6 Illustrative Masterplan

This chapter sets out the Illustrative Masterplan for the site and represents one way in which the development could be delivered, in line with the Parameter Plans and Design Code. This plan is not submitted to Bristol City Council for approval; however, it represents an important and carefully considered illustration of how development could be laid out. Reference should be made to the Design Code for further details.

The Vision

The Illustrative Masterplan aims to transform Brislington Meadows into a sustainable neighbourhood that will appeal to a diverse residential population close to transport connections, schools and essential services.

People will choose to live here because of its landscape-led approach and attractive setting with new convenient connections to help navigate the topography.

Brislington Meadow's natural setting will be further-complemented by enhancing green connections to Victory Park and Eastwood farm, and retention of public pathways to open spaces positioned amongst mature trees.

The new neighbourhood will be a desirable place to live, socialise and take part in daily urban life.

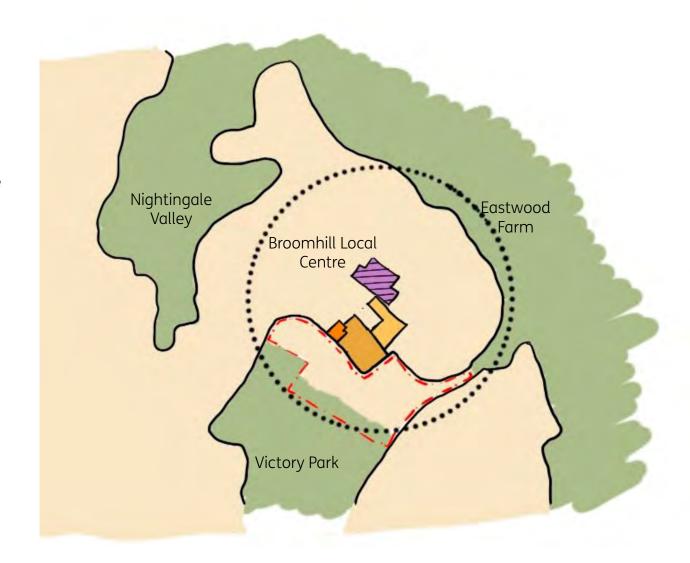
The vision for Brislington Meadows is of a new neighbourhood that:

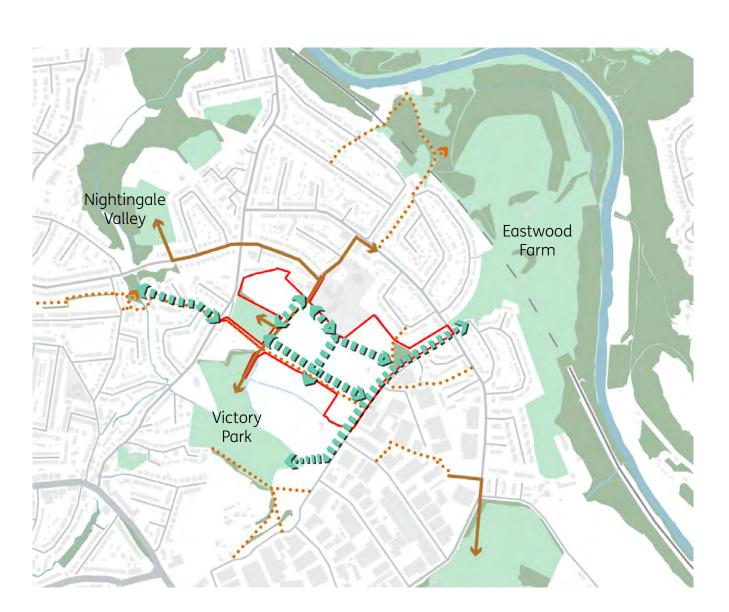
- Creates an integrated and sustainable Broomhill community;
- Provides a community where residents and nature co-exist:
- · Retains as many existing trees and hedges as possible;
- Retains and enhances publicly used routes to nearby key destinations
- Creates valuable, diverse habitats including wet meadow;
- Maintains key wildlife corridors across the site:
- Provides large, varied open spaces and links with opportunities for play, learning, relaxation and wellbeing;
- Delivers a mix of housing to reflect local need, including private and rented, affordable, family homes and apartments, and
- Delivers low carbon development and maximise opportunity for active travel.

Bristol Context: providing for growth needs of the City

The site is allocated for development in the Council's adopted Local Plan (2014), with indicative capacity for up to 300 homes. The intention is to create a new neighbourhood that sits seamlessly between the existing built edge of Broomhill to the north and Victory Park to the south.

The allocation of the site for residential use was considered by BCC to be appropriate noting the site's sustainable location, close to facilities and services of Broomhill Local Centre, and encouraging further investment here, as well as the shops on the Brislington Retail Park, community facilities, green spaces, employment areas and public transport infrastructure. Convenient pedestrian and cycle access is at the heart of the proposed development offering the opportunity to facilitate effective sustainable modes of transport.





Immediate Context

Within its immediate context the site offers an opportunity to create a new neighbourhood that strongly integrates with the existing settlement of Broomhill, while offering new benefits for both new and existing residents.

The masterplan has been designed to integrate important strategic green infrastructure connections, as shown on the diagram adjacent.

Legend



Application boundary



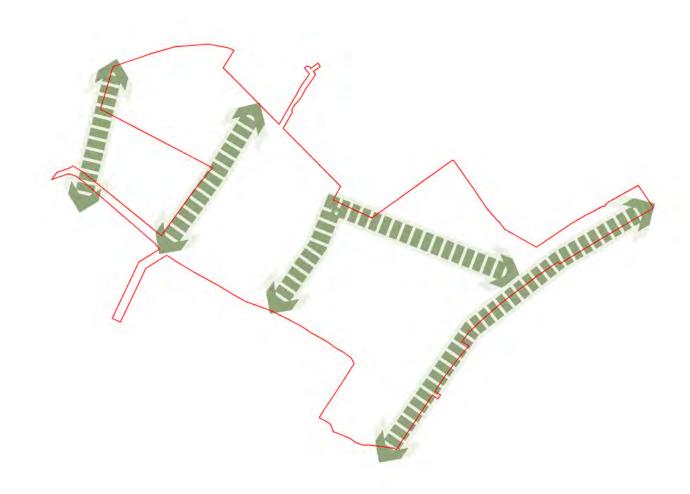
Landscape and ecology connections

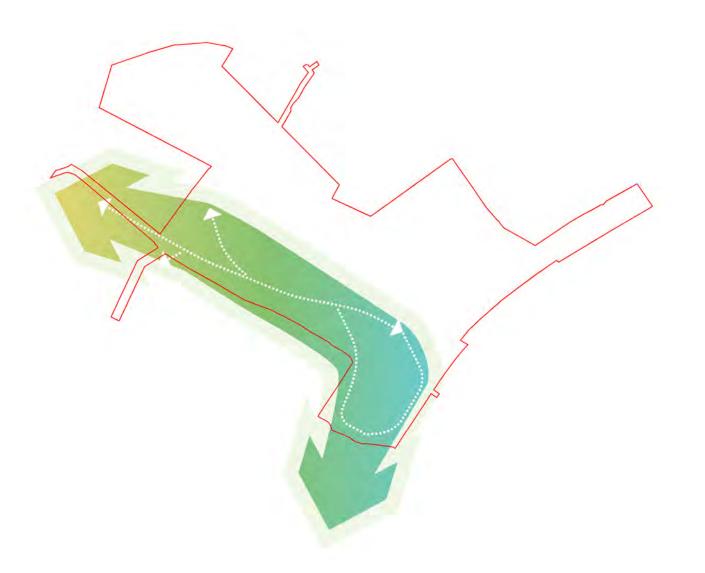
Design Principles

The following principles set the key structuring elements for the illustrative masterplan and has been informed by the site assessment.

1. Retain and enhance existing green corridors

- Retain as much valuable biodiversity within the site as possible;
- Present an interconnecting network of ecological corridors through and within the site;
- Multi-functional green spaces that provide important social spaces for people to interact together and with nature, as well as an ecological value;
- Provide every household with a view of the site's natural assets;
- Ensure appropriate frontage and overlooking of spaces where necessary to make spaces safe and attractive, and
- Avoid bringing parking into the corridors, instead drawing the landscape character into the streets and frontages.



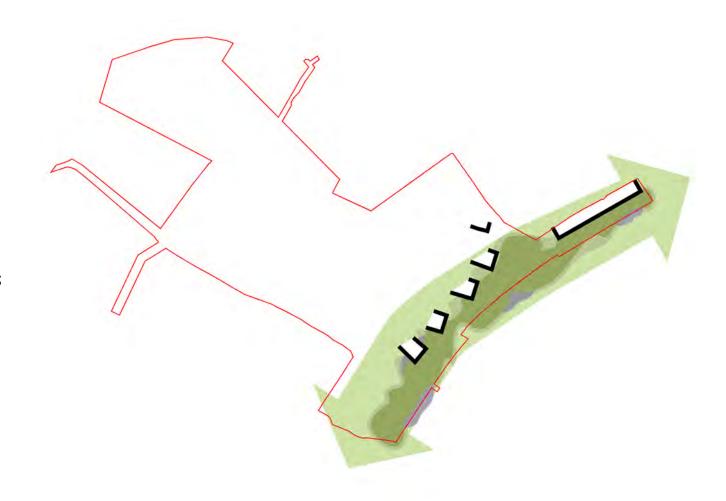


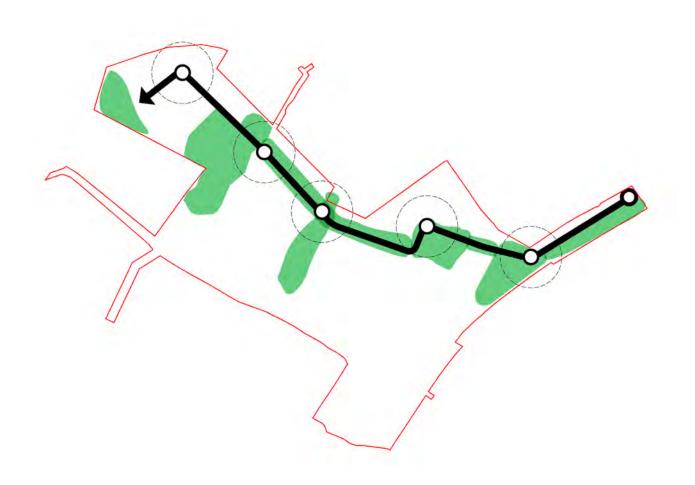
2. Creation of a wetland meadow

- Enhance the natural value of the lower slopes by creating a wetland meadow rich in biodiversity;
- Create continuous frontage along the meadow with units that will enhance the quality and sense of security in the space, whilst simultaneously benefiting from the openness and character of the landscape, and
- Optimise the topography, ground conditions and 'no-build buffer' to create large areas of biodiverse wet grassland on the lower slope.

3. Set homes within the landscape

- Introduce a strong ecological corridor connecting the substantial natural resources to the north and south;
- The topography and location of the green link has influenced the placement of apartment blocks which positively impact the key ecological corridor to create a consistent rhythm and style of frontage;
- The green corridor has influenced the placement of apartment blocks which will sit positively amongst the landscape;
- The scale of the built form is appropriate for the character of the natural habitat and will create a good sense of overlooking, and
- Parking pulled away from the corridor and softened by drawing the landscape into the courtyards.





4. Create a street that moves through a series of spaces

- A kinked primary street alignment that passes through green spaces and provides interest and an opportunity to introduce focal buildings at key points;
- Glimpsed views over Bristol from the primary street, and
- Consistency of character with some variation along the different parcels.

Concept Masterplan

A place to get in touch with nature, nestled in the meadow landscape, with parks and woodland on your doorstep.

A place of its own but not in isolation. The development will bring benefits to the community and become an essential part of the "20 minute neighbourhood".





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Illustrative Masterplan

The Outline Planning Application is supported by an illustrative masterplan which demonstrates one form in which development could be set out in accordance with the Parameter Plans featured in Chapter 9.

It is a landscape-led plan that shows clusters of development sat within a network of green spaces offering a range of recreation and leisure opportunities for existing and future communities. All residents will benefit from the defining characteristic of proximity to open space: this will include areas of recreation, learning, walking and cycling, informal paths and existing landscape elements including established hedgerows and trees.

Brislington Meadows has been strongly shaped by the topography and existing landscape features. The masterplan establishes a pedestrian and cycle friendly, permeable layout that provides access to green space in a more inclusive way compared to the current condition of the routes through the site. Three main residential parcels respond to the existing

key features, whilst setting a pattern of development that represents sensitive assimilation of built form within its immediate context.

This illustrative masterplan shows 257 residential dwellings (Use Class C3), with a rich mix of house types. The average density is approximately 51 dwellings per hectare. The number and type of dwellings has been informed by capacity testing and design development as shown on pages 74 - 77 and 113 - 115 of this document. Different options were explored as the constraints and requirements for the site have been further analysed, understood and tested. Stakeholder and public engagement has also influenced the masterplan.

Land Use	Area (Hectares)
Residential Area (Use Class C3)	5.12 ha / 12.65 ac
Open Space (including play areas, public rights of way, SuDS and utilities)	4.48 ha / 11.07 ac
Total Site Area	9.6 ha / 23.7 ac

Legend

Nature and Landscape

- **Existing woodland**
- Landscaped entrance from Broomhill Road
- Water attenuation features
- Existing hedgerows and trees

Access and Movement

- New primary access from **Broomhill Road**
- 6 Emergency access from **Bonville Road**
- Pedestrian access point
- Pedestrian and cycle access point
- Existing public right of way retained and/or realigned where required
- 10 New accessible pedestrian and cycle link to Fermaine Avenue
- 11 Dedicated pedestrian and cycle route

Built development and recreation

- 12 Residential development
- Play areas (indicative locations)
- **Brislington Green**
- 'Brislington Heights' green space
- The Meadow
- 'The Gate' green space



Brislington Meadows

A place that delivers a varied mix of high quality homes within a short walk or cycle to existing shops and education in Broomhill via a new pedestrian and cycle route.

Landscape is at the heart of the design, with all new homes fronting onto publicly accessible green space, with a network of walking and cycling routes and areas for play and recreation.





Illustrative Housing Mix

The illustrative mix of house types is indicative only at this Outline Planning stage, but shows how a diverse mix of dwellings could be provided across the new neighbourhood, able to meet both market and affordable housing requirements.

The Illustrative Masterplan currently shows 257 units but HE are applying for permission for up to 260 homes on the site. Additional dwellings could be accommodated on site as part of the detailed design proposals which may seek to amend the illustrative layout or scales shown, albeit within the parameters set by the submitted suite of parameter plans.

Houses	Number of homes
2 bed	108
3 bed	57
4 bed	9
Total	174

Apartments	Number of homes
1 bed	51
2 bed	32
Total Number	83



Legend

2 bed house

3 bed house

4 bed house

1 bed flat

2 bed flat



Indicative Housing Mix

Response to Local Character Study

The local character studies in Chapter 2 identified various design considerations in terms of masterplanning, landscape design as well as safety and surveillance. These 'lessons learnt' have influenced the design of the Illustrative Masterplan.



Masterplanning principles

The following lessons were drawn from the analysis of the site and its surrounds and have been implemented in the masterplan:

- Outlook onto landscape from homes
- Parking located away from public open space
- Ensure there is natural surveillance of green spaces and streets
- Avoid long sections of side boundary along a street.
- Simple dwelling form with a consistent approach to roof form
- Street trees to add interest to the street scene and break up visual impact of parking.

Further principles are embedded within the accompanying Design Code:

- A consistent material palette, with other materials used to add interest;
- · Co-location of parking, refuse and loading facilities, and
- · Boundary treatment that clearly delineates public and private.



Topography

- 1 Opportunity to accommodate level changes within back gardens (see page 118)
- Use of gabion walls/earthworks to create an attractive landscape feature
- 3 Dwellings step up or down the slopes, responding to the topography and creating a varied roofscape
- Ease of movement up and down the sloping topography
- Make use of existing topographical features that merge play / open space equipment into the landscape
- 6 Encourage level access from the street to the front door
- 7 Design public spaces to take advantage of the views
- 8 Opportunity for varied roofscape to add interest and variety to the views within the site.





Landscape

- Integrate green space into the development creating opportunities for residents to have access to nature on their doorstep
- Provide active travel connections and public spaces that encourage interaction
- Provide a variety of meeting places for a diverse population.
- Incorporate existing trees and hedgerows into green spaces
- Providing good quality play spaces for diverse age groups
- Providing vegetation, mature perimeter trees around spaces to offer shade and natural buffers to roads
- Help existing and new residents with new, active and improved parks, playgrounds and public spaces that encourage social interaction.

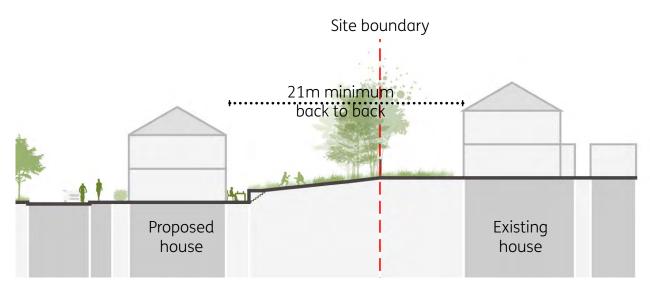
Response to existing properties

The new development needs to successfully adjoin with existing residential areas to ensure that privacy and a defensible boundary are maintained for existing residents. The adjacent diagram illustrates the design approach along the northern boundary.

A back-to-back interface has been used where properties back onto the boundary of the site, completing the 'block' of housing and creating a defensible boundary to existing dwellings.



Key plan



Cross section AA showing the design response along the northern boundary

Legend

Existing boundary conditions

Boundaries with the rear of private dwellings and access lanes ШШ

Boundary with the side of private dwellings

Boundary with nursery and junior school ШШ

Boundaries with adjacent roads/ access roads

ШШ Boundary with green space

Proposed boundary conditions

Rear of private dwellings

Side of private dwellings

Road

Green space



Building form and massing

The plan opposite shows the proposed townscape strategy for the site. The key principle is to ensure active frontage is provided onto public open spaces. This will help define development parcels, creating safe and welcoming spaces.

A predominantly continuous frontage along the primary street provides a sense of arrival and active surveillance, and define the street scene. The primary street will act as a corridor through the development with key buildings along the route guiding visitors through the neighbourhood. Key buildings may be taller and/or have a change in material application to assist with wayfinding.

Legend



Key space / focal point



Key building



Secondary focal points

Frontage onto green space



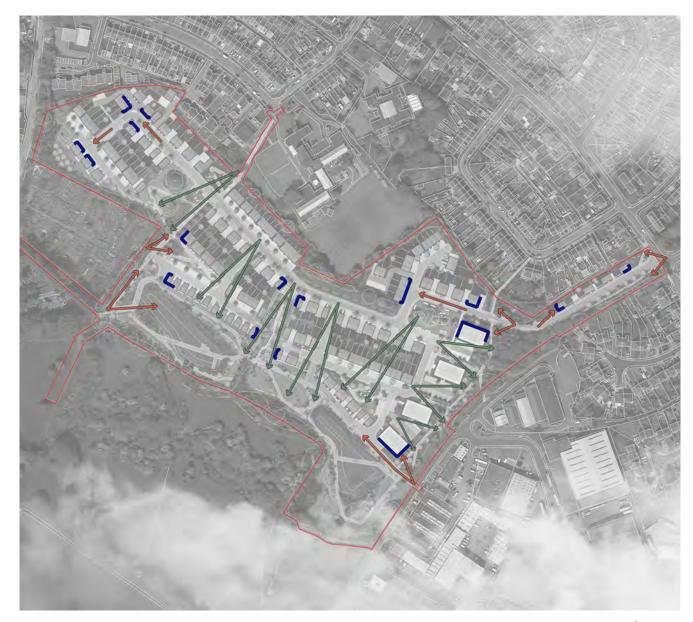
The topography of the site creates an opportunity to provide an interesting roofscape and architectural response which can be viewed from the public routes through the wetland meadows along the southern edge of the site.

The layout has been designed to enable long range views from key spaces, such as the community green and northern part of 'The Gate'.

Buildings are positioned to terminate internal views, define spaces and generally improve the legibility of the area.

Legend

- Internal view
- Long range / green view
- Buildings terminating views



Built form will typically be 2 – 2.5 storeys high. A maximum of 2 storeys is proposed along the northern boundary of the site reflecting the existing scale of homes along this boundary. Storey heights increase southwards to create a variation in roofscape, with taller buildings located on the lower parts of the site to manage the visual impact.

Apartments (max 4-storeys) are situated on the eastern edge to reflect a transition in character from Bonville Road. This arrangement of dwellings enables landscape to thread through the residential area, between the buildings, from Bonville Glade.

The built form is arranged to enable long range views towards green spaces, and the long range views identified in chapter 3 of this DAS.

Legend







Capacity Testing

The residential capacity of the site has been tested rigorously. This has required an iterative process of design and testing against a spatial plan. Technical work undertaken for the planning application has sought to ensure that efficient use of land is made and that the physical constraints have been understood and inform capacity.

Although layout is a reserved matter under this application, the development plots have been tested in detail with an indicative layout produced for the whole site. The layout has been driven by the following objectives:

- Delivering a housing mix appropriate to the local market and need;
- Providing a quality of built form in keeping with Homes England objectives and achieving the ambitions for a landscape-led masterplan;
- Responding positively to site constraints and opportunities such as higher densities at the southern edge of the site where housing meets the wetland meadow:
- Make efficient use of land in close proximity to the existing shops and education in Broomhill;

- Achieving a development form in keeping with principles of good urban design including those in Building for a Healthy Life, and
- Provision of both private amenity space and extensive areas of public open space.

The plans adjacent are extracted from the Illustrative Masterplan to demonstrate capacity testing in more detail. It is anticipated that residential density will vary across Brislington Meadows in response to site constraints and place making decisions. The average density across the site is 51 dph, a higher density area is incorporated along the southern and eastern edge which would consist of apartments and compact house types. The plans therefore show a range of outcomes but the average density reflects the Parameter Plans and therefore the upper limit of homes being applied for.

For the purpose of testing capacity, parking will follow the BCC parking standards in the Local Plan: 1 space per one bedroom dwelling, 1.25 spaces two bedroom dwelling and 1.5 spaces for three or more bedroom dwelling.



Example 1 typical density circa 55 dph

2 - 3 storey detached and terraced homes
with on plot parking to the front and side with gardens to the rear.

Linked detached units, an urban typology
with a parking on plot between homes and a garden / terrace above the driveway.

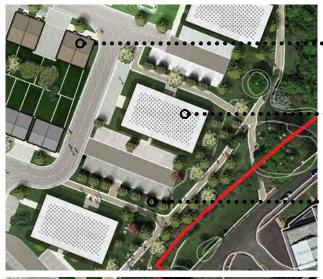
• • Key buildings at the end of the street are taller and act as wayfinders.

Example 2 typical density circa 38 dph

Typically 2 storey detached and semidetached homes with occasional 2.5 storeys in accordance with the parameters.

••• On plot parking located to the side of homes.

•••• Changes in levels accommodated within the gardens.



Example 3 typical density circa 81 dph

2 - 3 storey houses

4 storey apartments fronting onto Bonville Glade

The green infrastructure threads between the apartments through landscaped parking courts.

Example 4 typical density circa 48 dph

Typically 2 storey terraced and semidetached homes with occasional detached homes on corner plots.

Parking located in front of the homes or to the side.

Character

Brislington Meadows provides an opportunity to create a place with a distinctive character. In certain locations of the masterplan, it is anticipated it will be medium to high density, with a variety of compact housetypes including mews houses, linked detached homes, and apartments, to terraced and semidetached homes and occasional larger detached family homes.

The design will vary from formal to informal depending on its location. Lower density areas will be characterised by informal arrangements of housing where spacing between dwellings varies in width. In denser areas a more formal character with orthogonal layouts will be utilised with limited building typologies to define a character of repetition, rhythm and order.

It is anticipated there will be more variety in facing materials within the neighbourhoods. However materials will be coherent along a street or space with one prevailing material to ensure consistency and a clear design rationale.



Jersey Avenue, Brislington. Varied roofscape with integrated solar panels.



Integrated pathways with landscaping.



Contrasting materials. Solar panels integrated into the roof



Choice of materials and colour create a distinctive place.



Housing fronting green spaces.



Example of linked detached



© Robin Forster Photography



Connecting users to nature.



Landscape features integrated into public realm.



Informal seating in open spaces.

Responding to Site Constraints

The adjacent diagram illustrates the constraints within the site and how the Illustrative Masterplan responds appropriately to these constraints:

- Development is set back from the overhead powerlines and green infrastructure under the lines is designed with planting of appropriate heights;
- Existing public rights of way are retained and integrated into the green infrastructure and residential layout. New designated pedestrian and cycle routes are created to enable ease of movement within and through the site, replicating the movement possible on the existing trodden paths;
- The layout of the masterplan has been designed to work with the levels where possible and create alternative accessible routes where necessary. Green spaces are located to take advantage of the long range views possible from the upper slopes;

- Trees and hedgerows have been incorporated into the green infrastructure network where possible, taking account of the important ecological connections north south and east west through the site, and
- The telecommunications mast will be relocated off-site.

Legend

- Application boundary
- Tree Preservation Order
- Definitive Public Right of Way path
- Actual alignment of east-west route taken
 - Existing trees and vegetation
 - Trees with bat roost potential
- ----- 2.5m contour lines
- No build zone for development due to overhead powerlines
- Existing pylon
- Existing telecommunications mast with 30m buffer
- Existing edge of Brislington Trading estate



Constraints plan overlaid onto Illustrative Masterplan

Working with Topography

The final approach to dealing with the significant level change will be decided at reserved matters planning stages. However, the layout developed to date has been based on trying to balance cut and fill effectively over the site, creating accessible streets by minimising the amount of level change on the primary and secondary streets and creating flexibility on plot for a variety of solutions to be developed later ranging from under build, opportunity for split level housing, terraced garden walls or larger retaining structures at plot boundaries.

General principles

The proposals work with the natural topography/land form of the site as much as possible and this has helped enable the masterplan to:

- Retain more trees and hedgerows for ecology (as well as the added benefit of incorporating them into proposed public open space;
- Reduced engineering, i.e. concrete retaining structures and earthworks to create development platforms;
- Naturally facilitated surface water drainage to the lower part of the site beneath overhead power lines that are a constraint to development;
- Managing building heights and visual prominence of the scheme that may have resulted from using retained development platforms;
- Minimising overlooking on existing residents and potentially protecting their views as new homes step down the slope;

- Allows the design to incorporate more gradual paths to overcome steep gradients that could be caused by retained development platforms;
- Balance cut and fill across the site;
- Creating accessible streets and minimising the amount of level change on the primary and secondary streets;
- Ensuring a positive and level interface between the development plots and the existing hedgerow and green space areas with easy movement and to prevent the encroachment into root protection areas (RPAs) of existing trees;
- Where possible provide accessible pedestrian cycle routes through the development;
- Locate key play spaces in areas accessible to all;
- Creating flexibility on plot for a variety of detailed design solutions- split level, semi split level, terraced garden walls etc. and
- Capture the best key views out of the site from the upper reaches of the site.

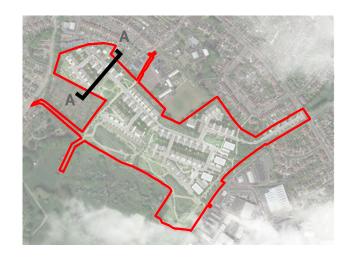
Accommodating levels plan

Legend

- Application boundary
- Indicative location of retaining walls

Site Sections

The proposed sections below are illustrative only but demonstrate how the proposed development shown on the illustrative masterplan (and in accordance with the submitted parameter plans) would sit within its immediate context.





Illustrative section

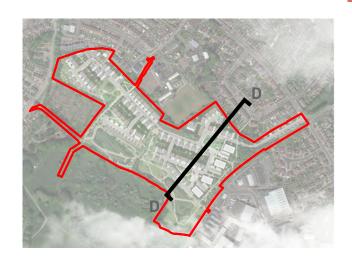




Illustrative section









7 Landscape Strategy

This chapter sets out the illustrative landscape strategy across the site, describing the variety of green spaces proposed and their character and function.



A Landscape-led Masterplan

The landscape vision for Brislington Meadows draws on the inherent characteristics of the landscape setting including the topographical changes, and existing features. The approach takes advantage of the opportunities for views, in a meaningful and positive manner, promoting a highly sustainable approach to the environment, creating a diversity of spaces needed to nurture a thriving social infrastructure.

In creating this masterplan, landscape considerations such as green infrastructure linkages within and off site, new public spaces and extensive meadow area have had a significant influence on the evolution of the masterplan.

Landscape Elements

A number of design approaches have been developed to ensure that the landscape elements of the masterplan are coherent, integrated with other land uses and are both functional and deliverable. These include:

- Delivering a green infrastructure that will create habitats, provide climate resilience, enhance people's enjoyment, learning and interaction with nature, providing play, recreation and sustainable drainage;
- Providing a mixture of green spaces for play, recreation, relaxation and socialising;
- Prioritising retention and enhancement of high quality habitats and trees;
- Creating a network of pedestrian and cycle routes;
- New hedgerow and tree planting
- Creating a liveable place for the local community where residents and nature co-exist;

- Delivering green links with local natural green spaces such as Victory Park and Eastwood Farm and amenity, and
- Creating new habitats such as the wet meadows, increasing flora and fauna diversity and managing existing habitats.



Landscape-led Masterplan - diversity of landscape spaces

A network of ecological corridors

Each of the green connections has its own identity, to be designed as complementary to both placemaking and ecology.

Primary ecological corridors

- Wildlife Corridors
- Meadow edge corridor

Secondary ecological corridors

- Community and Habitat
- Mature planted edges

Tertiary ecological corridors

- Learning and Play
- Marginal edges
- Back garden green corridors

The wild Edge

- A naturalistic area of open space
- New tree, scrub and hedgerow planting



A network of ecological spaces



Primary Ecological Corridors

Primary Ecological Corridors

Strategically important corridors, dark, semi-natural habitats providing for wildlife year round (refuge, foraging and overwintering) and maximising biodiversity value.

Wetland Meadow Corridor

- A positive opportunity to provide an ecological park feature which can service the site from a SuDS perspective as well as benefiting the wider community with a public open space which complements Victory Park.
- Boardwalks and jetties will provide amenity and community value as well as protecting emerging habitat.

The Greenway and Bonville Glade

- An ecological link between Eastwood Farm and Victory Park.
- An enhanced woodland and new parkland that threads through the residential area.
- Opportunity for informal and formal walking routes providing residents with direct access to nature.

Secondary Ecological Corridors

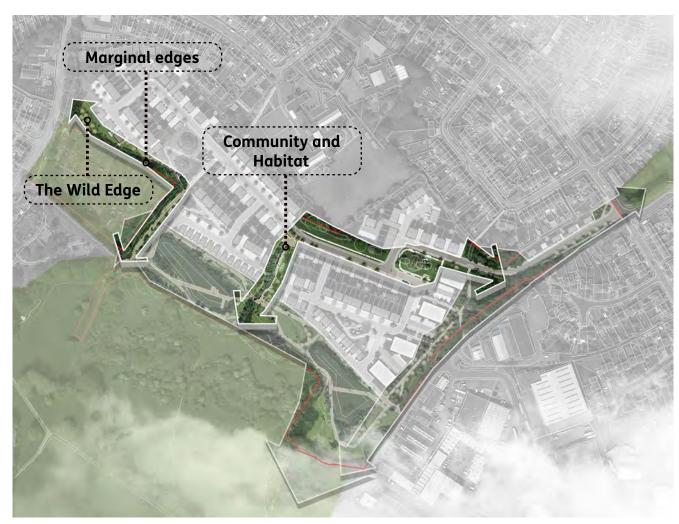
Stepping stone corridors, dark linkages maintaining functional connectivity with the strategic corridors to maintain and extend existing wildlife routes, seminatural habitats maximised, providing foraging and refuge for wildlife accessing through the site, maximising opportunities for enhancing biodiversity.

Marginal Edges

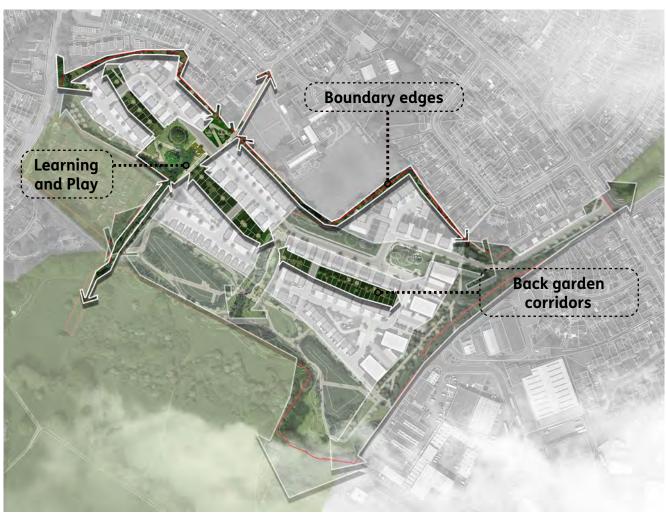
- Existing mature trees retained and reinforced with new tree and hedgerow planting.
- Naturalistic in character with limited access from residents and visitors along the east-west arm due to the topography towards School Road.

Community and Habitat

- Ecological emphasis with a direct route to the wetland meadows.
- Open spaces which create opportunities for people to meet, sit and enjoy the views.
- Containing communal features, places to sit and gather, multi-functional landscaped social spaces.



Secondary Green Corridors



Tertiary Green Corridors

Tertiary Ecological Corridors

Local permeability through the development, e.g. created by corridors of aligned gardens, green space and local green links – semi-natural habitats incorporated/created where possible, wildlife friendly planting and landscape design features to maximise opportunities for biodiversity where possible even if only at a small scale.

Learning and Play

- Formal play provision is sited here, within close proximity of the primary schools and nursery to the north of the site.
- A meeting point for active lifestyles, of all ages.

Back garden green corridors

- Opportunity to provide important ecological connections for example for hedgehogs.
- Native garden trees that provide benefits to wildlife

Wetland Meadow

The linear low-lying meadow will serve a multifunctional purpose, incorporating pedestrian and cycle paths, sustainable drainage features, and areas of flowering grassland.

Landscape: A multifunctional space containing species rich flowering grassland, opportunities for social interaction, accessible walking and cycling routes including boardwalks across the SuDS features. It also serves as an extension to Victory Park.



Key plan

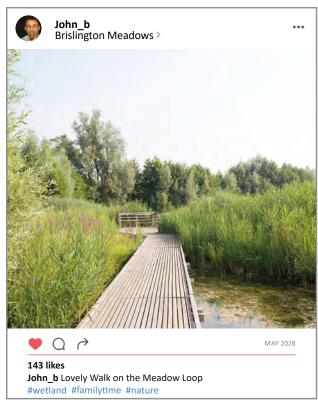
Changes in levels provide opportunities for living walls.

Ecology: Rural native southern edge, species rich grasslands and species rich marginal planting to attenuation features. Attenuation features to have hummocks and small pools to create areas of standing water.

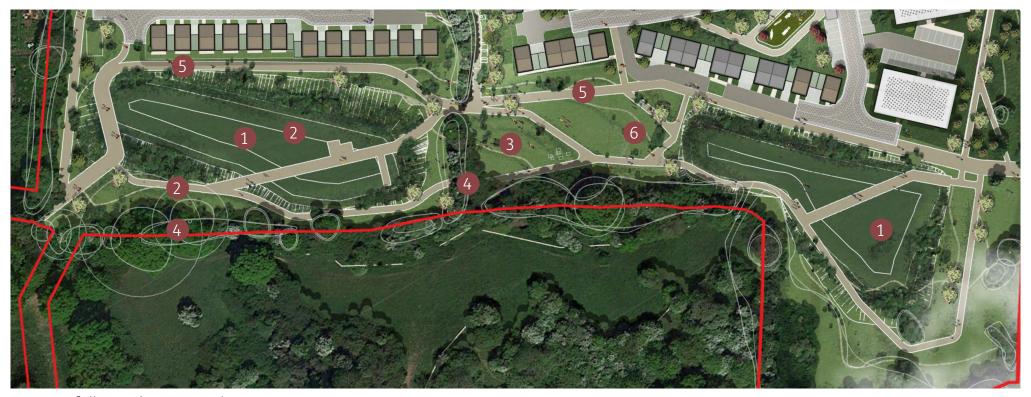
Retained thickets of scrub and individual trees along the southern edge retain a vegetated frame around the open, central space and provides additional habitat for nesting birds.

Existing features such as the brook, hedgerows and trees are retained and form a large part of the boundary edge.

Built form: Formal arrangement of buildings fronting onto the park.



Boardwalks across meadows and SuDS



Extract of Illustrative Masterplan

- Attenuation basin with hummocks and small pools
- Realigned Public Right of Way
- Flowering grassland
- Existing trees and hedgerows

- Dedicated cycleway (3m wide)
- Existing overhead pylon



Brislington Green

A significant nodal point where a number of routes converge creating an opportunity for people to connect and interact. A large open space, it is an interpretation of a village green. Its high location enables people to sit and gather.

Landscape: Open space with retained hedgerows and mature trees in the centre. New low level planting providing enclosure to the space but enabling visual connection with homes. Natural, informal play is integrated into the space.



Key plan

1 Retained mature trees, and native tree planting with enhanced hedgerow to connect to Bonville Glade 2 Informal play space and seating providing opportunities for social interaction and gathering.

3 Homes front the space.



Extract of Illustrative Masterplan



Design of the space is defined by the retained hedgerow and trees centrally located and the need to retain and enhance the east-west green connection.

Ecology: A key area of green infrastructure linking Bonville Glade and the Gate, consisting of retained mature trees and native hedgerows.

Set within the east-west habitat corridor, existing trees and a hedgerow in the centre help to connect the existing woodland to 'The Gate'.

Built form: Homes are positioned in a formal arrangement providing enclosure to the space.



Principle diagram



Illustrative view of Brislington Green

The Gate

Characterised by retained hedgerows and trees, the Gate forms an important ecological link connecting to the Wetland Meadow to the south. The linear corridor takes advantage of, and frames, long range views.

Landscape: An ecologically rich linear space, the existing native hedgerow is an intrinsic part of the space, the landscape and built form are designed to enhance this ecological link. A resting space is located at the top of the green space to enjoy views across the south of Bristol.



Key plan

Species rich grassland and new tree planting are situated along the eastern edge of the surfaced footpath. Informal play is interspersed within the green space, an opportunity to incorporate play features, seating and viewpoints within the changes in levels. Natural play will be incorporated in the form of a trim trail along the linear space.

Ecology: An ecological corridor linking to the Meadows. Limited / low level lighting to ensure a darker landscape corridor for bats.

Built form: Properties provide natural surveillance, but do not have primary frontages onto green space.

- 1 Retained hedgerow
- 2 Dwellings to have windows to ensure natural surveillance of the space.
- 3 Informal play space
- 4 Viewpoint with informal seating
- 5 New surfaced path



Extract of Illustrative Masterplan





Retained spaces on steep slopes



Use of topography for play and fitness



Illustrative view of The Gate

The Greenway

Buildings set within a tree lined greenway, creating a welcoming entrance into Brislington Meadows and an ecological link from Eastward Farm towards Bonville Glade. An important movement corridor for people and wildlife, connecting key destinations and landscape, incorporating habitat creation while also providing a landscape setting to homes. Street trees, hedgerows and woodland planting strips will create a landscaped streetscene.

Landscape: The footpath is separated from the carriageway, set within the landscape, meandering through new and existing tree



Key plan

planting and an area of woodland. The boundary to properties on Broomhill Rd/ Condover Rd should ensure privacy and security through natural features such as thick hedges which will also support this important ecological corridor.

Ecology: Native planting, trees and hedgerows to enhance the wildlife route.

Drainage features to be incorporated above and below ground. Where below ground, planting provided on top to maintain green corridor

Built form: Buildings are set within the landscape.

- 1 Landscaped entrance from Broomhill Road.
- 2 Footway within landscaped corridor
- 3 Tree planting proposed on top of underground water tank

- 4 Existing woodland
- 5 Homes front onto primary route providing natural surveillance



Extract of Illustrative Masterplan





Pollinator habitat



Deadwood habitat



Illustrative view of The Greenway

Brislington Heights

A key community space, Brislington Heights is a space for people of all ages to learn, play and connect with nature. It is a central meeting point for active lifestyles.

Landscape: Embracing the topography of the site, it is a playful landscape design using terracing to address the levels.

Terraces can create elements of protection and enclosure of spaces as well as seating. The focus is on learning and play for all.

A formal play area, within close proximity of the new pedestrian / cycle link to the junior schools and nursery. Naturalistic play equipment is encouraged. A network of routes follow desire lines.



Key plan



Extract of Illustrative Masterplan





Ecology: Opportunity to create living walls and introduce new native hedgerow planting to enclosure the space, while providing a stepping stone for wildlife to back gardens. The retention of existing trees will provide a sense of maturity to the landscape.



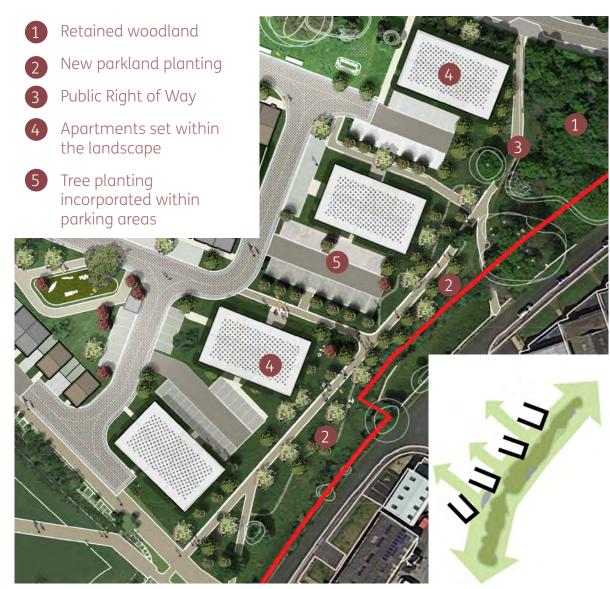
Illustrative view of Brislington Heights

Bonville Glade

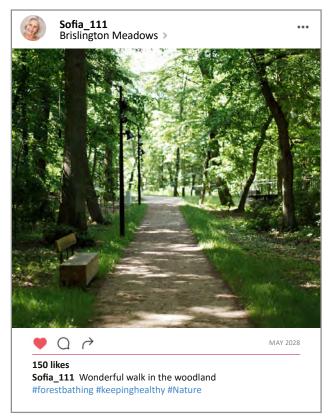
An enhanced woodland and new parkland that threads through the denser residential area. Characterised by the existing woodland to the north, with seasonal planting and informal glades, new formal planting to the south connects to the Wetland Meadow. Enhancing the public open spaces around the woodland will assist with wayfinding, improve the setting of residential properties fronting onto them and will maintain key habitats and foraging routes for existing wildlife. The southern area is characterised as a formal landscape with new tree copse planting, shrubs and a diverse grassland mix.



Key plan



Extract of Illustrative Masterplan



Low level scrub planting, with a dedicated footway. Landscape threads between the buildings.

Ecology: A mosaic of mown and tussocky areas of high diversity grassland will support invertebrates and foraging for birds, bats, badgers, reptiles and hedgehogs. Small patches of scrub and native trees will be planted to diversify habitats.



Illustrative view of Bonville Glade

Biodiversity Net Gain

Homes England are committed to achieving a 10% Biodiversity Net Gain (BNG) as a result of this development. relying on both on and off-site measures. An extensive ecological assessment has been undertaken that independently considers wildlife sites, habitats, flora and fauna. In addition to BNG commitments, bespoke mitigation for wildlife will be included where required or recommended by the impact assessment. We are committed to continuing to work with local wildlife groups and have registered the scheme with Building with Nature, which will help ensure we deliver a high quality place for both people and wildlife.

An outline BNG assessment has been undertaken to support this application and based on the outline scheme landscape parameters provided. This report details the ecological surveys undertaken to establish a baseline position, and what the anticipated impacts are. Biodiversity Metric 3.0 Metric has been used to inform the outline BNG assessment, as per current best practice.

The assessment confirms that the postdevelopment habitat unit value represents a net loss of - 24.12% in habitat unit value (-14.23 habitat units), meaning a deficit of 20.14 habitat units compared to a 10% net gain position.

Based on the hedgerow losses estimated from the outline Parameter Plans and Illustrative Masterplan and accounting for the enhancement and planting opportunities presented by the Illustrative Masterplan, a net gain of up to 530m hedgerows should be achievable within the site. The Outline BNG assessment calculates a +132.12% net gain in hedgerow unit value (an estimated gain of 5.84 hedgerow units) could be delivered within the site

Planting Strategy

Any impacts upon veteran tree T6 must be avoided. High quality (category A) and moderate quality (category B) trees should be retained wherever possible. The requirement to remove these trees must be justified by sound design rationale and may result in the requirement for an increased level of mitigation compared to the removal of lower value trees. The presence of low value (Category C) trees should not unduly constrain development design, but wherever possible they should be incorporated into future detailed development design.

Scrub, including bramble scrub, provides valuable shelter and forage for wildlife and should be preserved where possible. Enhancement to retained scrub features could be delivered through increasing species and/or structural diversity.

It may be possible to avoid tree removal but where removal is unavoidable, there will be opportunity within both private and public green spaces to increase arboricultural value by most key metrics:

number, canopy coverage, species diversity, distribution, function and longevity.

The green infrastructure corridor along the east of the site north to Broomhill Road provides the greatest opportunity for tree planting. Scrub and shrub planting will complement tree planting to replace scrub features for which avoidance is not possible within detailed design.

New planting should seek to maximise biodiversity function (providing nectar, pollen, berry or seed resources or places of shelter for wildlife) and should deliver climate resilience. While native planting is preferable (and only native planting should be considered as part of woodland or hedgerow enhancement plans), non-invasive non-native species which offer these combined functions may be considered, subject to agreement with BCC.



Holcus Meadow



Pollinating habitat

Ecology

Detailed design should seek to minimise losses of trees, scrub and hedgerow habitat. Retained scrub, even bramble, should be enhanced through supplementary planting and management to increase species and structural diversity.

There must be no impact within the Tree Protection Zone (TPZ) that would put the veteran tree T6 at risk. This tree is irreplaceable habitat and is the single most important ecological feature in the site.

Management and planting should seek to enhance the woodland by Bonville Road and should aim to improve diversity and longevity of the woodland and encourage woodland processes such as natural regeneration.

Grassland losses are likely to be largely unavoidable but any local retention and enhancement of existing grassland should be prioritised where possible. Off site offsetting will be required to address loss of grassland and, depending on detailed design, any residual loss of hedgerows and scrub.

SuDS basin floors should be designed to deliver wet meadow with a varied microtopography that creates small pools which will retain standing water for longer periods following inundation. All 'meadow' grasslands, wet and dry, in the south and east corridors should achieve good condition.

Landscaping through the development should maximise biodiversity interest by ensuring more diverse 'flowering lawns' are incorporated rather than standard amenity mixes, except in the very formal intensive use locations. Flowering lawns should be maintained to at least moderate condition (the main criteria likely to 'fail' is the varied sward height as these will be maintained at standard low heights of around 70-40mm).



Robin



Bee on ivy



Meadows for invertebrates



Greenfinch

Long term management plans should be developed for on and off site habitats, which should set out key performance indicators for each habitat type and target habitat condition. Long-term monitoring against these KPI should be implemented and remedial actions identified if habitats are found to be under performing against objectives. The production of the longterm management plan is anticipated to be secured by condition.

Precautionary measures will be required prior to and during construction to ensure no protected wildlife is endangered. Method statements outlining such measures will be produced to inform Reserved Matters application(s) once detailed design and construction programmes, including phasing, are confirmed. It is anticipated these will be secured by condition.

A method statement for the protection of slow worms will be required. Translocation of slow worms to an off site receptor site may be required subject to the phasing of development and availability of sufficient habitat carrying capacities

and connectivity with off site habitats being retained on site throughout the construction period.

Impacts on invertebrates are considered one of the most significant to arise from the proposed development. Loss of habitats could result in decreased abundance and diversity of species. Habitat creation and management recommendations are provided in addition to species specific mitigation measures to provide a varied landscape that will support a diverse invertebrate assessment (including some of the most notable species identified from surveys) throughout the year.

Measures to maintain nesting, roosting and foraging habitats for birds and bats are recommended in addition to measures to accommodate badgers and hedgehogs within the site. A sensitive lighting strategy will be fundamental to maintaining invertebrate and bat populations locally and within the site.

Open Space Provision

The open space provision has been assessed against the *Guidance for Outdoor Sport and Play: Beyond the Six Acre Standard.* The table overleaf, illustrates the site exceeds open space provision standards comfortably. A minimum zone of 1.87ha of open space

Brislington Meadows is currently framed by green vegetation and forms green corridors following hedgerows and openspaces. Mature trees are located within clumps and much of the openspace is valued by the local community.

There is an opportunity for formal play provision along the ecological links which can embrace the existing topography with play, nature learning and for fitness uses.

The site's existing hedgerows provide a semi-natural setting for informal play within close proximity of homes, allowing for passive surveillance and frequent interaction between users.

The summary table below sets out the open space provision based on the **Guidance for Outdoor Sport and Play: Beyond the Six Acre Standards**. The plan opposite identifies where these uses can be delivered within the site.

Open Space Typology	Quantity Guideline (Hectare per 1,000 population)	Hectares per 624 population	Walking Distance from dwellings (metres)	Provision (ha)
Amenity Green space	0.6	0.37	480	0.46
Parks and Gardens	0.8	0.5	710	0.79
Natural and Semi-Natural	1.6	1.0	720	2.11
Total	-	1.87	-	3.36
Total including botto	4.24			

The Landscape Parameter Plan states 4.48ha of open space, however this includes some infrastructure including vehicle connections.

Legend



Parks and Gardens (0.79 ha)

Natural and Semi Natural Green space (2.11 ha)





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Play Strategy

In regard to playspace requirements, within the Urban Living SPD, the scheme provides ample opportunity to provide playspace across the site, in line with requirement for 10sqm per child. Final detailed playspace strategy will be confirmed at detailed design stage and once final housing mix known.

Brislington Meadows is already well connected to open space areas and play facilities. To enhance the local play strategy within Brislington, new play areas will be safe, pedestrian friendly and designed for a diverse population. New, active and improved small park spaces, playgrounds, and public spaces will encourage interaction and provide a variety of meeting places within mature landscapes for new and existing residents of all ages and abilities.

Brislington Heights Local Equipped Area for Play (LEAP)

This space will provide a range of passive and active recreational facilities including seating, children and young people's play spaces with nature play and learning activities.

Community Green Local Area for Play (LAP)

This play space will incorporate the sloping topography with slides, timber constructed play equipment and small children's play spaces. Rest areas will be provided along the sloping footpath which provides a key

link to the Broomhill Junior School and Mama Bear's nursery.

The Gate Local Area for Play (LAP)

This play area will provide a key green route moving users north-south of the site and links together the primary route to the meadow. A natural trail play area along the footpath will be sympathetic to the sloping gradient with seating and spaces for small children to play.

The summary table below sets out the play provision based on the **Urban Living SPD** (2018). The plan opposite identifies an indicative location where these uses can be delivered within the site.

Equipped / Designated Play Areas	Quantity Guideline (Hectare per 1,000 population)	Hectares per 624 population	Walking Distance from dwellings (metres)	Provision (ha)
LAPs	0.01	0.01	100	0.06
LEAPs	0.04	0.02	400	0.04
Total	0.05	0.03		0.1

Communal Local Area for Play (LAP)

Located within the central parcel of development, this communal play space will be enclosed by active frontages and have good natural surveillance. The play space should utilise the sloping nature of the site with play equipment, mounds and slides.

Legend

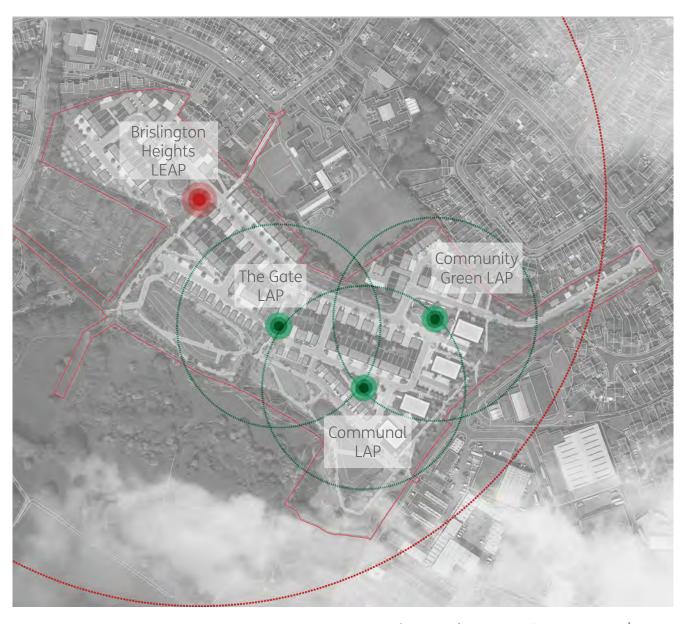


_EAP (400m isochrone)



LAP (100m isochrone)

Play Strategy



Sustainable Drainage

In terms of the proposed drainage strategy, the site can be divided into four surface water catchment areas (A, B, C and D), and the proposed drainage strategy will discharge flows generated from these catchments to off site at the greenfield Qbar equivalents for rainfall events up to and including the 1 in 100 year +40% climate change. Surface water flows from the Catchment A will discharge its flows into the 225mm public surface water sewer in School Road, Catchments B and C will discharge their surface water flows into the unnamed tributary south of the site. Catchment D will discharge its surface water flows into the 225mm public surface water sewer in Broomhill Road.

Sustainable Drainage Systems (SuDS) in the form of attenuation ponds and permeable paving will be introduced for the proposed development to attenuate surface water flows to the required rainfall events. In addition, the SuDS will also improve water quality in line with the recommendations within the NPPF.

Adequate space has been provided on the site to store storm water flows generated by the 1 in 100 year +40% climate change event. By adequately sizing the SuDS storage facilities on site, appropriate measures will be provided to minimise flood risk on the site.

The proposed site will consist of three foul water drainage networks serving 3 catchment areas (A,B and C). The foul flows from each network will discharge into the public foul sewers located within the adjacent roads. Due to the site topography, Catchment A will require a pumping station and rising main to pump flows back up to a suitable point to allow flows discharge off site by gravity.

In line with Industry Standard, emergency storage to contain 24-hour foul inflow is to be provided.



Example attenuation area



Example of a broadwalk through wetland

Legend

Application boundary

Proposed surface water pipe

Proposed foul water pipe

Attenuation area

Proposed attenuation tank

Catchment Area A

Catchment Area B

Catchment Area C

Catchment Area D

