Parking for flats

Parking for flats can be located at the rear on plot. This parking must be securely concealed behind active and attractive frontages. Large open rear parking courts will not be accepted.

Parking provision for flats must not dominate or be in place of quality shared amenity space provision. This should be shown at a usable depth to accommodate both activity and planting and can be achieved:

- At ground level - acting as a buffer to parking
- On a deck over parking
- On roof terraces.

To avoid overly dominant parking areas, rear parking courts must not back on to one another.

Structural columns, where required, must not encroach into the width of the parking bays.

- Proposals must consider the implications on microclimate. Designs should seek solutions that contribute to urban cooling.

- Proposals must demonstrate how parking spaces could be adapted over time when private car ownership may fall.

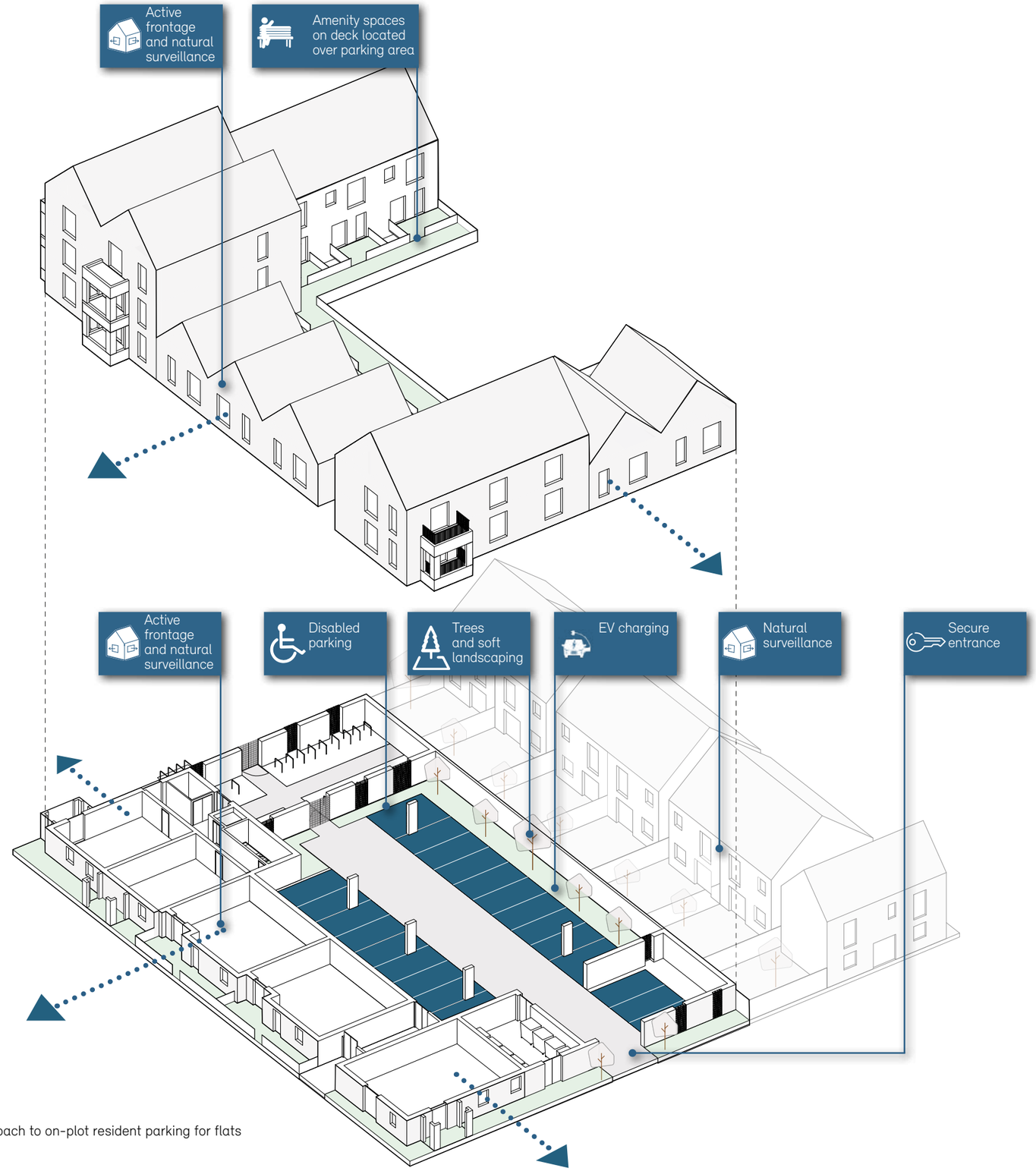


Illustration of an acceptable approach to on-plot resident parking for flats

Mews streets

Rear mews streets have been incorporated into the Code to provide rear parking and servicing for homes with car free frontages or restricted parking, such as terraced houses.

Where mews streets are used they must be arranged to create a well overlooked and active street. A sense of enclosure should be formed with a combination of active building frontages, a varied roofline, and high quality boundaries such as walls or hedges.

Mews garages must be interspersed with front doors and windows along the ground floor frontage. To soften the mews streets, thresholds must include planting including climbing plants.

Mews streets should have the appearance of a continuous surface. Where this cannot be achieved with a shared surface, a continuous low 20mm kerb should be used, with a matching finish used for both pavement and carriageway. Mews surfaces can use block paving or heritage asphalt finishes.

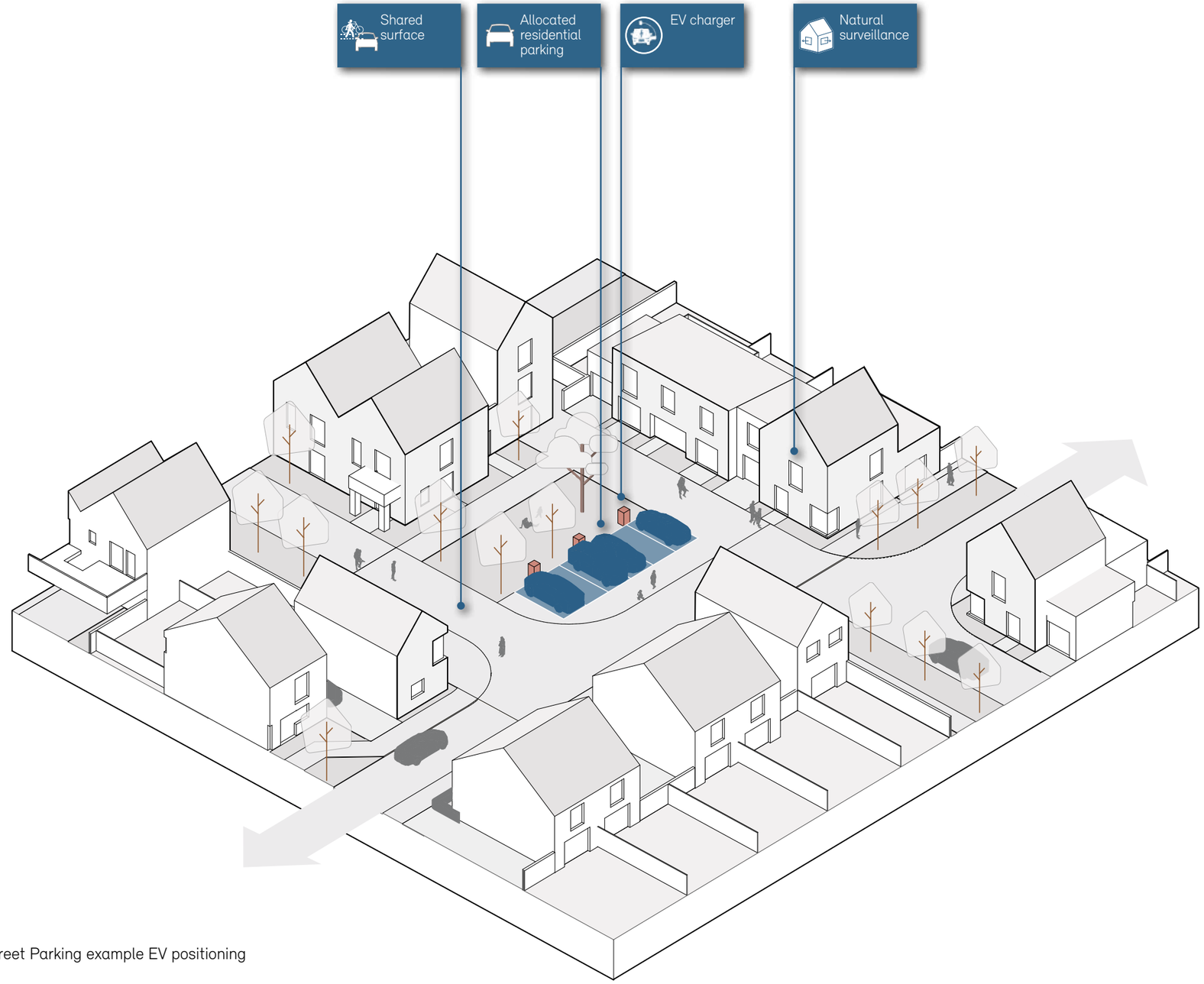
Parking squares

In place of using rear parking courts, parking squares can be incorporated into the public realm.

Parking squares must have natural surveillance from surrounding building frontages. They should incorporate social spaces and landscape planting alongside the provision of parking spaces.

Locations for possible provision of car-club vehicles should be considered within parking squares.

Further guidance on creating enclosure can be found in the Built Form section of the Code.



Axo - On Street Parking example EV positioning

Waste collection and servicing

Waste collection vehicles and storage

The street layout must minimise the negative impacts of large waste collection vehicles on the streets, sense of enclosure, and public realm.

Waste and recycling storage and collection must be robust and be carefully integrated into the urban design to not detract from the street scene. The refuse collection route should allow vehicles to continue mainly in a forward direction and avoid vehicles reversing, except where a turning head is specifically incorporated into the street scene for this purpose.

Tracking for refuse vehicles must be provided as part of any reserved matters application. Tertiary street surfaces and radii must be minimised while being suitable for a vehicle to maintain 300mm from the kerb and to turn without oversailing the highway edge.

Refuse collection points should be within 30m of homes and a maximum of 10m from the adopted highway.

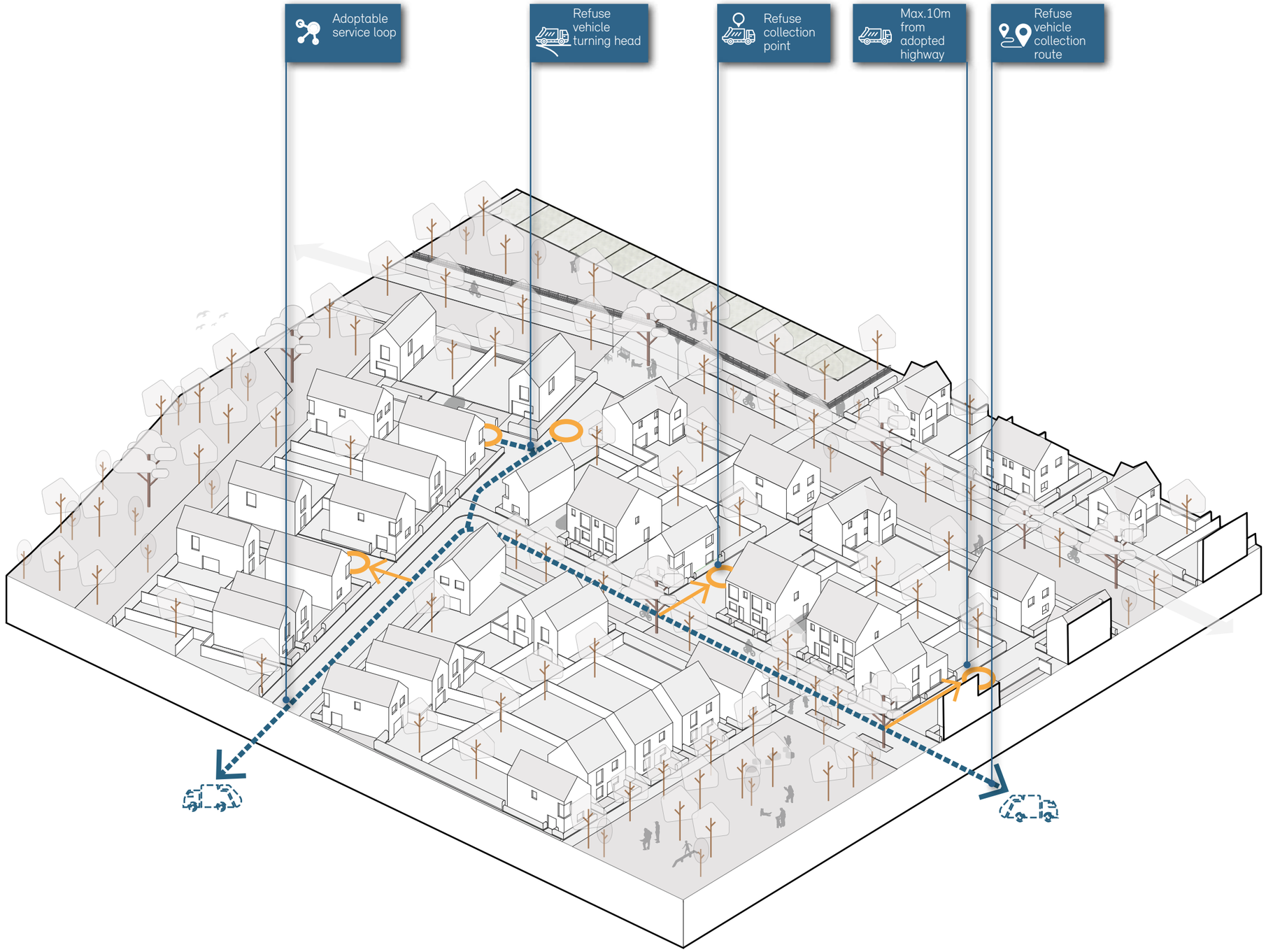
All homes and non-residential buildings must be provided with adequate internal and external storage for waste and recycling. Provision for houses is via wheelie bins. Apartments will use 'Eurobins' located within communal bin stores.

Any collection points that are required should be sized to accommodate the likely waste requirements of the homes they serve, and reflect the separate collection of different waste streams. For collection points this will typically mean providing space for 2 bins for each home on the day of collection. Collection points should be integrated into the street scene and avoid intrusion to neighbouring homes.

All proposals must comply with the local authority requirements for waste and recycling storage and collection. This is currently the RECAP Waste Management Design Guide SPD (Cambridgeshire County Council and Peterborough City Council 2012 or successor document). This guidance is expected to be updated, and design teams should engage with the waste collection team at an early design stage.

Alternative approaches – e.g. Iceberg bin waste storage and collection

Iceberg bins (underground communal bin storage) have recently begun to be used in Cambridge, for example at the University's Eddington development. These systems have the advantage of removing unsightly and bulky bins from streets and homes, and may be used for both flats and houses. The underlying principles for waste collection set out in the Code will allow for either system to be utilised. However, currently the Local Highway Authority will not permit underground communal bin storage in adopted public highway.



Waste vehicle collection route

All refuse and recycling collections must be able to be made from the adoptable public street network. Neighbourhood street designs should incorporate small adoptable service loops off the primary infrastructure, as illustrated on the Framework Diagram opposite.

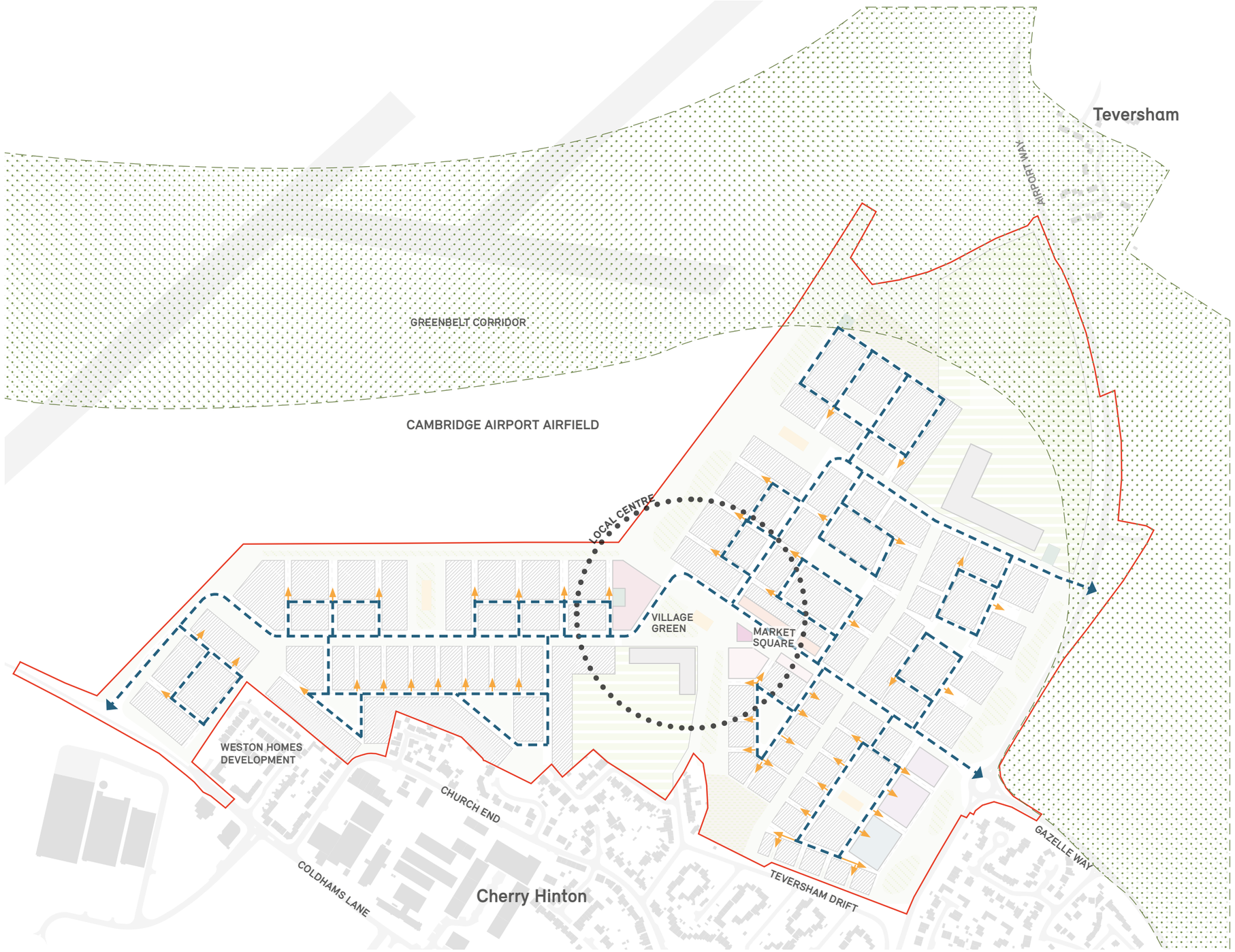
The design of these loops must promote low vehicle speeds, walking, and cycling and can incorporate shared surfaces. The design and location of access road junctions must minimise disruption and crossing points with cycling infrastructure.

The refuse collection route should allow vehicles to continue mainly in a forward direction and avoid vehicles reversing, except where a turning head is specifically incorporated into the street scene for this purpose.

Community recycling

A site-wide community recycling point must be provided by the 800th completed dwelling. This must be accessed via the adoptable highway, and should be discreetly but conveniently located.

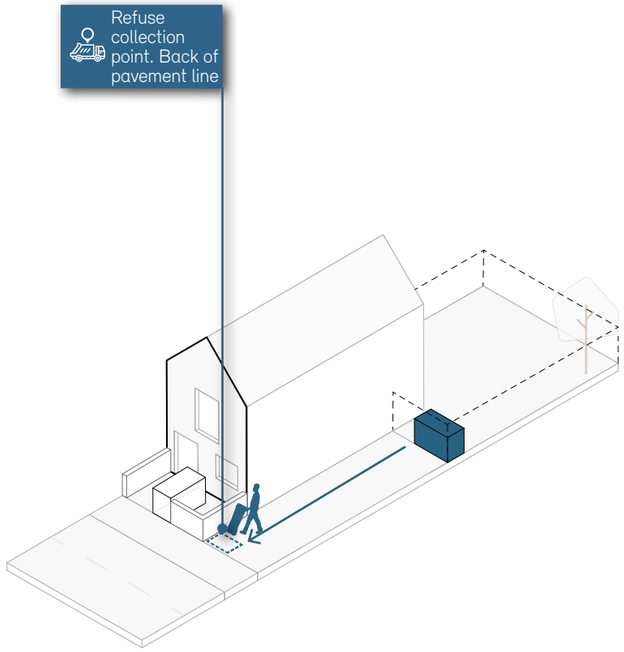
Further guidance on providing adoptable street designs can be found in the Public Spaces section.



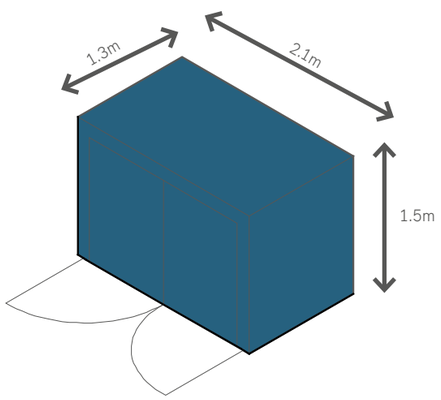
Illustrative framework diagram showing strategy for service loops and waste collection

Examples of ways to arrange refuse storage and collection points.

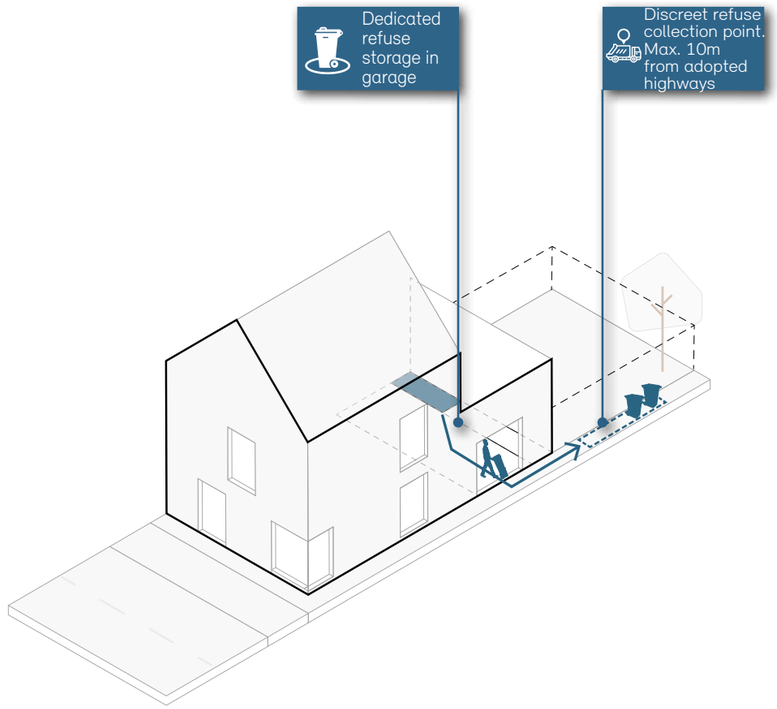
- Refuse storage for flats should not be associated with cycle stores
- Refuse for houses should be from back of pavement line
- Where refuse collection distances would otherwise exceed 10m from adopted highways, discreet collection points can be used.



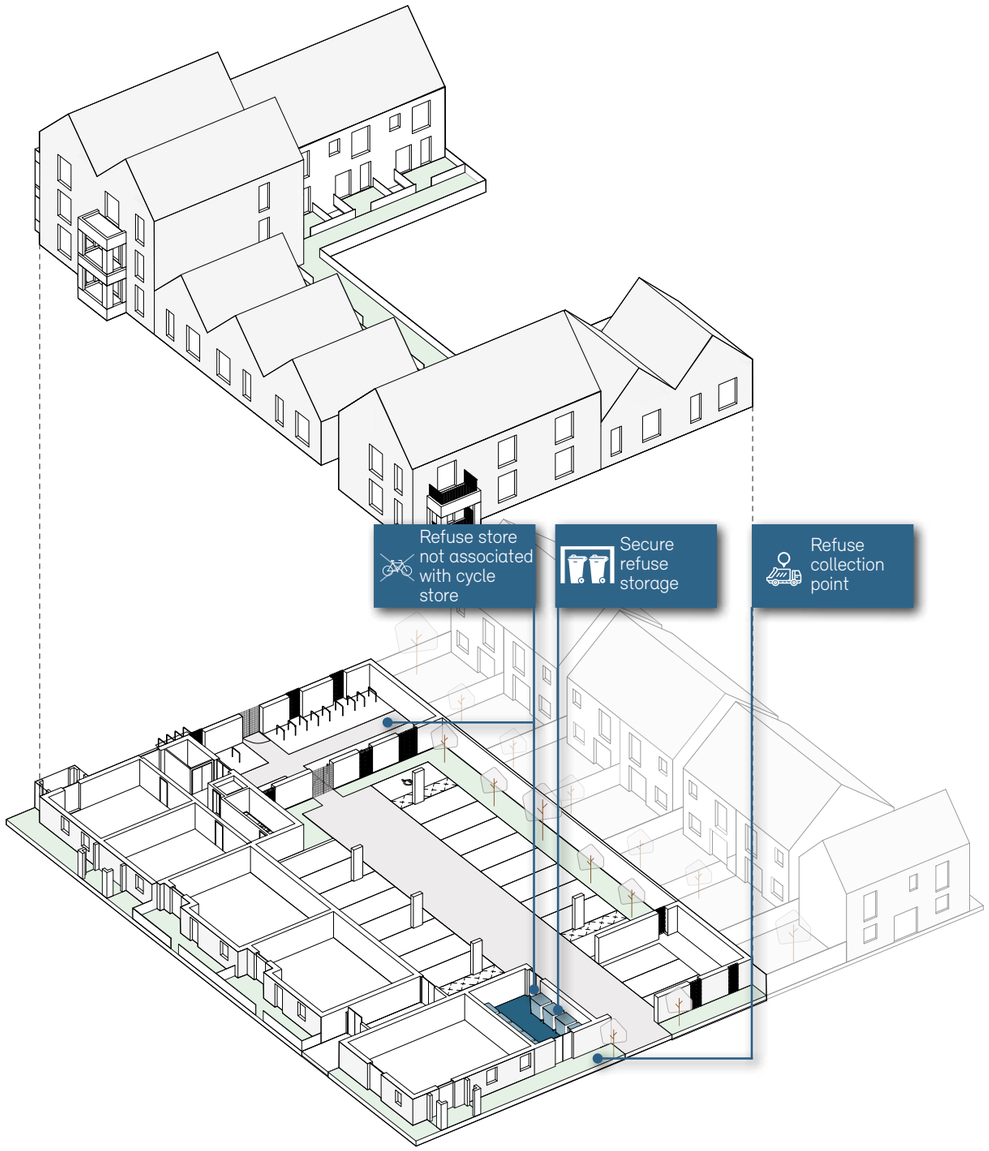
Secure refuse store behind on plot parking
Must not rise above a side wall next to the public realm



Typical bin store dimensions for a house



Integrated refuse storage



Integrated bin store in an apartment building with ventilated screens

3 Nature

Nature must be incorporated into each aspect of the design, with an approach described as "Living Infrastructure". This must create an integrated network of natural habitats, sustainable drainage, and tree planting. These are places that can deliver an increased quality of life and improved microclimate.

The nature framework diagram (right) illustrates the key nature considerations and connections that must be provided across the site. This element of the design code is broken into four subsections as follows:

1. Urban greening
The urban greening framework must deliver a variety of high quality open spaces and green corridors across the site area, incorporating zoning for biodiversity habitats.

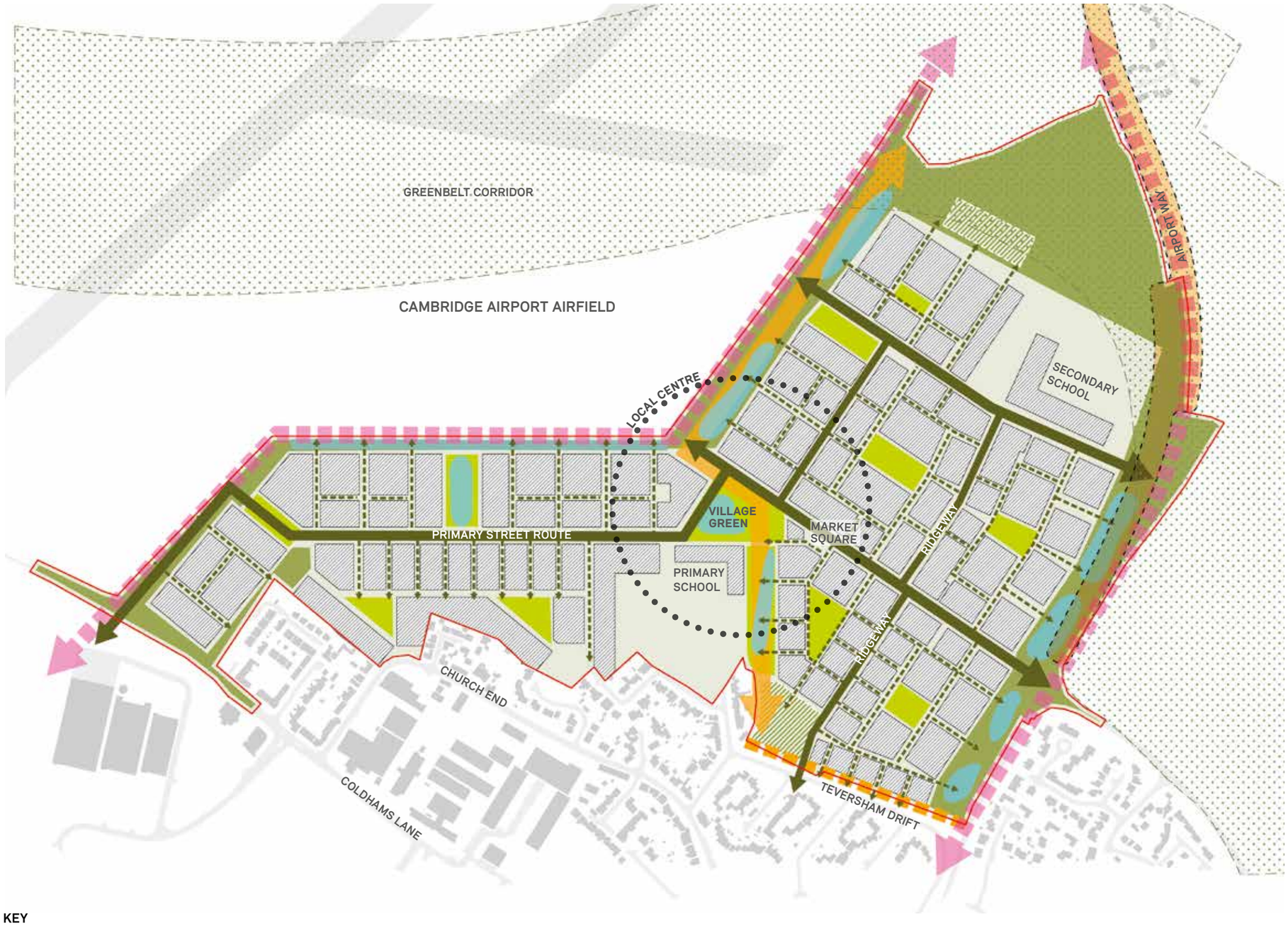
2. Water responsive
The water responsive framework, connected across the site, must ensure that the blue infrastructure integrates with the landscape and helps mitigate the impact of climate change.

3. Nature conservation
The comprehensive nature conservation framework must enhance existing landscape and ecological key features on the site.

4. Living landscapes
The outline permission sets out a requirement for a net gain in biodiversity.

The comprehensive living landscapes framework must help deliver biodiversity and nature conservation supporting wildlife.

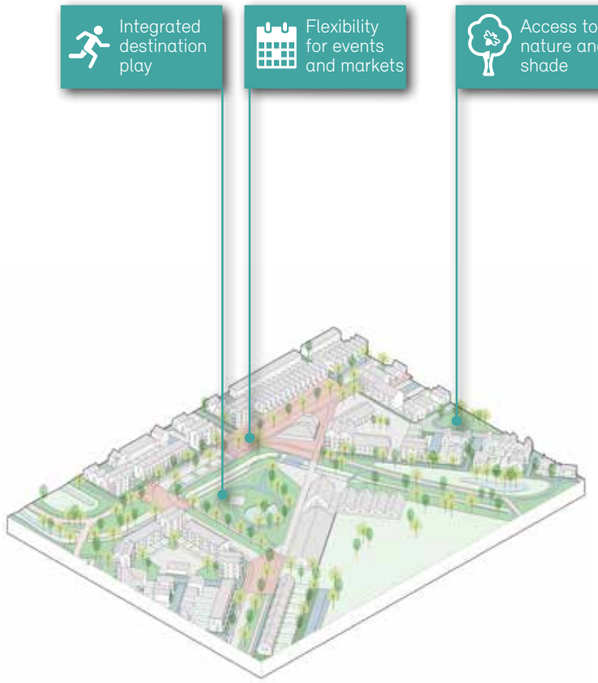
Building design should facilitate the integration of nature in the form of green and brown roofs, bee/swift bricks/ bat bricks as well as design of boundaries with gaps for hedgehogs.



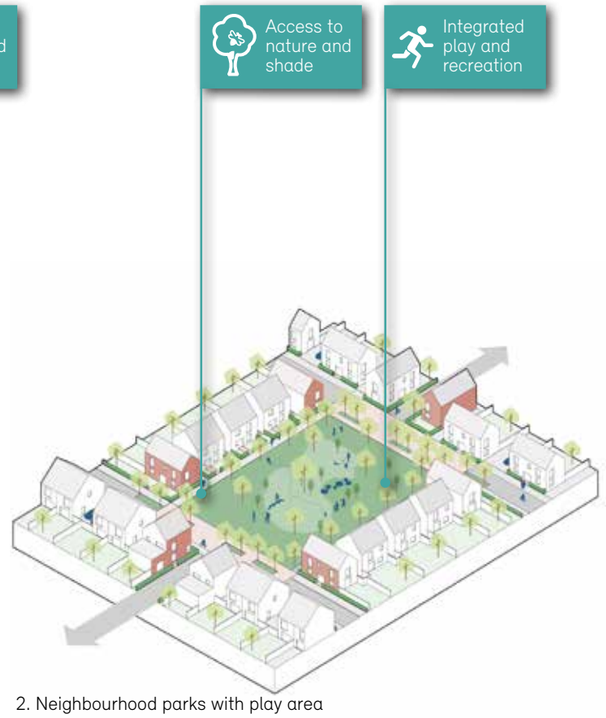
Urban greening framework

A thorough and widespread urban greening framework will deliver a variety of high quality open spaces and green corridors across the site area.

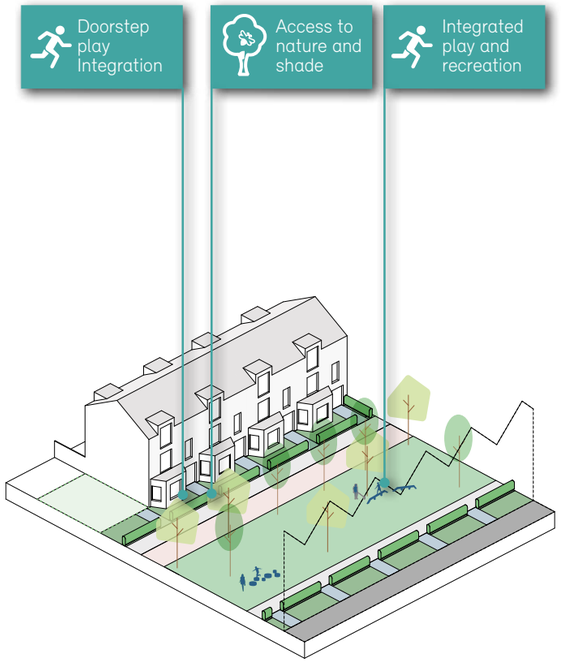
- Primary/secondary streets including The Ridgeway must act as green corridors, creating and supporting habitats and bring people closer to nature. All movement corridors must be designed to connect leisure, recreation and community facilities, as well as parks, open spaces, and allotments. Further guidance on urban greening for streets is in the Public Spaces section of the Code
- Tertiary streets and spaces must connect to the green corridors and make connections to the green networks surrounding the site
- Perimeter parklands must frame the edges of the site and create spaces for nature and people including footways and cycleways with rest points, exercise points and play integrated within them
- The green infrastructure must deliver a variety of high quality open spaces and wildlife habitats which will encourage sustainable lifestyles. This can include trim trails, formal and natural play trails, linear parks, pocket parks, walking and jogging routes, outdoor gyms and allotments
- The tree canopy in particular will need careful consideration to achieve a mature level of tree canopy cover within the development that complies with the strictures of airport safeguarding, yet can allow for further maturity or additional planting upon the relocation of the airport. Further guidance on airport safeguarding is included in the Lifespan section of the Code.



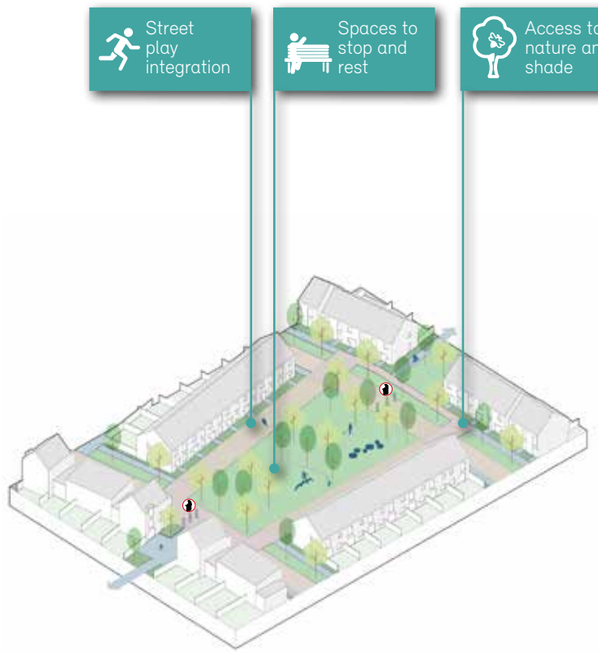
1. Village green



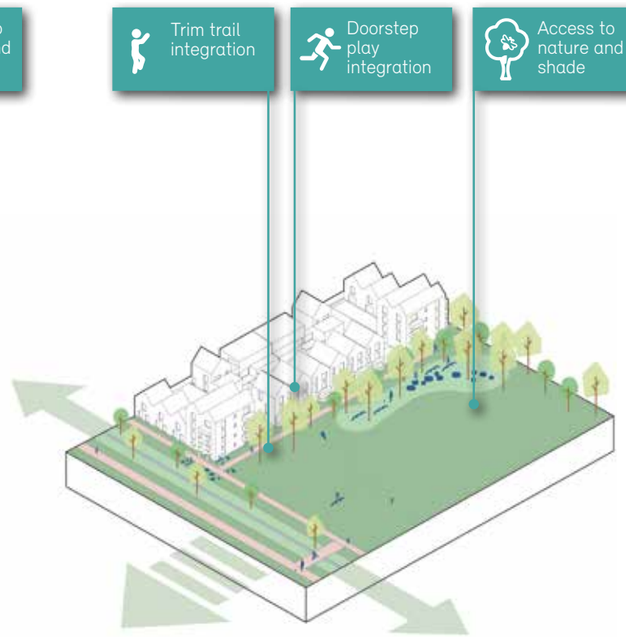
2. Neighbourhood parks with play area



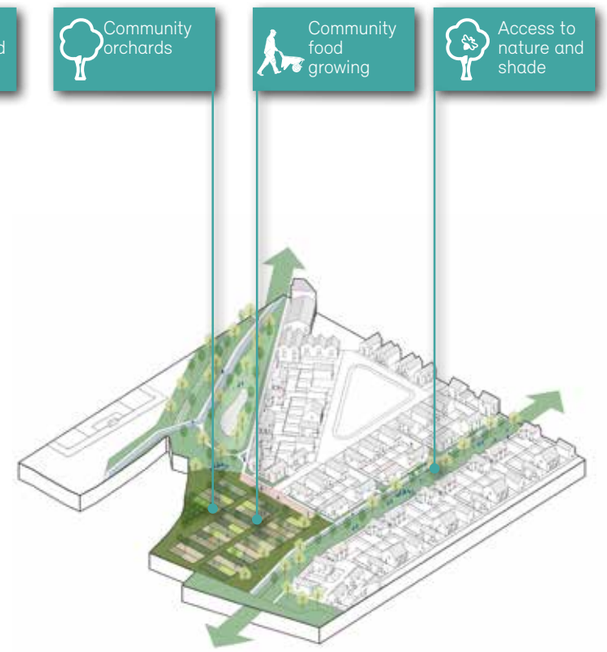
3. Greenways



4. Neighbourhood park



5. Parkland edges



6. Allotments

Water responsive framework

A site-wide water responsive framework of blue infrastructure (SuDS) must control both quantity and quality of surface water runoff throughout the site. This is to help mitigate the impact of climate change within the site and surroundings and integrate with existing water and drainage courses.

The site is traversed by an existing award drain. The route of this drain adjusted by the masterplan. Designs must enhance this feature, integrating it into a naturally planted landscape which improves the biodiversity of the drain and supports the habitat requirements of water voles.

The blue infrastructure must maintain and enhance biodiversity and provide amenity and benefit to all, delivering a variety of high quality spaces for enjoyment of nature.

SuDS features must be designed to have a natural, organic form and positively contribute to green infrastructure and not appear heavily engineered.

On plot SuDS features should be encouraged within the development. On plot SuDS features are beneficial to developments as they can manage the first 5mm of rainfall, provide additional stages of surface water treatment, and act as additional attenuation volume throughout the development.

KEY

- Application Boundary
- Attenuation Basins
- Swales
- Award Drain

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SuDS strategy

- The site wide SuDS Strategy must be considered early in the design phase of all public realm spaces to ensure that the development is resilient to flooding and does not contribute negatively to the surrounding locality and should be in line with the Cambridge City Sustainable Urban Drainage Design Guide.
- SuDS features must not appear as heavily engineered objects within a naturalistic landscape but must respond to the design aesthetic of the space
- SuDS designs must respect and work with the existing topography of the site
- Crossings of SuDS features must be well designed and avoid heavily engineered headwall and outfall features
- Maintenance needs for the features must be embedded as part of the design.

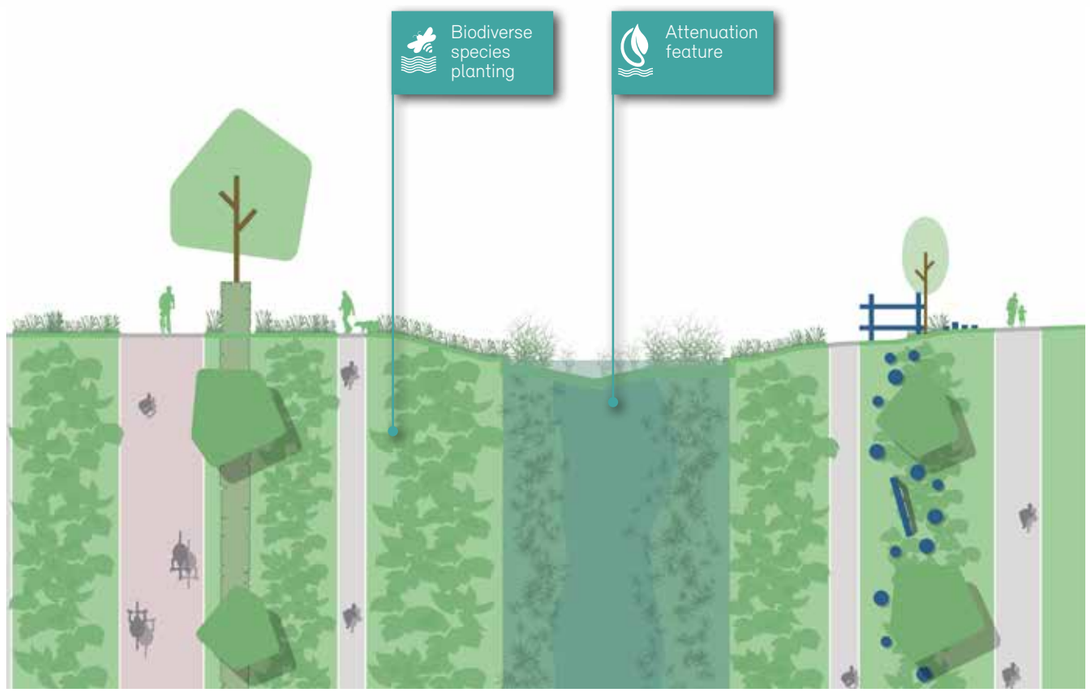
Multi-functional spaces

- Spaces which serve multiple functions, such as attenuation and play must be well integrated into the landscape
- Attenuation basins should enhance biodiversity and be safe but without the need for additional fencing or barriers
- Attenuation basins must allow for 1 in 100 year storm events plus 40% allowance for climate change meaning they will be primarily dry features and must not hold water beyond these events and drain away quickly
- Consideration of post event recovery and/or repair must be factored into the designs, particularly where play features may be out of use for a short period to allow for ground conditions to dry out and growth of planting or grasses to resume.

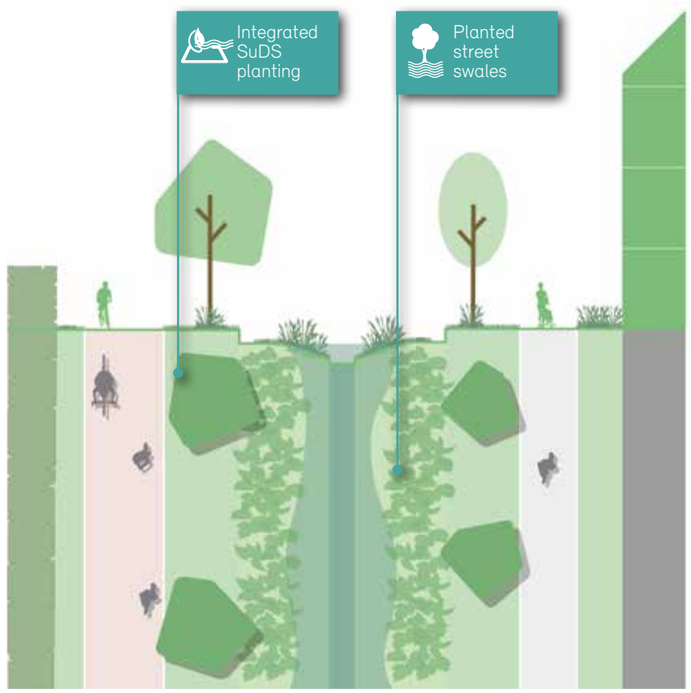
Streets and planted swales

- Swales to collect Highways drainage must be provided on the Primary and Secondary streets
- The gradient of street Swales must balance a number of factors including the need to maximise activity zones as shown in the primary infrastructure cross sections, functional factors related to invert levels, topography and safety
- Swales should be designed to improve water quality of run-off
- Swales must be planted to enhance biodiversity within the site and minimise maintenance burden.

1. SuDS in the public realm - design to avoid guarding



2. Open space and attenuation

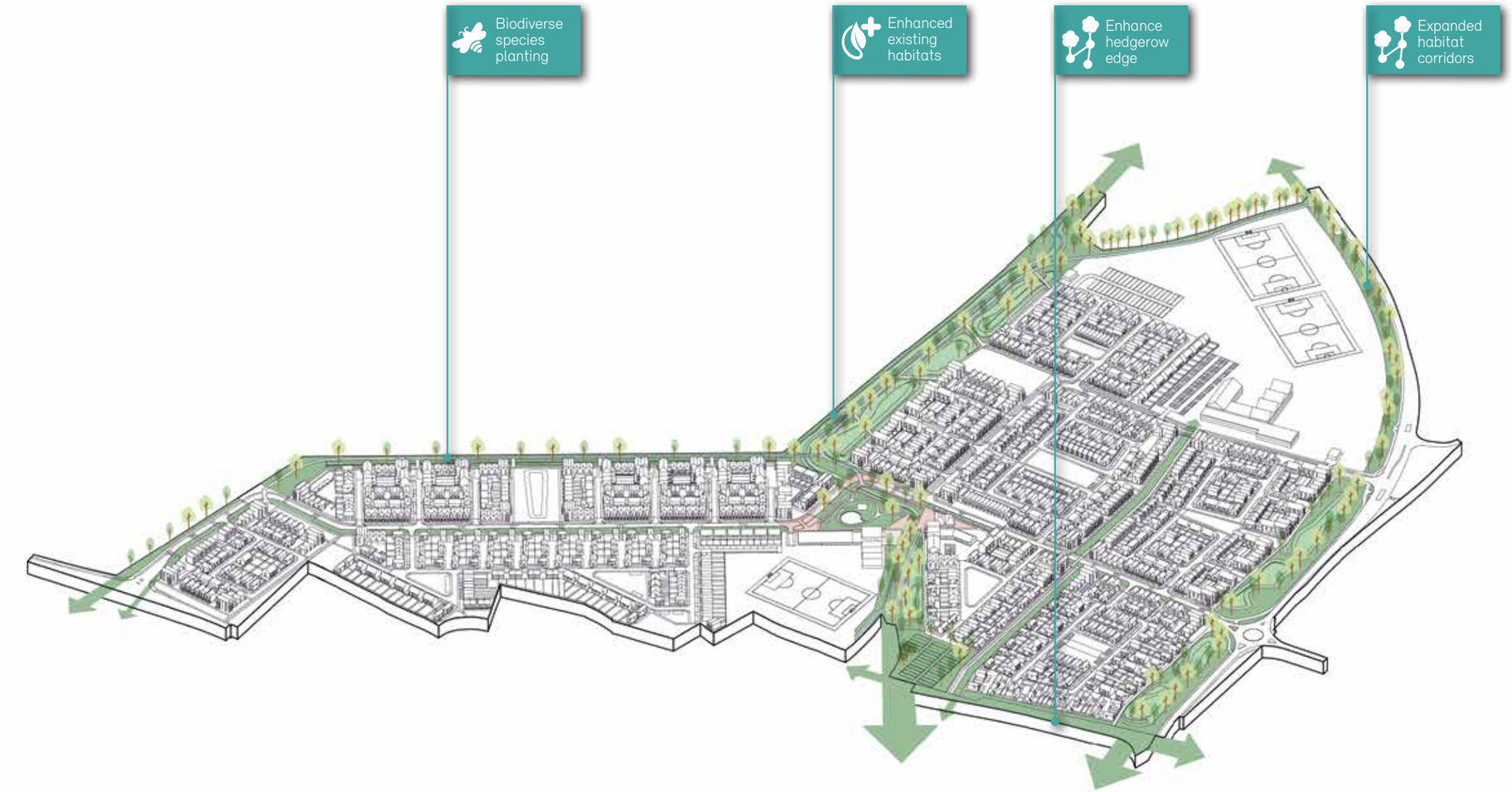


3. Streets and planted swales with street tree planting

Biodiversity enhancement

To achieve a comprehensive nature conservation framework that enhances the key existing landscape and ecological features on site, the following requirements must be met:

- Key non-statutory sites must be enhanced and conserved. These include the Airport Way Road Side Verge (RSV), the Teversham Protected Roadside Verge (PRV) and the Teversham Drift Hedgerow City Wildlife Site (CWS)
- Key habitat enhancements must be achieved on site in accordance with the recently adopted Cambridge City Council Biodiversity Strategy (2022) and Greater Cambridge Shared Planning Service Biodiversity SPD (2021).
- Additional ecological surveys must be completed as part of each Reserved Matters application to ensure the right enhancements are being achieved in the right locations
- Designs which support an increase in biodiversity must aid in enhancing and conserving habitats for a range of protected and valued species. In the design, planning, and management of the greenspaces, a particular focus for the enhancement actions should be for water voles and their habitat along the award drain, Pipistrelle bat foraging corridors and nesting habitats for the Song Thrush. In addition, designs which enhance the incidence of calcareous grasslands, floodplain grassland, hedgerows and streams are encouraged. Refer to the recently adopted Cambridge City Council Biodiversity Strategy (2022) and Greater Cambridge Shared Planning Service Biodiversity SPD (2021) for additional information on local strategies
- Consideration of all required habitats elements within the built form and landscape (nesting / feeding / water / roosting etc) should be explored. The Outline Approval does not establish a fixed figure for biodiversity net gain. However all designs will aim to provide biodiversity enhancement.
- As part of the Outline Approval discussions when it was accepted a shortfall may occur on site in Biodiversity Net Gain (BNG). There is a component of BNG that will be delivered off-site by the Wildlife Trust at their site at Fulbourn Fen.



Watervole nesting opportunity

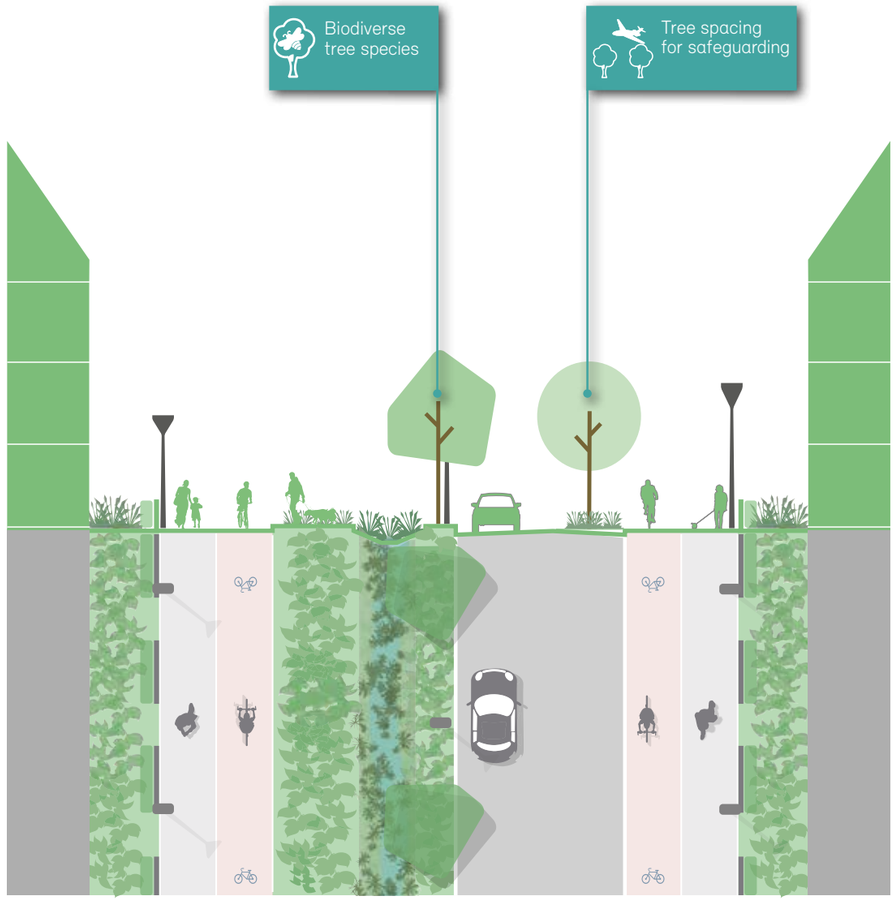
Integrated swift brick example

Bug hotel example

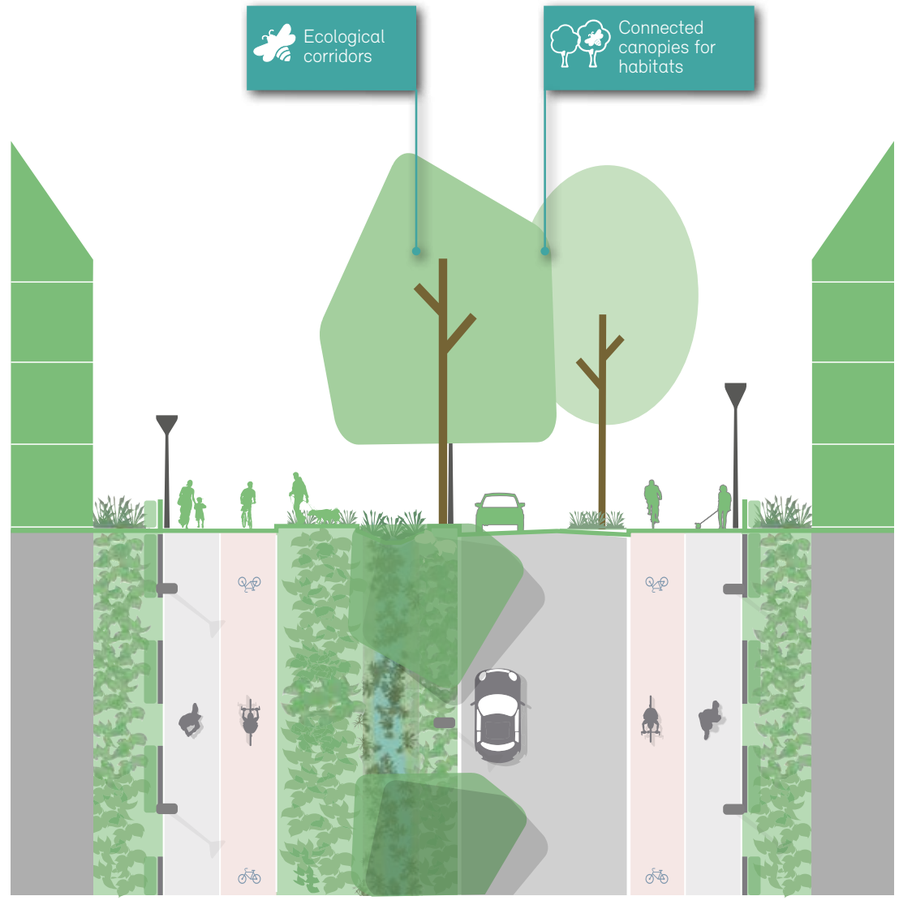
Living landscapes

To achieve a living landscape framework which helps deliver biodiversity net gain and supports wildlife through habitat creation and conservation and access to nature for all, the following requirements must be met:

- Proposals must incorporate existing landscape features enhanced and integrated within new designs which provide a variety of high-quality open spaces which integrate, nature, play, recreation, movement, drainage and amenity.
- Creation of a transitional landscaped edge to the development which responds to the needs and context of each edge condition
- Creation of a tree canopy which responds to the current limitations of operational safety for the adjacent airport yet provides ample greening of streets, parks and other landscape areas
- Street tree spacing along the Primary street must be around 15-18 meters apart allowing for tree canopies to eventually knit together at maturity
- Application of a long term management plan which highlights the need to allow intensive management during the operational life of the airport and which can reduce in intensity should the airport relocate in the future
- Support sustainable and active lifestyles for residents and visitors
- Provision of a diverse planting palette which is resilient to climate change, suitable to the character and context of the edge of the City of Cambridge and supports the goals of enhancement, conservation and creation of wildlife habitats.
- Appropriate ecological sensitive lighting should be incorporated along boundaries of designated wildlife areas and newly created green spaces.



1. Managed tree canopies during airport ongoing operations



2. Tree canopies allowed to connect following cease of airport operations

Planting palette

- The Planting palette must support the creation of a biodiverse landscape
- Both native and non-native species of trees, hedges and shrubs and herbaceous plants should be used in order to achieve resilience and wildlife value within the landscape
- An area of chalk grassland/chalky subsoil exists on most of the site and offers a unique opportunity to use a wider range of species which have different nutrient and soil demands benefiting biodiversity while reducing maintenance needs.
- Recommendations within ecology assessments should be followed to enhance and increase habitat for target species such as water voles
- Requirements for the selection and management of trees, shrubs, hedges and grasslands must consider the requirements of airport safety and safeguarding.

Trees

- The approach to trees should follow the elements above
- Both native and non-native trees should be used to enhance the developments ability to deliver a biodiverse, resilient landscape
- A hierarchy of trees for use on Primary, secondary, tertiary and other movement corridors should be included as part of the Landscape Strategy for each Reserved Matters application.

Wetlands, water courses and SuDS features

- All elements of the site wide SuDS strategy are to comply with airport safeguarding requirements for as long as the airport is in operation
- Most features will not contain standing water and their planting and maintenance regimes must reflect this
- Some water features which do hold standing water will be densely planted to discourage flocking water fowl while the airport is in operations
- SuDS basins to do contain permanent water will only be located within the "Lower wildlife safeguarding priority area" as defined in the outline planning consent Design and Access Statement
- Management of the ponds will be monitored and altered to be more attractive to wild life should the airport relocate.

Trees

Alnus Glutinosa (Common Alder)

Acer Platanoides "Cleveland" (Norway maple)

Juglans Regia (Common Walnut)

Tilia X Euchlora (Caucasian Lime)

Shrubs and Hedges

Acer Campestre (Field Maple)

Corylus Avellana (Hazel)

Crataegus Monogyna (Hawthorn)

Viburnam Lantana (Wayfaring Tree)

Marginal Aquatics

Calthapalustris (Marsh Marigold)

Carex Pendula (Pendulous Sedge)

Iris Pseudacorus (Yellow Flag Iris)

Mentha Aquatica (Water Mint)

Plot Planting

Choisya "Aztec Peal" (Mexican Orange Blossom)

Hebe "Franciscana Variegata" (Variegated Shrubby Veronica)

Hypericum "Hidcote" (St John's Wort)

Verbena Bonariensis (Argentinian Vervain)

Urban greening adding definition to a public place
Granary Square, Kings Cross **Townshend Landscape Architects and Applied Landscape Design**

4 Public Spaces

The heart of our approach to public space will be good street design that creates space for people and nature, rather than just roads. Neighbourhood Parks will provide a leafy heart to each small neighbourhood, creating natural places to meet with the neighbours and play a short walk from every home – the largest of which will be the new village green.

The Public Spaces framework diagram opposite shows the public spaces and connections that must be provided in order to deliver the network of public spaces that are required by the code. Required outcomes include:

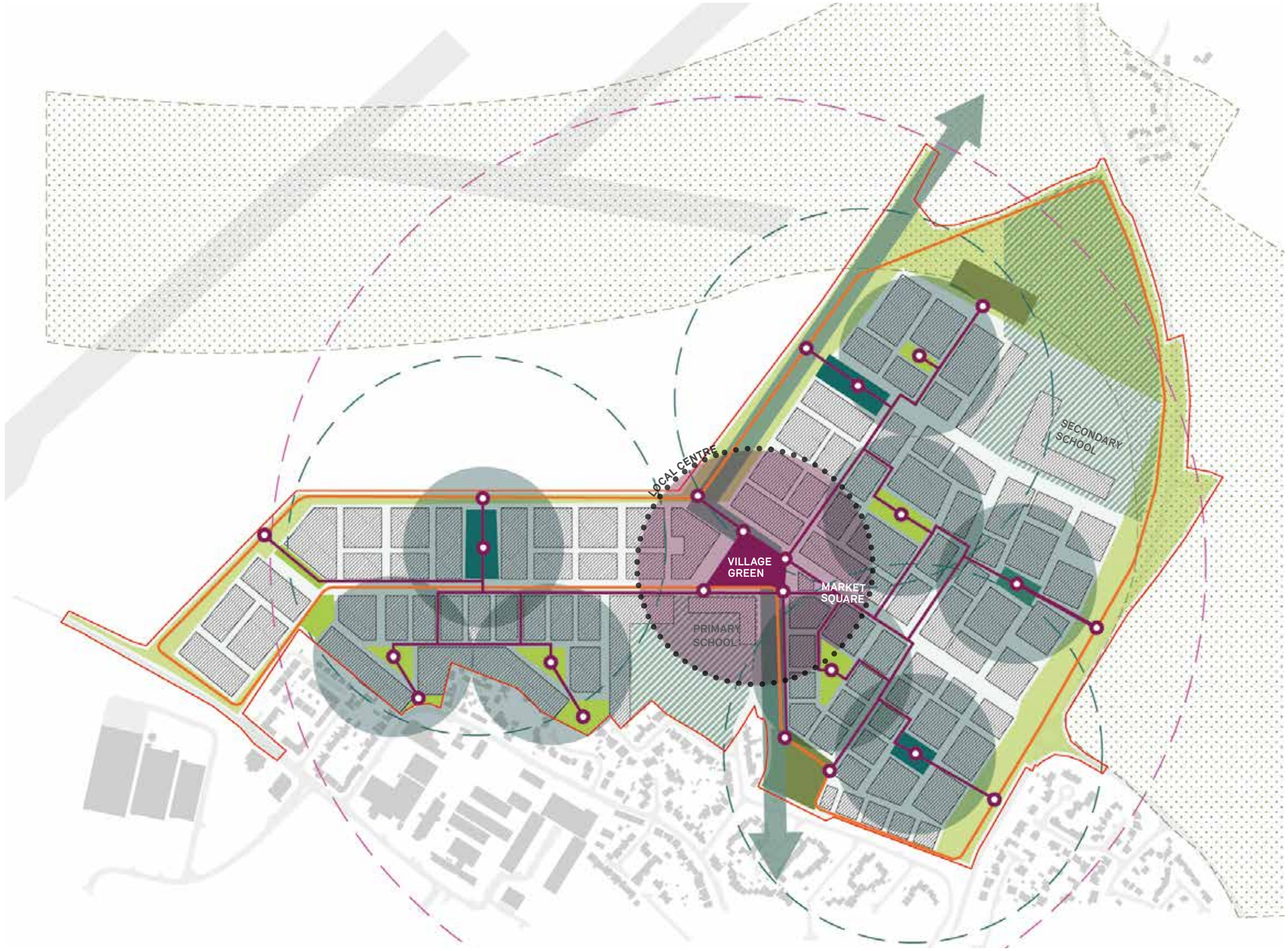
1. Public space typologies including streets
This should create a linked series of public spaces which create a varied character for flexible use.

2. Play Strategy
Create a playable public realm which is socially, physically and emotionally engaging.

3. Cultural sociability
This should ensure the integration of the spaces for local people and community cohesion.

4. Active lifestyles
To ensure opportunities for play and recreation to suit all ages and disabled people are integrated with the streets and public spaces.

5. Coherent character of materials and elements
To ensure public spaces are brought together with consistent, considered, design.



Public space typologies

Linked public space network

A variety of public spaces must connect across the site, creating a linked network of different, flexible and cohesive spaces to support public use and cultural sociability.

Public spaces must include combinations of activities that help bring people together including play, social meeting, resting, and being in nature.

Public spaces must safely combine necessary movement routes with social activities without having to resort to fenced enclosures.

Public space typologies

There is a network of public spaces located across the site. Apart from streets, these are broken down into three main categories as follows:

Local centre/village green

The Village Green must act as a focal point to the whole development and provide key facilities for activities and sitewide interaction. The Village Green must help support and be used in conjunction with the other community infrastructure surrounding it.

Neighbourhood parks

Neighbourhood parks must create a leafy heart to each small neighbourhood. They must provide a place to meet with the neighbours, play, and to be in nature, a short walk from every home.

Other small green pocket parks and squares should be considered where opportunities arise, e.g. where they can be combined with car parking or to provide other focal points. While potentially smaller, these should follow the sociable, play, and nature, principles of neighbourhood parks.

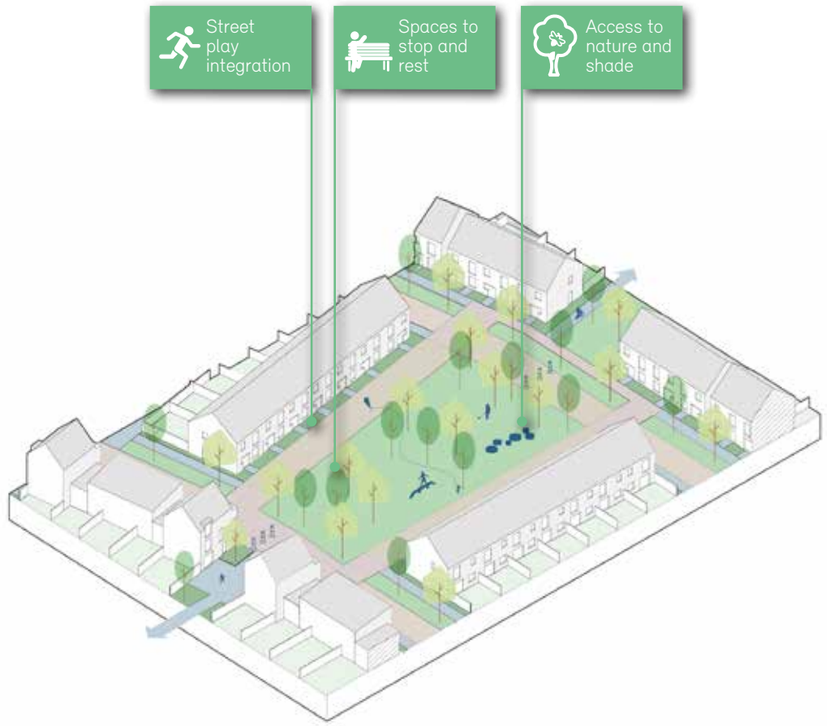
Parkland edges

Parkland edges, forming the east and west perimeter of the site, must include walks, and places to rest, enjoy views, and interact with nature.

To mitigate traffic noise adjacent to Cherry Hinton Road, acoustic barriers should be integrated into parts of the landscape to help create quieter areas. These can be co-located with path meeting points, rest and activity spots.

1. Local centre/village green

2. Neighbourhood parks with play area



3. Neighbourhood parks

4. Parkland edges

Streets

The Code sets out a hierarchy of streets, which must be used to contribute to the distinctive character of the development. Almost all streets are to be designed to adoptable standards.

The street hierarchy framework opposite sets out a network of interconnected primary, secondary and tertiary streets that must be created.

The location of the primary and secondary routes is fixed through the Outline Application.

The tertiary streets include small looped routes for service and other powered vehicles, accessed from the main infrastructure. The location of the tertiary streets is not fixed, but their design should follow the principles set out in the framework plan.

The network of tertiary streets aims to create low traffic neighbourhoods, where social interaction and play can flourish. Reserved matters designs, at the outset, should seek to restrict the movement of powered vehicles between neighbourhoods, through the use of modal filters. These breakpoints must maintain permeability for pedestrians/cyclists. The exact location of modal filters should be established through detailed masterplanning.

Street designs must include the planting, footways, cycle routes, and threshold zones as illustrated within the Code.

Junctions are a key part of delivering Living Infrastructure and must include focal points for a mix of social activities, nature and doorstep play. Further guidance on the adoption strategy for streets and other public spaces can be found within the Lifespan section of the Code.

The way buildings frame the streets must follow the guidance set out in the Built Form and Identity sections of the code.

Integrated space for rest along key walking routes to be provided.

KEY

- Site Boundary
- Primary Street
- Secondary Street
- Tertiary Streets (low speed - pedestrian/cycling priority streets)
- Ridgeway (car-free Street)
- Walking and Cycling
- Existing Streets (Site Perimeter)

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Framework masterplan showing the hierarchy of streets. Primary and Secondary routes are fixed. The tertiary routes are illustrative.