

**Local Plan 2016-2036
Issues & Options Consultation
Winter 2017**

Background Paper

**North Keynsham
Strategic Development Location**



**Bath & North East
Somerset Council**

B&NES Local Plan Options Document

Background Paper: North Keynsham Strategic Development Location

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1.0 Introduction

- 1.1 This background paper sets out the Council’s justification for its emerging approach towards the proposed development at North Keynsham. It explains the policy context for the Local Plan and the range of evidence that was commissioned and which was used to inform the Local Plan Options document.
- 1.2 It is essential that the evidence documents referred to are read as a whole, rather than relying on some of the selected summaries or highlights that follow.

2.0 Policy Context

National Planning Policy Framework (NPPF)

- 2.1 The NPPF provides the Government’s policy context for planning. It shapes the parameters of the content of Local Plans, and explains the Government’s position on issues of acknowledged importance. Local Plans need to conform with the NPPF. It therefore provides the context for much of the evidence that has been commissioned to inform the preparation of the Local Plan. This is elaborated in more detail under the relevant sections below.

West of England Joint Spatial Plan (JSP)

- 2.2 This provides the overarching planning framework for the West of England, and sets out the spatial strategy for meeting the growth aspirations of the area. The JSP establishes that in order to meet the need for housing within the West of England, a range of greenfield locations are needed to complement existing housing commitments, urban intensification, small windfall sites and ‘non-strategic’ growth. This includes the identification of North Keynsham as a Strategic Development Location, capable of delivering 1500 homes (1400 in the plan period) and a policy outlining overarching development principles. The JSP establishes the general area of search for strategic growth at North Keynsham and the potential scale of development. This has been informed by consideration of constraints, opportunities and the context present at each location, as well as opportunities afforded by strategic transport interventions and place-making principles. The JSP Publication Document has been published for consultation prior to submission to the Secretary of State for examination.

Core Strategy/Placemaking Plan – (current B&NES Local Plan)

- 2.3 This provides the current planning policy context for development within Bath and North East Somerset up to 2029. Its policy framework as it applies to North Keynsham will be superseded with the adoption of the new Local Plan.

New Local Plan

- 2.4 The new Local Plan will allocate the North Keynsham SDL as a development site. The mix of uses and infrastructure requirements for the SDL will be refined to establish precise land use requirements. This process will be informed by further detailed technical evidence, masterplanning and community engagement through the plan making process.

Keynsham Neighbourhood Plan (NDP)

- 2.5 Keynsham Town Council is currently leading on the development of a Neighbourhood Development Plan (NDP) for the town. This will be a new way for local people who live and/or work in Keynsham to have a say in the planning and future development of the local area over a 15 year time period. The Plan currently aims to influence planning for roads and transport in the area and to enable the delivery of new community facilities for the town. In doing so the NDP will be able to help identify key issues that planning for the North Keynsham SDL will need to take into account.

3.0 Evidence Base

West of England Joint Spatial Plan Policy 7.1: North Keynsham

- 3.1 As part of the overall spatial strategy to deliver the housing needs for the West of England, strategic development locations (i.e. locations capable of accommodating 500+ dwellings) have been identified for detailed assessment through local plans. North Keynsham is one of 12 locations throughout the West of England which are consistent with the sustainable development objectives of the JSP. In order to provide strategic guidance for the detailed work to follow, the Joint Spatial Plan summarises the development principles, opportunities, constraints and infrastructure requirements to be taken into account. Policy 7.1 sets out the bespoke requirements for North Keynsham which forms the starting point for detailed assessment through the local plan. The requirements identified in the Joint Spatial Plan policies are not exhaustive and will evolve as more detailed assessment and masterplanning takes place.

Policy 7.1 – North Keynsham

Development at North and East Keynsham is shown on the Key Diagram. Development in this area should comply with the following key strategic principles and infrastructure requirements:

- The delivery of around 1,500 new homes, with 1,400 homes built in the plan period, optimising densities and including affordable housing.

- Include around 50,000 m2 of employment floorspace.
- Creation of a new local centre to provide a focal point for the new community with an appropriate range of small-scale retail, services and facilities.
- A new primary school on site and financial contribution to the provision of a secondary education provision off site.
- New mixed tenure marina providing residential and leisure moorings.
- A layout and form that produces a high quality of urban design, contributes positively to local character and distinctiveness, and that mitigates impact on sensitive views (including key views from the Cotswolds Area of Outstanding Natural Beauty). This should incorporate a well-integrated, multifunctional green infrastructure network that includes new wetland features, restored floodplain meadows and new woodland.
- Provision of key transport infrastructure including:
 1. North Keynsham multi modal link from Avon Mill Lane to A4. This new link will be designed as a street through the development, considering the needs of pedestrians, cyclists, public transport and vehicles, and capable of performing a wider strategic function for traffic relief in Keynsham. Development will have a positive relationship with the link road;
 2. Pedestrian and cycle connections in all directions which link the site with key services and facilities. These include Keynsham rail station, the town centre, the A4 public transport corridor, the A4175 Keynsham Road and the Bristol to Bath cycle path with the potential for new bridge connections across the River Avon;
 3. Where existing vehicle routes across the railway line are no longer required for continued use by motor traffic, seek to downgrade them to pedestrian and cycle only links;
 4. Metrobus (high quality public transport) route from Bristol to Keynsham on the A4 corridor;
 5. High frequency local bus service following an orbital route connecting the site to the town centre, Metrobus, rail and other local bus services;
 6. Improved passenger facilities at Keynsham rail station;
 7. Off-site junction improvements including at Hicks Gate; and
 8. Expanded or relocated A4 Bristol Park & Ride.

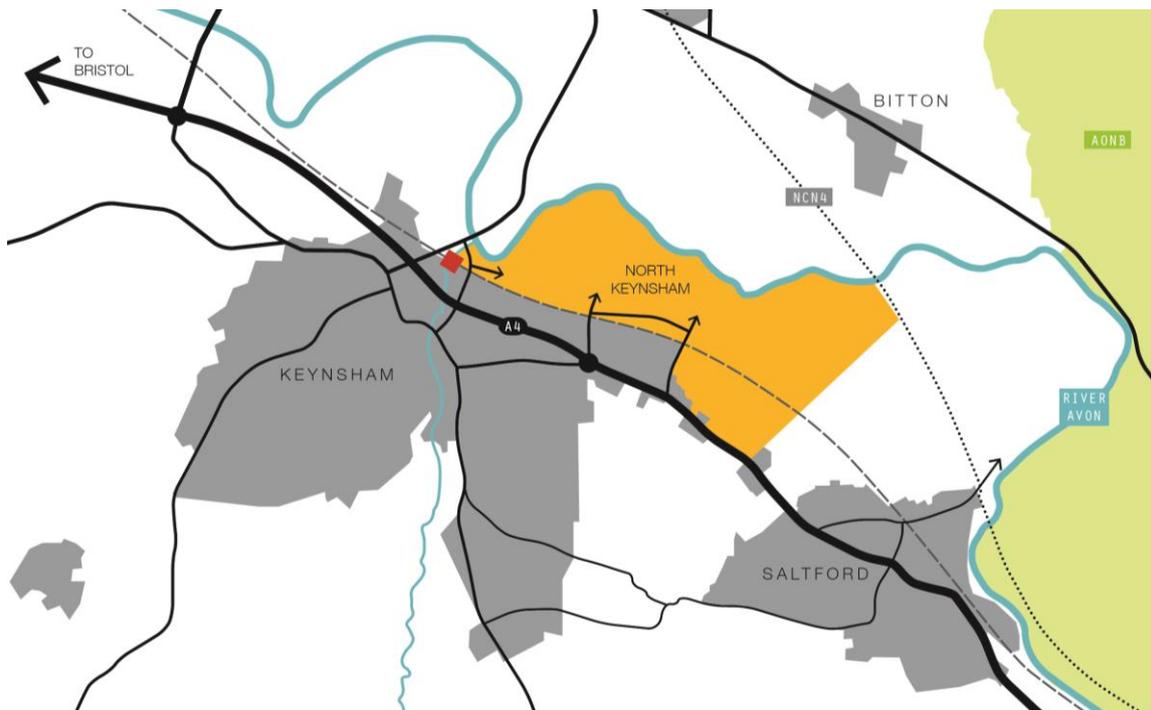
No housing will be completed at the North Keynsham SDL ahead of the Avon Mill Lane to A4 link, Keynsham rail station improvements and Metrobus (high quality public transport) route from Bristol to Keynsham on the A4 corridor being completed. This should not prejudice a full Transportation Assessment which will be required for each location.

Site Context

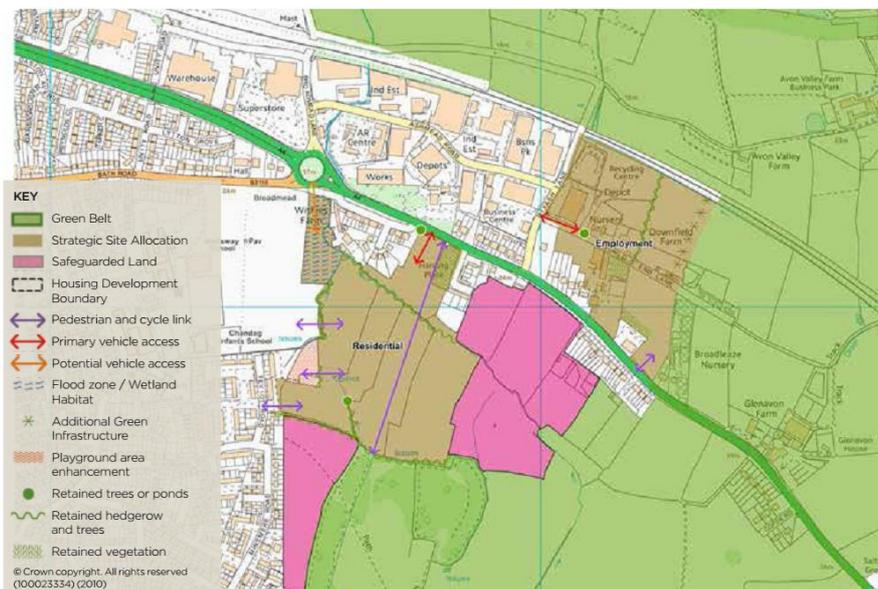
- 3.2 The site lies to the north-east of Keynsham, between the town and the River Avon, and also includes the land at East Keynsham that was safeguarded for future development in the Core Strategy. The majority of the site is currently within the Green Belt. The western end of the site lies within 500m of the train station and

extends for 2km eastwards towards Saltford. It lies close to the urban fringe of the town but the main part of the site is isolated due to severance caused by the railway line. The site is largely level, sloping downwards to the floodplain and river. It is largely undeveloped but includes a range of uses including Broadmead Lane Industrial Estate, Wessex Water Sewage Treatment Works and Avon Valley Wildlife and Adventure Park. The site lies in close proximity to the A4 providing direct access to Bath and Bristol by car and public transport, and close to the Bristol and Bath cycle path to the east.

North Keynsham Location



East Keynsham Safeguarded Land Location (in pink)



Landscape and Visual Impact Assessment

3.3 The Council carried out a Landscape and Visual Assessment in the early spring of 2017 to provide a detailed landscape and visual baseline assessment of the North Keynsham SDL area as well as an assessment of the impact of various hypothetical development types on the principle landscape and visual receptors. The assessment covers primarily a local landscape character assessment of the site area in the context of the wider Avon valley floodplain landscape character. In addition a brief commentary is included covering the key landscape elements/features on the site divided into vegetation, the river itself, landform and World's End lane. An update to previous LVIA work was then carried out to assess impacts of a range of potential development types and is based on a more detailed set of baseline survey material.

Methodology

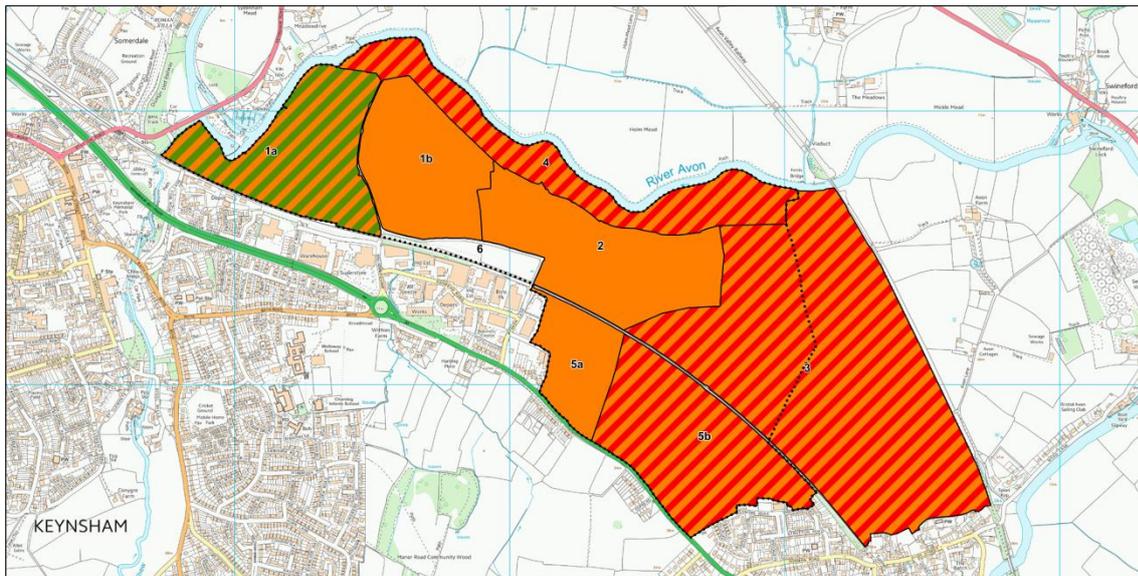
3.4 The methodology has been carried out in accordance with the Guide to Landscape and Visual Impact Assessment, 3rd Edition (Landscape Institute and Institute of Environmental Management and Assessment). The assessment is necessarily general given the hypothetical nature of any development. Scoring for sensitivity, magnitude and significance of effects is based on a scale of low, low to medium, medium, medium to high and high; and negative, neutral and positive. The landscape assessment is primarily against the local landscape character and key landscape elements such as important tree groupings, the river and landform features. The visual assessment is against grouping of viewpoints within key recreational area and routes as described in the baseline visual assessment and as listed below:

1. Cotswolds AONB and Cullyhall/Clay Lane
2. Bristol and Bath Railway Path
3. River Avon Trail
4. Monarch's Way

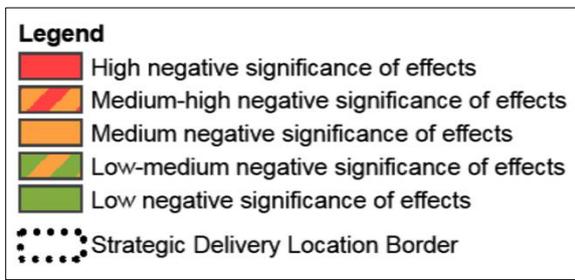
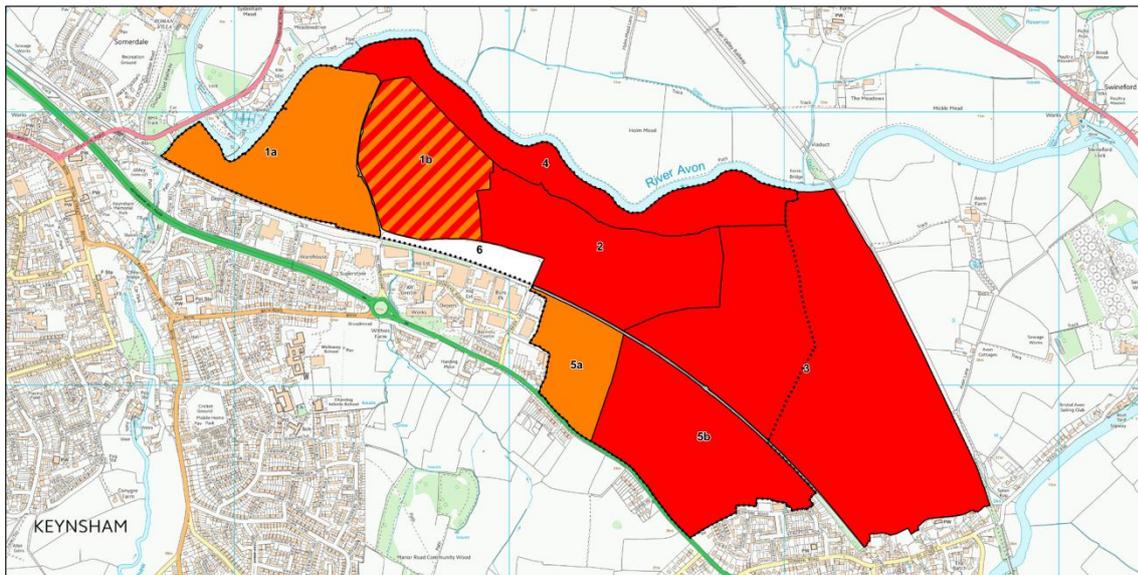
Conclusions:

3.5 The work assessed the significance of effects on the landscape character and visual impacts of development potential in different land pockets. These areas and their level of significance are set out in the plan below. This, combined with other evidence, has informed the suggested extent of development that is set out in the Local Plan Options document.

Landscape and Visual Impact Assessment
Combined Significance of Development Effects for Low Density Housing



Landscape and Visual Impact Assessment
Combined Significance of Development Effects for Medium to High Density Housing



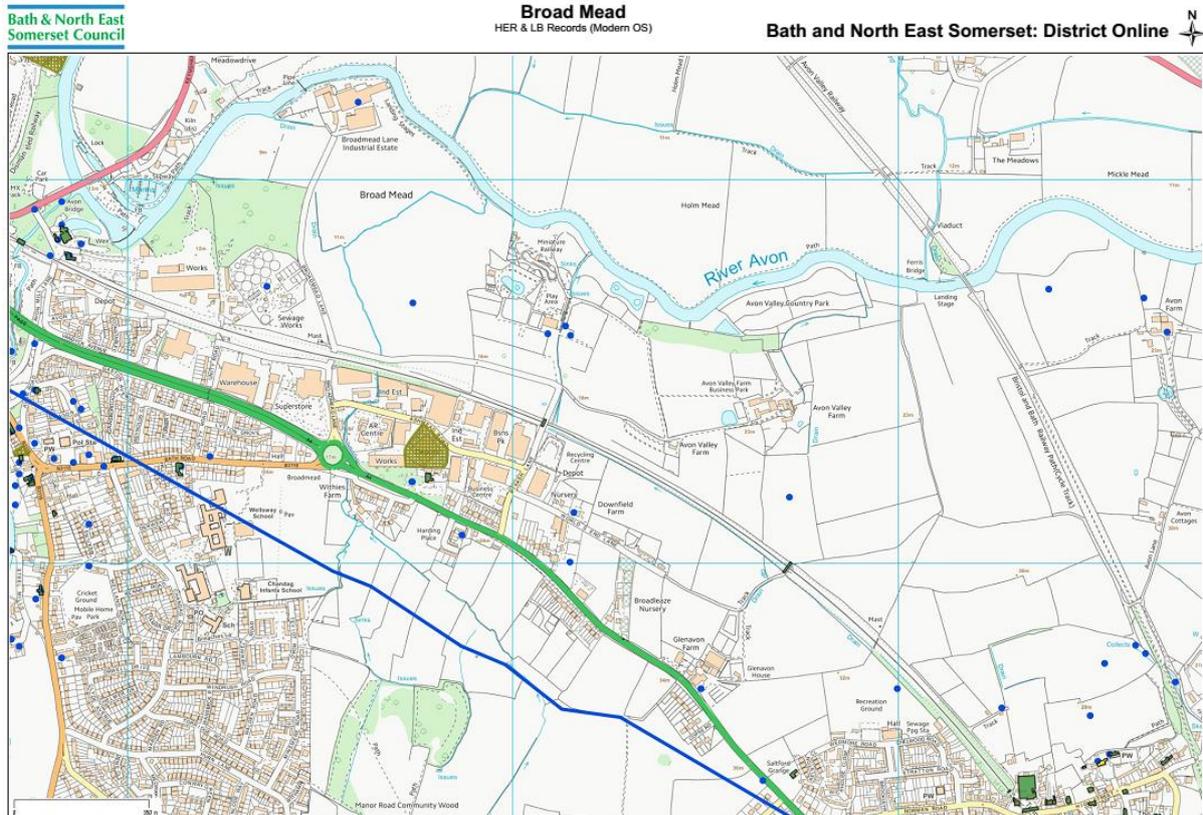
Implications:

- The eastern and riverside areas are considered to be the most visible and least appropriate for development;
- Structural planting will be required to mitigate views in line with the prevailing bands of woodland in the surrounding area. These will be especially important along the edges of the development;
- The structural planting along the edges of the development should be around 30m in depth to provide visual screening and privacy for residents;
- Site should be laid out to minimise visual impact in views from sensitive locations.

Heritage Assets

3.6 Arup undertook an assessment of heritage assets during spring 2017. The site includes a small number of listed buildings around Avon Mill Lane, two Listed bridges (Pixash Lane and pedestrian bridge to the east) and a number of heritage sites with HER records, notably some Roman finds at Avon Valley Park. There are a small number of buildings with notable character at Broadmead Lane Industrial Estate and Avon Valley Farm.

Historic Environment Record and Listed Building Record



Implications:

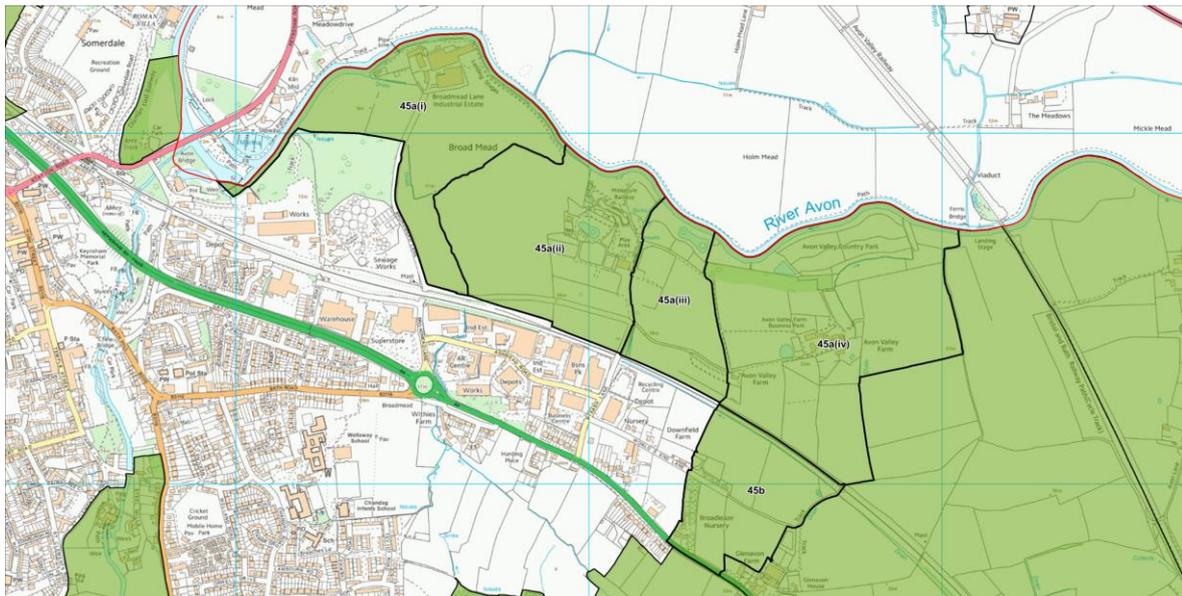
- Mitigation will be required to ensure that there is a positive strategy for the conservation and enjoyment of the historic environment and that heritage assets are conserved in a manner appropriate to their significance.
- Public open space could be located in areas of heritage interest to reduce impact on sensitive sites.
- The development is required by the Joint Spatial Plan to contribute positively to local character and distinctiveness. The development should support a high-quality mix of housing typologies and tenures to develop a sustainable community which compliments the existing settlement. Local architectural character could be explored to ensure the development feels appropriately bedded into its environment.

Green Belt

3.7 The JSP will establish the 'Exceptional Circumstances' for releasing locations from the Green Belt for development. The new Local Plan will set out the new detailed Green Belt boundary at North Keynsham. The Council has undertaken a Green Belt Assessment to assist the definition of precise boundaries of the Strategic Development Location. It has been informed by the Joint Spatial Plan Stage 2 Green Belt Assessment¹, which was used to advise the identification of the Strategic Development Locations. The assessment builds on the work done in the Joint Spatial Plan Stage 2 Green Belt Assessment which considered the performance of cells in respect of the purposes of the Green Belt set out in the NPPF. This assessment considers Green Belt performance in greater detail and assesses the impact of development on the Green Belt. The Local Plan Green Belt Assessment cells are shown in the image below:

¹ [https://www.jointplanningwofe.org.uk/gf2.ti/-/756738/23257829.1/PDF/-/Towards the Emerging Spatial Strategy Green Belt Assessment Stage 2.pdf](https://www.jointplanningwofe.org.uk/gf2.ti/-/756738/23257829.1/PDF/-/Towards%20the%20Emerging%20Spatial%20Strategy%20Green%20Belt%20Assessment%20Stage%202.pdf)

Local Plan Green Belt Assessment cells



Appraisal criteria

3.8 The extent of the cell and its contribution to the purposes of the Green Belt has been assessed using the same methodology as was used for the JSP Green Belt Stage 2 Assessment. The aim of the assessment is to determine an overall contribution rating for each cell based on a combination of assessments against each relevant Green Belt purpose. The approach has been tailored to reflect the wording of the Green Belt purposes in the National Planning Policy Framework (paragraph 80):

Green Belt purposes 1, 2 and 4 are directly expressed:

- 1 - to **check** the unrestricted sprawl of large built up areas;
- 2 - to **prevent** neighbouring towns from merging into one another;
- 4 - to **preserve** the setting and special character of historic towns;

Whereas purposes 3 and 5 are expressed as assistance roles:

- 3 - to **assist** in safeguarding the countryside from encroachment;
- 5 - to **assist** in urban regeneration, by encouraging the recycling of derelict and other urban land.

3.9 These five statutory purposes of the Green Belt form the basic appraisal criteria. In addition, the appraisal takes account of a further, 'local Green Belt purpose' which seeks *"to preserve the individual character, identity and setting of Keynsham and the villages and hamlets"*. The local purpose is of continuing relevance having regard to the reasons for the original designation of the Bristol and Bath Green Belt (one of the

reasons for the Green Belt given in the 1966 County of Somerset Development Plan Written Statement was to specifically prevent the merging of Bristol, Keynsham, Saltford and Bath and to preserve the identity and character of the surrounding towns, villages and hamlets; this has consequently been included in each subsequent Development Plan including the current adopted B&NES Core Strategy/Placemaking Plan).

3.10 In order to demonstrate variations between the cells in terms of the extent of their contribution, a scale with three rating levels has been devised as set out below:

| | | |
|----------------------|--|--|
| Major contribution | | Cell makes a major contribution to serving Green Belt purposes These cells can be considered to be at the front line of contributing to purposes of Green Belt. |
| Contribution | | Cell makes a contribution to serving Green Belt purposes Noting that the Green Belt is an extensive designation, not all cells are likely to be at the front line of making a contribution. The 'contribution' rating is applicable to those cells which support the purposes of Green Belt, particularly in combination with other cells. |
| Limited contribution | | Cell makes a limited contribution to serving Green Belt purposes These are cells which are considered to have only a limited or negligible contribution to individual purposes. They do not have a significant role in themselves and do not have a significant role in supporting or assisting the purposes of Green Belt in combination with other cells. |

Commentary on the assessment

3.11 Cells around Keynsham and Saltford make a contribution or major contribution to Green Belt purposes. The cells contribute to preventing merger of towns in the Bristol-Keynsham-Saltford-Bath corridor by maintaining openness and preventing coalescence between the existing settlements. Between Keynsham and Saltford the cells prevent the merger of the settlements within the overall separation of Bristol and Bath. Of particular importance the cells contribute to preserving the individual character, identity and setting of Keynsham and Saltford, in particular cell 45B. All cells make a contribution to assisting in safeguarding the countryside from encroachment and assist in urban regeneration.

3.12 The Stage 2 Assessment shows that all the cells make a CONTRIBUTION to prevention of the merger of neighbouring towns. Development in all cells would therefore have a negative impact on the Green Belt against this purpose. The Stage 2 Assessment scored all cells equally in respect of their CONTRIBUTION to assist in safeguarding the countryside from encroachment. The detailed analysis showed some minor differences in the cells, largely due to the presence of scattered buildings, but this was not considered to have a significant effect on the overall character of the cells or their Green Belt performance in respect of purpose 3. The

impact of development in relation to this purpose will be negative and is also likely to be fairly uniform across the cells. All the cells make a CONTRIBUTION to preserving the individual character, identity and setting of Keynsham and Saltford. Development in all cells would therefore have a negative impact on the Green Belt. Cell 45B is considered to make a MAJOR CONTRIBUTION in serving this Local Green Belt Purpose as the existing Green Belt gap between Keynsham and Saltford is relatively narrow within this land cell. The eastern boundary of 45B is only around 400m from the built up edge of Saltford. If the whole of this cell was to be developed then it is considered that it would significantly erode the gap between Keynsham and Saltford. Development in this cell would therefore have a significant impact on the Green Belt against this purpose.

Implications:

- Limit the amount of development in cell 45B in order to minimise Green Belt harm by limiting the reduction in the gap between Keynsham and Saltford.

Ecology

- 3.11 The JSP was accompanied by a Habitats Regulations Assessment which set out the process undertaken pursuant to satisfying the requirements of the Conservation of Habitats and Species Regulations 2010 in relation to the West of England Joint Spatial Plan. It provides recommendations in relation to the North Keynsham SDL. The site is located immediately adjacent to the River Avon which is known to be used by Horseshoe Bats.
- 3.12 Arup undertook an assessment of ecology assets during spring 2017. There are a number of environmental and ecological designations affecting the site. Stidham Farm Site of Special Scientific Interest (SSSI) is located to the east of the site and currently managed as an arable field. This SSSI is designated for its geological features. There are three Sites of Nature Conservation Interest on site: Stidham Farm SNCI, Broad Mead Field SNCI in the centre (designated for its marshy grassland and botanical interest), and the River Chew SNCI (designated for its running water and associated marginal habitats, including protected fauna, which use the site in part as a wildlife corridor). The River Avon SNCI runs adjacent to the northern site boundary and is designated for its running water and associated marginal habitats, including protected fauna, botanical and invertebrate interest.

Implications:

- Protection of ecological assets of the river corridor, particularly in terms of lighting and habitat enhancements to offset the change of land use and associated recreational pressures. There is a need to avoid light spill onto the river corridor.
- Stidham Farm SSSI should be retained on site in its current form, given its designation.
- SSSI margins could be enhanced with native species.
- Retention, expansion and enhancement of all hedges should be maintained across the site.
- Mature trees should be retained.
- Broad Mead Field SNCI should be retained and expanded as a marshy grassland in order to improve its biodiversity and to mitigate the loss of habitat elsewhere.
- Other SNCIs on site and adjacent should also be retained and enhanced.
- In conjunction with the landscape assessment the site should incorporate priority habitats into the design, such as hedgerows, orchards, ponds, lowland meadows, reed beds, lowland mixed deciduous woodland, wet woodland, wood-pasture and parkland. These habitats can be used to alleviate flood risk, increase biodiversity and provide foraging, breeding and commuting habitat for a range of protected species, including badgers, bats, amphibians, reptiles and riparian mammals.
- The development should embrace green technology and opportunities to minimise the ecological footprint through measures such as rainwater harvesting and green roofs.

Green Infrastructure

3.13 Green infrastructure can be defined as the networks of natural spaces and corridors that make up the natural environment in a given area. The range of benefits that green infrastructure can deliver can be summarised as;

- Supporting healthy lifestyles and thriving communities
- Providing active access to the outdoors
- Enhancing landscape character and built heritage
- Enhancing biodiversity
- Supporting healthy ecosystems
- Providing climate change solutions
- Invigorating the local economy and natural tourism
- Enhancing sense of place

3.14 The West of England Nature Partnership have undertaken strategic environmental mapping for the whole of the West of England which has informed the formulation of the Joint Spatial Plan and in turn the assessment of the North Keynsham SDL. This assessment identifies strategic ecological networks, strategic Green Infrastructure networks and opportunities for Green Infrastructure prioritisation and enhancement.

- 3.15 Using the West of England Green Infrastructure Framework's (2011) 8 cross cutting themes, 8 objectives were drafted and map layers created identifying key GI features, important for meeting each objective.

Green Infrastructure objectives:

1. To maintain and enhance a functional and connected strategic green infrastructure network maximising opportunities for enhancing networks of green corridors and open space.
 2. To establish and maintain coherent and resilient ecological networks, by reducing fragmentation, and delivering habitat restoration, re-creation and biodiversity enhancement.
 3. To provide natural solutions to help tackle the impacts of climate change, such as increased use of trees and green spaces to reduce urban heating, land uses that absorb carbon dioxide, and active travel solutions to reduce motorised transport.
 4. To optimise the use of green infrastructure and natural ecosystem services to deliver sustainable water management, flood mitigation measures and reduce flood risk.
 5. To improve the network of active travel routes and accessibility to green spaces to support healthy lifestyles and provide more opportunities for people to connect with nature.
 6. To design and deliver high quality green infrastructure improving local sense of place to protect and enhance landscape character, and the natural, cultural and heritage services that they provide.
 7. To recognise opportunities for local food production in urban and rural areas and increase food security by protecting the best and most versatile agricultural land.
 8. To create attractive areas for inward investment by enhancing green infrastructure within and around housing and employment sites that demonstrate strong links to the wider green infrastructure network.
- 3.16 Arup have considered the findings of the West of England assessment and have provided recommendations as to how to incorporate Green Infrastructure into the SDL.

Implications:

- Assessment shows that the Green Infrastructure priorities for North Keynsham relate to Objectives 2, 3, 4 and 5
- The riverside area has significant potential to be made publicly accessible and enhanced as both an amenity and environmental asset, linked into a wider green infrastructure network across the site.
- Potential enhancements should have a low visual impact but include play and fitness trails, children's play areas, sports pitches, access to the water for boating and fishing activities, and planting of a 'wet woodland' environment. There is potential to provide allotments, orchards and community gardens within the public areas, alongside sports and leisure

facilities.

- A network of various public open spaces should be provided within the residential area, creating green corridors between the riverside area to the north, the main road through the centre and along the SUDS network. Incidental squares and pocket parks should be provided within larger development blocks to provide some relief and accommodate surface water retention. These areas should benefit from passive surveillance and provide a range of children's play facilities and safe movement routes.
- Connections across the river towards the long distance recreational walks should be explored.
- Create green corridors between the riverside area and the railway corridor, providing a range of ecological, connection and recreation opportunities and accommodating surface water attenuation.

Education

- 3.17 The requirement to provide a primary school on site and increase secondary school capacity in the area is based on an assessment of existing provision and on the legal requirement to meet the educational needs of the pupils anticipated in the proposed development. A development of around 1,500 dwellings would produce around 465 primary school pupils. This will necessitate the provision of a new primary school located within the development site. Early Years provision may also be required depending on the sufficiency of provision available in Keynsham in future. This can be provided via a stand-alone facility/facilities located on site or via an Early Years unit as part of the primary school.

Implications:

- Provision of a new primary school delivered on site;
- Provision of new early years facility delivered on site;
- Increased provision at an existing local secondary school.

Transport

- 3.18 Currently, access to the site is significantly constrained by the railway, the River Avon and by associated capacity constraints on the A4 and connecting roads. Existing lanes through the site are narrow and have constrained crossings of the railway. At present there are four vehicle access points: at the far western end via Keynsham Road or Avon Mill Lane, providing access to the town centre and railway station; in the centre via the Broadmead Lane underbridge; and in the east via the Pixash Lane overbridge (Listed structure limiting opportunity to improve capacity). There are two additional minor links at Unity Road (connecting the DS Smith site, under the A4, towards Bath Road) and east of World's End Lane. A series of Public Rights of Way

run through the eastern end of the site and provide access towards the long distance routes provided by the River Avon Trail, Monarch's Way and the Bristol and Bath Railway Path (NCN4), which provides opportunity to connect towards Bath. There is currently no direct pedestrian/ cycle route from the site across the river. At present there is no public transport connectivity to the site with the nearest services running along the A4 and Keynsham Road. While the site is close to Keynsham Station, pedestrian and cycle access from the site is poor and indirect.

- 3.19 Atkins has produced transport evidence to support the production of the Joint Spatial Plan in the shape of the West of England Joint Transport Study. Transport evidence from the Joint Transport Study was used to inform the assessment of potential locations for housing and employment growth. The proposed growth strategy within the Joint Spatial Plan was then used in forecasts of future travel demand and to shape the development of the long-term Transport Vision.
- 3.20 The Transport Vision would support a transformation in travel behaviour in the West of England, including more than doubling the trips made by cycling and public transport, resulting in a significant reduction in the mode split for journeys by car. The Transport Vision sets a target for no overall increase in the number of trips by car across the sub-region set against the backdrop of delivering 105,000 new homes. This Vision is required to unlock the delivery of new homes and jobs, improve economic performance and competitiveness, tackle health and inequality challenges and support the delivery of ambitious CO2 reduction targets.
- 3.21 The Transport Vision is a package of complementary schemes that will expand travel choices and improve the performance of the transport network:
- **Smarter Choices** – new technology and travel behaviour programmes to significantly shift travel behaviour from single-occupancy car use to car-sharing, public transport and walking and cycling;
 - **Active Travel** – improved facilities to improve the attractiveness of walking and cycling, including local traffic management schemes, wayfinding, increased permeability and new strategic cycling routes;
 - **Bus** – improvements to local bus networks, to build on the success of the GBBN, including improvements to vehicle specification, stops, ticketing and extension of bus priorities;
 - **Metrobus** – new routes, building on the current programme, and a consolidation package will 'lock in' the benefits through upgrading bus priorities and renewing signalised junctions;
 - **Mass Transit** – focusing on the corridors with the highest potential passenger flows, the ambition is for new forms of mass transit (e.g. light rail), with facilities to interchange with Metrobus and rail services;
 - **Interchange and Park & Ride** – a network of sites on the edges of the urban areas will enable interchange between radial and orbital services and intercept traffic on the edges of the urban areas;

- **Rail** – improvements to local rail services and new stations on the network, building on the ambitious MetroWest Phases 1 and 2 package of rail network improvements;
- **Road Network** – re-routing of traffic onto new transport links to facilitate reallocation of road space in the urban areas, to build a ‘virtuous circle’ in which sustainable modes are increasingly attractive;
- **Freight** – schemes to tackle road congestion will benefit freight movements, particularly to and from Bristol Port, to be complemented by management of freight routing into the urban area; and
- **Financial measures** – which will be needed to effectively manage future demand on the road network and generate revenue to be reinvested in delivering the Transport Vision.

3.22 The JTS includes detailed analysis of the South East Bristol to Bath transport corridor and describes the Transport Vision and major investment proposals related to the North Keynsham SDL in more detail. The corridor includes Bath, Keynsham and routes into Bristol from the South East. The priorities on this corridor are to:

Improve orbital connectivity in South Bristol.

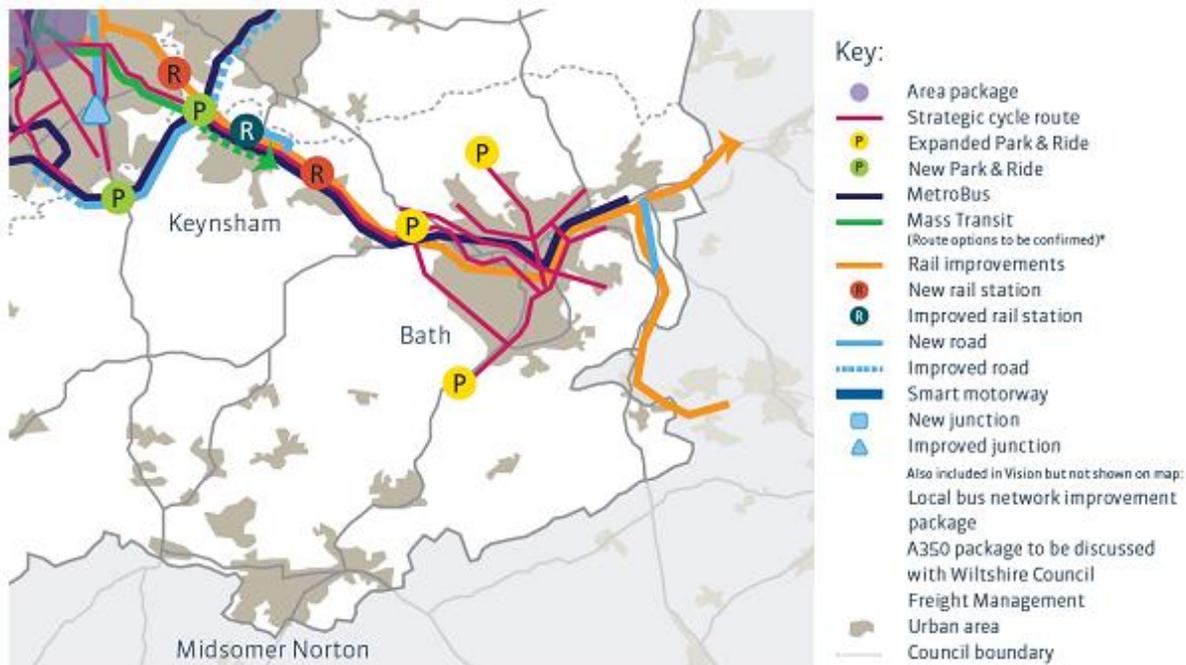
Improve connectivity in the Bristol – Bath corridor.

Reduce impacts of through traffic in Bath.

Improve regional connectivity to the South Coast.

3.23 A mass transit route between Bristol and Bath will transform travel choices along this corridor, which would be delivered in conjunction with the Callington Road Link to facilitate road space reallocation on the A4 into Bristol. This would be to Metrobus standard but with the expectation of light rail between Bristol city centre and Hicks Gate and potentially beyond. New and expanded Park & Ride sites are proposed as an integral part of the future public transport network, including a new site at Hicks Gate.

JTS Proposals: South East area



A4 corridor via Keynsham and Saltford

3.24 Mass transit between Bristol and Bath is proposed to complement an improved rail corridor and better accommodate a wider range of trip patterns. Bus priority on the approaches to Saltford would improve bus journey times and punctuality through the village. Options would need to be considered for the best mode for this corridor: this could initially be a Metrobus standard route, but the longer-term ambition would be for a light rail solution extending from Bristol city centre to Hicks Gate and potentially beyond. In addition, a new highway connection is proposed from the A4, near or at the Broadmead Roundabout, to the A4175 at Avon Mill Lane. This will provide access to the North Keynsham Strategic Development Location and will also provide traffic relief in Keynsham town centre.

JTS A4 Corridor Package of schemes

| | |
|---|--|
| Bath Cycle Network and Greater Bristol Cycle network – Bristol to Bath route | A Strategic Cycle Route between Bristol and Bath forms part of the Greater Bristol Cycle Network and Bath Cycle Network schemes. These include reallocation of road space on arterial routes and traffic management measures, complementing investment in quiet routes and off-road facilities to create an easy to use network. |
| Mass Transit to Bath | Initial priority for Metrobus corridor to Bath, with longer-term ambition for light rail between the Hicks Gate / Keynsham area and Bristol city centre, to serve Hicks Gate Park & Ride and beyond and Temple Meads. |
| Park & Ride Package for Bristol urban area | A network of new and expanded Park & Ride sites on the edge of the Bristol urban area, enabling traffic to be intercepted and facilitating multi-modal interchange. This includes the provision of a site on the A4 at Hicks Gate, which would replace the existing site at Brislington. |
| A4 to Avon Mill Lane | New highway link from the A4, east of Keynsham, crossing railway to |

| | |
|--|---|
| Link | connect to Avon Mill Lane and A4175 north of Keynsham. This will improve traffic routing around the east of the town and will facilitate access to new development north of Keynsham. |
| Service Improvements and Station Upgrades | Target for all stations across West of England to be served by at least two trains per hour in each direction, with increased capacity rolling stock to accommodate demand. Improved waiting facilities and interchange at stations, with consistent MetroWest branding. This will include upgrades to the stations at Oldfield Park and Keynsham to a consistent MetroWest standard. |

- 3.25 This package of schemes would require major re-engineering of the road network along the whole corridor, including at Bath, Saltford and Keynsham. The mass transit route would serve a new Park & Ride site at Hicks Gate, to replace the existing site at Brislington, which will enable people to access services towards both Bristol and Keynsham. It would then follow the A4 through Brislington to Temple Meads and Bristol city centre. A key benefit of relocating Park & Ride from Brislington to Hicks Gate will be to enable traffic to be intercepted further upstream on the A4 corridor, reducing congestion on the constricted section of the A4 between Hicks Gate and Stockwood Road. The traffic lane providing access to the current Brislington Park & Ride site could be converted to a lane for the mass transit service.
- 3.26 Mass transit from Keynsham to Bristol would necessitate completion of the Callington Road Link, a new road link between A4320 St Philips Causeway and A4174 Callington Road, which would enable diversion of through traffic from the A4 onto St Philips Causeway. This would provide several benefits: it would reduce the volumes of traffic through the heavily congested A4/A4174 West Town Lane junction and would allow major re-engineering of the current A4 through Brislington to allow the creation of the new transit route, together with other improvements to sustainable transport and public realm. The mass transit route would be complementary to further improvements in passenger rail services. Existing stations will also be improved, including Keynsham.
- 3.27 The Transport Vision forecasts large increases in the numbers of people working from home and commuting by walking, cycling and public transport. It also forecasts a small reduction in the numbers of people living in the West of England who drive to work, even though there is a forecast 28% increase in the overall number of people trips. This reflects the level of ambition in the Transport Vision to achieve substantial mode shift from the car to active travel and public transport.
- 3.28 The Joint Spatial Plan uses the JTS assessments to specify the strategic transport measures required for the North Keynsham SDL, namely:
1. North Keynsham multi modal link from Avon Mill Lane to A4. This new link will be designed as a street through the development, considering the needs of pedestrians, cyclists, public transport and vehicles, and capable of performing a wider strategic

function for traffic relief in Keynsham. Development will have a positive relationship with the link road;

2. Pedestrian and cycle connections in all directions which link the site with key services and facilities. These include Keynsham rail station, the town centre, the A4 public transport corridor, the A4175 Keynsham Road and the Bristol to Bath cycle path with the potential for new bridge connections across the River Avon;
3. Where existing vehicle routes across the railway line are no longer required for continued use by motor traffic, seek to downgrade them to pedestrian and cycle only links;
4. Metrobus (high quality public transport) route from Bristol to Keynsham on the A4 corridor;
5. High frequency local bus service following an orbital route connecting the site to the town centre, Metrobus, rail and other local bus services;
6. Improved passenger facilities at Keynsham rail station;
7. Off-site junction improvements including at Hicks Gate; and
8. Expanded or relocated A4 Bristol Park & Ride.

3.29 The JSP stipulates that no housing will be completed at the North Keynsham SDL ahead of the Avon Mill Lane to A4 link, Keynsham rail station improvements and Metrobus (high quality public transport) route from Bristol to Keynsham on the A4 corridor being completed.

Implications:

- Incorporation of the key transport measures outlined in the JTS and JSP within the Local Plan site allocation and SDL masterplan;
- Primary vehicle access to be provided via the North Keynsham Link Road, with potential to downgrade existing accesses routes to pedestrian/ cycle-only. The route should be of an appropriate nature for a mixed-use environment and be designed to passively restrict vehicle speeds while working as a public transport corridor for local and longer distance services;
- All homes to be within 400m of bus stops or 800m of the station;
- The development should adopt a simple and highly connected street network based on a connected block structure and strong street hierarchy which supports sustainable and healthy transport options. It should provide strong, safe links to the pedestrian and cycle network, schools and facilities and to local public transport connections at the A4 and Keynsham Station;
- The school and neighbourhood centre should be located on key and accessible routes and used to create a sense of place to aid wayfinding;
- The improvements to the riverside area could provide an improved transit corridor for cycling commuters connecting to the Bristol to Bath Railway Path and has leisure potential as a destination for other local people.

Viability

- 3.30 The NPPF requires at Paragraph 174 that local planning authorities have regard to the impact on viability of the cumulative effect of all their planning requirements on the implementation of the development plan. Paragraph 177 identifies that “Any affordable housing or local standards requirements that may be applied to development should be assessed at the plan-making stage, where possible, and kept under review”. Paragraph 173 of the NPPF requires that local planning authorities give careful attention “to viability and costs in plan-making and decision-taking”. The NPPF also requires that “the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened”. After taking account of policy requirements, land values should be sufficient to “provide competitive returns to a willing landowner and willing developer”. The NPPG stresses the need for evidence on viability to ensure that the Local Plan vision and policies are realistic and provide “*high level assurance*” that plan policies are viable. Evidence should be proportionate and not every site needs to be tested.
- 3.31 The JSP is supported by a viability assessment by BNP Paribas which is the beginning of this process of review and testing in accordance with para 177 of the NPPF above. The Viability Assessment objective was to give a high level indication of firstly, whether any of the Strategic Development Locations are unviable in the absolute sense, i.e. the total value of a site fails to cover its costs of construction or to make any contributions to infrastructure and affordable housing; secondly to provide an indication of how the SDLs perform comparatively with one another and thirdly; in so doing, to suggest where contributions to infrastructure and affordable housing may be most challenging.
- 3.32 Infrastructure delivery is a prime concern for communities in accepting growth and all parties in the development process, including landowners and developers need to demonstrate commitment and willingness in this regard in order that the step change in growth being proposed in the WoE through the emerging JSP is delivered in an acceptable, beneficial and timely manner.
- 3.33 With respect to the initial assessment and the benchmarks, BNP Paribas are of the view that there is a high level of assurance that all the SDLs are capable of making some infrastructure and affordable housing contributions, over and above the basic costs of development. Given the long timescale for delivery of the site and potential for uncertainty about the economy over that period, it will be appropriate to retest the viability of the scheme at later stages of the Local Plan preparation.

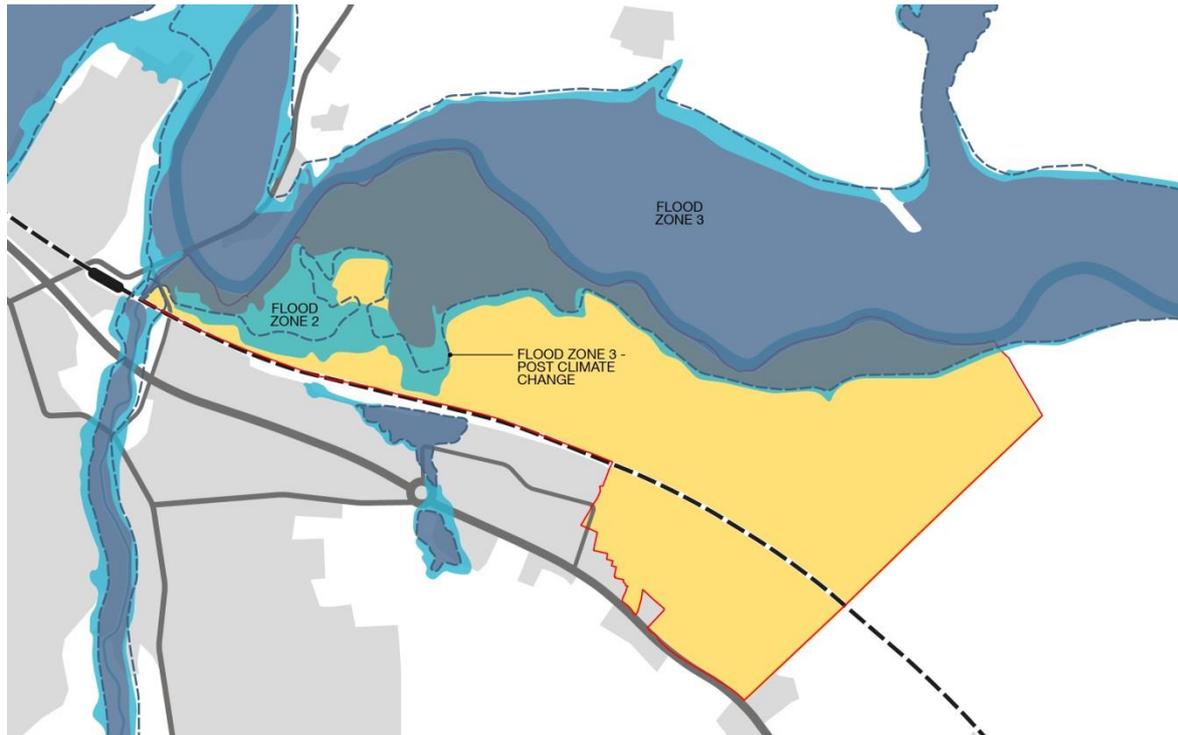
Implications:

- After taking account of policy requirements, to create an economically viable scheme that delivers land values that are sufficient to provide competitive returns to a willing landowner and willing developer. This is to ensure that the scheme can be realised and delivered.

Flood Risk

3.34 Significant areas of the site lie within Flood Zone 3 (functional floodplain and areas with high probability of flooding). This primarily affects the northern area of the peninsula, around Broadmead Lane Industrial Estate, and up to the Wessex Water site, and a corridor along the River Avon, including the access from Avon Mill Lane / Keynsham Road. There are areas at risk from surface water flooding around the Broadmead Brook. Flood Zone 2 (medium probability - 1:100 to 1:1000yr annual risk) affects further areas around the Wessex Water and DS Smith sites. The B&NES Strategic Flood Risk Assessment demonstrates that further areas of the site will fall within Flood Zone 3 following climate change. Initial work by Arup suggests there could be opportunity to re-route Broadmead Brook to provide improved outfall from upstream, reducing flood risk around the railway line, while improvements to levels within the functional floodplain could ease floodwater flows. The alignment of the North Keynsham Link Road could assist in providing current and future flood protection. The majority of the existing dwellings north of the railway discharge into the River Avon un-attenuated. Significant improvements will be required to attenuate flows from the redeveloped site.

Flood Zone Constraints



Implications:

- Seek to avoid development within areas of Flood Zone 3;
- Seek to avoid residential development within Flood Zone 2;
- Reduce and manage flood risk;
- Re-route Broadmead Brook to provide improved outfall from upstream, reducing flood risk around the railway line;
- Use alignment of the North Keynsham Link Road to assist in providing current and future flood protection;
- Incorporation of a Sustainable Urban Drainage and surface water attenuation networks to avoid additional pressure on the existing floodplain and provide additional habitat;
- Incorporate measures such as rainwater harvesting and green roofs.

Utilities

3.35 The site is constrained by the presence of the Wessex Water sewage treatment works at Broadmead Lane. Anecdotal evidence suggests that the site has odour nuisance issues which could limit the attractiveness for more sensitive development such as residential. Wessex Water odour risk assessment would be triggered within a 400m consultation zone around the works site. The site is crossed by a number of

utilities, many associated with the Wessex Water site. Most notable is the gas pipeline (Feeder 14) which passes southwest to north-east at the eastern end of the type. The pipeline was not constructed to allow new roads above so would require upgrading or diverting if it were crossed. A National Grid easement of 10m exists either side with further HSE consultation zones around the alignment (inner zone: 40m, middle zone: 125m, outer zone: 155m). A sludge pumping main crosses east-west through the centre of the site towards the Wessex Water site with a second route running north from the works. The western end of the site is crossed by a number of high- and low-voltage Western Power lines. Many of these routes would require easement or diversion to facilitate development.

Utility Constraints



Implications:

- Undertake odour analysis for the Wessex Water sewage treatment works;
- Incorporate easement considerations into the layout of the development;
- Stakeholder engagement required with individual utility providers.

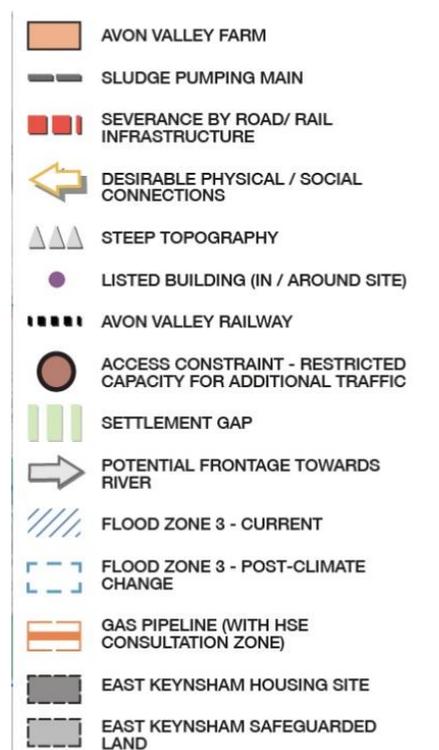
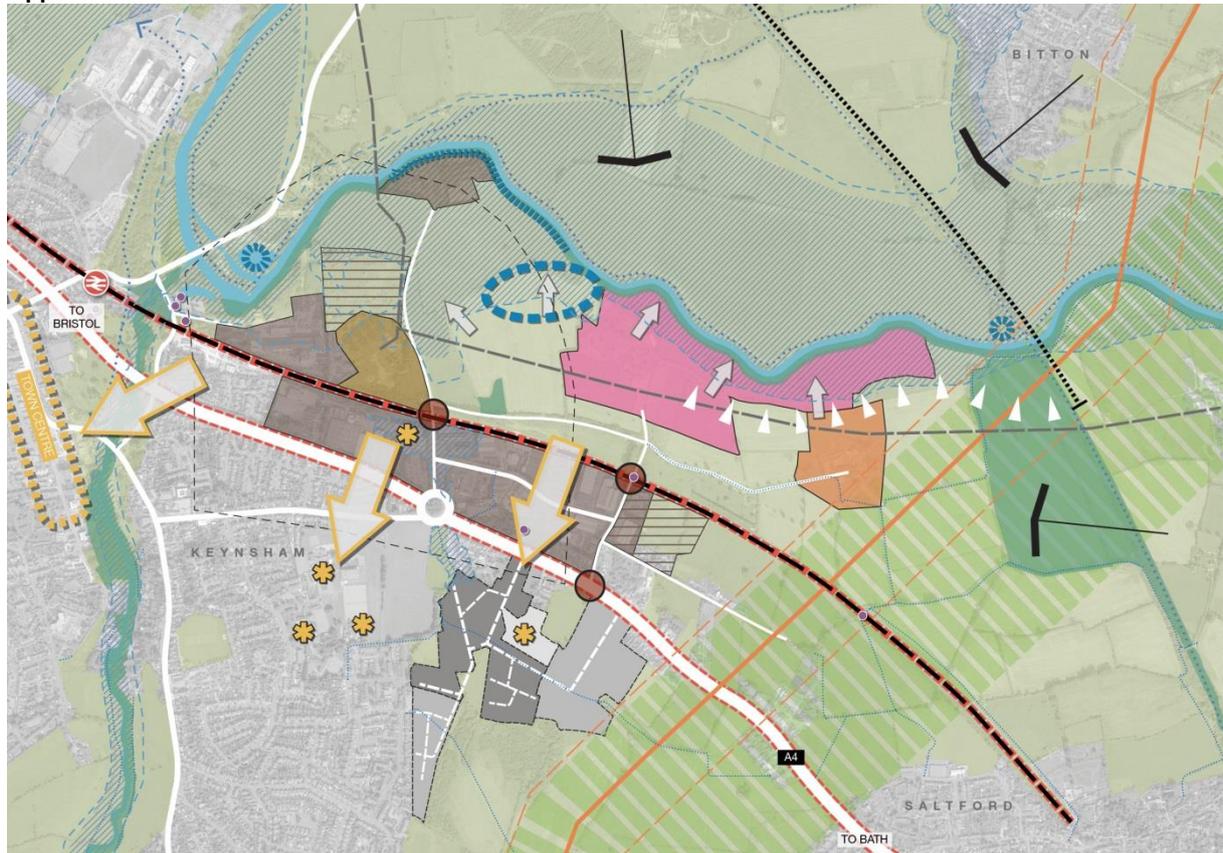
4.0 Bringing it all together: North Keynsham

- 4.1 Arup has produced a strategic planning framework for the North Keynsham site on behalf of the Council. The framework demonstrates an urban extension which responds to the strong landscape setting. The development includes residential-led development of apartments and family housing focused around a new marina with supporting neighbourhood centre and primary school. Mixed employment

development is included at the western end of the site with extensive green infrastructure across the site. The scope of the framework is a layout for the site itself with consideration given to the off-site improvements required.

4.2 An initial assessment of the opportunities and constraints relating to residential-led development has been made and is summarised below:

Opportunities and Constraints



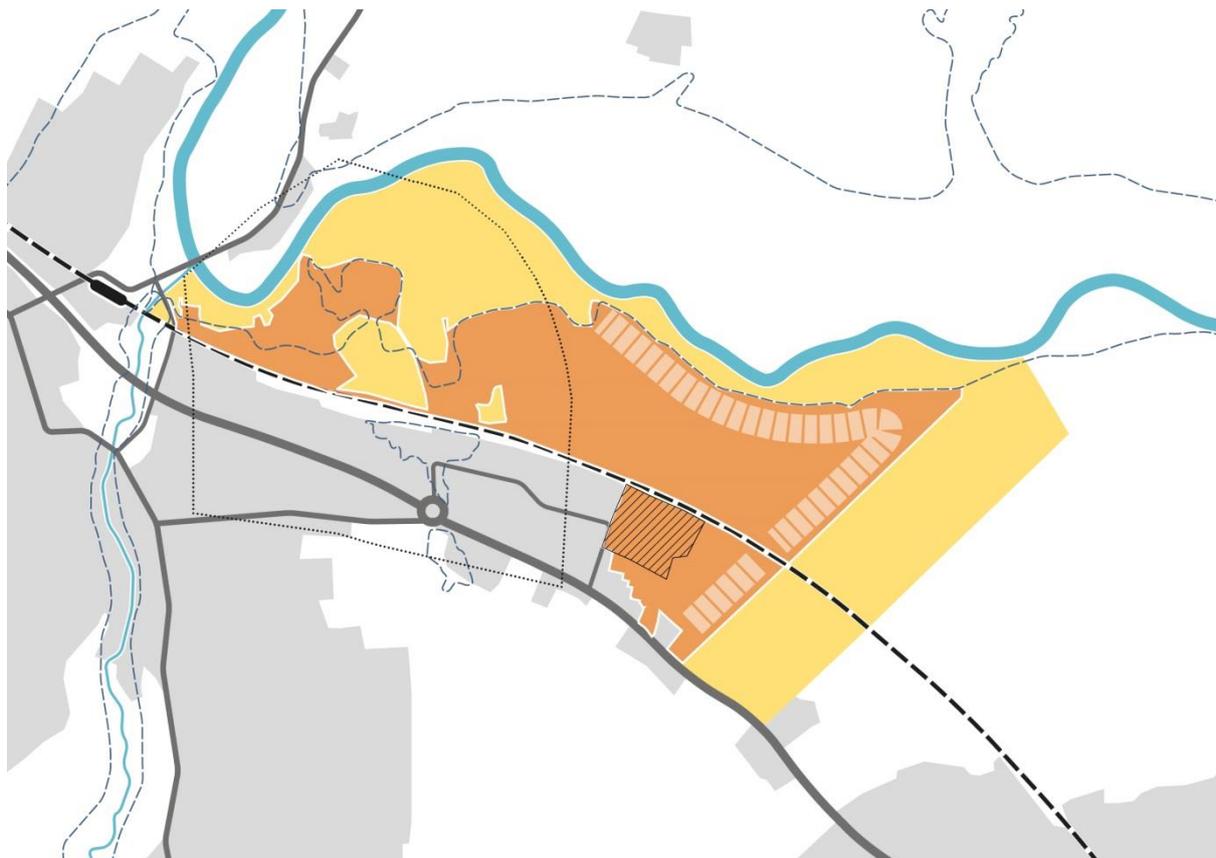
| OPPORTUNITIES | CONSTRAINTS |
|---|--|
| Upgrade the riverside area to provide an enhanced public experience alongside ecological improvements. Opportunity to link into the marina proposals, provision of public open space and pedestrian/cycle links. | Landscape is highly sensitive and has limited capacity for accommodate new development, particularly at the eastern end. Buffer planting and/or setbacks will be required along these edges. |
| Frontage and outlook onto the River Avon, providing a high-quality living and recreation environment. Strong opportunity around a new marina for high-density residential development. | Proximity to active industrial sites: potential environmental health concerns, strong impact on views from and to the site and likely poor frontage along proposed North Keynsham Link Road route. |
| Provide a strong neighbourhood centre which acts as a focus to the site, serving residents and employees. Opportunity to cluster retail, service and education uses around key open space and marina frontage. | Severance from existing communities due to the railway means this development will need to be carefully designed to establish a community and ensure desirability. It will need to provide for day-to-day social and retail functions with potential loss of residential land. |
| Opportunity to create strategic pedestrian and cycle connections to Keynsham town centre and railway station and the local schools. Connections across the river towards the long distance recreational walks should be explored. | Limited public transport services constrain amenity for commuter and amenity journeys. Poor connectivity to the existing railway station. |
| Consider realignment of the proposed North Keynsham Link Road and users of the site. Appropriate street environment to be used to provide traffic calming. | Limited opportunity for new vehicle and pedestrian/cycle routes due to topography and neighbouring land holdings. Routes may be considered undesirable due to perceived lack of safety and surveillance. |
| Create green corridors between the riverside area and the railway corridor, providing a range of ecological, connection and recreation opportunities and accommodating surface water attenuation. | Poor access to the site using existing routes and congestion on connections to the A4. Improvements would require new bridge access and new road provision at a cost to the project. |
| Opportunity to provide a new, enhanced facility at the Avon Valley Park which caters for an increased number of visitors and has a wider range of attractions. | Existing location of the Avon Valley Park divides the site and limits public access to the riverside. Relocating or removing the facility could considerably improve amenity of the development and open spaces and give a more centralised community. |
| Development provides the opportunity to improve the functionality of the floodplain and ease flows in connecting watercourses. | Large areas of the site lie within Flood Zones 2 and 3 and are unsuitable for development. |
| | Existing infrastructure considerably constrains the layout of the site unless relocated which will have an associated cost to the project. |

Developable Area

4.3 Taking into account the site context, a maximum development envelope has been defined for built development. This takes into account the fixed land uses, protected sites and current floodplain. Access routes, public open space and landscaping may lie outside this area. Within this area there are additional sensitivities that will affect the site layout:

- High landscape sensitivity at northern and eastern edges
- Proximity to Wessex Water sewage treatment works (400m consultation zone)
- Proposed waste services and recycling centre
- Future extent of floodplain following impact of climate change.

Developable Area



- SITE EXTENT
- DEVELOPABLE EXTENT - 70HA (47%)
- PROPOSED WASTE SERVICES AND RECYCLING CENTRE
- FLOOD ZONE 3 - POST-CLIMATE CHANGE
- WESSEX WATER ODOUR RISK ASSESSMENT CONSULTATION ZONE (400M)
- AREA WITH INCREASED LANDSCAPE SENSITIVITY

Vision and Objectives

- 4.4 It is important to create a vision for North Keynsham as this will form the foundation of the Local Plan allocation and the subsequent development and type of place that is created. The vision describes the kind of place the area should become and what is needed physically, economically and socially. It will help to shape what happens on the site, giving it coherence and a real sense of identity and place.

PROPOSED VISION

To open up this currently isolated area to its environs in a sensitive way, creating a new sustainable urban neighbourhood with increased access to the River Avon and connecting Keynsham to strategic walking and cycle routes.

This will be a lively, safe, sustainable and healthy place which reinforces the distinctive character of Keynsham, improves connectivity, enhances our understanding and respect of nature and creates spaces around which a new community can start to form.

The community will thrive and develop within a well-integrated and multifunctional green infrastructure network of new wetland features, restored floodplain meadows and new woodland.

OBJECTIVES

A LIVELY PLACE

- 1. In order to create and reinforce public life, people will be invited to walk and cycle within the new neighbourhood with a high quality public realm and cycle infrastructure.**
- 2. The neighbourhood will accommodate a critical mass of people to sustain local services such as a primary school and a local centre.**

A SAFE PLACE

- 3. To increase activity, the neighbourhood will be permeable, compact and walkable, with attractive public spaces and a mix of uses.**

A CONNECTED PLACE

- 4. The neighbourhood will be integrated with the existing built up area of Keynsham as far as possible.**
- 5. High-quality walking and cycle routes will be provided to the Bristol to Bath cycle route, the train station and to new and existing development to the south of the A4. Public access will be provided to the riverside area.**
- 6. A new highway link will be delivered between Avon Mill Lane and the A4 through the development. This will become a new street, considering the needs of pedestrians, cyclists, public transport and vehicles, in that order. Development will front onto and define this new street.**

A SUSTAINABLE PLACE

- 7. Site layout and infrastructure will ensure a high number of trips take place by foot, bike or public transport.**
- 8. Development will be expected to incorporate energy efficient buildings and include renewable energy generation. The aspiration will be to deliver a zero carbon development.**

A HEALTHY PLACE

9. To combat sedentary lifestyles, walking and cycling will be a natural part of the pattern of daily activities.

A DISTINCTIVE AND RICH PLACE

10. The new neighbourhood will contribute positively to local character and distinctiveness. It will take clues and cues from Keynsham's distinctive character as inspiration but will form a contemporary new quarter with its own character and qualities.

11. Development should work with the landscape structure and contribute positively to the characteristics of the river corridor.

12. Green Infrastructure will be incorporated to improve environmental quality, to mitigate landscape impact and to promote connectivity for people and wildlife.

4.5 The vision and objectives have been derived from the understanding of the site, its history and geography and suggests how a sense of place can be created and related to what is already there. It is important that the vision is not lost during the development of the design, so as it develops, the plan must be constantly checked against the vision. However, the development of the vision and objectives is also an iterative process and must be shaped through consultation with key stakeholders and the wider community; it is therefore likely to evolve through the Local Plan process.

Options Development

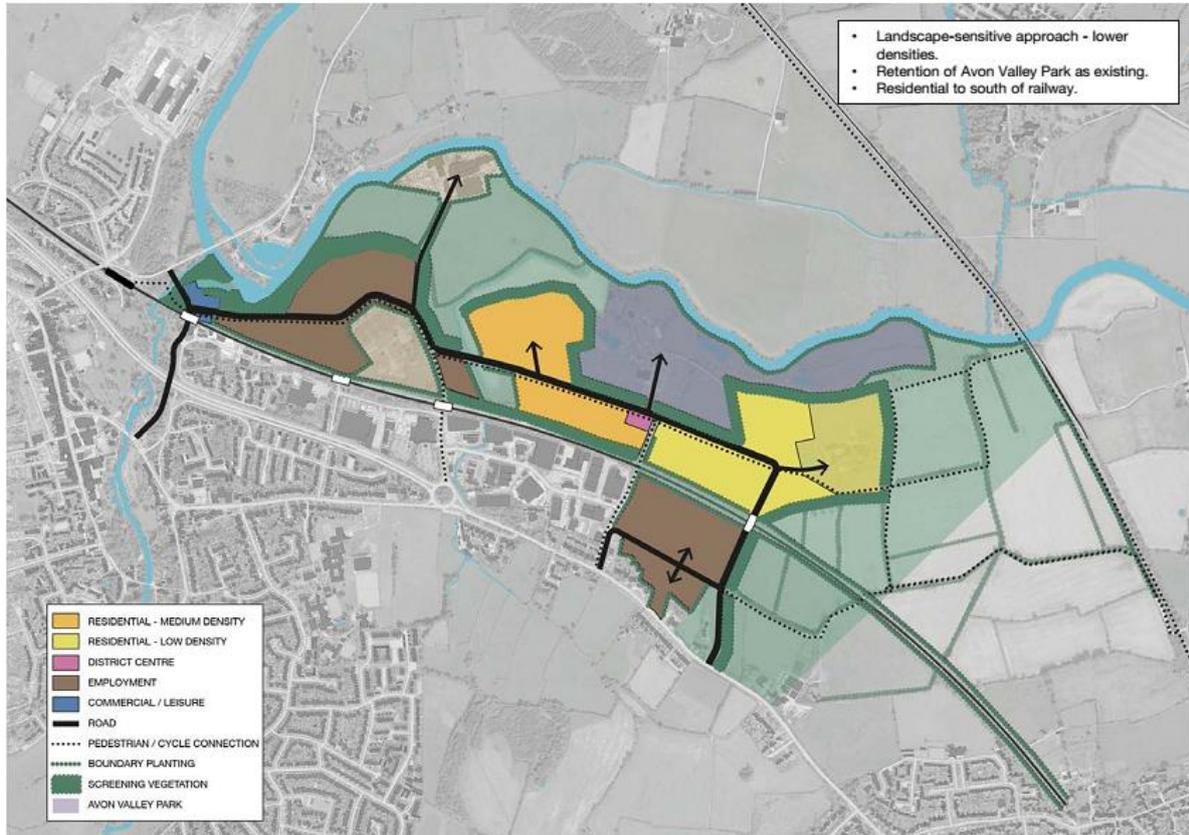
4.6 Preparing and testing land use and layout options is an important part of plan-making and the masterplanning process to ensure that they form a coherent, realistic and deliverable outcome. Guidance² from the Commission for Architecture and the Built Environment (CABE) recommends that testing of the options should be able to answer five fundamental questions:

1. Will it deliver the vision established for the place, based on its unique qualities?
2. Does it set out proposals and principles that will create a place that will function well in terms of its urban design; streets, blocks, spaces, movement, landscape and infrastructure?
3. Does it provide the basis to create great architecture, buildings and public spaces in terms of design quality, set the standards to be achieved and provide the framework for testing proposals?
4. Are the proposals viable in economic and market terms?
5. Is the plan deliverable? What are the mechanisms to ensure delivery?

² Creating Successful Masterplans: A Guide for Clients

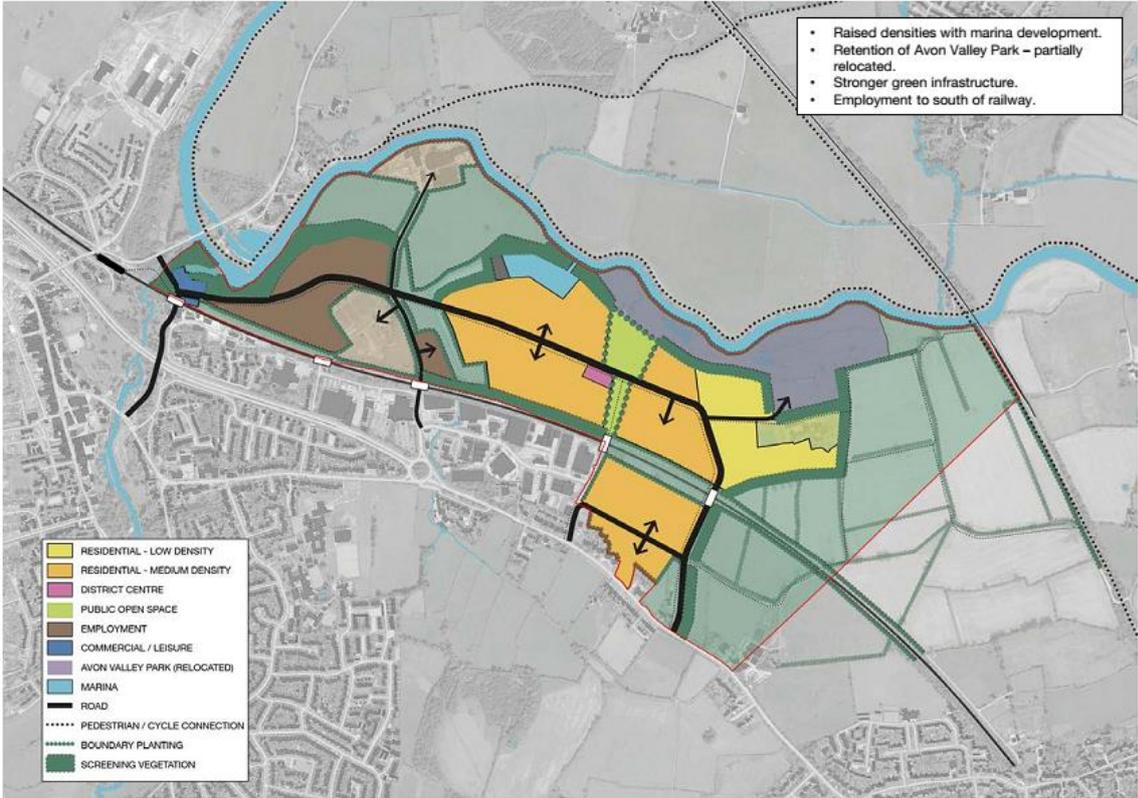
4.7 Arup produced a number of options to test against these fundamental questions. A number of these are reproduced below:

Option A



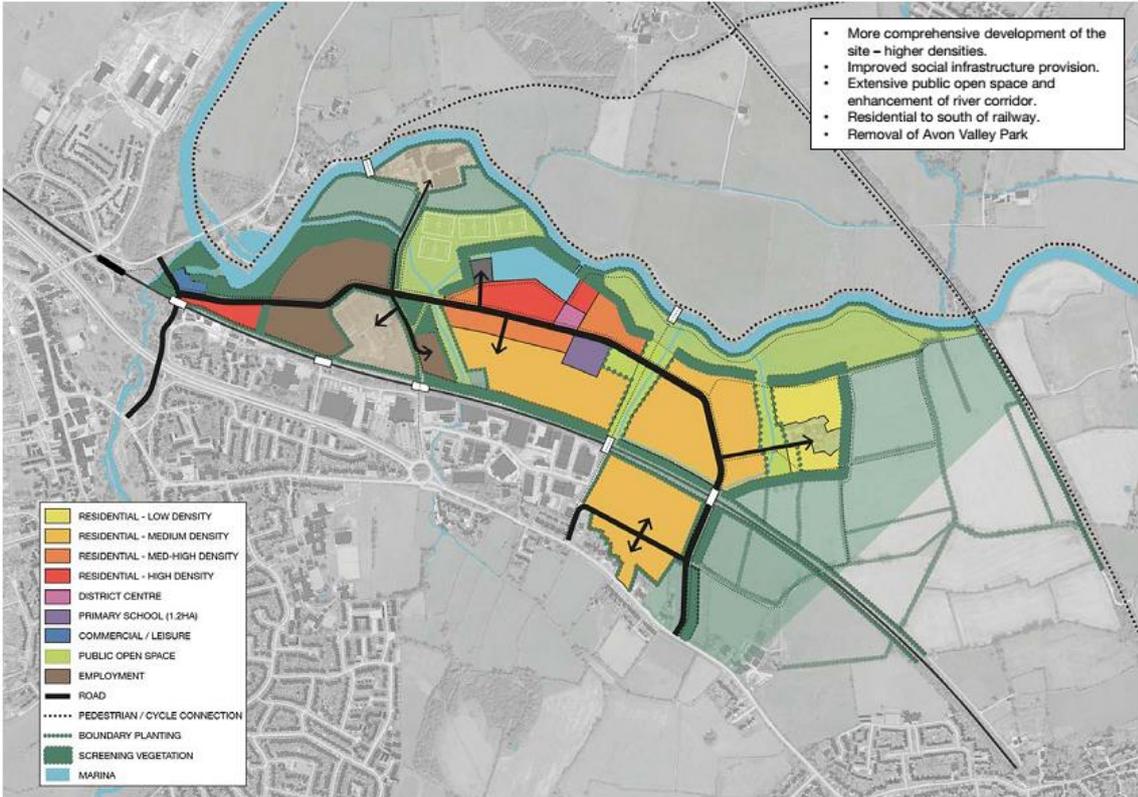
ARUP

Option B



ARUP

Option C



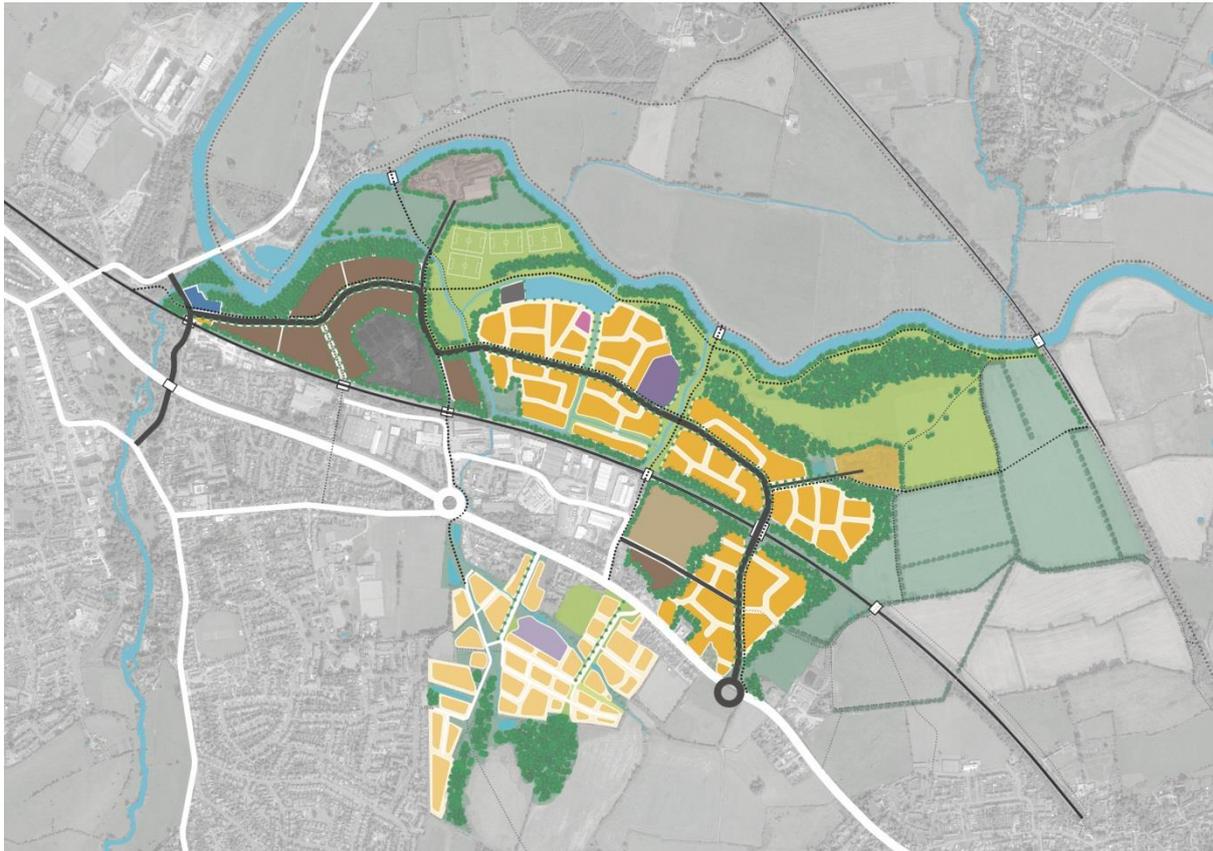
ARUP

- 4.8 The options ranged from a more landscape sensitive approach (Option A) with lower densities across the site to more comprehensive options (Option B and C) with higher densities. These were also subject to viability analysis by Cushman and Wakefield.
- 4.9 The conclusion from options testing was that Option C was the only option that produced a viable scheme that passed the NPPF test of creating an economically viable scheme that delivers land values that are sufficient to provide competitive returns to a willing landowner and willing developer. Option C was also able to provide a framework for delivering the vision and objectives, had the potential to create a place that functioned well in urban design terms and had the potential to create great architecture, buildings and public spaces in terms of design quality. Crucially, Option C has the potential to generate a critical mass of people able to support services such as public transport, local shops and schools, and in doing so has the greatest potential of creating a place that meets the objectives of a lively, safe, connected, sustainable, healthy and distinctive new community. Options A and B did not achieve enough development quantum or create sufficient residual land value and therefore failed the fundamental tests of being viable and deliverable. In addition, Option A in particular had far less potential to generate a critical mass of people able to support services required by the JSP, and would be less successful in meeting the set objectives.

Concept Framework for Local Plan Consultation

- 4.10 Option C was further developed and refined by Arup to produce a concept framework which responds to the site analysis, vision and objectives which provides a high-level layout and an indication of site capacity. The framework has been structured to optimise residential and employment development, balanced against the flood risk, landscape sensitivity constraints and the limitations of the Health and Safety Executive (HSE) consultation zones around the National Grid gas pipeline. The concept framework was further refined with the help of initial stakeholder engagement (for example through workshops with B&NES Councillors and the Town Council and initial discussions with landowners) to produce the concept framework for the Local Plan issues and options public consultation. The main areas of refinement following the stakeholder and landowner engagement focused around options for the alignment of the link road and incorporating Avon Valley Wildlife and Adventure Park as an integral part of the overall masterplan.

Initial Concept Strategic Framework

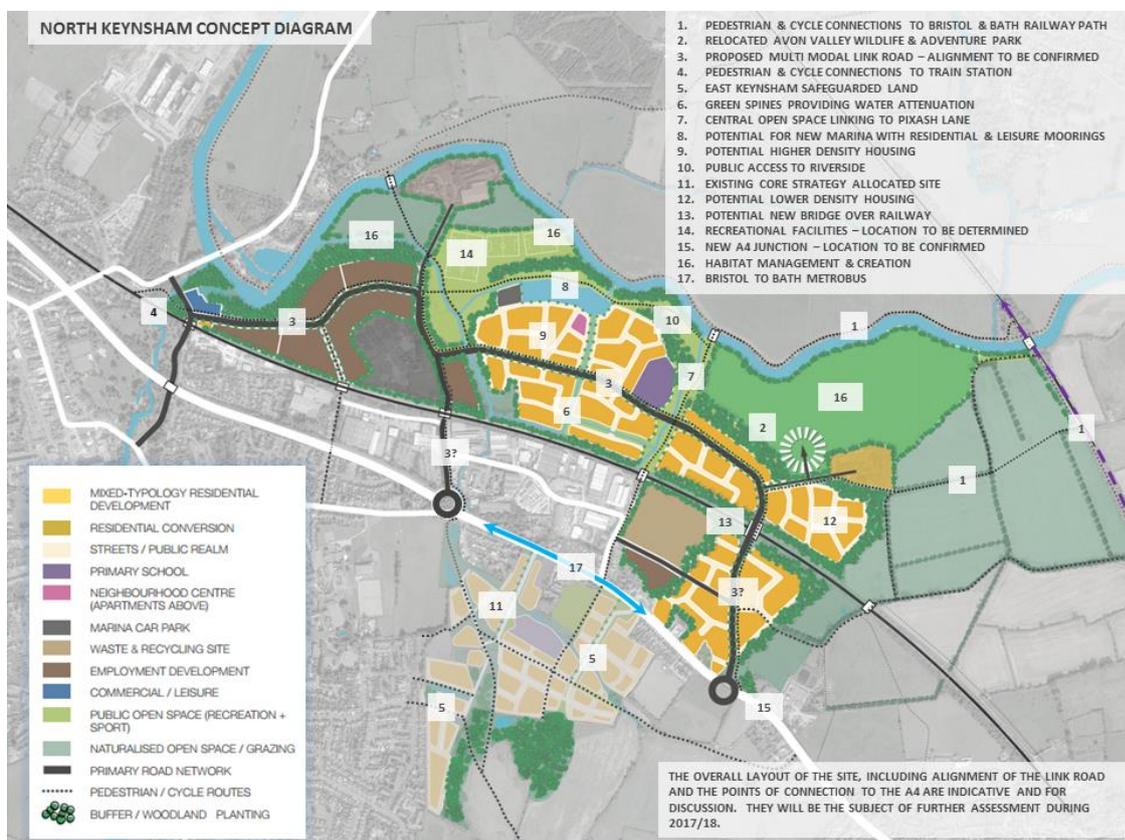


- MIXED-TYPOLOGY RESIDENTIAL DEVELOPMENT
- RESIDENTIAL CONVERSION
- STREETS / PUBLIC REALM
- PRIMARY SCHOOL
- NEIGHBOURHOOD CENTRE (APARTMENTS ABOVE)
- MARINA CAR PARK
- WASTE & RECYCLING SITE
- EMPLOYMENT DEVELOPMENT
- COMMERCIAL / LEISURE
- PUBLIC OPEN SPACE (RECREATION + SPORT)
- NATURALISED OPEN SPACE / GRAZING
- PRIMARY ROAD NETWORK
- PEDESTRIAN / CYCLE ROUTES
- BUFFER / WOODLAND PLANTING

LAYOUT CHARACTERISTICS

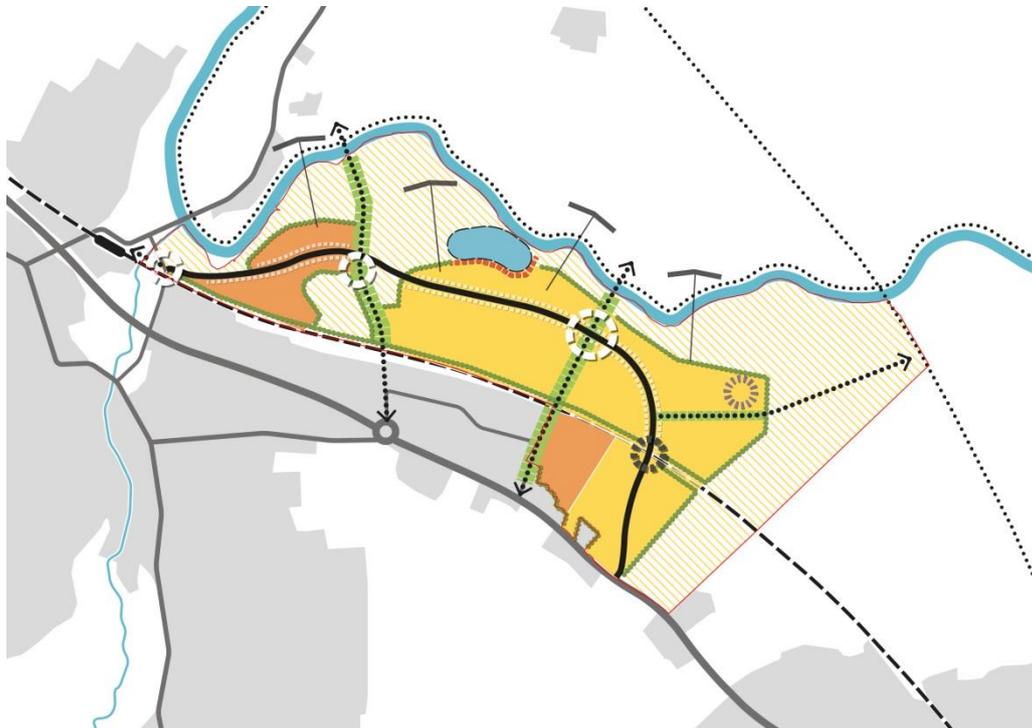
- 1 Pedestrian and cycle connections across the River Avon.
- 2 Improved pedestrian and cycle connections to Keynsham railway station.
- 3 North Keynsham Link Road alignment through centre of site from Avon Mill Lane to A4 with new roundabout.
- 4 Primary school (1.2 ha site).
- 5 Green spines through residential area providing surface water attenuation through SUDS.
- 6 Central public open space along key pedestrian route linking riverside to Pixash Lane.
- 7 New marina providing residential and leisure moorings. Car park provided to the west.
- 8 Higher density housing fronting marina and riverside - maximise development along valuable views and provide strong surveillance.
- 9 Public access to riverside area with ecological landscape and public realm improvements and increased leisure amenity (integration of sport/ play trails).
- 10 Employment development around main access road (55,000sqm floorspace).
- 11 Existing vehicle routes downgraded to pedestrian and cycle-only links.
- 12 Neighbourhood centre (0.5 ha) - potential convenience retail, primary care and community uses with apartments above.
- 13 Character of existing farm to be retained and enhanced for residential development.
- 14 Extensive buffer planting around edges of site to mitigate against visual impact of development. The planting should establish a new viable habitat with recreational, ecological and flood mitigation benefits.
- 15 New recreation facilities to potentially include sports pitch provision.
- 16 New waste and recycling site within Strategic Allocation site.
- 17 Improved pedestrian and cycle connections to the Bristol & Bath Railway Path.
- 18 Links to the East Keynsham Strategic Allocation and community woodland.
- 19 New roundabout connection with A4.
- 20 Habitat management and enhancement to deliver flood and recreational benefits. To include restoration of flood plain grazing marsh (UK Priority Habitat) and new woodland.

Final Concept Strategic Framework for public consultation



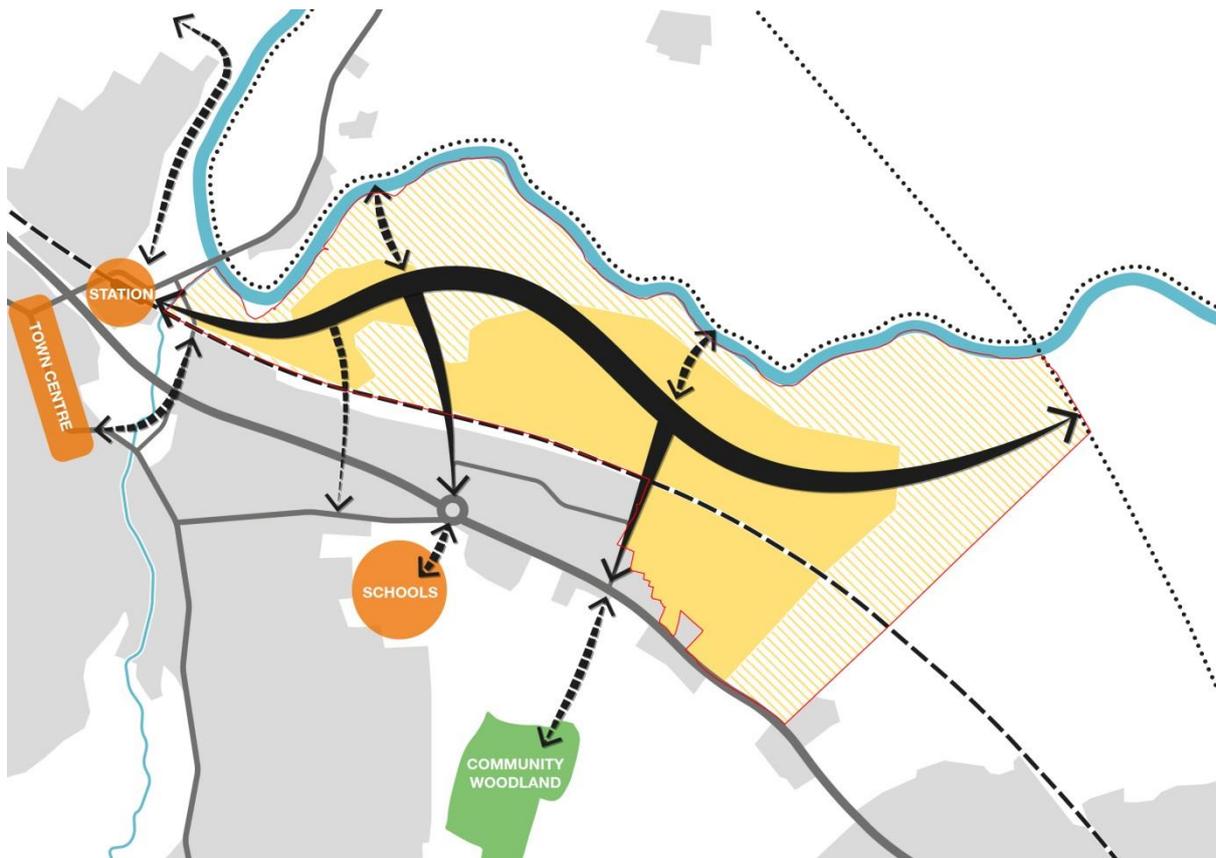
4.11 The concept framework incorporates a number of topic specific strategies that respond to the vision and objectives:

Placemaking Strategy



- MIXED-TYPOLOGY RESIDENTIAL DEVELOPMENT
- EMPLOYMENT / INDUSTRIAL DEVELOPMENT
- MIXED-USE - OPEN SPACE/ RETAINED DEVELOPMENT/ LANDSCAPE
- STRONG FRONTAGE ALONG MAIN STREETS
- STRONG FRONTAGE TO MARINA - TALLER BUILDINGS / HIGHER DENSITY
- PREFERRED MARINA LOCATION
- ORIENTATION TOWARDS RIVERSIDE
- KEY PEDESTRIAN / CYCLE LINKS
- NEW BRIDGE - OPPORTUNITY FOR LANDMARK
- GATEWAY / FOCAL AREAS - STRONG FRONTAGE, PUBLIC OPEN SPACE OPPORTUNITY
- VISUAL SCREENING AROUND EDGES
- GREEN CORRIDORS ALONG MOVEMENT ROUTES
- RETENTION OF FARM CHARACTER

Pedestrian and Cycle Connections



Key Points:

- East-west between Keynsham station and the Bristol & Bath Railway Path.
- North-south between the A4 and the riverside, with potential for bridge connections over the river.
- Cycle-friendly infrastructure within the development.

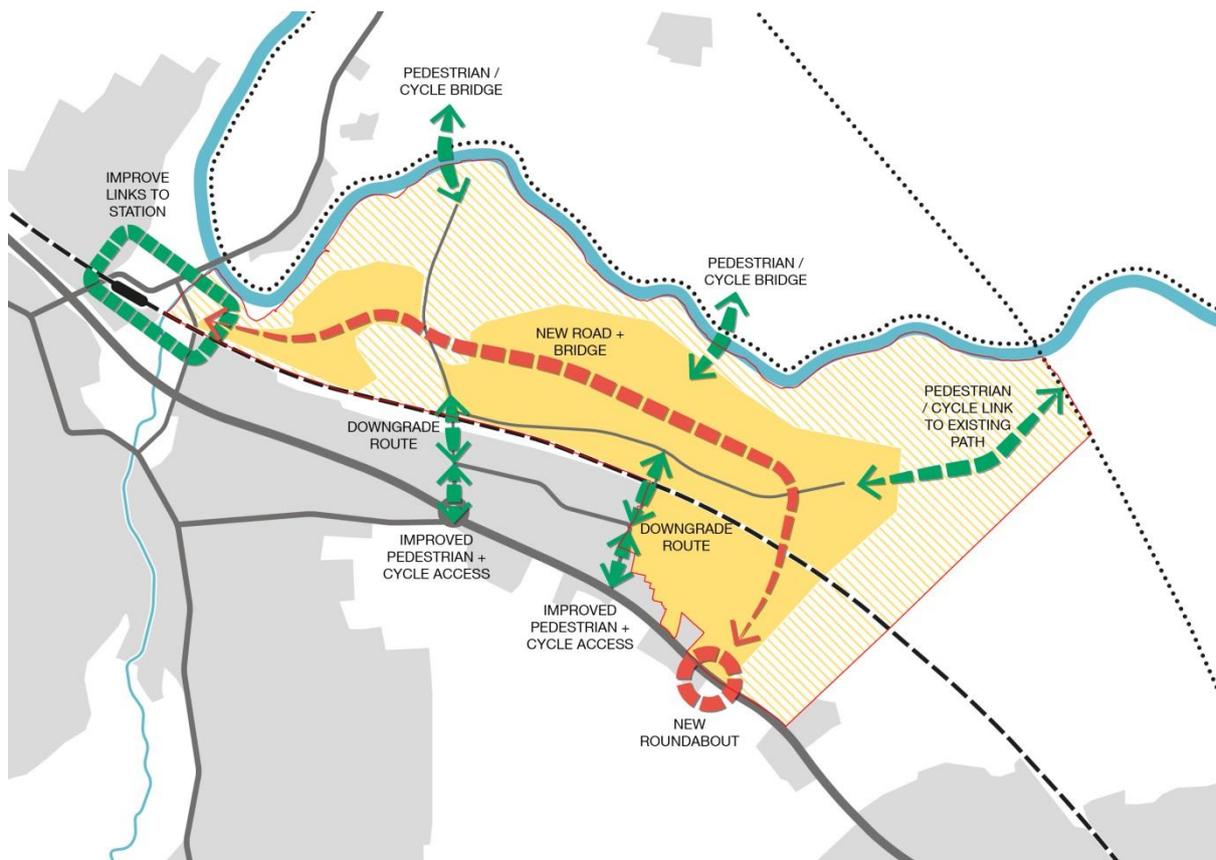
Green Infrastructure



Key Points:

- Legible network of green corridors and public spaces which increase the value and amenity of neighbouring developments.
- Support biodiversity and enhance existing habitats.
- Manage surface water through SUDS networks and attenuation.
- Increase public access to the riverside and natural environment with a mix of recreation and leisure offers for residents and other local people.
- Develop a community which fits within the ecological, heritage and landscape context.

Infrastructure Improvements

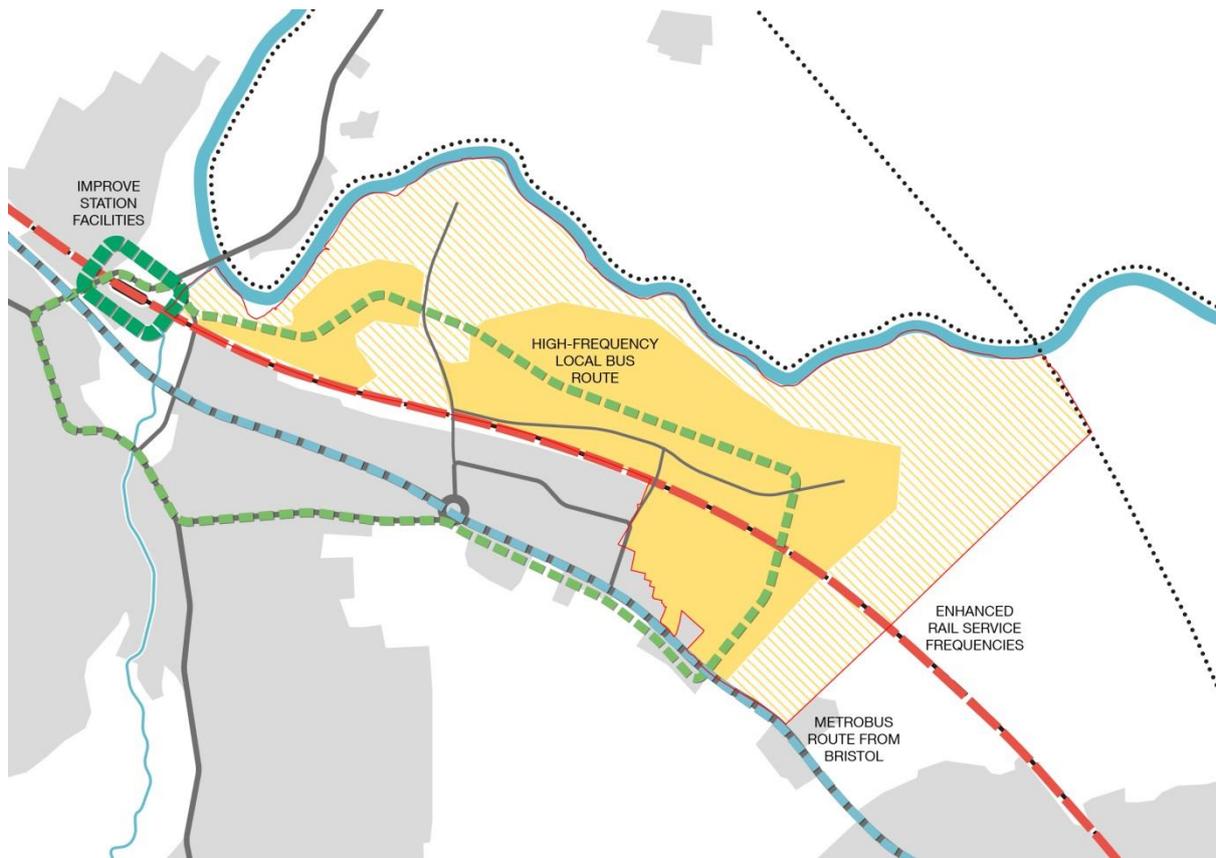


Key Points:

A number of key infrastructure improvements are required or highly desirable to make the site a strong and sustainable development:

- New road through the site, North Keynsham Link Road, providing relief to the town centre as primary access for the site with new roundabout on the A4.
- Downgrading of existing vehicle accesses (Broadmead Lane and Pixash Lane) to pedestrian/cycle only routes.
- New pedestrian/cycle bridge/s across the River Avon.
- New pedestrian/cycle connections to Keynsham Station and the Railway Path

Public Transport Improvements

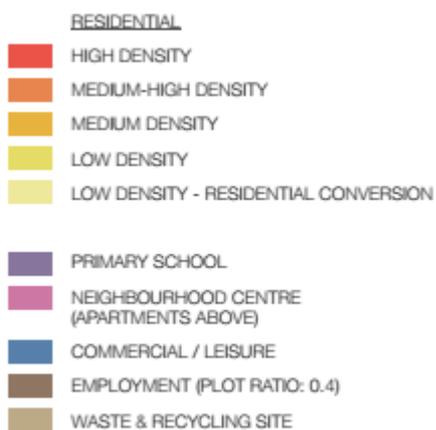


Key Points:

The following public transport improvements have been proposed to serve the site:

- Keynsham train station to be improved with enhanced service frequencies (MetroWest) and improved passenger facilities and expanded car parking.
- Metrobus route from Bristol on the A4 corridor with new stops to provide pedestrian interchange with rail and local bus. In the long-term, light rail could replace Metrobus on the A4 corridor.
- All homes to be within 400m of bus stops or 800m of the station.
- High-frequency local bus service following an orbital route linking the site to the town centre, Metrobus, rail and other local bus services.

Development Density



Key Points:

- The benefits of seeking higher density levels in overall terms are well recognised – especially in the context of delivering mixed-use development where a minimum housing density is required to sustain non-residential uses
- The aim should be to generate a critical mass of people able to support services such as public transport, local shops and schools
- Recommended approach to density is design-led, concentrating on sustainable urban quality with the need to relate densities to context and the need to provide a mix of densities within large developments
- The suggested densities are based on analysis of what the market might realistically deliver and are therefore seen to be viable and deliverable

Key Principles of the Concept Framework

4.12 Clifton Emery has developed a series of Placemaking Guiding Principles for the Joint Spatial Plan, covering Biodiversity, Health and Wellbeing, Social Sustainability, Transport and Urban Design & Landscape (shown below). These are addressed in the key principles for the SDL.

Placemaking Guiding principles (Clifton Emery)

| Biodiversity | Health and Wellbeing | Social Sustainability |
|---|--|---|
| 1. To maintain and enhance a functional and connected strategic green infrastructure network. | 1. To deliver safe and healthy places made up of thriving neighbourhoods with a high quality of life. | 1. To deliver a region with sustainable and economic housing growth. |
| 2. To establish and maintain coherent and resilient ecological networks. | 2. To improve and protect the health and wellbeing of the people in the West of England and to reduce health inequalities. | 2. To encourage economic development, diversification and prosperity. |
| 3. To provide natural solutions to help tackle the impacts of climate change. | 3. To plan for development that promotes health and well-being. | 3. To deliver mixed and sustainable communities. |
| 4. To optimise the use of green infrastructure and natural ecosystem services to deliver sustainable water management, flood mitigation measures and reduce flood risk. | 4. To ensure measures are taken to tackle unhealthy neighbourhoods and unhealthy lives. | 4. To ensure engagement enables co-production with communities based on identifying existing local community assets and generate catalysts for more resilient healthy and sustainable outcomes. |
| 5. To improve the network of active travel routes and accessibility to green spaces. | 5. To ensure that the neighbourhood is the basic setting for health. | 5. Invest in our city, town and neighbourhood centres. |

LAYOUT

4.13 The site layout demonstrated on the framework uses a connected block structure which supports the street hierarchy to provide clear legibility and give strong frontage over key streets, open spaces and pedestrian/ cycle routes. Taller buildings could be used to reinforce the urban form at these locations. The school and neighbourhood centre should be located on key and accessible routes and used to create a sense of place to aid wayfinding.

NATURAL ASSETS

4.14 The development should respond positively to the existing natural assets and landscape to ensure that the benefits of development outweigh the loss of green belt land. The site should respond to the B&NES Green Infrastructure Objectives for the area:

1. Recognise and enhance a legible network of physical green spaces and corridors.
2. Support resilient ecosystems and biodiversity.

3. Mitigate and adapt the natural and built environment to climate change through the implementation of green infrastructure.
 4. Reduce and manage flood risk.
 5. Improve mental and physical health, and the cohesion of local communities.
 6. Maintain and enhance cultural heritage, landscapes and natural resources.
 7. Increase sustainable food production.
 8. Promote economic growth, employment and skills improvement.
- 4.15 The riverside area has significant potential to be made publicly accessible and enhanced as both an amenity and environmental asset, linked into a wider green infrastructure network across the site. The improvements could provide an improved transit corridor for cycling commuters connecting to the Railway Path and has leisure potential as a destination for other local people.
- 4.16 Potential enhancements should have a low visual impact but include play and fitness trails, children's play areas, sports pitches, access to the water for boating and fishing activities, and planting of a 'wet woodland' environment. There is potential to provide allotments, orchards and community gardens within the public areas, alongside sports and leisure facilities. A network of various public open spaces should be provided within the residential area, creating green corridors between the riverside area to the north, the main road through the centre and along the SUDS network. Incidental squares and pocket parks should be provided within larger development blocks to provide some relief and accommodate surface water retention. These areas should benefit from passive surveillance and provide a range of children's play facilities and safe movement routes.
- 4.17 Edges of the developed areas should be planted up with bands of woodland to around 30m depth to provide visual screening and privacy for residents.
- 4.18 The existing designated areas (SSSI and SNCI) should be protected and enhanced in line with their existing character. There is significant potential on this site to restore and re-create habitats and biodiversity. Public open space could be located in areas of heritage interest to reduce impact on sensitive sites.
- 4.19 The development should embrace green technology and opportunities to minimise the ecological footprint through measures such as rainwater harvesting and green roofs. The development should incorporate sustainable drainage and surface water attenuation networks to avoid additional pressure on the existing floodplain and provide additional habitat. Boundary planting and wooded areas will contribute to reducing urban heating and absorb carbon dioxide.

RESIDENTIAL DEVELOPMENT

- 4.20 The development should support a high-quality mix of housing typologies and tenures to develop a sustainable community which compliments the existing settlement. Local architectural character could be explored to ensure the development feels appropriately bedded into its environment.
- 4.21 The framework plan demonstrates a housing quantum based on a transition of densities: high-density apartments to give a strong frontage around the marina, mix of mid-density houses and apartments over the centre of the site and lower density family housing at the eastern edges where the visual impact will be greatest.
- 4.22 An assumption has been made that higher density units would be provided over 3-4 storeys giving strong frontage and higher densities around public open spaces and the main road. Development over the rest of the site is more appropriate at 2-3 storeys. Around the edges, development should respond to the potential for attractive views towards the riverside and provide appropriate surveillance of public areas whilst minimising visual impact.
- 4.23 The site has potential as a location for custom-build or self-build housing with plots set aside for these alternative delivery mechanisms. This could help establish a strong and unique identity for the site.

ACCESS + MOVEMENT

- 4.24 Primary vehicle access would be provided via the North Keynsham Link Road, with potential to downgrade existing accesses routes to pedestrian/ cycle-only. The alignment currently shown draws the road through the middle of the site to best serve site and through traffic. The route should be of an appropriate nature for a mixed-use environment and be designed to passively restrict vehicle speeds while working as a public transport corridor for local and longer distance services.
- 4.25 The development should adopt a simple and highly connected street network based on a strong street hierarchy and which supports sustainable and healthy transport options by providing strong, safe links to the pedestrian and cycle network, schools and facilities and to local public transport connections at the A4 and Keynsham Station. Existing connections under or over the railway should be utilised and connecting routes upgraded where appropriate.

SOCIAL INFRASTRUCTURE

- 4.26 Due to the site's segregation from neighbouring communities, a small neighbourhood centre would be needed to support both residents, visitors and employees with daily social, community, health and retail functions. This could include a small convenience store and some smaller units for retail or small businesses. A marina-side location could be appropriate with potential for additional apartments on upper storeys.
- 4.27 Provision should be made for a primary school on the site. At present, it has been assumed that secondary school provision will be accommodated off-site, subject to developer contributions.

EMPLOYMENT DEVELOPMENT

- 4.28 The framework allows for significant employment development primarily located at the western end of the site where land is less appropriate for residential development due to proximity to the sewage treatment works.
- 4.29 Further employment development is shown at World's End Lane, accommodating the proposed B&NES waste services and recycling centre.
- 4.30 Any new development should provide a strong frontage to the street with car parking in less prominent locations to the rear.
- 4.31 The site framework has potential to accommodate a relocated and remodelled Avon Valley Adventure & Wildlife Park, which would contribute to employment on the site.

DEVELOPMENT PRECEDENTS



ACTIVE FRONTAGE TO OPEN SPACES | STRONG BELT OF PLANTING AROUND EXPOSED EDGES OF THE SITE TO MITIGATE IMPACT ON SENSITIVE VIEWS



STRONG NEIGHBOURHOOD CENTRE AS FOCUS FOR COMMUNITY © GOOGLE 2017



OPPORTUNITY FOR SHARED AND COMMUNITY GARDENS AND ALLOTMENTS ALONGSIDE PRIVATE PROVISION AND PLAY / RECREATION SPACE



MIX OF HOUSING TYPOLOGIES AND TENURES - POTENTIAL FOR DIVERSITY THROUGH ALTERNATIVE HOUSING MODELS AND CUSTOM-BUILD



PEDESTRIAN AND CYCLE FRIENDLY ENVIRONMENT WITH CONVENIENT, SAFE AND ATTRACTIVE MOVEMENT ROUTES



POTENTIAL TO USE THE MARINA AND SURFACE WATER MANAGEMENT AS A DEFINING FEATURE OF THE SITE, CREATING CHARACTER WHILE BEING FUNCTIONAL AND SUSTAINABLE



CONCEPT VIEW PHOTOMONTAGES

4.32 The following images give an impression of the type of development currently envisaged on the site:



CONCEPT VIEW - MARINA



CONCEPT VIEW - RIVERSIDE



CONCEPT VIEW - MAIN STREET

Overall Development Quantum for North Keynsham

The current assessment of development capacity for North Keynsham, based on the analysis above is as follows and is the basis of the Local Plan issues and options consultation:

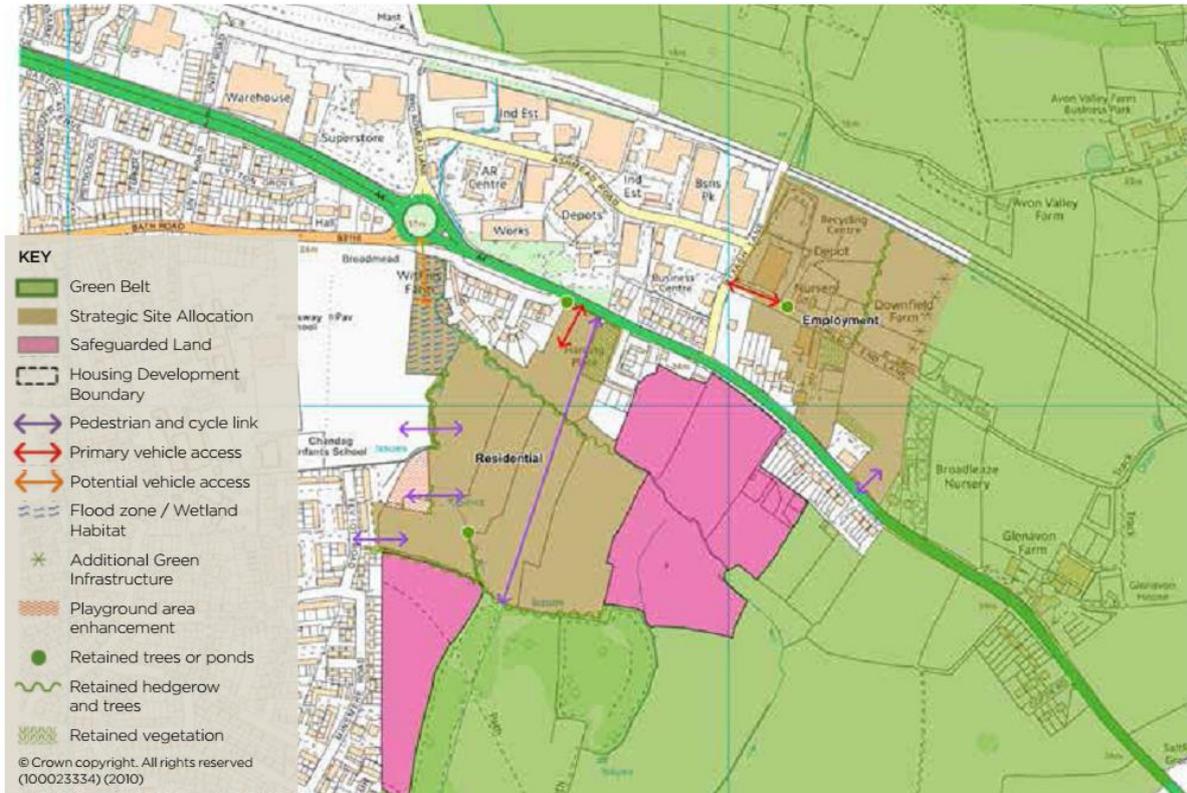
- 1,220 dwellings
- 55,000sqm of employment floorspace
- Local services including a primary school and local centre (including retail and office floorspace)
- Facilities including a relocated Avon Valley Adventure and Wildlife Park and new marina with residential and leisure moorings

5.0 Bringing it all together: East Keynsham

5.1 Land at East Keynsham (Policy KE3A) was allocated for residential and employment floorspace within the adopted Core Strategy in 2014. This is shown by the brown areas on the map below. Land was removed from the Green Belt to accommodate this strategic site allocation. At the same time, in line with national planning policy, additional land was removed from the Green Belt and safeguarded in order to meet longer-term development needs (Policy KE3B). This land is shown by the pink areas on the map below. The safeguarded land was not allocated for development in the

Core Strategy, but is proposed to form part of the new Local Plan Strategic Development Location alongside the land at North Keynsham.

Core Strategy Policies KE3A (land adjoining East Keynsham Strategic Site Allocation) and KE3B (Safeguarded Land at East Keynsham)



5.2 A planning application for the KE3A allocated site was submitted in 2016 for around 250 dwellings and gained outline planning permission on 4/10/2017 (application reference number 16/00850/OUT). These 250 dwellings do not form part of the 1,500 total for the North Keynsham new Local Plan Strategic Development Location.

5.3 The outline planning application was accompanied by a masterplan developed by Clifton Emery Design which illustrates a framework for the development of the site sustainably within the constraints and opportunities that it presents. The masterplan is not subject to the Local plan consultation process, but information on it is included below for the purposes of comprehensive and context. The masterplan responds to the Policy KE3A requirement to ‘be designed to allow future highway, pedestrian and cycle connections to the safeguarded land’. It therefore covers both the KE3A allocated site and the KE3B safeguarded land and illustrates how the safeguarded land could be masterplanned to ensure a comprehensive approach is made to future phases.

5.4 Clifton Emery based the masterplan on an initial concept for the site which was developed around a number of overarching design considerations. These include

achieving a landscape led approach; meeting objectives of planning policy; the need to overcome the physical constraints of the site; the importance of creating a successful place that is locally distinctive; and the necessity of developing a viable and deliverable scheme. The concept plan below illustrates how these elements could come together showing how the allocated and consented site might integrate with the adjacent safeguarded land.

East Keynsham Concept Plan (Clifton Emery)



Vision and Objectives

- 5.5 Clifton Emery have also developed a vision and objectives for the East Keynsham allocated site and safeguarded land:

East Keynsham Vision

Living in East Keynsham allows residents to enjoy the best of two different worlds. On the one hand the convenience of a bustling market town just a 20 minute walk or 5 minute drive away, whilst on the other the tranquillity of the countryside is next door. Whilst locally the neighbourhood is close to many local facilities including shops and schools, the train station at Keynsham means Bristol and Bath can be easily accessed.

The woodland setting of the neighbourhood has large areas of public open space for residents and visitors to enjoy. The country park offers great walks with well-connected footpaths, community orchards, allotments, play areas and a wetland habitat area.

The site provides homes in leafy streets and many new homes share large plots and generous south facing gardens. The houses are designed so that they use low levels of energy resulting in much cheaper energy bills.

East Keynsham is a sought after place to live due to the quality of the place; its modern rural character; the convenience of local facilities including the new primary school; the linked open spaces with ponds, diverse flora and fauna, play areas and pedestrian and cycle connections linking into the wider network of countryside walks in the locality. People love living in the wooded East Keynsham community

Key landscape objectives:

- To connect the Manor Road Community Woodland through the site to the north west and create a linear park around this connection that will form the landscape centrepiece to the development and the wider neighbourhood as a whole.
- Retain the alignment of the stream running east to west through the site and the creation of a wetland area at the low point in the north west.
- Create a 'village green' on the western part of the site creating a landscape and social connection to the adjacent Chandag Estate.
- The creation of a "sylvan" neighbourhood showing a woodland setting to the site.
- Retention of the existing hedgerows and mature trees where possible.
- Retention of the existing public rights of way through the site as a key pedestrian connection.
- Locating productive and play landscapes at the heart of the site within the linear park.
- A suitable treatment to the A4 is achieved with development following the established building line and showing a woodland treatment to the entrances of the site in keeping with the character of the A4.

Key placemaking objectives:

- A leafy residential character
- Locating the primary school at the heart of the site making it easily accessible from other parts of the site and the surrounding area.
- High quality public space opposite the school creating an arrival point to the neighbourhood.
- Two vehicular access points from the A4 that establishing a loop through the site marked tree avenues.
- Low density housing wrapping around the edges of the site that relates well to the surrounding countryside and creates an outward looking neighbourhood.
- Good pedestrian connections through the site connecting to the existing public right of way, Manor Road Community Woodland and west through the Chandag Estate to local facilities.
- Use of locally distinctive materials, species and architectural precedents;
- Informal spaces for play and social interaction.
- Shared surface approach to public realm to create neighbourhood streets and spaces that allows vehicles and people to cohabit safely.

Key sustainability objectives:

- Development blocks aligned for maximum solar gain and a fabric first design approach
- Comprehensive SUDS approach that improves the current greenfield run of rates.

Key heritage objectives:

- Marking the route of the Roman road with a green infrastructure.
- Retaining the supposed route of the east west Roman road with a new road on the alignment of that route
- Ensuring that there is an appropriate distance from the listed Ellsbridge House north of the A4.

East Keynsham Masterplan

- 5.6 The resulting masterplan produced by Clifton Emery seeks to create a high quality mixed use neighbourhood that is well connected to nearby local facilities and the town centre of Keynsham; a sustainable masterplan with a landscape led character that offers a high quality and environmentally conscious neighbourhood.

wider framework plan which shows how the site could integrate with the adjacent safeguarded land.

- 5.8 The illustrative layout has been designed in the context of best practice in urban design and as such would, provided that key principles are adhered to, perform well if considered against Building for Life 12 criteria at the detailed application stage.
- 5.9 The structure of the layout has been formed around the landscape, heritage, utilities and drainage constraints. The proposed residential areas are set within large areas of public open space.
- 5.10 The layout shows access to the site from a junction on the A4. From here the key access route travels south into the site along a wide avenue with a double line of trees. The access route breaks at the heart of the site where a community open space is situated. The space has been designed using shared surface principles and is a flexible space that could accommodate community events, parking and school drop-off whilst also allowing the through flow of traffic.
- 5.11 The primary school has been positioned adjacent to the community space. It is at the centre of the scheme for ease of access. If the safeguarded land does come forward the area dedicated to the school could expand. Additionally the school is well positioned to the public open space to the south and onwards to the Manor Road Community Woodland where there could be opportunities for outside learning.
- 5.12 From the principal access route, a simple network of linear streets and development blocks has been designed to maximise solar gain, frame views into the wider landscape and create a simple, permeable and legible new neighbourhood.
- 5.13 The masterplan shows how perimeter development with a complimentary density and character to the existing neighbourhood can be achieved, creating the framework for a safe, secure and attractive residential neighbourhood.
- 5.14 Secondary routes connect the principal route into smaller pedestrian priority streets. Individual homes have been orientated where possible to be south facing with south facing gardens. The layout demonstrates it is possible to achieve sustainable development at the reserved matters stage.
- 5.15 A permeable network of footpaths and cycle paths is also illustrated. The alignment of the existing east west public right of way is retained. The route would be upgraded to accommodate cycles creating a strong connection from the edge of the site to Saltford in the west, towards the Wellsway School and the Bath Road. A further series of footpaths creates a permeable network. This links into routes in the Manor Road Community Woodland to the south and west into the Chandag estate and onwards to the nearby schools.

- 5.16 The illustrative layout has been designed to accommodate a variety of housing types responding to local need. A mix of 1, 2, 3, 4 and 5 bedroom homes on generous tree lined streets providing on-street parking. 2 - 2.5 storey houses and some 3 storey apartment buildings are proposed. These look to complement the existing built context of Keynsham and the surrounding locality and to harmonise the visual relationship of the scheme in its wider setting.
- 5.17 The proposed linear park stretches from the wetland area in the north west to the Manor Road Community Woodland via community orchards, allotments, play spaces and new areas of woodland with a complementary visitors centre in the south. The wetland area has been designed around proposed attenuation ponds to accommodate surface water run-off from the site to improve current green field run off rates. The route of the historic Roman Road has been retained within the public realm of the scheme with a 10m easement established for its long term retention.
- 5.18 The illustrative layout shows a public open space on the western border of the site fronted onto by short runs of terraced housing that responds to local character. The plan shows that a mixed use scheme can be developed on the site that integrates seamlessly with the local area.

CONCEPT VIEW IMAGES (CLIFTON EMERY)

Looking west into the proposed village green and onwards towards Kelston Roundhill



Looking north from the community square at the heart of the neighbourhood along the main avenue



Overall Development Quantum for East Keynsham Safeguarded Land

The current assessment of development capacity for the East Keynsham Safeguarded Land, based on the analysis above is as follows and is the basis of the Local Plan issues and options consultation:

- 280 dwellings
- Expanded primary school

6.0 The Local Plan Issues and Options Consultation



6.1 The Local Plan Issues and Options consultation presents the emerging proposed approach to development at the strategic development location at North and East Keynsham and raises key questions & issues for discussion.

Summary of proposals for the North Keynsham Strategic Development Location, incorporating the East of Keynsham Safeguarded Land:

- 1,500 dwellings
- 55,000sqm of employment floorspace
- Local services including primary schools and a local centre (including retail and office floorspace)
- Facilities including a relocated Avon Valley Adventure and Wildlife Park and new marina with residential and leisure moorings
- Delivery of key transport infrastructure including the North Keynsham multi modal link road from Avon Mill Lane to the A4, Keynsham rail station improvements, Metrobus (high quality public transport) route from Bristol to Keynsham on the A4 corridor, pedestrian and cycle connections (including to the Bristol to Bath cycle path), a high frequency local bus service, off site junction improvements.
- Incorporation of a layout and form that produces a high quality of design

6.2 The analysis of the Strategic Development Location raises a number of key issues that will be tested through the issues and options consultation. A number of questions have been suggested and the feedback will help to inform the next stage of development of the Local Plan and accompanying masterplan. These questions are as follows:

Local Plan Issues and Options Consultation Questions:

Link Road alignment

- What do you think of the proposed road alignment?
- Do you have any views on the existing crossing points? Have you got any thoughts on the overall movement strategy?

Internal street network and wider connections

- What do you think of the proposed approach to the street network and wider connections?
- Do you think it is important to create a healthy neighbourhood by encouraging walking and cycling?

Landscape impact

- What do you think of the proposed response to landscape impact, especially considering views from the Cotswolds?
- What do you think of the proposed response to landscape impact, especially considering views from the Cotswolds?

Housing mix

- What should the housing mix comprise of?
- Is there any scope for other forms of housing, for example student accommodation?

Zero carbon development

- Do you agree with the principle of aiming for a Zero Carbon development?
- How ambitious should we be? How do you think this aim could be achieved?

Avon Valley Wildlife & Adventure Park

- How can Avon Valley Wildlife & Adventure Park be best integrated into the new development?
- What opportunities are there to minimise visual impact from the Cotswolds?
- Do you agree with the requirement to link with the Bristol to Bath cycle path?

7.0 Next Steps

- 7.1 Following consideration of comments on the Local Plan Issues and Options document, as well as further assessment work, the Council will publish its Preferred Options for consultation in summer 2018. This will encompass greater detail on the strategic development location.
- 7.2 Any evidence base gaps will be identified following the consultation phase, and through the scoping work required to take the plan onto its next and more detailed phase.
- 7.3 The Arup Strategic Planning Framework identifies some of these evidence base gaps, such as:
- North Keynsham Treatment Works Odour Assessment to inform the next stages of masterplanning;
 - Stand-alone EIA compliant Landscape and Visual Impact Assessment assessing the potential effects of a preferred concept framework;
 - Energy Strategy to define a viable approach to meeting and managing the incremental growth of the site's building energy demand;
 - Surface Access Strategy including preparation of concept highway alignment plans and associated junctions;
 - Highway Bridge Design Concept for proposed highway bridge over railway demonstrating technical feasibility including the progression of agreements with Network Rail;
 - Pedestrian Cycle Bridge Design Concept for new pedestrian and cycle bridges over River Avon demonstrating technical feasibility and concept design drawings for structures;
 - Marina Concept Design & Hydrological Analysis for proposed location (including lock gate and sluices);
 - Modular Housing & Custom Build Feasibility study of the potential for the application of accelerated construction techniques and custom-build;
 - Green Infrastructure feasibility work to establish a new wet woodland, water meadow and/or reed bed habitat plan to provide multi-purpose SUDs solutions for the new housing, highways and pedestrian / cycle paths, and to create a high quality, sustainable place to live.
- 7.4 A second stage of strategic masterplanning will be required to take the above into consideration. A design code should be developed to accompany the Local Plan allocation and masterplan to ensure a high-level of design quality across the site. The design code should provide greater detail regarding matters including layout, building orientation, form and massing, unit mix, public realm treatments, green

infrastructure and street hierarchy. This should ideally be developed alongside the Local Plan as a Supplementary Planning Document (SPD).