

# Cribbs/Patchway

New Neighbourhood Development Framework SPD

Adopted March 2014

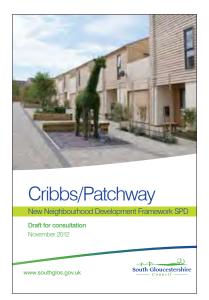




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## 1. Introduction and background



In January 2013 the Council endorsed the principles of a draft Development Framework for the proposed New Neighbourhood at Cribbs/ Patchway.

This was updated following the adoption of the South Gloucestershire Local Plan: Core Strategy in December 2013. Following further public consultation this supplementary planning document (SPD) was adopted in March 2014.

As an SPD it adds detail to policies set out in the South Gloucestershire Local Plan: Core Strategy and should be read in conjunction with the policies within it.

#### New neighbourhood overview

The main requirements for the new neighbourhood are set out in Policy CS26 of the Core Strategy (see Appendix 1). By 2027 it will provide approximately 5,700 new homes and around 50ha of employment land, together with a range of community services and facilities.

This development provides an exciting opportunity to build a new community that enhances the urban edge of north west Bristol. It will draw together the many strands of placemaking to establish a new community which both supports its own residents and brings wider benefits to the surrounding communities. The development framework sets out how this will be achieved and provides for delivery of:

- A strong new landscape and movement framework for the area.
- A lively, healthy, well integrated and well supported community with its own sense of identity.
- A distinctive and high quality public realm.
- A sustainable development.
- A significant part of the Council's strategic housing provision, and
- An enhanced employment area focussed on aerospace and defence sectors, advanced manufacturing, emerging materials technologies, information technology, and micro-electronics.

#### Filton Enterprise Area

In addition to the Council allocation of this development the Local Enterprise Partnership (LEP) have designated an area overlapping and adjacent to the New Neighbourhood as an Enterprise Area. Whilst this has no formal statutory status in planning terms the intention is that it will act as a catalyst and focus for inward investment, and help reinforce the wider aspirations to support and enhance the existing aerospace business cluster nearby.

#### Strategic delivery issues

Comprehensive and co-ordinated development

This area is in multiple ownerships. Policy CS26 sets out the requirement for development to be comprehensively planned and phased to ensure full integration between the different land uses and the provision of ancillary facilities and supporting infrastructure, both within and beyond the area.

#### Movement

Travel patterns across the wider north fringe are complex, driven by the number of significant destinations and large-scale single land uses such as the former Filton airfield, the Airbus complex, and Cribbs Causeway. The key benefits arising from development in this area comprise:

I dramatically improving connections for sustainable modes of travel across Filton airfield between key destinations;



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- ensuring all uses are within close proximity to high quality public transport services, and;
- maximising funding contributions across the whole area.

#### Green infrastructure

The provision of open space across the north fringe of the Bristol urban area needs specific consideration. The Council's Open Space Audit (2010) identified shortfalls across the north fringe in provision for public outdoor sports facilities, children and young people, and allotments.

The audit further recognised that access to open space is a significant issue, and in that particular residents have few access points to the wider countryside. This raises the importance of these access points and sets the context and challenge of planning new developments in this area, in respect of public open space.

#### Social infrastructure

The Cribbs/ Patchway area is adjacent to two council-designated priority neighbourhoods (Filton and Patchway) and established pockets of housing at Catbrain Lane and Passage Road. There is a general lack of adequate and sufficient community facilities in the area, which is exacerbated by the poor accessibility and connectivity in the wider area. Recent experience of large-scale developments has highlighted the challenges surrounding early provision of adequate community infrastructure, which proposals will need to appropriately address.

#### Purpose of the document

The allocation of the Cribbs Patchway New Neighbourhood is set out in the Core Strategy (Policy CS26) and is intended to ensure the delivery of approximately 5,700 dwellings. This document is intended to amplify that policy, and seeks to aid infrastructure delivery, setting out in detail the need, timing, and where appropriate, location of infrastructure requirements that will make the Cribbs/ Patchway area a vibrant and attractive place to live, work and visit.

It also seeks to help developers and landowners submit successful planning applications by establishing a flexible vision and broad principles for development, and can be used as a guide for developers and members of the public to understand the requirements, timing and broad location of infrastructure requirements.

It will also be used to inform development management decisions. Development proposals will be required to clarify where they differ from the SPD.

Where delivery of infrastructure set out within the SPD is dependent on collaboration from other individuals or organisations applicants will be required to provide formal evidence that this can and will be achieved. To this end, South Gloucestershire Council are facilitating a collaboration agreement (or equivalent) as the most effective mechanism for securing coordinated delivery of sustainable development and infrastructure across the area. This agreement should:-

- Agree a phased and collaborative approach to development and infrastructure delivery, bringing forward individual sites in a sustainable way;
- Address issues where delivery of development or infrastructure is reliant on more than one landowner, and where failure in provision could prejudice or fail to positively facilitate, surrounding development or delivery of infrastructure, and identify solutions to positively facilitate surrounding development;
- Seek optimum and efficient delivery of development and infrastructure to the benefit of the wider area; and
- Seek opportunities to equalise costs and benefits between landowners to the benefit of the nature and timing of delivery development as a whole.

Applications that do not demonstrate a commitment to comprehensive development as set out above will be refused planning permission.

#### Supplementary Planning Document - process and programme

This SPD has been prepared to amplify and provide further guidance in support of the policies of the South Gloucesteshire Local Plan: Core Strategy (adopted December 2013) and should be read in conjunction with that document.

The SPD has been prepared in line with National Legislation and Policy and with the Council's Statement of Community Involvement adopted May 2008 (SCI) (see: http://www.southglos.gov.uk/Documents/PTE080288.pdf) The SPD has been prepared following several stages of public consultation (see section 2 below) before being considered for final adoption in March 2014.

This SPD is also supported by:

- a Sustainability Appraisal,
- a Statement of Consultation, and
- an Equalities Assessment

## 2. Public engagement

Many people and organisations have an interest in the development of the Cribbs/ Patchway new neighbourhood. National policy requires that this should be more than simple scrutiny of proposals but a creative exercise in finding ways to enhance and improve the places in which people live their lives (NPPF para 17). The Council has therefore sought to engage with stakeholders throughout the planning of the new neighbourhood and to undertake specific periods of public consultation.

The Council is required to set out in a separate Statement of Community Involvement (SCI) how it intends to involve the wider community in the preparation of plans and policy documents and in planning application decisions. The Statement of Community Involvement is a Local Development Document within the overall Local Development Framework and is available to view on the Council's website at www.southglos.gov.uk/corestrategy

The vision and guidance contained in this document has been the subject of discussion through stakeholder workshops, meetings with the Council's development partners and information gathered from Statutory Consultees.

The following events comprise the key stakeholder workshops and their outcomes.

#### March 2011 - Cribbs/ Patchway key stakeholder workshop

#### Key outcomes/challenges:

- Uncertainty over the future of Filton Airfield and impact on surrounding areas.
- The numerous constraints to movement such as Filton Airfield, railway line, main roads in the area.
- I Traffic and congestion generated by development.
- How to integrate proposed development with surrounding communities.

#### November 2011 - Cribbs/ Patchway key stakeholder workshop

#### Key outcomes/challenges:

- Movement and traffic, particularly the management of East- West movement between the A4018 and A38, and North - South traffic onto existing roads, and consequent impact on surrounding communities,
- If the need to plan as a comprehensive whole whilst allowing flexibility for distinct identities to be developed over a long period of time.
- Need to express the [potential] role of Cribbs Causeway more clearly.
- I The disposition of 'local centre(s)' across the site and the land uses contained within them.
- Clarification of type of potential employment that could be provided, and the potential for local jobs and skills improvement.
- The potential for sustainable/ renewable energy networks require further investigation.

#### October 2012 – Cribbs/ Patchway key stakeholder workshop

#### Key outcomes/challenges:

- Uncertainty over the future role of Cribbs Causeway.
- If the need to provide a clearer steer on type of employment to be provided, the potential for it to support local workforce and skills, and the positioning of the employment within the new development.
- If the need to provide a clearer strategic plan for green and blue spaces and access to/between them.
- I The need to provide a concerted approach to water management.
- I The potential for significant improvements to local and city-wide movement networks (particularly cycling networks) to improve the quality of the local environment and support local work opportunities.
- The potential to deliver an exemplary strategic energy strategy.

#### November 2012 – Public consultation on the draft SPD

#### Key issues:

- Greater detail and clarity over the proposed works to mitigate the additional traffic generated by development
- I The need for better cycle links to and from the wider area
- Objection to loss of Filton airfield
- Greater clarity needed over employment proposals
- Impact of development on quality of life for surrounding residents
- Impact of development on local ecology and wildlife

#### June 2013 - Cribbs/Patchway public exhibition

#### Key issues:

- Greater detail and clarity over the proposed works to mitigate the additional traffic generated by development
- Impacts of development on local schools, open space, businesses, facilities, roads and people
- The need for provision of passenger rail services

## November 2013 – Cribbs/Patchway: Landowner framework plan consultation

#### Key issues:

- proposed Framework Plan goes into more detail than originally envisaged for the SPD Framework Diagram
- I the status of the proposed Framework Plan is unclear
- I not possible to understand the level of policy compliance

#### Sustainability appraisal

Sustainability Appraisal is an important part of Core Strategy and Supplementary Planning Document preparation and is governed by National Legislation and Regulations based upon European Law known as the Strategic Environmental Assessment Directive (SEA).

Sustainability Appraisals involve evaluating the impacts of development plans on the environment, the economy and on society. In 2009 the Regulations regarding Sustainability Appraisals were amended to exclude the need for Sustainability Appraisals when preparing Supplementary Planning Documents.

The Council undertook a sustainability appraisal of this allocation when preparing policy CS26 of the Core Strategy. However, the Council believes Sustainability Appraisals are a useful tool in deciding how a site's assets and constraints might be usefully measured and to test appropriate options for development at all stages of planning. Therefore this SPD document is supported by a Sustainability Appraisal.







### 3. Site context and characteristics

#### Location & land use

This area is located within the west of the Bristol North Fringe. Regionally, if not nationally, important aerospace industries are clustered around this area. Cribbs Causeway is an out-of-town shopping area including; The Mall regional shopping centre, Cribbs Causeway retail park, free standing foodstores and a hypermarket. Patchway Trading Estate is a long-standing warehouse and distribution park separating Cribbs Causeway area from the adjacent residential community. These strategic economic land uses make the area one of strong economic activity and employment provision. The wider area contains residential communities within the administrative boundaries of both South Gloucestershire (Patchway and Filton), and Bristol City Council (Henbury, Brentry and Southmead).

It is adjacent to Junction 17 and close to Junction 16 of the M5, from which the A4018 and A38 respectively lead into the centre of Bristol. It is also close to Junction 15, the Almondsbury interchange with the M4 providing strategic road connections to the west and east. The site is bounded to the south by the Avonmouth railway line which is currently used for freight only.

The site's location is highly accessible by both strategic and local road network and formerly by passenger rail as well as the existing freight railway line, and this accounts for the long-standing concentration of mainly employment uses in the surrounding area. Development of the site provides the opportunity to achieve a better balance between housing and employment in this part of the North Fringe.

The former airfield and surrounding area contain areas of historic significance. Primarily these relate to the listed buildings on and adjacent to the former airfield. The former comprise a group of hangars from the First World War and are set against a background of ancient woodland and Hayes Way. The latter (Cedar Lodge) is a remnant of the former Charlton village and is located adjacent to common land (Charlton Common).

#### Landscape, ecology & water

Notwithstanding the predominance of large-scale land uses and strategic transport network the area also contains significant landscape features. The Henbury Trym river runs through the west of the site via a surface reservoir and south towards Blaise Castle. Haw Wood is an area of ancient woodland that lies adjacent to the M5 on a prominent ridgeline to the west of the area. The area to the south and west of the former airfield runway comprises open pasture land. Areas of common land are remnants of a common associated

with Charlton village that was demolished to make way for the airfield in the 1940s.

The landscape is still dominated by the open land of the former Filton airfield runway. The large scale buildings of the Brabazon hangars and the surrounding commercial and industrial buildings are significant features in the setting of the A38. The open land and trees of Filton Golf course remain a significant feature due to their elevated position to the south.

A visual watershed is created by slightly higher landform that cuts across the centre of the airfield, north to south, blocking views from the east to west ends of the area. To the east, the open area of the airfield contrasts strongly with the adjacent industrial developments and housing fringe, whilst to the west the runway merges with open land around Fishpool Hill, creating an increased sense of connection with the countryside.

Most of the site is made up of improved grassland, but with pockets of ancient and planted broadleaved woodland and dense/scattered scrub. There are strong field patterns and well connected hedgerows to the west and south-west. There are also several Sites of Nature Conservation Interest (SNCI) along a short section of the railway line, north-east in Charlton Hayes, and west (Haw Wood).

The majority of the site is in Flood Zone 1, with small portions of the site and immediately surrounding areas located in Flood Zones 2, 3a and 3b. The site drains to the Henbury Trym in the west and down Stoke Brook to Bradley Brook to the east, with the watershed bisecting the former Filton Airfield. The Cribbs (Lysander Road Delaying) Reservoir was installed to mitigate additional run-off from Cribbs Causeway.

The landscape character of the wider area is highly varied due to the range of land uses and can be sub-divided into a number of areas.

#### **Transport**

The site is bounded by and has running through it a number of significant roads, including the M5, A38 (Gloucester Road), A4018 (Cribbs Causeway/ Wyck Beck Road), Merlin and Lysander Roads (around Cribbs Causeway), Hayes Way and Highwood Road.

These provide good access to the strategic highway network and include the main arterial routes into the centre of Bristol. However, they also dominate the local environment in terms of visual impact, noise and pollution and are significant barriers for pedestrians and cyclists to access key destinations in the surrounding area. Notwithstanding this there are number of local and strategic designated walking and cycling routes in the surrounding area that may provide the potential to enhance connections.

The proposed MetroBus route is currently planned to run down Highwood Road and terminate at the Mall, creating a strategic high speed public transport link between the centre of Bristol (7.5km away) and the North Fringe. These two areas are key destinations for employment, health, leisure and shopping. Development provides the opportunity to extend this service through the new neighbourhood and Enterprise Area and connect to Parkway rail station and onwards to Bristol City Centre.

There are numerous local bus services serving the surrounding and wider area that terminate or run through the Cribbs Causeway area. The existing bus station to the north of the Mall is a focal point for public transport services in the area and offers a choice of routes to the centre of Bristol, Parkway Station and the north, west and east of Bristol.

#### Communities, facilities and services

The site includes and is surrounded by a number of separate residential communities, including Patchway, Filton, Catbrain Lane and Passage Road within South Gloucestershire, and Brentry, Henbury and Southmead within Bristol.

A range of community facilities, health services, local centres and small parades of shops are available in the wider locality. Cribbs Causeway contains the Mall and numerous supermarkets. Two primary education facilities and one secondary school (Patchway Community College) are present in Patchway.

There is one public park at Patchway (Norman Scott Park) and a number of smaller open spaces, play areas and sports pitches in the wider area. Nonetheless the useability of these facilities for local residents is often hampered by poor access due to the wider road infrastructure and nature of land uses in the area. Open space provision in the area is significantly below recommended levels

There is a general lack of adequate and sufficient community facilities in the area, which is exacerbated by the poor accessibility. Provision of new community facilities and services, schools and open space needs to be considered in the wider context of facilities and services within the administrative boundary of Bristol, and surrounding development within the North Fringe including Charlton Hayes. Recent experience of large-scale developments has highlighted the challenges surrounding timely provision of adequate community infrastructure.

## 4. Vision and objectives

To support the Core Strategy the Plan's vision for the North Fringe of the Bristol Urban Area, of which Cribbs/ Patchway forms a part, has been developed with the input of our communities, civic leaders and partners.

#### The vision is:

The North Fringe of Bristol urban area will continue to be a major economic driver in the South West region and the West of England sub region. It will continue to maintain its role as a major focus for employment, commercial and retail activity, education and learning. The distinctive identities and heritage of the existing communities will also have been strengthened and preserved.

Up to 2026 and beyond, new neighbourhoods will provide opportunities for people to live near to where they work and be well integrated with existing communities. All residents and workers will have better access to local amenities and high quality public transport, walking and cycling links. Community identity and neighbourhood distinctiveness will be improved by the development of new public spaces and high quality landscaping.

The green network will be enhanced through opportunities to provide new and improved green spaces, within the existing urban area and which connect to the wider countryside. This network will include new corridors along the Henbury Trym, and from Stoke Park to the Three Brooks Nature Reserve via the East of Harry Stoke new neighbourhood.

This New Neighbourhood presents an exciting opportunity to take a fresh and innovative approach to development to enhance this urban edge of north Bristol and contribute to the aims of the wider vision. It will deliver good urban design and high quality infrastructure at the right time and in the right location to best serve surrounding development. In particular it will deliver sustainable development through;

- A strong new landscape and movement framework for the area,
- I Good physical connections with the surrounding area,
- Healthy, lively and well connected communities with their own sense of identity,
- Distinctive and high quality public realm,
- Local jobs, services and facilities, and a full range of dwelling types and tenures
- Recognition of the history of the area.

#### **Objectives**

#### Comprehensive development

The National Planning Policy Framework (NPPF) makes it incumbent upon the Council to guide development to the most sustainable solutions (para 8), and seek opportunities to achieve sustainable development, and net gains across all three dimensions of it (para 152).

In essence the Council considers sustainable development can only be achieved through comprehensively planned development, and Policy CS26 makes it a requirement for development to be demonstrably comprehensively planned and delivered, and to positively facilitate and not prejudice surrounding development.

Successful comprehensive delivery will require engagement, collaboration and coordination between different landowners.

#### Open space and natural assets

When appropriately planned, designed and managed, green and blue infrastructure (the network of natural and semi natural features, green spaces, outdoor sports facilities, play areas, lakes and rivers) has the potential to deliver a wide range of benefits from providing sustainable transport links, improving air and water quality, increasing biodiversity, giving a focus to a community, enhance peoples' health and well-being, enhancing land values, and mitigating and adapting to the effects of climate change.

Strategic Green and Blue Infrastructure (GI & BI) will need to comprise a substantial, interconnected and multi-functional network of spaces (both green and blue assets), protecting and enhancing the existing ecological habitats, trees and hedgerows, and their integration through the use of SUDS and the treatment of waste water from buildings.

#### Integration and ease of access

A measure of a successful and sustainable neighbourhood is one in which people can quickly and conveniently access a range of services and facilities to support their everyday needs. The connection and, where appropriate, integration of the new community at Cribbs/ Patchway with neighbouring communities and key destinations will be dependant in part on good access and connections to services and facilities, and on getting the movement framework right within the site

The development of this new neighbourhood provides the opportunity to maximise the site's connections and reconnect its surroundings, and to promote the most sustainable forms of transport.

#### Strong communities

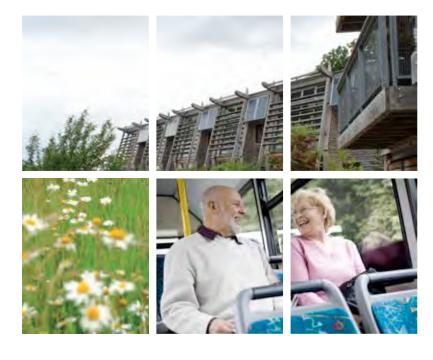
The Council is committed to the provision of vibrant, cohesive and robust communities that are able to meet the diverse needs of all future residents. The Council will seek every opportunity to maximise personal and community well being and to create equal opportunities for all residents of the new neighbourhood.

#### Health and wellbeing

Our mental and physical health and well being at every stage of our lives is shaped by our ability to live, learn, work and relax in an environment that promotes opportunities for formal and informal social interaction, gives good access to education and employment and provides for both formal and informal physical activity. The fair distribution of health, well-being and sustainability are important social goals within the New Neighbourhood so that every resident can participate equally in the benefits it provides.

The council will encourage developers to undertake a Health Impact Assessment (HIA) of their proposals for the New Neighbourhood. The HIA is an opportunity to identify where there may be better design solutions that deliver better health and well being outcomes for future residents. The results of such an assessment will be fed into the Design and Access Statements that set out the design principles for the development of sites.

Where necessary the Council will seek effective methods of controlling the noise impacts arising from the road traffic and railway movements as part of development.



The framework diagram which follows illustrates how the overall proposals may be delivered.

## Eramowork Diagram







Existing

MetroW

Potentia

Improve



Bus Priority/controlled access junction est proposals al train stations Primary road network Secondary road network train stations

ed railway bridges





### 5. Access and movement

This section sets out the requirements, location and timing of strategic access, connections, improvements and provision of new walking, cycling and public transport links from all new development within the New Neighbourhood to key destinations.

Development as part of the Cribbs/ Patchway New Neighbourhood provides an opportunity to create a more sustainable pattern of access and movement around this part of the Bristol North Fringe and adjoining areas. The principles of a sustainable access and movement pattern as set out below are cross-cutting with other principles in this document, in particular the location of strategic green infrastructure and disposition of land uses.

The overall aim of development should be to provide as many low carbon connections as possible to the existing and proposed surrounding network to give people as much choice as possible about how they travel to and from destinations in and around the Bristol North Fringe area.

Proposals must demonstrate how they will adhere to the following key principles and as illustrated on the indicative diagram at pages 30 to 31.

5.1 Make sustainable modes of travel (walking, cycling and public transport) more convenient than car travel: Development proposals must emphasise and prioritise sustainable patterns of movement across the Cribbs/ Patchway New Neighbourhood, through the form and layout of blocks and the hierarchy of routes, connecting in particular to key destinations.

Justification: The current pattern of development and in particular the rail network restricts most north-south movement (by foot, bike and public transport as well as by car) to Gloucester Road (A38) and Cribbs Causeway (A4018). Orientating blocks and prioritising routes north-south will improve the permeability and legibility of the area for pedestrians and cyclists, encouraging more sustainable travel.

5.2 Prioritise walking and cycle within an overall movement framework, and ensure all pedestrian and cycle routes, including safe routes to school, are direct, safe, continuous, attractive and comfortable: Development proposals should demonstrate how they will prioritise walking and cycling over other modes of transport, and public transport over other vehicular travel modes, where these are the most sustainable option. This should include identifying key barriers to providing walking and cycling routes to key destinations, and proposing measures to eliminate or address these barriers, and identifying enhancements, extensions and links with existing walking and cycling networks. They should also demonstrate where relevant how they are

incorporating the most important walking, cycling and public transport connections within the strategic green infrastructure network (see Framework Diagram and Green & Blue Infrastructure section).

Justification: Designing routes for pedestrians, cyclists and public transport, then for cars will ensure walking and cycling is more convenient and more attractive than driving, while also allowing car use as a last resort and where no other options are possible.

5.3 Provide sustainable travel options, including public transport, at the earliest opportunity: Proposals must demonstrate how they will provide (in whole or part) and/ or positively facilitate the creation of strategic walking and cycling routes shown on the Framework Diagram and in Section 4, on occupation of the first homes. The Council will work with developers and service providers to ensure public transport networks are delivered at the earliest opportunity. In particular the Council will seek the early delivery of a route between Charlton Road and San Andreas roundabout, and strategic walking and cycling links between Henbury/ Brentry (both along the Henbury Trym and north of Fishpool Hill) and Patchway, and across the A38 to Parkway.

Justification: To ensure from the outset that sustainable travel habits are encouraged, and that walking and cycling is more convenient and attractive than driving wherever possible.

5.4 The Council will require developers to identify and safeguard sites for railway stations (and associated interchange facilities) along the route of the Henbury railway line.

Justification: To ensure from the outset that sustainable travel habits are encouraged, and that walking, cycling and public transport are more convenient and attractive than driving wherever possible.

5.5 Within residential areas, the primary means of access to individual plots will be frontage access directly from the street, and streets will be designed to facilitate this accordingly. Rear access, rear parking courtyards and cul-de-sacs will only be permissible in exceptional circumstances: Rear access, rear parking courtyards and culs-de-sac will be permitted where it can be demonstrated that they are appropriate in their context, part of a range of parking solutions across a development, and offer benefits to the form and layout of development. Where these criteria have been demonstrated culs de sac will be short, with the end of the road visible from the entrance.

Justification: To ensure a pattern of development that encourages active frontages and natural surveillance of movement networks.

5.6 **Ensure the creation of walkable, legible neighbourhoods:** All development should prioritise access via a comprehensive network of walking and cycling routes to public transport nodes and vital services. Development should be demonstrably within 400m of a public transport node, and within 800m of shops and services (distances measured 'as you walk'). Proposals must demonstrate how densities and mix of appropriate uses address principles 6.3, 8.1 and 8.3.

Justification: To ensure a pattern of development that encourages walking, cycling and use of public transport.

5.7 **Control and manage car access through the use of homezone principles:** Streets should be designed as multi functional spaces to maximise natural surveillance and encourage social interaction. Streets must be designed to be 20mph as standard with up to 30mph on primary routes through the area. Highways, signage and street elements should be consistent across different landownerships, and designed to maximise legibility, reduce highway clutter, sustain the sense of place and create a high quality public realm.

Justification: To ensure a pattern of development that encourages walking, cycling and use of public transport.

5.8 Ensure that from the outset each phase of development as built allows logical, and safe access and movement, through a reasonable choice of travel modes, including the provision of any temporary arrangements as may be necessary until such time as later phases of development are built to provide permanent connections:

Justification: To ensure a pattern of development that encourages walking, cycling and use of public transport.

Provision	Requirement	Delivery principles
Strategic walking and cycling routes	The provision of strategic walking and cycling routes through the Cribbs/ Patchway area connecting the following key points:  Station Road and the A4018 at the south west corner of the area.  Cribbs Causeway.  Local centres within the new development.  Fishpool Hill.  Charlton Road.  Coniston Road.  The sites of the proposed railway stations.  A38 at access junctions and underbridge to North Way.  Access junctions to Hayes Way.  Timing: Each development parcel to have or connect to direct, safe, continuous, attractive and comfortable walk/ cycle connections in place prior to first occupation of any dwelling or building  Delivery: By developer of each development parcel.	<ul> <li>Whilst it is recognised that the network will be delivered incrementally each dwelling or building of each development parcel should have or connect to a direct, safe, continuous, attractive and comfortable route to each of the key points (excepting those areas still to be completed) prior to first occupation.</li> <li>Core principles: <ul> <li>Routes to be attractive to 'commuter' cyclists and pedestrians.</li> </ul> </li> <li>Routes to be designed to enhance green infrastructure principles for movement corridors (e.g. protection and enhancement of wildlife corridors, providing informal play opportunities, etc).</li> <li>Minimum width of shared use paths to be 4 metres, with localised widening at locations where groups of people are likely to gather (for example outside a school or local shops).</li> </ul>

# Bus network & infrastructure (on-site)

The provision of bus routes throughout the Cribbs/ Patchway New Neighbourhood connecting the following key points:

- A4018 (for Henbury, Bristol City Centre and Avonmouth).
- Cribbs Causeway and The Mall bus interchange.
- Local centres within the new development.
- Charlton Road bus gate (for Southmead Hospital and Bristol City Centre).
- The sites of the proposed railway stations at Filton North and Henbury.
- The A38 at access junctions, including the underbridge to North Way (for Filton, Bristol Parkway Station, Abbeywood, University of the West of England, and Emersons Green).
- Access points onto Hayes Way (for Patchway and Thornbury).

Financial contributions will also be required towards appropriate off-site bus priority measures to maximise the effectiveness of the on-site provision.

Timing: Each development parcel or building within a development parcel is to be within 400m walking distance (by the most logical route on the ground) served by local bus services connecting to the key points listed above.

Delivery: By developer of each development parcel.

Whilst it is recognised that the network will be delivered incrementally each dwelling or building of each development parcel should be within 400m walking distance (by the most logical route on the ground) of a bus stop served by bus services connecting to some or all of the key points prior to occupation.

#### Core principles:

- Roads identified for use by buses are to be a minimum of 6.5m wide. Where onstreet parking is permitted the road with will need to be at least 2.5m wider.
- Bus stops shall be provided at locations that mean no dwelling or building will be more than 400m walking distance (by the most logical route on the ground).
- Bus shelters shall be provided at each bus stop. These will be capable of providing Real Time Information and will be lit.
- Bus lay-bys will be provided at stops where buses are expected to lay over (terminal or timing points).

## Rapid transit network

The provision of a direct, high quality bus priority route connecting the Cribbs Patchway New Neighbourhood to Bristol Parkway Station

Timing: In conjunction with the appropriate development parcel of the former Filton Airfield site.

Delivery: By South Gloucestershire Council for off-site elements, and developer of each relevant development parcel for on-site elements.

- A direct route for buses between The Mall bus station and Parkway Station through the New Neighbourhood and via Gipsy Patch Lane linking two arms of the North Fringe to Hengrove route.
- Roads identified for use by the rapid transit network are to be a minimum of 6.5m wide. Where on-street parking is permitted the road with will need to be at least 2.5m wider.
- Bus priority measures at junctions and segregated sections of bus only route where appropriate will also be required (for example within local centres).
- Off-site, the Council will investigate, with development partners, the opportunity to route this extension through 'Rolls Royce East Works' site, and secure improvements to the Gipsy Patch Lane railway bridge.

#### Rail

The reinstatement of passenger services to the Henbury line along the southern boundary of the new neighbourhood, including the construction of new stations at Filton North and Henbury with appropriate interchange for walking, cycling and public transport routes connecting to all the areas of the development within the new neighbourhood.

Timing: In conjunction with the Devolved Major Scheme funding stream from the Local Enterprise Partnership.

Delivery: By South Gloucestershire Council/ Network Rail/ Train Operating Company.

#### Core principles:

- Safeguarding of station sites including sufficient land to enable the provision of interchange facilities with walk, cycle, bus and cycle/ car parking provision.
- Provision of walk, cycle and bus routes to and from the station sites to local centres, Cribbs Causeway and A38/ A4018. Includes routing of east-west walk, cycle and bus routes from underbridge with A38 to enable Filton North interchange.
- Location of development to mitigate any noise impact from increased train services along the railway on new development, especially housing.

## Highways infrastructure (on-site)

The provision of internal highways to the appropriate design standard.

Timing: Each development parcel will need to be served by appropriate access and internal road layouts.

Delivery: By developers under Section 38 process.

- Manual for Streets (and appropriate updates) to be the default design quidance.
- Where conflicts between travel modes are likely, then vehicular traffic will be the lowest priority with priority being given to pedestrians, cyclists, buses, and service vehicles.
- All streets to be designed to be fully accessible to all users.
- Materials to be used on adopted sections of the highway are to be from an agreed palette. The design of the internal layout should be aimed at minimising future maintenance liabilities. Where enhanced materials are used, the sections of the network affected would not be adopted without the payment of an appropriate commuted sum.
- Cul-de-sacs style streets that require turning heads will only be acceptable in exceptional circumstances. Where areas of development are served from a single vehicular access point then the layout should take the form of a loop avoiding the needed for service vehicles to turn or reverse.
- Car parking should be provided within each property curtilage. Where this is not possible then parking provision should be within sight of the relevant property. On-street parking should conform with best practice design guidance, and should not interfere with the movement of other vehicles or road users.

# Highways infrastructure (site access)

The provision of suitable site access junctions from the strategic and local highway networks to allow easy and safe access to the CPNN development site.

- A4018 new junction to provide access to the Fishpool Hill development.
- A4018 / B4055 junction alteration to provide access to Haw Wood development.
- A4018 / The Laurels new junction to provide access to both the Haw Wood and Fishpool Hill developments.
- Merlin Way / Hayes Way alteration of existing junctions to provide access to sections of the Airfield development.
- A38 new junction to provide access to the Airfield East development (this could potentially be combined with access to the Rolls Royce site to the East of the A38).
- A38 / North Way potential use of existing access via bridge under the A38 to provide sustainable transport access into the south-east part of the CPNN area.
- Charlton Road use as a sustainable transport link to connect to the Southmead area and to Westbury.
- Fishpool Hill use to be restricted to local traffic only, with no through route for vehicles into the CPNN development.

Timing: Each development parcel will require access to the local highway network by the most appropriate means as demonstrated through the Transport Assessment process.

Delivery: By developers under Section 106 or Section 278 process.

- Junction designs to be approved by SGC and subject to the road safety audit and quality audit processes.
- New junctions should provide nil detriment to the existing network that they are being tagged onto.
- Opportunities to achieve nil detriment through the consolidation of existing junctions should be identified and taken where possible.
- Junctions to be designed assuming full build out of the CPNN development as set out within the SPD, irrespective of the phasing of the development. This is to avoid abortive work, and to ensure the most cost effective use of developer resources.
- Junctions should incorporate facilities for pedestrians and cyclists, and for bus priority measures, unless alternative provision is made for these users offering a more direct route matching desire lines.
- Commuted sums to offset the cost of future maintenance requirements will be required for certain elements of the new junctions such as new signals, street lighting, bus stop infrastructure or nonstandard materials.

## Highways infrastructure (off-site)

The improvement of junctions on the existing highway network to mitigate the impact of the CPNN development.

The following junctions have been identified:

- M5 Junction 17 capacity enhancements through the widening of approach roads and circulatory carriageway.
- M5 Junction 16 capacity enhancements through the widening of approach roads and circulatory carriageway.
- A38 Aztec West Roundabout capacity enhancements through the widening of approach and exit roads.
- A38 / B4057 junction capacity enhancement through the widening of the B4057 approach.
- A38 / A4174 Filton Roundabout capacity enhancement through the widening of the A4174 approach.
- A4018 Lysander Road
   Roundabout capacity
   enhancement through the
   widening of the A4018 southern
   approach.
- A4018 Crow Lane roundabout

   conversion to signalised
   crossroads to address capacity
   problems.

Timing: Each development parcel will identify the appropriate contribution to each of these schemes through the Transport Assessment process. Key constraints (i.e. whether a particular improvement is necessary to enable a development parcel to go ahead or to go beyond a certain level of development) to be identified through the TA.

Delivery: By South Gloucestershire Council and the Highway Agency utilising contributions from CPNN developers.

- SGC (or where appropriate the Highways Agency or Bristol City Council) will lead on the design and delivery of these schemes, but developers will be expected to identify the scale of their development impact upon each junction to enable appropriate and reasonable developer contributions to be set.
- The Transport Assessment process should identify whether a development parcel is constrained through a need for a mitigation measure in advance of development taking place. This will assist with the phasing of improvements.

#### Traffic Management (off-site)

The design and implementation of traffic management strategies within neighbouring areas to mitigate the impact of development traffic upon these local highway networks. The specific areas that will need to be considered are:

- Bradley Stoke
- Henbury village
- Westbury-upon-Trym
- Southmead

Timing: Each development parcel will be required to assess their impact upon each of these areas, to enable the calculation of an appropriate contribution. The Transport Assessment process will identify whether a specific impact requires the traffic management measures to be introduced prior to commencement of the development parcel, or at a specific threshold of development.

Delivery: By South Gloucestershire Council and Bristol City Council utilising contributions from the developers.

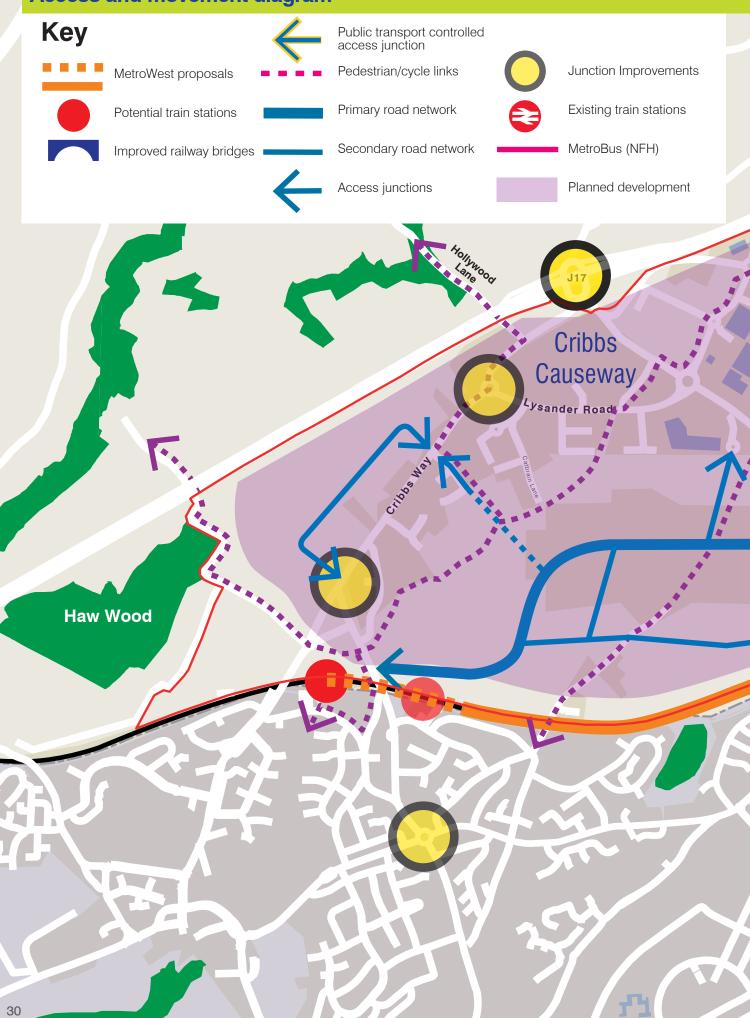
- South Gloucestershire Council (or Bristol City Council for the communities in their area) will lead on the design and delivery of these schemes, but developers will be expected to identify the scale of their development impact upon each junction to enable appropriate and reasonable developer contributions to be set.
- The Transport Assessment process should identify whether a development parcel is constrained through a need for a mitigation measure in advance of development taking place. This will assist with the phasing of improvements.







## **Access and movement diagram**





## 6. Community infrastructure

This section sets out the requirements, location and timing of community infrastructure to serve the new neighbourhood. Community infrastructure requirements cover a range of services and facilities that provide the focus for community life, and support the creation of cohesive, successful communities. Distinctive design, quality public realm and open spaces, and the provision and appropriate arrangement of facilities will play a significant role in the delivery of a successful and sustainable development. Proposals are illustrated in the diagram on pages 40 to 41

In order to ensure community infrastructure facilities are provided as early as possible the Council, with its development partners, will investigate the potential for temporary provision and co-location in appropriate locations. All development will be subject to regular monitoring and review to ensure that place-making and community building are being effectively integrated and delivered.

The management of these facilities will be a significant determinant in their success and it is considered that true community assets should be managed by the community, for the community, in perpetuity. Proposals for the long term management and maintenance of these assets will be considered in accordance with the Council's standard process.

These requirements are closely linked to the requirement for public art, and will be developed in accordance with the detailed Public Art Plan that has been created for the whole the new neighbourhood (set out below).

Community infrastructure will typically be focused in key areas across the new neighbourhood, including a number of distinct local centres.

#### Haw Wood

The main role of this centre is to serve the new residential community and those living on Passage Road. There is an opportunity to build upon and enhance the established sport offer and develop a modern centre for sport, health and well-being.

The primary uses will include outdoor sport with all-weather pitches plus gym, as well as potential for associated sports injury clinic and GP branch surgery. Shared facilities would maximise viability and encourage integration. There should be flexible indoor spaces available for community use as well as a Primary school and nursery; both could enjoy access to shared use pitches and outdoor space. Retail could include local convenience shopping and a café.

#### Henbury Trym

This should be a mixed use community cluster which acts as a link between new residential development and the natural green space adjacent to the Henbury Trym. This local centre should have a village centre feel with plenty of places for community activities including a community centre, informal green space and high quality external public realm for gatherings and outdoor events. The centre will include amenities such as toilets and refreshments to support informal recreational use of nearby green spaces.

The centre will include a Primary school that could contain community use sport pitches, a community centre with flexible spaces for hire, a nursery, cafe and local shops. The retail offer could include a pub/restaurant to encourage evening vitality.

#### Central airfield

This larger centre will act as a focal point for the whole new neighbourhood and Charlton Hayes although its sphere of influence could reach into Bristol. It will include a range of uses and facilities in the heart of the neighbourhood including a large community centre, indoor leisure, secondary and primary education, a library, nurseries, and police space. A destination public park will provide easy access for all to green space, sport pitches, play and community gardens and allotments. There will be potential for local retail in the shape of local food stores, pubs, restaurants, post office and café. Health facilities including GPs and dental surgeries and extra care housing will also be provided.

#### East of airfield

This centre will provide a focal point for the employment community and nearby residential areas and will include suitable facilities and spaces for that audience. The centre could accommodate flexible office space to rent, hotel/ conferencing facilities, food and drink outlets for daytime and evening customers, crèche/ nursery, sports and leisure activities that are accessible and available during day and evening, and open space. Retail facilities will need to be strong enough to be viable to meet local needs but not so strong that they undermine the viability of established town centres and the emerging facilities at Patchway. Green spaces and high quality public realm will provide space for relaxation and socialising at lunchtime and after work.

This centre should connect well with the other centres and residential areas allowing people to cycle and walk to and from work and throughout the wider area.

#### Patchway Trading Estate

The role of this area is to provide a stronger commercial offer and a more diverse mix of uses to retain people locally and anchor the new neighbourhood. There is scope for a range of commercial facilities, for instance spectator sport, conference, leisure and recreation facilities as well as services and facilities serving the local population.

#### Public Art Plan

Public Art can be described as any work of visual art, craft or design produced by an artist, designer or maker and sited in a location that is freely accessible to the public. Public art encourages the public to look at and interact with their environment in a new way It can develop a sense of ownership, local identity, personal and community pride, and help to create and promote local distinctiveness. A detailed Public Art Plan has been created that focuses on four principal elements applicable to the whole of the new neighbourhood, and then develops more detailed guidance for specific areas. The four principal elements comprise:

#### Green movement corridors

Proposals for this element will promote the need for animated, connected and coherent routes to encourage sustainable patterns of local movement. They will also promote walking and cycling to access schools, neighbourhood centres and local places of employment. Proposals will be linked to the principles and requirements for Green and Blue Infrastructure set out in Section 7.

#### Public buildings

Proposals for this element will raise the attractiveness and prominence of public buildings. They will improve the experience and enjoyment of community buildings, libraries, museums and sports venues.

#### Local centres

Proposals will contribute to delivering a sense of place, distinctiveness and identity within each local centre. They will comprise upgrading hard and soft landscape to provide an appropriate setting for the local centre, improve the environment and identity of public transport stops, and incorporate creative lighting to enhance evening activity. Commissions will be integrated within the street, building fabric and public space. Proposals will be linked to the principles and requirements for Green and Blue Infrastructure set out in Section 7.

#### Engaging communities

The Council, in liaison with developers, will promote and encourage a programme of temporary and permanent community engagement works linked within each of the key development sites. There is scope, in addition to physical works in these designated sites, for a continuing programme of engagement involving artists.

Proposals must demonstrate how they will adhere to the following key principles and as illustrated on the indicative diagram:

6.1 Plan for a flexible approach to the development of local centres and mixed use areas, including providing opportunities for temporary, mixed use, and/ or additional uses and buildings, and ensuring adaptability of use: The appropriate location and phasing of local centres and areas of mixed use will be critical in ensuring the needs of the local community are met, and that provision is coordinated in a complementary way with existing facilities in South Gloucestershire and Bristol areas. Indicative locations are identified on the Framework diagram. Collaboration between landowners/ developers is required to co-ordinate the provision of sustainable services and facilities.

Justification: To support community development and provide for local services, ensuring that social and community needs are met.

6.2 Ensure the provision of community space as part of development at the earliest opportunity that allows the opportunity for alternative uses on a temporary basis where required: Subsequent phases of development will increase the requirement for services and facilities over a wider area. Proposals should be flexible to allow the services and facilities on offer to change over time to meet the needs of the local community. See also table of infrastructure requirements on page 37.

Justification: To support community development and provide for local services, ensuring that residents who occupy early can access facilities and begin to form socially cohesive communities.

6.3 Provide services and facilities in the most accessible locations by a variety of means, prioritising walking and cycling first, followed by public transport: Proposals must demonstrate how they have located services and facilities on or at the junction of strategic routes through an area (as shown in the Framework Diagram) and close to public transport. In particular how they have created walkable neighbourhoods where residents live within 800m of shops and services. New residents' daily trip and commuting routes to schools, employment and retail will use high quality walking and cycling routes that are direct, safe, continuous, comfortable and attractive and encourage daily activity. See also principles 5.6 and 8.1.

Justification: To support community development and provide for local services in locations that encourage walking, cycling and use of public transport, thereby maximising accessibility for all to encourage long term sustainable facilities and support community development.

6.4 Ensure the provision of and contribution to the comprehensive and coordinated Public Art Plan: Each public art strategy provided by developers should operate with the framework of the Public Art Plan that accompanies this document, and the other requirements of the SPD, and demonstrate how it has incorporated its principles in relation to green infrastructure, public realm, social infrastructure and Community Development. Proposals should consider from the outset how public art can: integrate with the landscape, public realm and play opportunities of the development; enhance the unique history of the area including its aviation history, and be used to enhance legibility, character, distinctiveness and civic pride.

Justification: To create high quality public realm that people can easily navigate their way around, that will promote a sense of belonging, and support community development and ensure development is attractive and safe to use.

6.5 Incorporate the potential for future services and community facilities to be co-located in multi-use buildings with co-ordinated or shared management arrangements: Proposals must demonstrate how consideration has been given to co-location as a means of combining uses for the convenience of the community and to the benefit of service operators.

Justification: To maximise the convenience and quality of facilities for users and increase their financial sustainability.

6.6 Particular consideration will be given to the role of future asset management bodies in the provision of open space and any/all community services/ facilities, specifically what it would be responsible for, and when and how it would take over management: The Council will work with development partners and providers to ensure the planning and design of facilities is done in partnership with the local community, ideally through the creation where possible of a management structure which includes representatives of the local community.

Justification: To secure a sustainable and long term future for services and facilities provided by development.

Provision	Requirement	Delivery
Secondary School 1 x 7FE secondary school	One new secondary school located centrally within the New Neighbourhood.  Timing: By the 4,745th dwelling Size: 8.2 ha (min)  Delivery: via planning application S106 contribution/ developer provision	<ul> <li>Potential for dual use, co-location, and temporary/ interim provision of community facilities.</li> <li>Sited centrally within the New Neighbourhood to form the heart of the new community.</li> <li>Additional accommodation at either Patchway Community College or Abbeywood Community School may be required in advance of a new school if this site cannot be secured early.</li> <li>The timing of the secondary school may be required 2 years earlier or later depending on the delivery rate of dwellings and dwelling mix.</li> </ul>
Primary School 10FE on five sites	Five new primary schools accommodation 2 forms of entry at each school.  Timing: 1st primary school by the 835th dwelling. 2nd primary school by the 1,840th dwelling. 3rd primary school by the 3,190th dwelling. 4th primary school by the 4,745th dwelling. 5th primary school by the 5,405th dwelling. Size: 10 ha land (2ha / 2FE school) Delivery: via planning application S106 contribution.	<ul> <li>Potential for dual use, co location, and temporary/ interim provision of community facilities.</li> <li>To be accommodated at four or five new primary schools.</li> <li>A 3FE primary school should be located next to the proposed secondary school to provide the most flexible arrangement for delivery and management.</li> <li>The timing of primary schools may be required earlier or later depending on the delivery rate of dwellings and dwelling mix.</li> </ul>
Nursery 5 new 72 place full-day nurseries	Timing: as per the primary school provision.  Size: 0.4 ha land each  Delivery: via planning application S106 contribution.	<ul> <li>Provision for Childrens services will be accommodated within two of the new nurseries (preferably located in the Central Airfield and Haw Wood local centres) where the Council's normal space standards for nurseries will be increased by 50sqm GIFA.</li> <li>To be accommodated at five new 72 place full-day nurseries within the development.</li> <li>The land contribution requested from the nurseries includes space for car parking.</li> <li>If provision is co-located or located near a public car park onsite car parking requirement could be halved.</li> </ul>
Dental Services 1 dental practice	Timing: By the 1,840th dwelling. Size: 240 sqm. Delivery: via planning application S106 contribution.	Opportunities for co-location should be explored as with social care and other community infrastructure areas and multi- use buildings. Investigate location adjacent to area of public open space.

Youth Services	Floorspace provided as part of the dedicated community centre(s) (but in addition to the community centre floorspace requirement) across the development. The exact location for this floorspace is to be agreed with the Council.  Timing: As part of the community centre provision set out below.  Size: 60sqm  Delivery: via planning application S106 contribution.	<ul> <li>Provision for youth services will be accommodated within the dedicated community centres (locations to be agreed) where the Council's normal space standards for community centres will be increased by a total of 60sqm GIFA.</li> <li>Opportunities for co-location should be explored as with social care and other community infrastructure areas and multiuse buildings. Investigate location adjacent to area of public open space.</li> </ul>
Health Centre GP 8 GP Surgery	Timing: By the 1,840th dwelling. Size: 1,411 sqm. Delivery: via planning application S106 contribution.	<ul> <li>The Council, with NHS England and developers, will investigate the potential to provide temporary accommodation for GP practices prior to the provision of the full requirement.</li> <li>Opportunities for co-location should be explored as with social care and other community infrastructure areas and multiuse buildings. Investigate location adjacent to area of public open space.</li> </ul>
Libraries	Timing: By 2500th dwelling. Size: 418.95 sqm. Delivery: via planning application S106 contribution.	<ul> <li>The Council, with developers, will investigate the potential to provide accommodation for a temporary library service within the first or second community centre, prior to the full library provision being required.</li> <li>Opportunities for synergy should be explored as with social care and other community infrastructure areas and multiuse buildings. Located in highly accessible locations on or at the junction of strategic movement routes.</li> <li>Contributions also sought from commercial development, calculated once amount and type of commercial development has been confirmed. Libraries need to be flexible to meet diverse needs and adaptable over time to enable new ways of learning.</li> </ul>
Dedicated Community Centre (DCC)	Timing: 1st community centre by the 800th dwelling. 2nd community centre by the 1500th dwelling. 3rd community centre by the 2,500th dwelling. Size: 1,915.20 sqm. Delivery: via planning application S106 contribution.	<ul> <li>Potential for co-location/ dual use to accommodate complimentary uses such as social café, one stop advice service and Police room in additional floorspace.</li> <li>Where new DCCs are required the Sport England design guidance suggests a building with a main hall, a secondary hall, and a lounge/community room</li> <li>Ideally the setting up and management of this core social/cultural facility would be integrated into the community management strategy, developed during the handing over of control from developer to community.</li> </ul>

#### Built Sports facility 1 sports and activity centre

Timing: By the 1500th dwelling. Size: 1,250 sqm.

Delivery: via planning application S106 contribution.

Opportunities for synergy should be explored as with social care and other community infrastructure areas and multi-use buildings

To include the following:

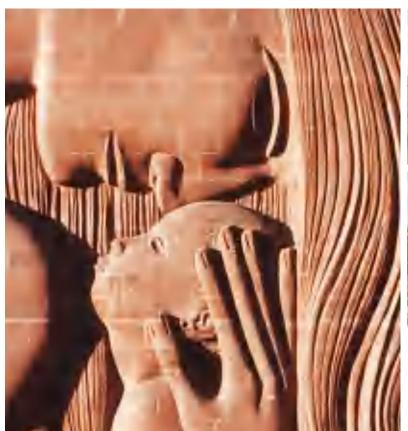
- A large studio / hall / community space with sprung floor
- Two smaller dance studios / community spaces with sprung floors
- A health and fitness gym
- Changing facilities and WCs
- Reception area
- Cafeteria / seating area
- Equipment storage space
- Outdoor space
- Space for car and cycle parking

#### **Public Art**

Timing: Phased across the lifetime of development.

Delivery: via planning application S106 contribution.

Proposals should be in accordance with the Public Art Plan that accompanies this document.







# Community infrastructure diagram

# Key



Local Centres



**Existing Local Centres** 

#### Patchway Trading

- Some retail and diverse mix of u
- Recreational face
- Spectator sport and leisure facil

#### **Haw Wood Area**

- Focus for outdoor sports
- Sports injury clinic
- Primary school/ nursery
- Community Centre
- Temporary library
- Police bureau
- Local convenience shopping
- Café/ pub/ restaurant

#### **Henbury Trym Area**

- Community centre & associated outdoor space
- Outdoor play area(s)
- Primary school/ nursery
- Local convenience shopping
- Café/ pub/ restaurant

uibbs

Over Lane

Causeway

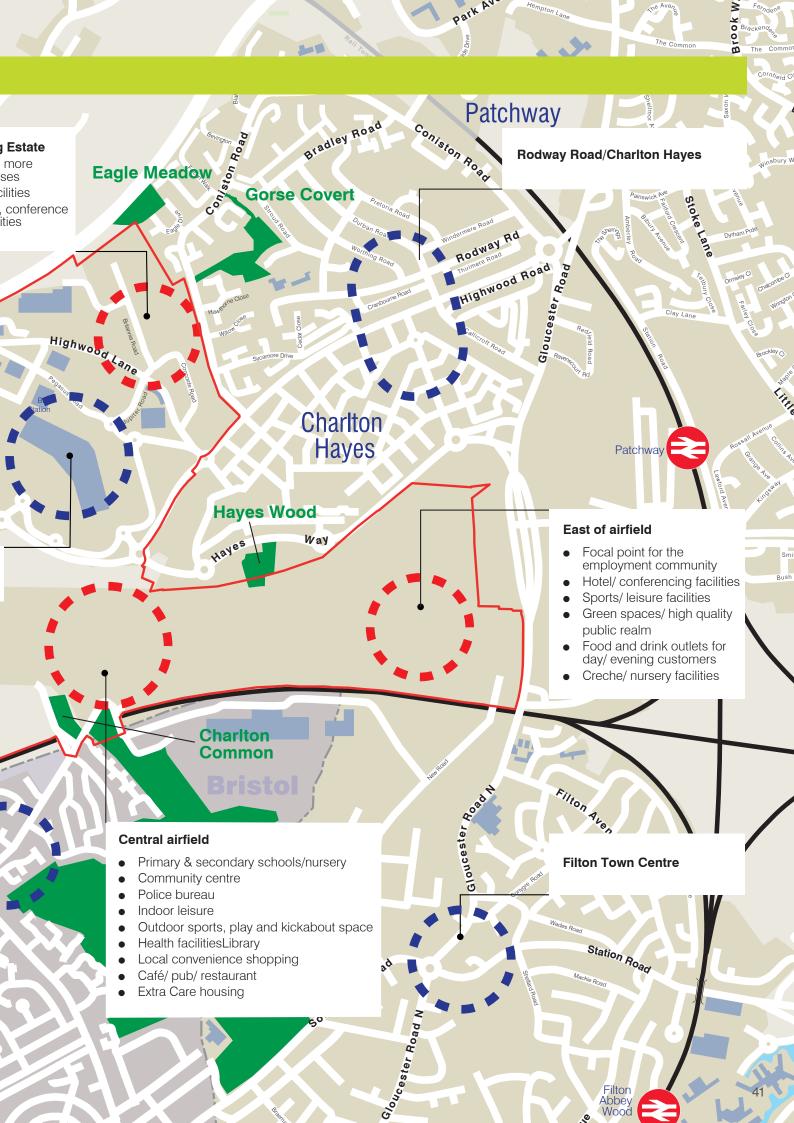
Lysander Road

The Mall out-of-town shopping centre

**Haw Wood** 

**Crow Lane** 

**Charlton Road** 



# 7. Green and blue infrastructure

Green and Blue Infrastructure (GI/BI) is defined as the network of natural and semi natural features, green spaces, rivers and lakes that intersperse and connect villages, towns and cities. Individually these elements are GI assets and the roles these assets play are GI functions. Proposals are summarised at pages 50 to 51.

This section sets out the requirement for Green and Blue Infrastructure provision, broad locations for different types of open space, principles/parameters for its design, and its potential delivery/ management.

An holistic approach is required to the project planning, design and management to ensure high standards of delivery against the objectives. Gl and BI throughout the site should be well designed and connected, creating a robust, multifunctional landscape in accordance with CS2 and the Forest of Avon objectives.

It will include:

#### 1. Haw Wood area

- Creation of woodland extension to Haw Wood SNCI and ridgeline alongside the M5 within the Blaise Strategic Nature Area (SNA). This should comprise a mixture of native woodland with a composition to replicate the ancient woodland, scrub and species-rich grassland arranged in a series of glades and rides with scalloped edges to support BAP priority species and mitigate the visual, noise and pollution impacts.
- Existing hedgerows to be incorporated into new woodland blocks, with the creation of new wildflower meadows with mown footpaths in accordance with the Forest of Avon Plan, which sets out strategic objectives and targets for new woodland.
- Contribute to reducing noise and air pollution from the motorway.
- General improvements to the public realm through appropriate provision of a combination of street trees, wildflower planting to verges, coordinated signage, lighting, and surfacing.

#### 2. Henbury Trym area

Improved footpath/cycleway access along the entire length linking to Blaise Estate within BCC area and improved links to Lysander Road and the Mall.

- Primary ecological corridor providing a generous buffer to development; minimum of 50m. Area to be sensitively designed to ensure ecological corridor is protected and enhanced, including enhancement of the existing streamside vegetation and the retention/restoration of existing ponds within this area and/or the creation of new wildlife ponds within the landscaping as 'stepping stones' for fauna to use as aquatic habitat or dispersal.
- Footpath/cycleway to be located away from the watercourse, in order to preserve the ecological corridor. Potential to include informal mown paths within new pictorial wildflower meadows close to stream/SUDs system.
- Sensitively designed natural play within GI corridor, of sufficient distance from the watercourse to ensure protection of ecological interest.
- Opportunity for learning/information on SUDS and flood attenuation.
- General improvements to the public realm through appropriate provision of a combination of street trees, wildflower planting to verges, coordinated signage, lighting, and surfacing.

#### 3. Destination Park

- Protection and enhancement of Charlton Common as part of the wider green infrastructure network
- Incorporate a mixture of formal sports provision with potential dual use with secondary school
- Outdoor gym/ Multi Use Games Area, destination children's play park, community gardens & allotments, horticultural therapy /sensory garden, and informal 'kickabout' space.
- Consideration will be given to the provision of new water features (linear series of ponds) within the Park to form part of the overall Sustainable Urban Drainage System (SUDs) provision for the site.
- Creation of ecological corridors along the railway line to enhance and extend the existing Site of Nature Conservation Interest (SNCI).
- General improvements to the public realm through appropriate provision of a combination of street trees, wildflower planting to verges, coordinated signage, lighting, and surfacing.

#### 4. GI/BI within housing areas

High quality public and private landscape to provide an attractive and functional setting to development.

- Existing landscape features (such as trees, hedgerows, watercourses etc) retained and enhanced throughout the development to inform the layout and provide a basis for a strong landscape framework.
- Proposed combined footpath/bridleway linking to wider Community Forest Path to the north and wider network to the south of the site into BCC area.
- Remnant wildflower meadow incorporated into development. Green links throughout development to provide pleasant walking and cycling routes. Existing trees and hedgerows retained to inform layout.
- Provision of community orchard adjoining allotments.
- Well designed, integrated SuDs provision throughout the development.
- New woodland planting should be provided to the ridge linking to earth sculpture. Improved footpath links to Mall via green routes.
- Potential to extend Highwood Road 'linear park' to the southern boundary of Charlton Hayes, with pedestrian links across Hayes Way to connect the two communities.
- Main east-west route to be a tree-lined primary route with, as standard through the development, high quality footpaths/cycleways. Main transport links should be designed as part of the overall GI network, with footpaths/cycleways separated from main carriageway where appropriate by landscape buffer with good street tree provision.
- Green links should be provided from Filton Wood SNCI through commercial areas of the site to railway embankment vegetation. A GI buffer should be incorporated alongside the railway corridor (southern site boundary) to provide a corridor of scrub/grassland/wetland habitat (ponds) immediately alongside the railway boundary, that will provide a suitable ecological buffer.
- Extension of Fishpool Hill north-east as a primary pedestrian and cycling corridor.
- General improvements to the public realm through appropriate provision of a combination of street trees, wildflower planting to verges, coordinated signage, lighting, and surfacing.

#### 5. GI/BI within Commercial Areas

Creation of hard and soft landscaping where employees and the public feel welcome to travel through commercial areas via green routes wherever possible.

- Public square/market place to front of Mall with general hard and soft landscape. General improvements to the public realm throughout Cribbs Causeway and the Mall area to include street trees, wildflower planting to verges, improved footpath & cycleway links etc.
- High quality public realm required throughout the development, including well designed and detailed hard landscaping, the incorporation of street trees and amenity planting.
- Extension of Filton Wood SNCI to provide new woodland to ridge and provide an adequate buffer of a minimum of 30m, between the woodland and commercial development abutting the northern boundary of the site.
- General improvements to the public realm through appropriate provision of a combination of street trees, wildflower planting to verges, coordinated signage, lighting, and surfacing.

The above assets will seek to maximise the multi-functional benefits envisaged by the Core Strategy (Policy CS2: Green Infrastructure). A hierarchy of formal playing fields and play areas will be provided throughout the area. These will be designed in conjunction with the strategic green infrastructure set out above to accommodate strategic walking and cycling routes, and more informal activities.

Proposals must demonstrate how they will adhere to the following key principles and as illustrated on the indicative diagram:

7.1 Protect and enhance key existing natural landscape features and habitats to reflect and enhance the area's local distinctiveness:

The area is typified by wooded ridgelines, good hedgerow networks with mature hedgerow trees, ponds and remnant wildflower meadow areas. These features result in a distinctive local landscape that forms the basis of the area's character, and should form the basis of a strong landscape framework and site wide Green Infrastructure network.

Justification: To conserve and enhance the natural environment and reduce the effects of pollution by providing a well-connected landscape framework for accessible green infrastructure.

7.2 Enhance and extend the landscape features identified above by the provision of substantial, connected networks of multifunctional open space: Proposals must demonstrate how they provide (in whole or part) and/ or positively facilitate the creation of the strategic green infrastructure elements listed above and shown on the Framework Diagram. Proposals will be expected to appropriately balance the various open space requirements across the wider New Neighbourhood area (i.e. beyond individual site ownerships) and create attractive and useable spaces to ensure new and existing users have the best accessibility to a range of open spaces.

Justification: To ensure adequate provision of a range of public open space that is useable, meaningful and maintainable, securing high quality design and a good standard of amenity.

7.3 Positively facilitate comprehensive proposals across the whole new neighbourhood to sustainably integrate natural and manmade processes: Proposals must demonstrate how they have ensured the comprehensive integration and positive facilitation of sustainable urban drainage across the whole New Neighbourhood, informed by a site-wide water strategy.

Justification: To ensure impacts on the natural environment are fully incorporated into green infrastructure proposals and mitigated against.

7.4 Utilise the Green Infrastructure network to improve the accessibility, permeability and legibility of the wider area as the focus of sustainable modes of travel: The green infrastructure network will incorporate, where appropriate, the strategic walking and cycling network as part of recreational routes, green corridors and informal open space. Proposals must demonstrate how they provide (in whole or part) and/ or positively facilitate the creation of these routes for walking and cycling.

Justification: To ensure strategic walking and cycling facilities are direct, convenient, attractive and safe.

7.5 Use the provision of various types of green infrastructure to provide an attractive and functional setting for a mix of uses, including the community services and facilities outlined in Section 6: Proposals must demonstrate how they have considered the benefits of locating various types of open space in conjunction with mixed use areas and local services and facilities. In particular they must demonstrate how the location of local services and facilities relates to the strategic movement network and opportunities for access by sustainable modes of travel.

Justification: To ensure an attractive, safe and vibrant public realm.

7.6 Enhance the ecological value of the area through positive management of existing areas of ecological value, and provision of new or extension of existing ecological corridors. Proposals must show how they have retained the existing biodiversity and created a net gain in biodiversity across the site. Proposals should build on existing ecological features and aim to provide a net gain regarding the biodiversity of the overall site.

Justification: To conserve and enhance the natural environment.

7.7 Promote a cohesive and high quality public and private landscape that assists in developing distinctiveness: Proposals that reinforce or recreate the natural landscape features described above will be viewed favourably. Proposals should demonstrate a strong landscape structure, using street trees and appropriate planting to define built form, enhance the street scene and areas of car parking, and incorporating street trees into SUDs proposals. Sufficient space should be provided to ensure longevity of larger tree specimens. Landscape areas around employment uses should be useable, accessible, high quality, and contribute positively to the wider public realm.

Justification: To conserve and enhance the natural environment, and ensure a well-defined, attractive public realm is delivered, and the effects of pollution are reduced.

7.8 Ensure the provision of useable, meaningful and maintainable open space as part of development from the outset, particularly those elements that facilitate the strategic movement routes set out in Section 5.

Justification: To ensure sustainable travel habits are encouraged from the outset, and the green infrastructure network provides an attractive, direct and safe public realm.

The requirements set out in the following table for Public Open Space are calculated on the basis of 5,700 dwellings in line with policy CS26.



#### **Provision** Requirement **Delivery** Informal Timing: Phased across the Informal recreational open space lifetime of development. Recreational Areas to be designed to incorporate grassed **Open Space** Land and provision of laid and landscaped areas with diversity of 191,520.00 out open space + financial topography and materials for informal sq.m. onsite contribution should Council recreation/play, but also to incorporate provision adopt future maintenance areas of equipped play space, biodiversity (based on requirement. conservation and enhancement. These areas allocation will provide access routes for both people and Delivery: via planning of 5.700 wildlife, and provide key recreational active application/ S106 contribution. dwellings) journeys through play opportunities. Areas should be free from litter and dog fouling, and have sufficient bins, social seating and appropriate lighting to encourage use. Parks and Gardens A landscaped area laid out and managed to high standards, which is well maintained, safe to visit and provides pleasant areas to walk, sit and relax while enjoying floral and landscape features, shrubs, trees and other natural characteristics. The area should be tidy, free from vandalism, litter and dog fouling. Appropriate facilities for the size of the site, such a paths, water features, bandstands, recreation facilities, play spaces, seats, bins, toilets, lighting. e.g. Destination park **Green Corridors** Promote environmentally sustainable forms of transport such as walking and cycling linking areas of housing, employment and community facilities. e.g. · Linear Park/ Fishpool Hill extensions. · Henbury Trym corridor. **Open Space** Accessibility: reasonable travel Well managed accessible natural/semi distance 720m straight line natural environment intended for wildlife Natural & distance equal to 15mins walk enhancement and managed to encourage Semi Natural nature conservation and enhancement of the time. 205.200.00 environment. The area should be free from Timing: Phased across the sq.m. onsite litter and dog fouling and include information lifetime of development provision boards, paths, appropriate provision of bins (based on Land and provision of laid and car parking allocation out open space + financial contribution should Council of 5,700 dwellings) adopt future maintenance · Henbury Trym ecological corridor. requirement. Haw Wood ridgeline. Delivery: via planning · Railway corridor. application/S106 contribution. Charlton Common. · Filton Wood buffer/ extension.

#### Outdoor Sports Provision 218,880.00 sq.m. onsite provision (based on allocation of 5,700 dwellings)

Accessibility: playing pitches reasonable travel distance 1,000m straight line distance equal to 20mins walk time.

Timing: Phased across the lifetime of development.

Land and provision of laid out open space + financial contribution should Council adopt future maintenance requirement.

Delivery: via planning application/ S106 contribution.

A wide range of well-located and accessible sporting facilities that are of high quality, well drained and include associated ancillary facilities, e.g. changing rooms, toilets, adequate parking and signage. These must be well maintained and free from dog fouling and litter. Facilities will include floodlighting and all weather surfaces where appropriate.

Includes all outdoor sports facilities whether naturally or artificially surfaced, e.g. playing pitches, bowling greens and tennis courts. Including full sized Multi Use Games Areas (MUGAs)

Options for dual use with built sports / secondary school / community centre e.g. Destination park
SW corner of allocation/ rugby clubs

#### Provision for children & young people 34,200.00 sq.m. onsite provision (based on allocation of 5,700 dwellings)

Play opportunities need to be delivered throughout the site to meet the need of younger children and youth. They should be provided close to other community provision, close to residential dwellings.

Accessibility: reasonable travel distance younger children 480m straight line distance.

Accessibility reasonable travel distance youth 720m straight line distance equal to 15mins walk.

Timing: Phased across the lifetime of development.

Delivery: via planning application/ S106 contribution.

Exciting, stimulating well equipped and positioned areas that provide a wide range high quality facilities including play equipment, playable landscapes, informal play areas (kickabout areas, other ball games skateboarding etc.) and hang out areas (shelters etc) as appropriate, which cater for the needs of children and young people of all ages and abilities. Facilities need to be attractive, well maintained, safe, secure, free from dog fouling and abusive graffiti and have good access.

Appropriately located across whole development to provide ease of access for all residents

#### Allotments 27,360.00 sq.m. onsite provision (based on allocation of 5,700 dwellings)

Accessibility: reasonable travel distance 720m straight line distance equal to 15mins walk time.

250sqm full sized plot. 125sq.m. half sized plot.

Timing: Phased and coordinated across the lifetime of development with occupation of dwellings.

(based on allocation of 5,700 dwellings)

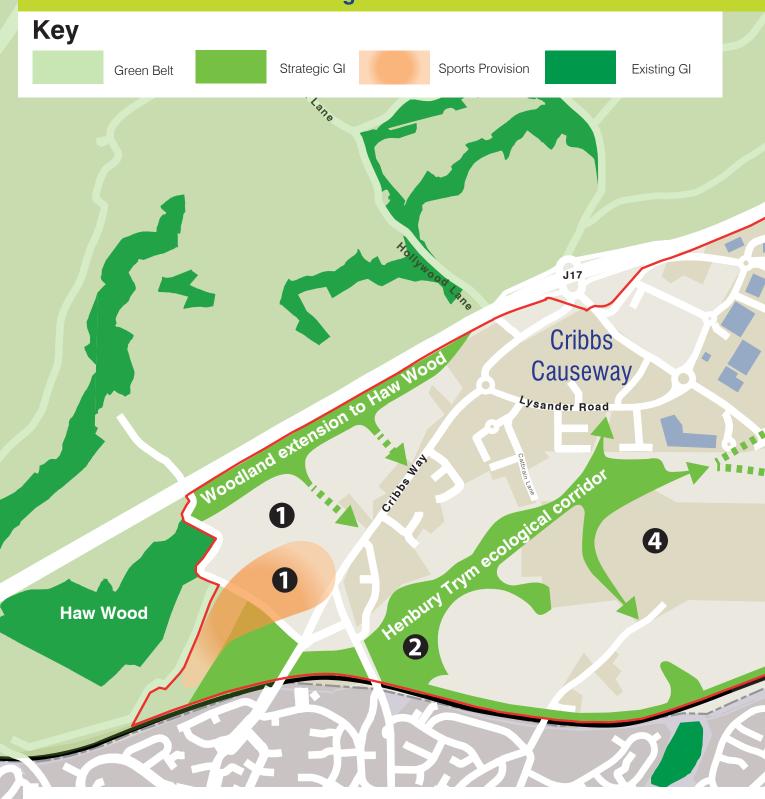
Delivery: via individual applications and pooled contributions.

Secure sites (prioritising natural surveillance from surrounding properties over fencing) for the production of home-grown fruit, vegetables and flowers with adequate provision of water and electricity and accessible to people of all physical abilities. Sites should include toilet facilities and have good access points for delivery/ dropping off materials/ soil ameliorants, composting facilities, secure storage facilities and rubbish bins, and to comply with the National Society of Allotment & Leisure Gardeners Limited. Half-size plots would cater for a greater number of new residents.

Appropriately located across whole development to provide ease of access for all residents.

e.g. Railway corridor

# Green and blue infrastructure diagram

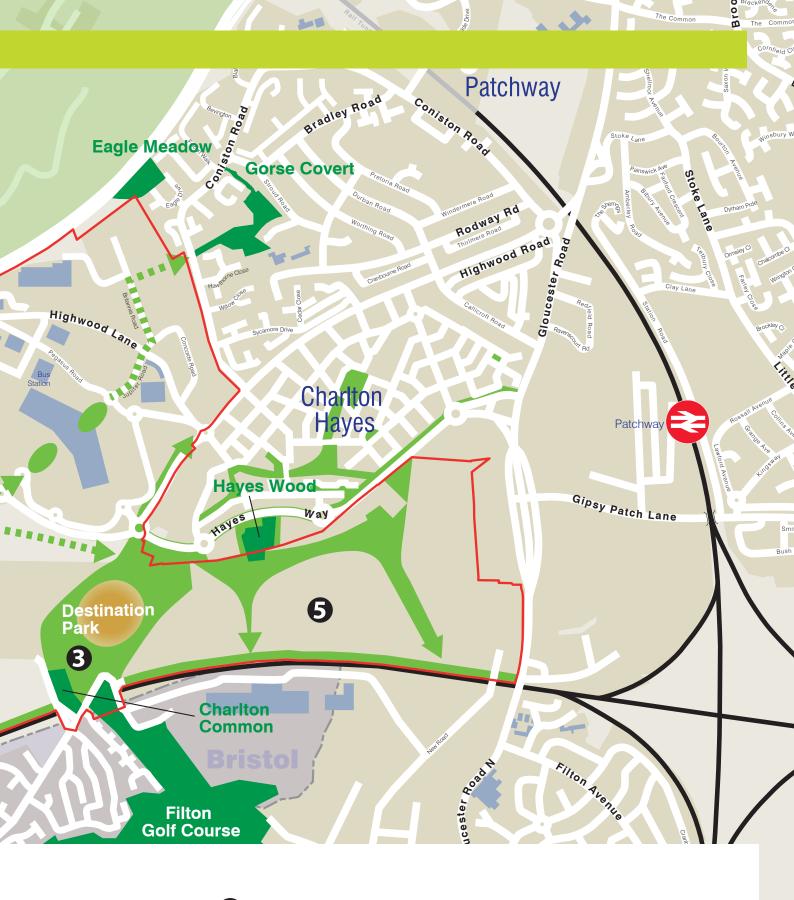


### **Green Infrastructure Priority Areas**

- 1 Haw Wood Extension
  - Woodland extension to Haw Wood SNCI.
  - Sports provision.
- 2 Henbury Trym Ecological Corridor
  - Primary ecological corridor min. 50m buffer to streamside vegetation.
  - Dedicated footpath/cycle access.
  - Improved links to to Blaise Estate and Cribbs Causeway.

## Destination Park

- Mixture of formal sports provision, secondary school, play park, cominformal 'kickabout' space.
- 4 GI/BI within Housing Areas
  - · High quality public and private land
  - Existing landscape features retained
  - Well designed, integrated SUDs.
  - Tree-lined east-west primary route.



with potential dual use with munity gardens & allotments, and

#### GI/BI within Commercial Areas

- Public square/market place to front of Mall with general hard and soft landscape.
- High quality public realm required throughout the development, including well designed and detailed hard landscaping.

dscape. ed and enhanced.

# 8. Land use

This section sets out the broad requirements for the development of mixed use communities, and also specific requirements set out in policy CS26. It also sets out the context for employment proposals in relation to the Filton Enterprise Area. Proposals must demonstrate how they will adhere to the following key principles and as illustrated on the indicative diagram at pages 60 to 61

#### Housing

8.1 The development will be expected to deliver 5,700 dwellings that meet the full range of local housing needs (individually or collectively) including; affordable housing, extra care housing for the elderly (see also 8.2 below), provision for gypsies and travellers (see also 8.3 below), and identification of land and provision of serviced plots for individuals and groups wishing to build their own home and community facilities: In relation to the provision of serviced plots for individuals and groups wishing to build their own home the NPPF requires local authorities to provide such opportunities under paragraph 50.

Justification: To ensure development provides mixed and balanced communities.

#### Affordable & Extra Care Housing

8.2 **35% of all new housing provided within the New Neighbourhood will be affordable**. Proposals will need to address the full requirements of the Council's affordable housing policy, including the overall amount, tenure and type, layout and standards, affordability, and preferred method of delivery. The Council will only accept the provision of affordable housing flats over retail premises in exceptional circumstances. The Council does not wish to jeopardise the overall delivery of housing in South Gloucestershire and consequently in seeking to negotiate the maximum level of affordable housing, it will have regard to the economic viability of the site and the factors underpinning it. The Council has consulted on an "Affordable Housing and Extra Care Housing Supplementary Planning Document." Regard will be had to this document and any future document superseding it, in the consideration of planning applications.

Justification: To ensure development provides mixed and balanced communities.

#### Gypsies & travellers

The Council will investigate the potential to deliver Gypsy and Traveller accommodation through the provision of residential pitches within the new neighbourhood. If suitable locations cannot be found the Council will explore the possibility, through negotiation with development partners, to deliver this provision at appropriate and deliverable off-site locations or through financial contributions.

Justification: To ensure development provides mixed and balanced communities

#### **Employment**

#### Filton Enterprise Area vision

At the Council's Policy and Resources Committee meeting of the 11th June 2012 the following strategic principles were agreed to shape the development of the three South Gloucestershire Enterprise Areas:

- Safeguarding future economic prosperity
- Integrated development to share benefits of economic growth.
- Aligned education, skills and training.
- I Targeted infrastructure investment opportunities

In addition a draft vision for the Filton Enterprise Area was agreed. This includes a broad outline of the intended uses as follows:

"Filton Enterprise area has the potential to be promoted as an internationally important opportunity for businesses to locate directly alongside existing successful enterprises, with a focus on the following activities:

- I Aerospace design, research and manufacture
- Defence
- Advanced manufacturing
- I Emerging materials technologies (working closely with the National Composite Centre located at the Bristol and Bath Science Park)
- Information Technology, maximising the potential of superfast broadband
- Micro electronics research and design

In addition to the core business activities detailed above the EA could also support:

- I Supply chain businesses supporting the core business activities
- I Financial and Business services sector
- Data Services
- Sustainable and Low Carbon energy research, development and manufacturing
- I Environmental technology"
- The Core Strategy identifies around 50ha of employment land within the New Neighbourhood. The expectation is that this will be primarily provided in an employment area at the eastern end of the airfield and specifically aimed at supporting the principles of the Filton Enterprise Area. It is further expected that around 30ha will be directly useable for employment purposes to support the principles of the Filton Enterprise Area, with the remainder taking account of the need for the Great Western Air Ambulance and National Police Air Services, Heritage Museum, local centre, access roads, drainage and landscaping.

In principle this 30ha should be planned on the basis of an equal provision of office (Land Use Class B1a), light industrial (B1b/c), and general industry (B2) uses, but other uses outside of these use classes that would support the aerospace cluster would be considered on their merits.

A 'hub' building should be provided as a focus for innovation, training etc allied to the aeropsace cluster, and would be located within the light industrial (B1b/c) area. Funding for this needs to be resolved. The hub building is viewed as a key component of the wider success of the employment land and Enterprise Area.

Justification: To protect and enhance the existing cluster of advanced engineering and aerospace businesses nearby, and ensure new development supports the aims of the Council and the Strategic Economic Plan produced by the West of England Local Enterprise Partnership (LEP).

8.5 Within the employment area and wider new neighbourhood opportunities for training and apprenticeships will be encouraged.

Justification: To ensure that there is an adequately skilled local labour force and that every opportunity is taken to support/ retrain the existing labour force, and support the aims of the Council and the Strategic Economic Plan produced by the West of England Local Enterprise Partnership (LEP).

#### General principles

8.6 Within the framework created by the movement, community and green infrastructure, create a pattern of mixed use, with a balance of homes, jobs, services and facilities that complement neighbouring activities, both within the new neighbourhood and adjoining areas: Proposals must contribute and demonstrate how they will positively facilitate clusters of complementary mixed uses, and avoid the creation of single-use or isolated facilities. In particular mixed use development will be expected on the key routes through the site. Proposals must demonstrably adhere to the principles set out in guidance documents such as Secure by Design.

Justification: To ensure a sustainable pattern of development that promotes sustainable modes of travel and reduces reliance on the car, and maximise the number of people who have easy access to work, services and facilities.

8.7 Ensure that proposals for commercial and mixed use areas are provided within a perimeter block structure with a public frontage that provides activity and overlooking to movement networks and spaces.

Justification: To ensure a sustainable and robust pattern of development that contributes to the public realm.

8.8 Ensure higher residential and commercial density is focussed around strategic walking, cycling and public transport routes, and within walking distance of local services and facilities.

Justification: To ensure a sustainable pattern of development that promotes sustainable modes of travel and reduces reliance on the car.

8.9 Encourage development in the most accessible locations, particularly those fronting strategic routes through the site, to be capable of adaption or change of use to alternative uses in the future if necessary.

Justification: To ensure a sustainable and robust pattern of development that can accommodate future change if required.

#### **Emergency services**

Discussions with the Great Western Air Ambulance Charity (GWAAC) and National Police Air Service (NPAS) to date have identified potential benefits in either relocating to another area within, or to sites outside, the Cribbs Patchway New Neighbourhood. The Framework Diagram indicates a potential location for these services should it not be possible or desirable to retain them in their current location. Relevant proposals must accord with the following principles:

8.10 Ensure the retention, or relocation within the Cribbs Patchway New Neighbourhood, of the GWAAC and NPAS: Proposals must set out clearly how these services are to be provided for in the long term, including information on delivery and long-term management of any new facilities required. Land should be safeguarded or secured for this purpose. In the event that alternative locations are secured off-site for permanent provision the future of the safeguarded land can be reviewed.

Justification: To retain key uses and services on site.

8.11 Consider the potential for co-location and/ or combined use with other community infrastructure requirements (e.g. community/ adult learning): Relevant proposals must state how consideration has been given to the potential to co-locate these services with other infrastructure requirements where possible and beneficial. As with other community services and facilities there may be potential benefits in terms of convenience for the local community and other users, and efficiencies for service operators.

Justification: To support community development and provide for local services that in locations that encourage walking, cycling and use of public transport.

#### Heritage museum

The Concorde Trust/ Bristol Aerospace Collection have, to date, identified a desire to utilise the existing group of listed buildings in the north east of the new neighbourhood for a new Concorde museum, identified on the Framework Diagram. Discussions are still at an early stage, and should proposals be forthcoming in that location they will need to accord with the following principles:

8.12 Ensure the setting and special interest of the existing listed and locally listed buildings is protected and enhanced: The group of buildings identified include four Grade II listed buildings/structures. Detailed proposals will need to follow an assessment of the significance of these buildings and their settings and should demonstrate how the development has respected this significance.

Justification: To protect recognised built heritage assets.

8.13 Consider and identify any potential for co-location and/ or combined use with other community infrastructure requirements (e.g. community/ adult learning): Relevant proposals must state how consideration has been given to the potential to co-locate with other infrastructure requirements where possible and beneficial. As with other community services and facilities there may be potential benefits in terms of convenience for the local community and other users, and efficiencies for operators of the museum.

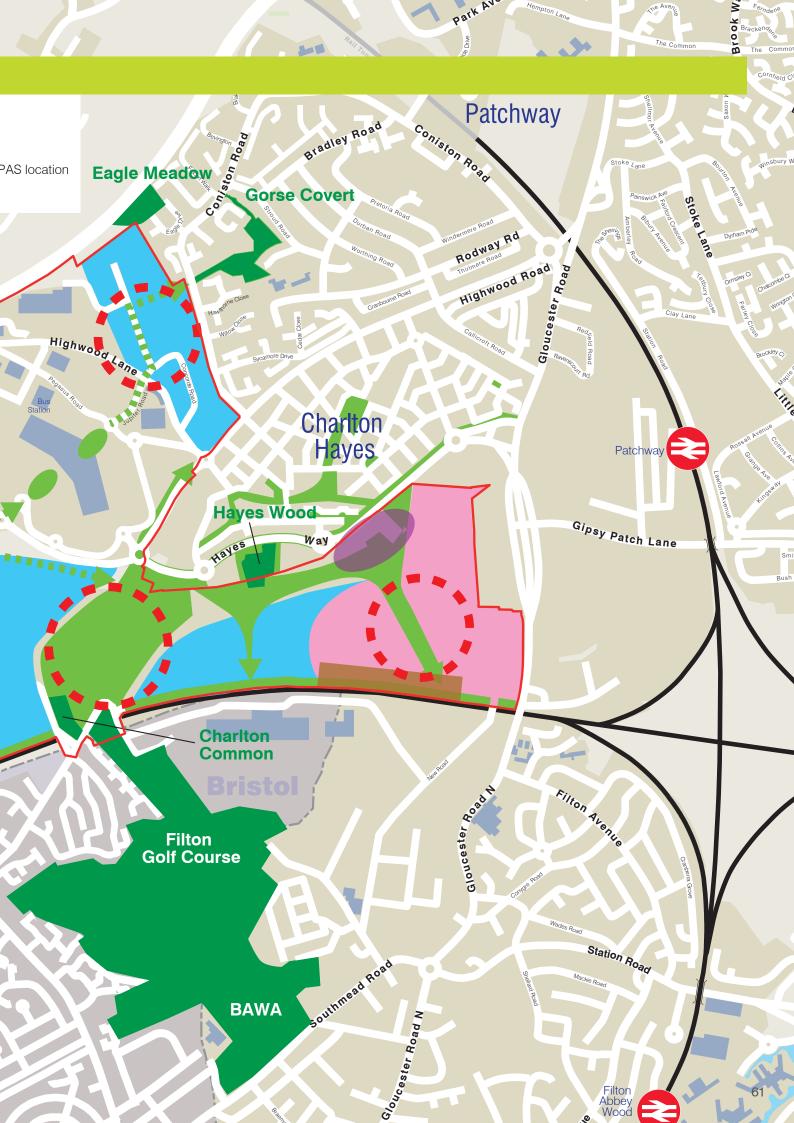
Justification: To support community development and provide for local services that in locations that encourage walking, cycling and use of public transport.

#### Waste and recycling facility

Developments across the Bristol North Fringe will generate the requirement for an additional waste and recycling site, and the optimum location identified is within the Cribbs Patchway New Neighbourhood.

Provision	Requirement	Delivery
Heritage Museum	Timing: TBC.  Delivery: Individual applications.	Potential for co-location/ dual use to accommodate complementary uses such as public café, community/ adult learning etc.
GWAAC/ NPAS	Timing: To ensure continuous service operation whether retained on site or relocated elsewhere.  Delivery: Individual applications.	If retained on site then opportunities for co-location with each other and with other community facilities should be explored.
Waste Transfer Site	Timing: By the 500th dwelling. Size: 8,300m2 on site provision Delivery: via planning application \$106 contribution/ developer provision.	Delivered within the PFI waste services contract, SITA to manage design and construction.
5 x Gypsy & Traveller pitches	Timing: On-site at relevant phase of development, or off-site contribution on commencement of development of each phase.  Size: 0.2ha/ on-site pitch.  Delivery: via planning application S106 contribution/ developer provision.	
Police Bureau(s), APNR Camera provision & funding for PCSO/ vehicle	1st bureau - by the 1500th dwelling or delivery of Haw Wood local centre, whichever is the sooner.  2nd – by the 2,500th dwelling, or delivery of Central Airfield local centre, whichever is the sooner.  APNR Cameras – phased with provision of new road infrastructure.  PCSO/ vehicle – annual payments from the 1500th dwelling or delivery of Haw Wood local centre, whichever is the sooner.  Delivery: via planning application S106 contribution/ developer provision.	Potential for co-location/ dual use with other services/ facilities in the local centres.

# Land use diagram Key Residential Heritage Museum Local Centres/ economic development land Strategic GI Employment Potential GWAAC/N J17 Cribbs Causeway Lysander Road **Haw Wood** 60 hts reserved. © Crown copyright and database rights 2014 Ordnance Survey 100023410.



# 9. Utilities and renewable energy

The Cribbs Patchway New Neighbourhood has the opportunity to be a practical exemplar of sustainable development through coordinated efficiencies in utility infrastructure provision, and through an approach to reducing energy demand and use of low carbon energy solutions.

To this end the Council commissioned Utilities Partnership Limited (UPL) to develop a Multi-Utility Sustainable Infrastructure Strategy for the New Neighbourhood.

The proposed Strategy recommends a coordinated approach across individual developments to the design and procurement of electricity, gas, water and sewerage infrastructure to gain efficiencies in cost and delivery, minimise costly network reinforcements, and maximise potential asset values and investments from the independent asset ownership marketplace.

In relation to low carbon and renewable technologies it also recommends a combination of technologies that suit specific areas of development, such as localised Combined Heat and Power for high density areas, solar photovoltaic (PV), solar water heating and ground source heat pumps for lower density areas.

The following proposals are recommended and applications should demonstrate how they have been considered and incorporated into proposals, and if not justify why.

#### Electricity

The optimum approach will require substantial coordination between the developers going forward. Development at Cribbs Causeway and Patchway Trading Estates can and should be fed from the existing Cribbs Causeway primary substation.

The optimum network reinforcement solution other proposals will be to tie in with the potential upgrade of the Filton DC primary substation, which supplies the former Filton airfield site.

In parallel there is potential for spare capacity elsewhere in the network to be utilised and minimise the need for additional network reinforcement. This would ideally suit itself to an independent asset ownership approach.

#### Water

Capacity is available for all identified development proposals. A co-ordinated approach would maximise opportunities for independent asset ownership. It should also be noted that the method of calculating contributions to water network reinforcement is based on capacity requirements of the system. This provides a direct incentive for Development proposals to reduce total water usage.

#### Gas

Capacity is available for all development proposals, but as before it is recommended that a co-ordinated approach is pursued to maximise opportunities for independent asset ownership.

#### Sewers

The optimum approach will require substantial coordination between the developers going forward. Wessex Water are currently investigating long term solutions as a result of developments across the North Fringe of Bristol.

In the meantime there is a need for an interim, co-ordinated solution at Cribbs/ Patchway to enable connections to be made in the short-medium term, without prejudicing a long-term solution being put in place.

#### Broadband

A separate Council study has identified the potential for fibre-optic internet connection in the wider Filton area, which could be incorporated into a wider package of infrastructure to maximise interest from independent asset owners.

#### Low carbon and renewable energy

The Cribbs/ Patchway New Neighbourhood represents a unique opportunity to promote and achieve the requirements set out within the Core Strategy policies CS1, CS3 and CS4, the Renewables (SPD) and the targets set out within the Low Carbon South Gloucestershire Plan 2012-2015.

The Strategy recommends a "fabric first" approach to zero carbon development, before considering the opportunities for low carbon and renewable technologies

In terms of energy efficiency it is recommended that;

- I the potential for solar gain be optimised in all buildings by considering building and roof orientation, overshadowing and materials selection,
- buildings should be well insulated;
- measures to avoid risk of overheating should be considered where buildings are well-insulated and designed to optimise solar gain;
- buildings should be designed to incorporate shading where appropriate and natural ventilation to the main living areas, with mechanical extraction for bathrooms and kitchens:
- a high % of dedicated energy efficient light fittings are installed,
- dedicated energy efficient light fittings or security lighting with movement detectors and daylight shut-off devices are provided,
- In the need for a tumble dryer be removed by installing purpose made drying facilities in the form of a drying cupboard with appropriate heating and ventilation, and external facilities to dry clothes for example a clothes dryer or washing line,
- provision is made for gardens appropriate for growing vegetables or allotments.
- I provision is made for a community space or forum within the development suitable for a regular farmer's market
- provision be made each dwelling for safe and secure storage for an appropriate number of bikes,
- space and services for a home office are provided, as well as a modern fibre communications network

In relation to low carbon and renewable energy technologies it is recommended that:

- opportunities to accommodate localised CHP and district heating networks, in higher density areas, are maximised;
- Solar Thermal Water Heating (STWH) or Solar Photovoltaic (PV) panels should be fitted as a standard measure in all dwellings with roofs facing between south-west and south-east,
- LED street lighting is provided

- I the controls and temperature readouts should be located in a prominent position within the living area of dwellings
- I installation of PV panels should be considered on non-residential buildings,
- wind turbines are considered for installation at the Primary and Secondary Schools
- I the use of ground source heat pumps be considered in lower density areas of the new neighbourhood and in any affordable or social housing,
- Biomass be considered for use in larger dwellings, commercial buildings and for CHP

Proposals must also demonstrate how they will adhere to the following key principles.

- 9.1 Ensure an overview is provided of the whole site in terms of:
  a) the expected phasing and, b) the building regulations each part of the site are envisaged they will have to comply with:
  Proposals must include commentary on the proposed amendments to the building regulations in 2013 and 2016, and expected implications for building design.
- 9.2 Ensure an overview is provided of the whole site in terms of its suitability for district heating: It is accepted that densities may be too low for the viable delivery of heat networks across parts of the development, however there is likely to be potential in the higher density phases and mixed use centres for smaller schemes particularly if development is likely to be constructed post 2016. Any buildings proposed in the meantime in close proximity to mixed-use centres should be designed with plant that is compatible with potential connection to DH. The option to connect in the future should not be designed out at this stage.

**At Reserved Matters stage,** applications should adhere to the following principles.

9.3 Prior to 2016 provide a clear and simple commitment to meet Code for Sustainable Homes level 4 & BREEAM 'very good', or demonstrate how development 'outperforms the building regulations': This could be by provision of additional design measures, and the consequential expected additional percentage in CO2 reduction over Part L of the 2013 building regulations.

- 9.4 Provide a layout plan showing how buildings and roof pitches have been orientated to maximise passive solar gain and the potential to use solar technology (if not now then in the future). This may have implications for masterplanning layout, house design / street scenes and should therefore integrate fully with other detailed design work
- 9.5 **Provide commentary on and examples of the proposed house designs:** To indicate how fenestration and internal layout has responded to passive energy objectives and promote the use of renewable technology.
- 9.6 Where appropriate demonstrate how opportunities to accommodate district heating networks have been maximised.

#### Allowable solutions

Applicants are encouraged to provide for a high standard of energy security on-site and within the design of the scheme. However, in order to ensure zero carbon objectives can be met from 2016, an Allowable Solutions (AS) mechanism will be developed in line with emerging Government guidelines. The definition of Allowable Solutions and priorities for investment will evolve in South Gloucestershire consistent with advice from the Zero Carbon Hub. This fund has the potential to support investment in, for example, district heating, social housing retrofitting initiatives, renewable energy projects and embodied carbon initiatives.

The development of a detailed Allowable Solutions policy will evolve through close consultation with our local partners.

In the Cribbs Patchway New Neighbourhood, the Council will engage closely with local developers and interested parties in the development of options for delivering Allowable Solutions.

# 10. Summary

This document sets out the key requirements in terms of infrastructure delivery of the Cribbs Patchway New Neighbourhood. It sets out what infrastructure is required of development proposals, when it is required and, where appropriate, the preferred location for infrastructure. In doing so the document is intended to aid infrastructure delivery, and act as a guide for developers and members of the public to understand the requirements, timing and broad location of infrastructure requirements.

Where delivery of infrastructure set out within the SPD is dependent on collaboration from other individuals or organisations applicants will be required to provide formal evidence that this can and will be achieved.







# Appendix 1 Policy CS26: Cribbs/ Patchway new neighbourhood

A major mixed use development is planned on 480ha of land at Cribbs Causeway, Patchway and Filton, as defined in Figure 6. Within the new neighbourhood through the preparation and adoption of a Supplementary Planning Document, provision will be made for approximately 5,700 dwellings in new mixed use communities, around 50 ha of employment land, and greater diversity of commercial uses including additional retail, together with supporting infrastructure and facilities.

Development will be comprehensively planned and phased to ensure full integration between the different uses and provision of ancillary facilities and supporting infrastructure, both within and beyond the area. This area will be a major focus for redevelopment and regeneration, and will deliver:

- social and physical regeneration through the substantial improvement of community infrastructure, public open space, access and movement, and the provision of a high quality built environment and public realm that is comprehensive and integrated (areas 1-5 4 on Figure 6);
- I the continued investment and focus of the area as a centre of excellence for the aerospace sector (character area 3 on Figure 6), including upgrading the quality of the local environment and range of services and facilities:
- an integrated and comprehensive approach to access and transport, including significant improvement to pedestrian, cycle and public transport networks, improvements to road networks across and beyond the area including the Strategic Road Network, and the safeguarding of land for a new railway station(s).
- a co-ordinated approach to carbon reduction, and new renewable and low-carbon energy generation and distribution networks;
- I the continued operation of the Great Western Air Ambulance Charity and Police Air Operations;
- protection, enhancement and provision of cultural and heritage facilities related to the long term legacy of engineering and aviation at Filton, including the Bristol Aero Collection and the Concorde Museum;
- sporting and commercial facilities including scope for hotels, conferencing and spectator sports;

proportionate provision of and/ or contributions to supporting infrastructure and facilities.

It is essential that an area-wide adopted SPD is the policy delivery mechanism to ensure development is comprehensively planned and delivered in accordance with the vision, Policy CS25 and partnership priorities for the North Fringe communities, and high quality urban design principles as set out in Policy CS1.

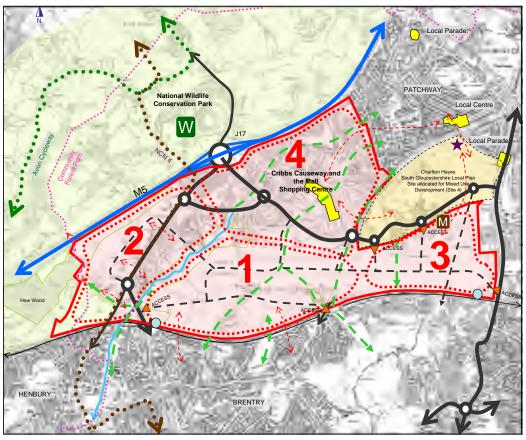
Development proposals will be required to demonstrate that they are in accordance with the SPD. They should positively facilitate and not prejudice the development of surrounding areas of the New Neighbourhood, and meet the overall vision for the transformation of the area.

The new residential neighbourhood(s) and commercial areas will provide for:

- a range of housing types and tenures in accordance with Policies CS17 and CS18;
- a secondary school, primary schools and full day nursery facilities sufficient to meet the needs of the new communities;
- I library, doctors surgery, community meeting space(s), indoor sport, children's and youth facilities;
- local retail, food and drink outlets (within character areas 1-3 on key diagram);
- well planned and integrated Green Infrastructure, sport and recreation provision, particularly alongside the Henbury Trym, in accordance with Policies CS2 and CS24;
- I the Cribbs/ Patchway New Neighbourhood Transport Package (see Policy CS7), including safeguarding land for a new rail passenger station(s);
- a waste transfer and recycling facility;
- I neighbourhood-wide wireless internet network;
- I the potential provision of pitches for Gypsies and Travellers;
- extra Care Housing dwellings; and
- high quality employment opportunities.

This list is not exhaustive and development should also meet other policies of the Local Development Framework and the provision of necessary utilities as appropriate. Further details are also set out in the Infrastructure Delivery Plan.

# **Core Strategy Figure 6**



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