & foul Telecoms - New Connections Residential Zone Primary Telecoms - New Connections Residential Zone Secondary Telecoms - Diversion of Existing Utilities	Initial capacity assessment

Water - New Connections Primary	
Water - New Connections Secondary	
•	
Water - Diversion of Existing Utilities	
Water - Infrastructure Upgrades off site	
Foul Water - New Connections Primary incl. pumping stations, pump mains etc	
Foul Water - New Connections Secondary	
Foul Water - Diversion of Existing Utilities	
Foul Water - Infrastructure / Sewage Works Upgrade off site	
Groundworks	
M1 Noise bund including bank stabilisation	
Landscaping to noise bund	
Landscaping to primary roads	Assumed necessary
Landscaping to secondary roads	
Acoustic fencing to noise bund	
Leighton Buzzard Road - NWHH local centre (additional costs for earthworks due topography)	Site investigations
Assumed groundworks estimate per ha residential district	Assumed necessary
Sustainability	
Additional construction costs over current Building Regs	Future proofing
Solar arrays and PV provision	Early local plan work
Education	
1 x 8FE secondary school (including sixth form provision	
1 x 8FE secondary school (including sixth form provision)	
1 x 8FE secondary school (2FE paid by additional growth)	HCC
5 x 3FE primary schools (inc. early years provision)	
3 x 3FE primary schools (inc. early years provision)	
2 x 2FE primary school (inc. early years provision)	
Sport and recreation	
5x Adventure Play Areas (NEAP+)	SADC/DBC open space standards
Amenity (capital cost)	
Natural/semi-natural (capital)	

Parks & gardens (capital)	
Playing fields (capital)	
Playing fields (maintenance)	
SANG	
SANG	
SANG - facility construction	Natural England
SANG - land management	
SAMMS	
Environmental mitigation & biodiversity	NPPF
Community	
2 x Community Hub (NWHH, EHHN)	Early local plan work
3 x Community Centre (other n'hood centres)	
Health	
Health Hub	Early local plan work
Health Centre	Zany rosai pian went
Housing	
Affordable housing 40%	
2 x 15 pitch gypsy and traveller sites	
6x 70-80 bed C2 Residential or Nursing care home	Early local plan work
4x 160 -170 home C3 Flexi-care scheme	
28- 34 Supported Housing units	
Waste	
Household recycling centre	HCC

Table 2: Draft Scenario D Infrastructure Schedule (September 2024)

9.7 The draft schedule has informed the examination of the viability and deliverability of the proposed allocations. The Infrastructure Schedule will be subject to continual review and updates. At the time of writing, the Regulation 19 consultation for both Local Plans are soon to be underway and information and policy requirements are subject to updates. Future editions of the viability appraisal will be run.