



### Tertiary streets

**Tertiary streets lead off the primary and secondary streets. These routes should form small service loops that are laid out to minimise vehicle junctions onto the major streets. This is to help reduce disruption to pedestrians, cyclists, and landscape planting.**

The carriageway of each service loop must be designed to an adoptable standard for the use of waste collection vehicles.

The design speed of all tertiary streets must no faster than 15mph. The lowest order of tertiary street should be used wherever possible – emphasising the use of shared surfaces and pinch points in the carriageway width.

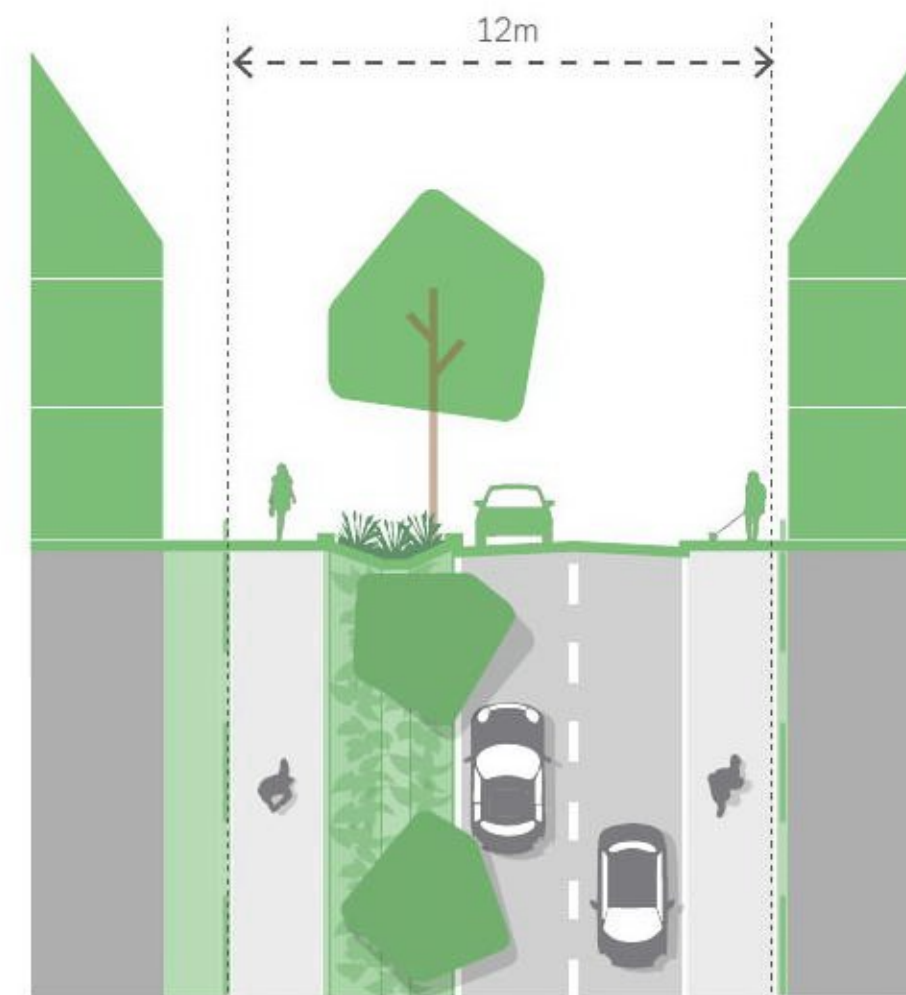
Shared surfaces should be used where streets cross or line neighbourhood parks.

Routes located off the adopted service loop should be designed to be managed and should incorporate visitor parking with charging points, natural planting and SuDS drainage.

### Green and Blue Features

	Primary street	Secondary street	Tertiary street
Street trees	Yes, large species	Yes, medium species	Context driven, medium to garden species
SuDS	City adopted swale	City adopted swale	City/private managed rain gardens, swales, permeable surfaces

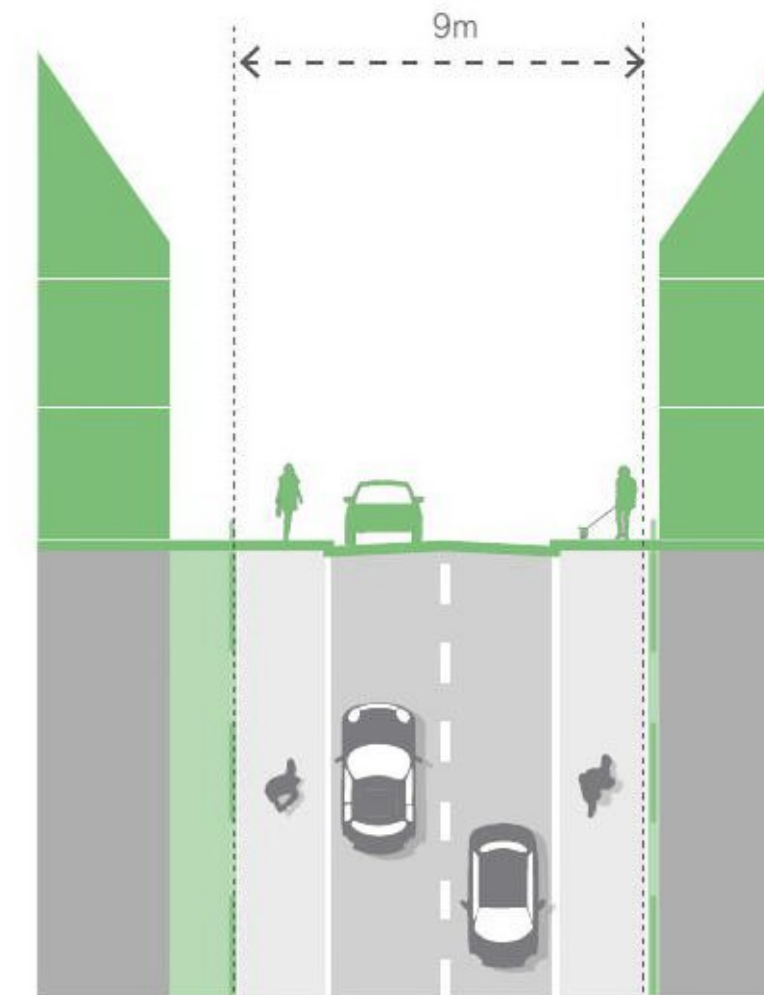
Tertiary Street 1 – Typical section and plan



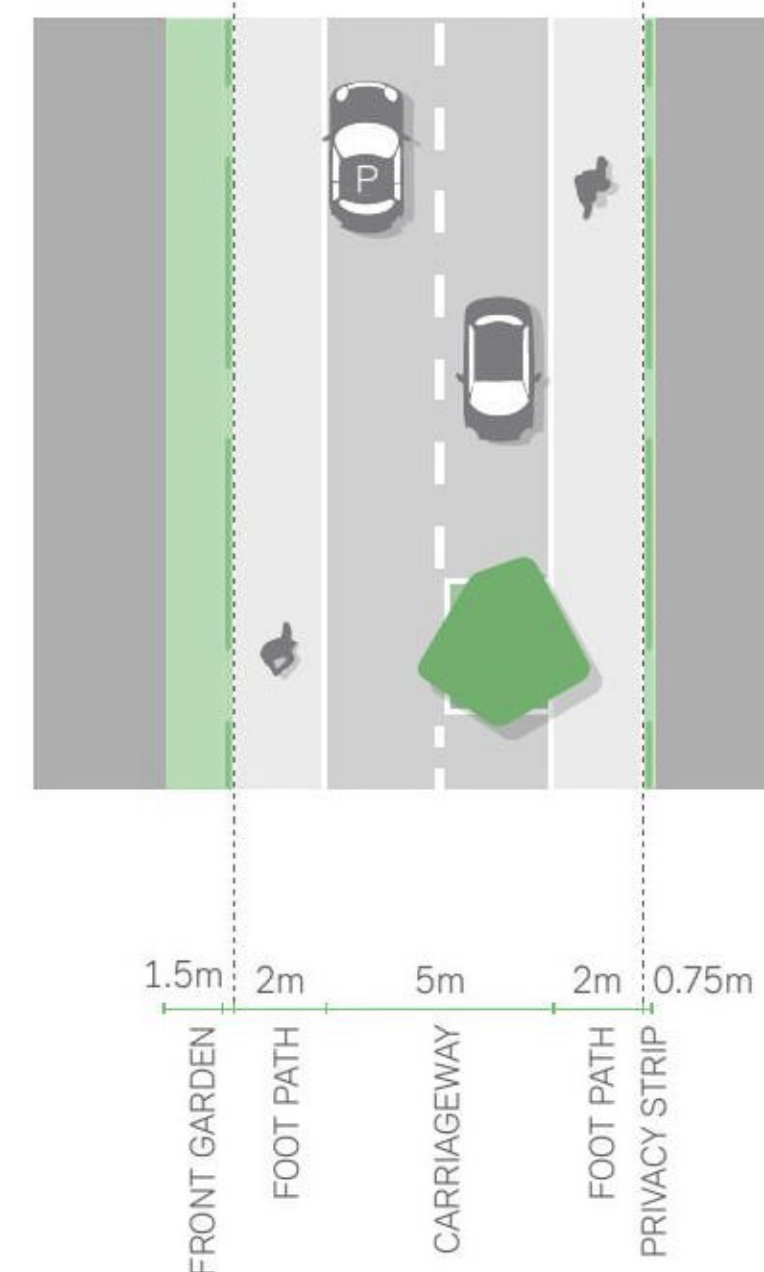
Tertiary Street 1 – Raised table and tree pit



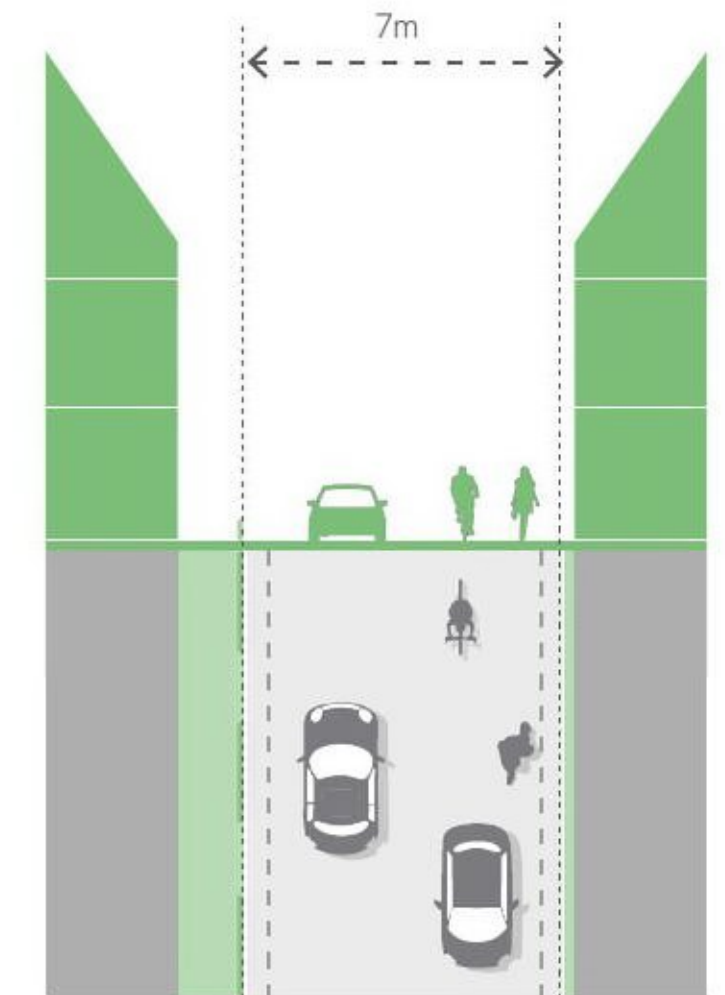
Tertiary Street 2 – Typical section and plan



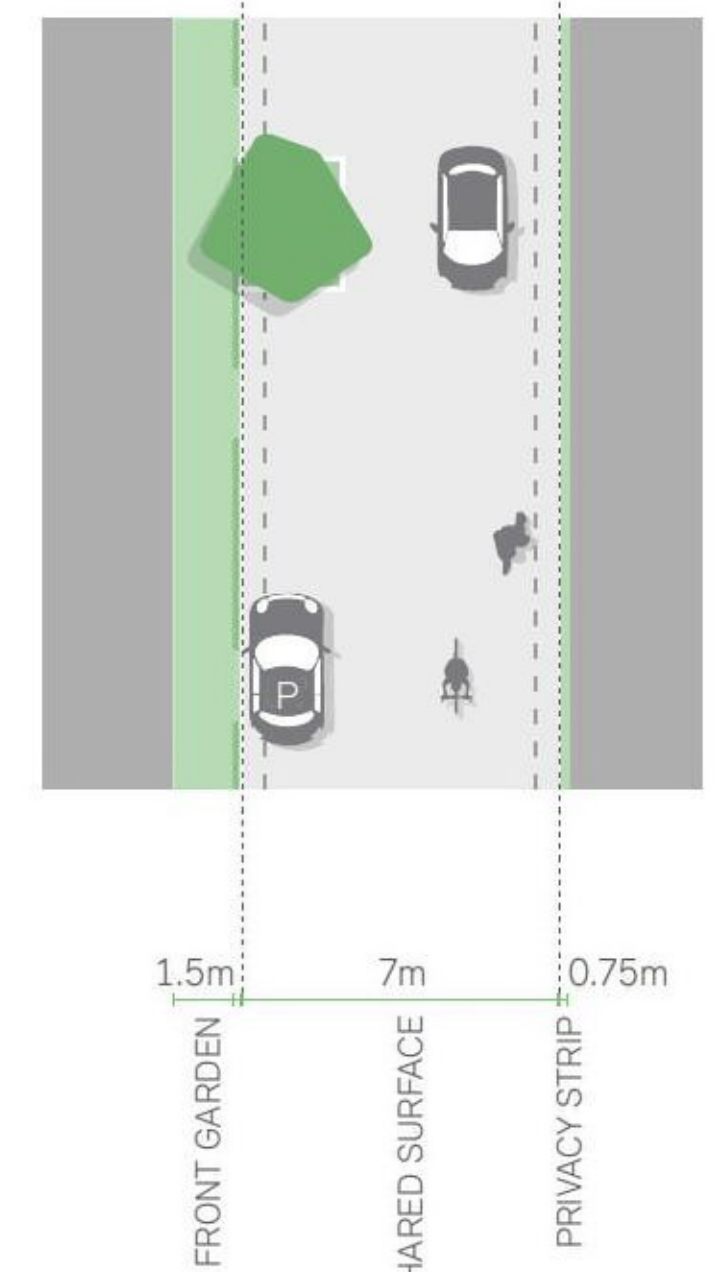
Tertiary Street 2 – Build out tree pits



Tertiary Street 3 – Typical section and plan



Tertiary Street 3 – Build out tree pits





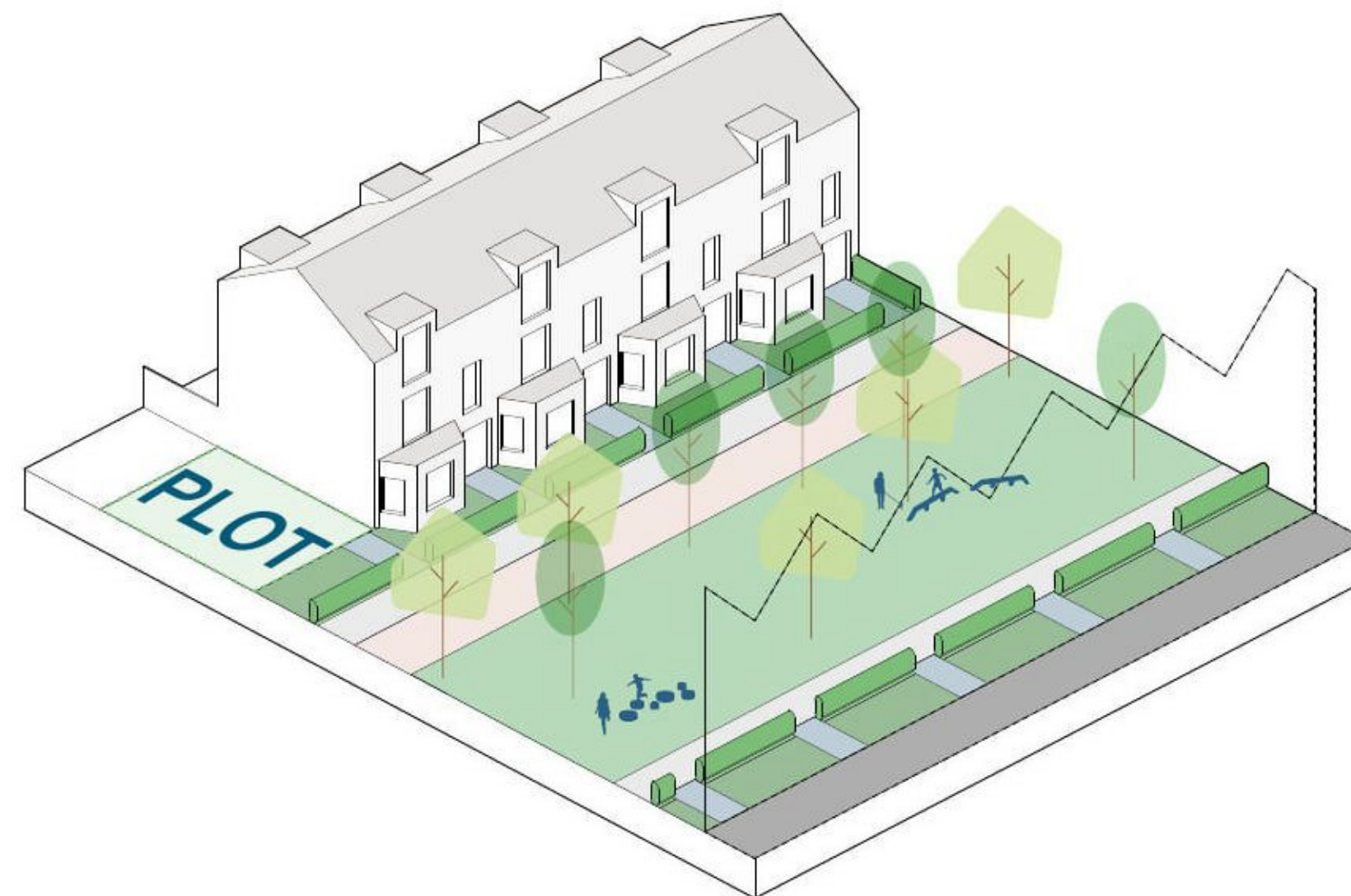
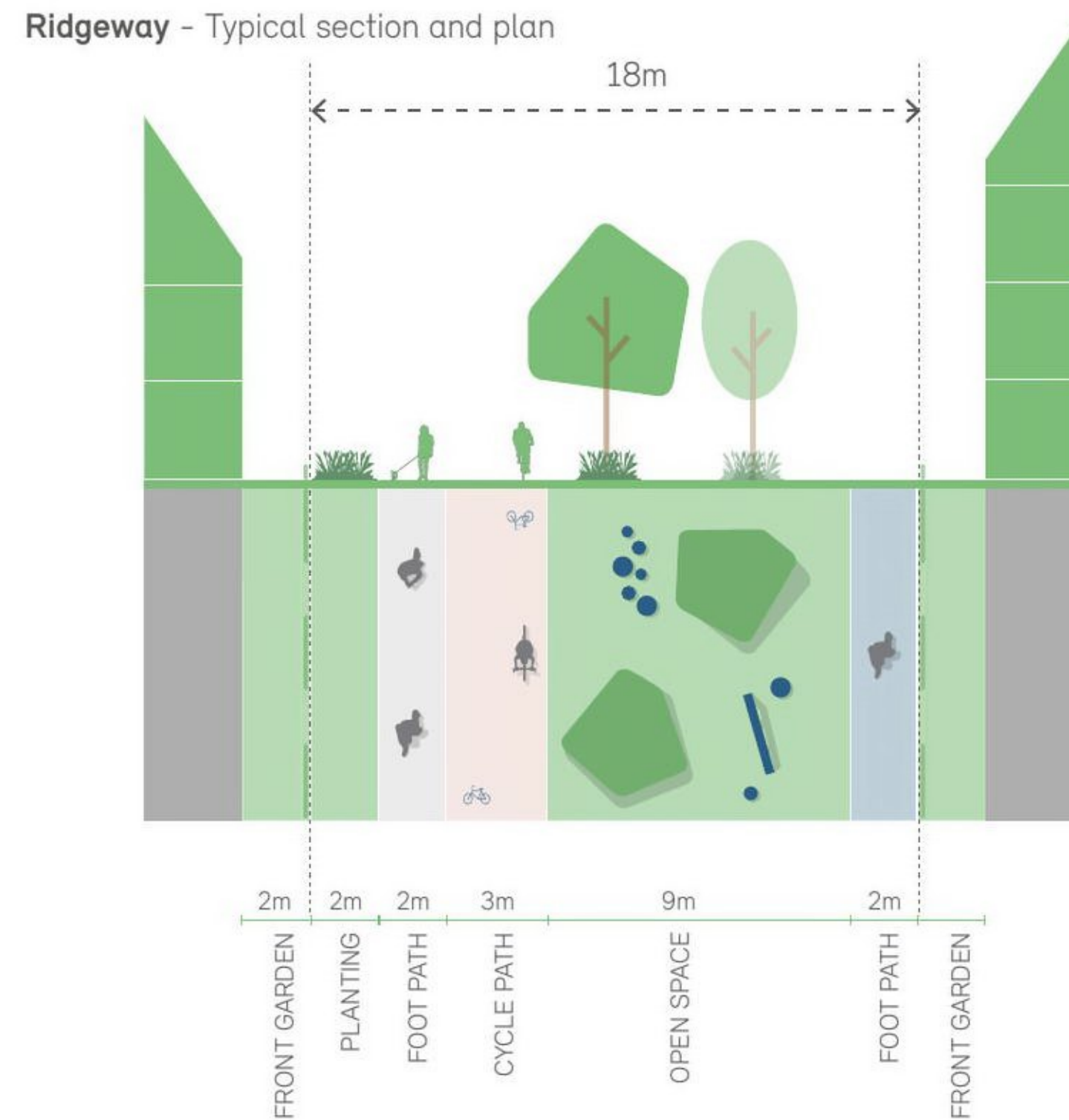


### The Ridgeway

The Ridgeway follows a natural ridgeline in the topography of the site. It is a dramatic green spine, providing a safe, traffic free landscaped street leading from Teversham Drift to the secondary school. It must provide walking and cycling infrastructure set in a landscape of semi-mature tree planting, natural habitats, and social spaces.

The Ridgeway:

- Should be aligned with the nearby church towers of Cherry Hinton and Teversham
- Secondary school entrance must terminate the northern point of The Ridgeway - and the building must act as a focal point
- Must be a traffic-free, planted, and sociable street.



Abode at Great Kneighton **Proctor Matthews Architects**



The Avenue, Saffron Walden **Pollard Thomas Edwards**



Knights Park, Cambridge **Pollard Thomas Edwards and Alison Brooks Architects**





### Street design matrix

A matrix has been prepared setting out the design specifications that should be used for each adopted street typology. The design intent is to create a walkable and low speed environment.

The junction radii and design speeds listed here should be treated as maximums, rather than targets.

Kerb heights should be 20mm high to all tertiary streets.

Centre lines should not be included on any streets.

	Primary street	Secondary street	Tertiary street
Speed limit	30	30	30
Design speed	20	20	15
Width	6.2m	6.2m	Varies, refer to sections
Footway/cycleway	2m footways + 2m cycleways both sides	2m footways + 2m cycleways both sides	
Verge	Yes	Yes	
Bus access	Yes	Yes	No
On-street parking	Yes but not delineated	Yes but not delineated	Yes but not delineated
Traffic calming	Yes	Yes	Yes
Utilities	Beneath footway/cycleway	Beneath footway/cycleway	Beneath footway/cycleway
Centre line radii	30m	30m	20m
Street lighting	6m columns	6m columns	5m columns
Junction spacing			
Junction visibility	2.4 x 25m	2.4 x 25m	2.4 x 17m
Junction radii	6m	6m	To suit tracking
Direct vehicular access	No	No	Yes
Kerb height	100mm	100mm	20mm
Centre line	None	None	None
SuDS	Swale	Swale	Mixed
Shared surfaces	None	None	Mixed (serving no more than 12-14 homes)



Knights Park, Cambridge Pollard Thomas Edwards and Alison Brooks Architects



Tree-lined street. Clay Farm, Cambridge



Accordia, Cambridge Grant Associates and FeildenCleggBradleyStudios



## Play strategy

The Design Code aims to create a playable public realm which is socially, physically and emotionally engaging.

The formal play strategy for Cherry Hinton North must work on 3 levels:

- Street Play
- Doorstep Play
- Destination Play.

These should be added to by trim/play trails, allotments, and playing fields.

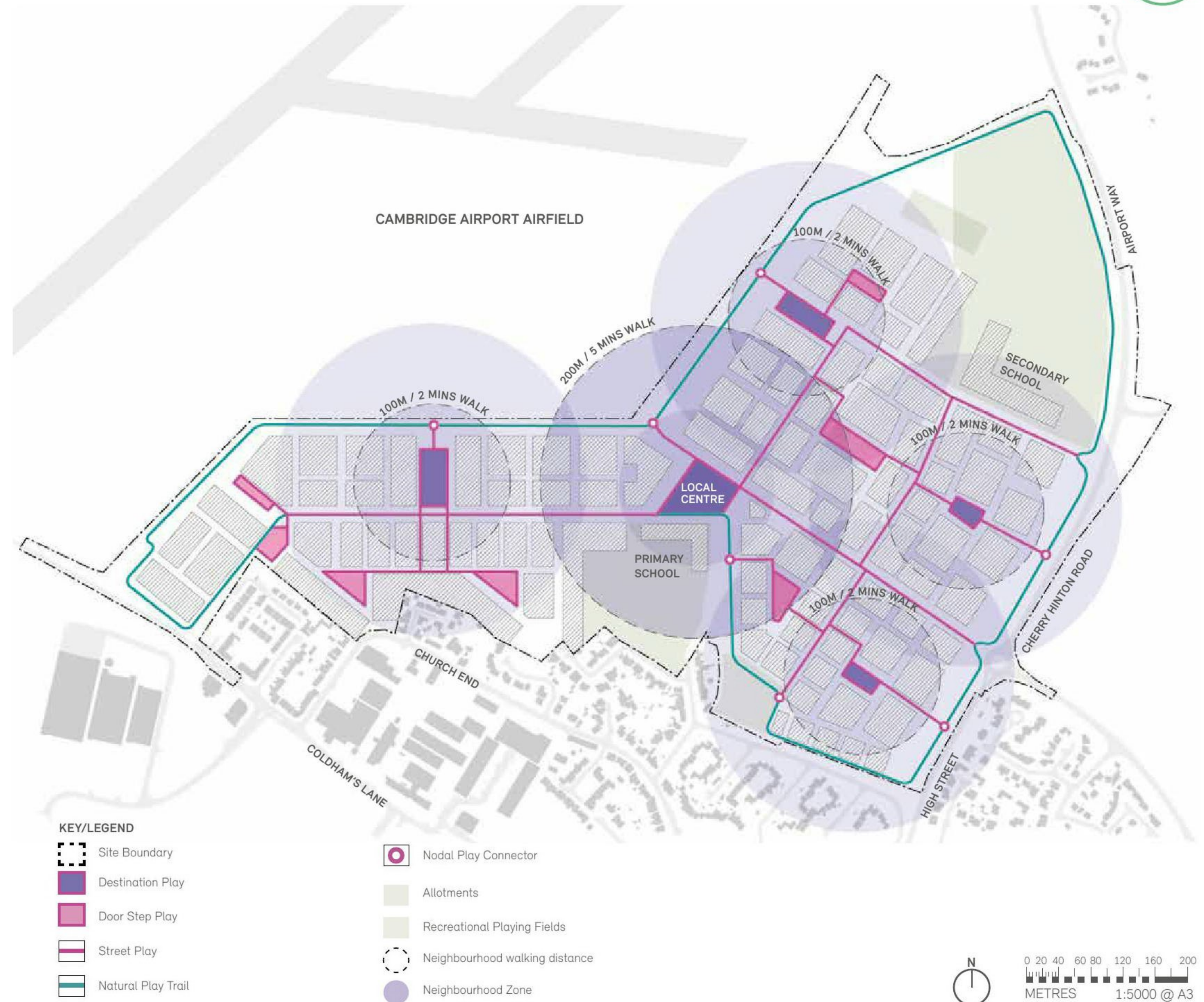
This strategy must form a network of play opportunities to provide play near to every home. The provision is diverse and integrated within streets and spaces with an emphasis on play for all ages, groups, and abilities.

A play toolkit should be used to control the quality and character of play space and its equipment.

A youth and children's play strategy is a requirement of the outline planning permission and must follow the principles set out above.



Natural play space







Public spaces should include combinations of activities that help bring people together including play, social meeting, resting, and enjoyment of nature. They should be able to safely combine necessary movement routes with social activities without having to resort to fenced enclosures.

### Street

Streets must include focal points for a mix of social activities, nature, and doorstep play. These can range from a focal tree or simple piece of seating to a combination of landscape and play features.

### Neighbourhood

Neighbourhood parks should provide a public landscape focus for each neighbourhood. The edges of each park must be defined by building frontages. Each park must follow the Living Infrastructure principles and contain activities to attract people to them including playing, meeting, resting, food growing, foraging, and being in nature.

### Destination

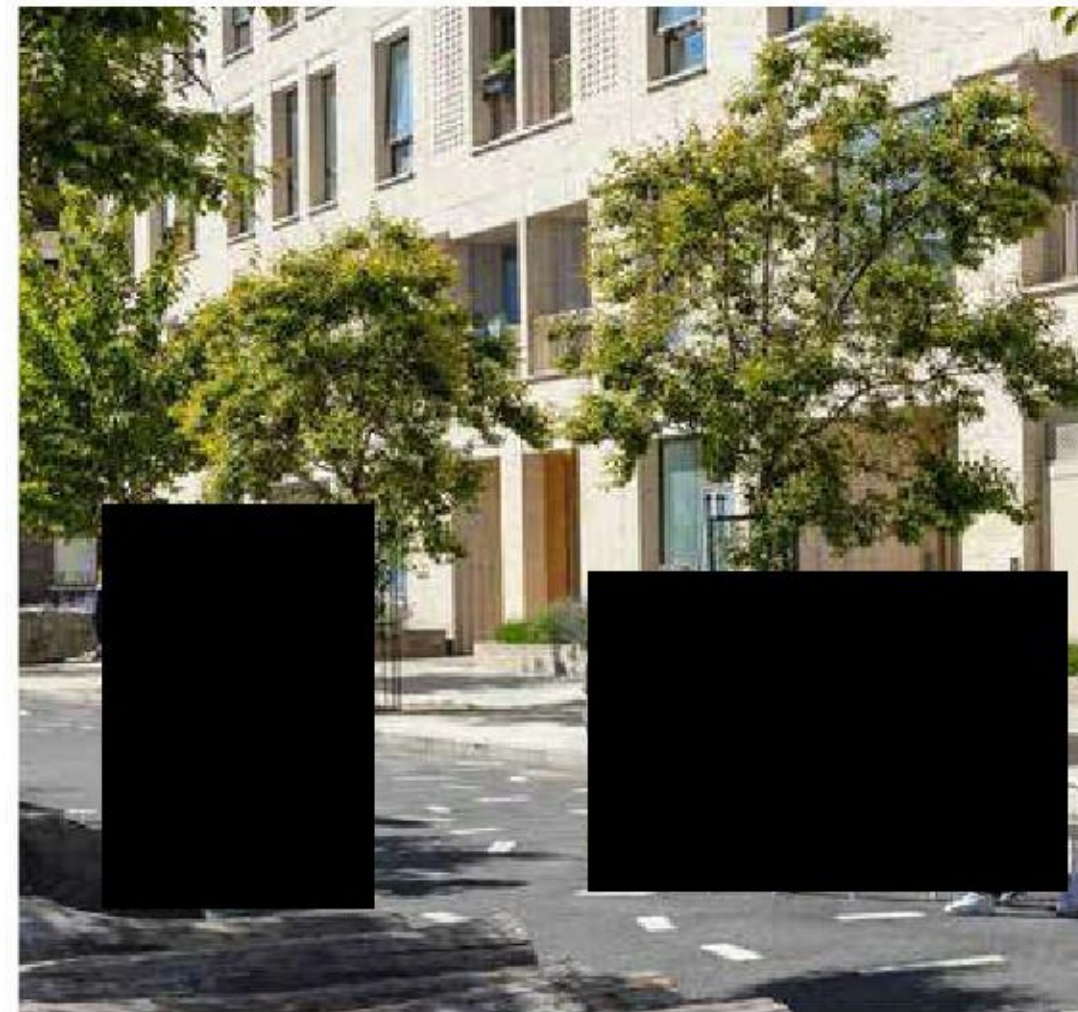
The Local Centre forms the main focal point for all play and social gathering.

Parkland edges should connect the development to the local agricultural landscape. They should be inspired by Cambridgeshire's 'fen edge chalkland' landscape traditions and must be laid out to provide SuDS landscapes integrated with natural planting and informal play.

### Design to avoid railings

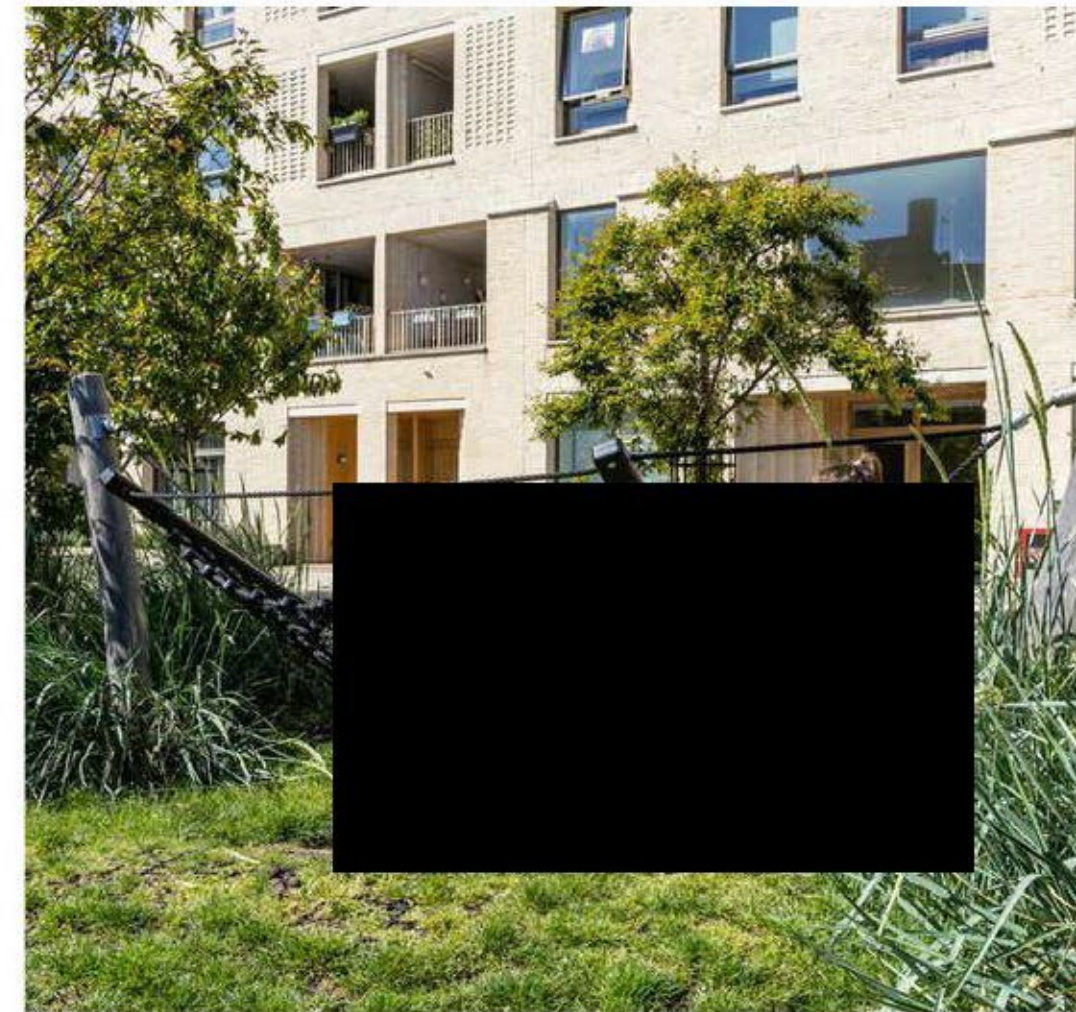
Drainage features must feel engaging and be fully integrated in the natural landscape and public realm. They must not be enclosed by railings.

### Street



King's Crescent **Henley Halebrown**

### Neighbourhood

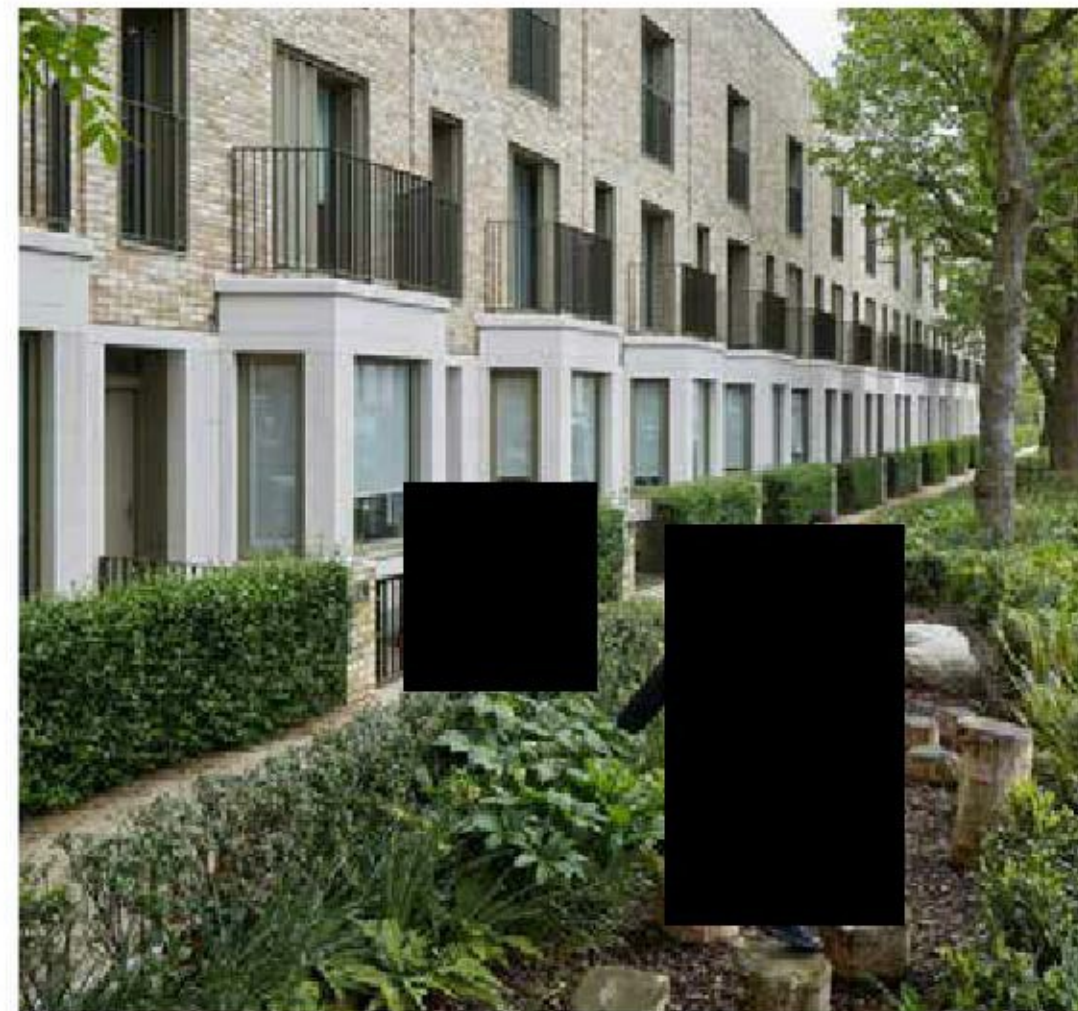


King's Crescent **Henley Halebrown**

### Destination



Tumbling Bay Playground **LUC Landscape Architects**



South Gardens **Maccleanor Lavington**



King's Crescent **Henley Halebrown**



Bridget Joyce Square rainpark **Robert Bray Associates**





The network of public spaces must make connections between each other and the surrounding area – including consideration for future developments. Public spaces must work alongside public buildings and the movement network to support and enhance community cohesion and foster social interaction.

### 1. Supporting new and future communities

- Neighbourhood Parks should facilitate smaller gatherings providing infrastructure for events
- Public spaces adjacent to the airfield should allow easy connections to future developments on the airfield site.

### 2. Supportive public spaces

- Public spaces which serve community facilities must provide adequate opportunity to stop and rest and trees/structures should be provided to allow for shade/shelter
- Public spaces and places must be welcoming and accessible to all genders, ages and abilities
- Public spaces and public realm finishes must provide flexibility in use and allow for spaces for markets or community gatherings adjacent to the focal buildings, namely schools and amenity buildings.

### 3. Supporting social cohesion

- Public spaces and places must be welcoming and accessible to all
- Future community growth and emerging need should be considered e.g. by allowing flexibility for future cultural uses to be added within the local centre.

### 4. Supporting the local community

- The development must be integrated within the local area via attractive walking, cycling and bus routes.
- Planned community uses, services and activities should help support existing uses and needs within the local community, and avoid undermining current services through duplication.
- Local needs and requirements should be defined, and detailed proposals developed, through local engagement.







The design of outdoor environments must support improved physical health and mental well-being. This includes promoting walking as the first choice for all internal trips, play and exercise, and access to nature.

An active lifestyle framework which is connected across the site should ensure opportunities for play and recreation to suit all ages are integrated with the streets and public spaces. Designs must create socially inclusive and accessible public spaces that are welcoming and safe for everyone.

### 1. Recreation for all

- Recreation spaces should provide a variety of types, catering for a multi-generational experience.
- Play should follow inclusive play principles, including physical, creative and social play, and engage all of the senses.

### 2. Doorstep play

- Seek to provide easily accessible and overlooked space for play and social interactions immediately outside or close to the front door
- It must be considered not to create nuisance for the adjacent properties and should be natural play if possible
- These well-overlooked spaces can positively support the gradual increase in young peoples' confidence to meet others and navigate their immediate neighbourhood.

### 3. Play along the way

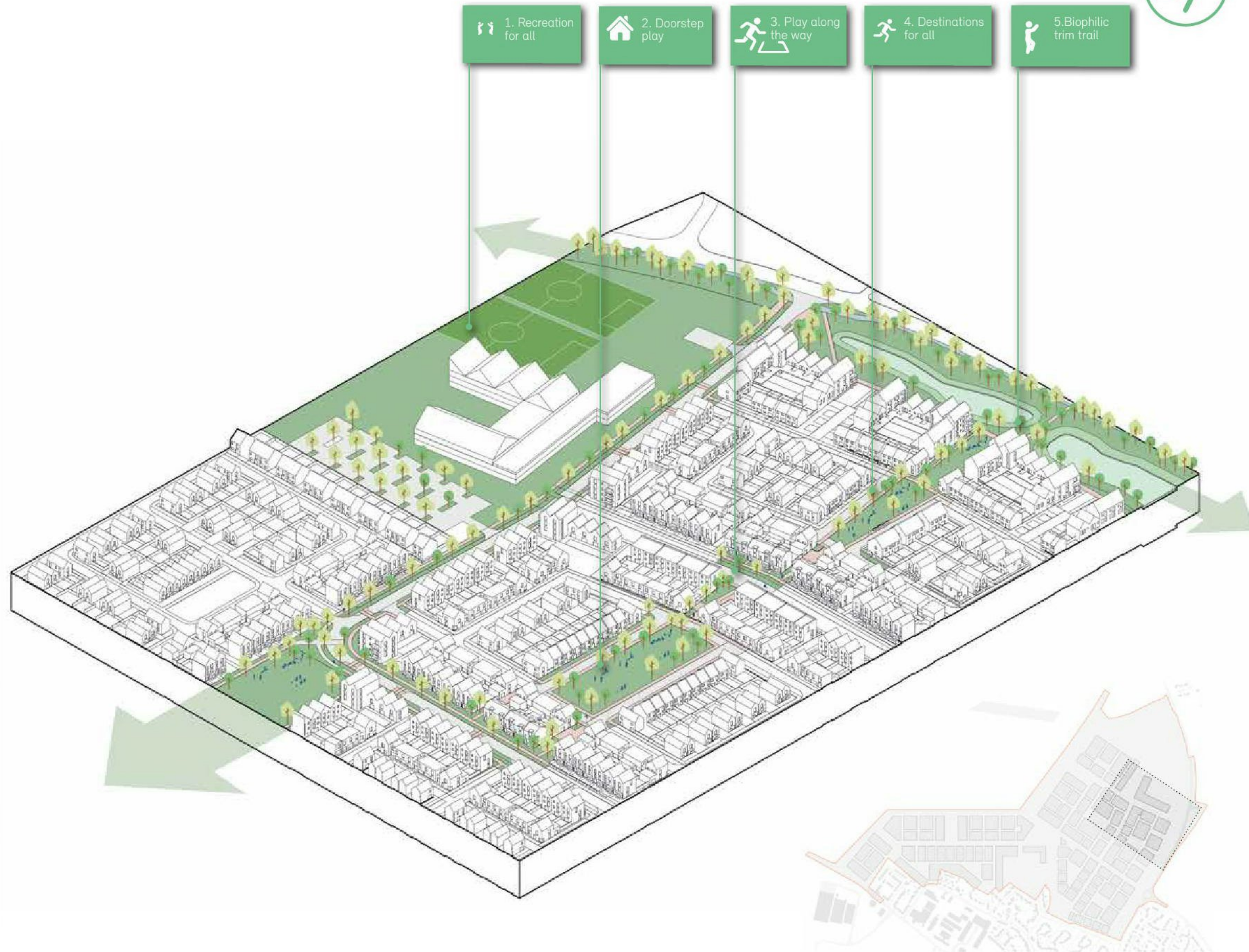
- Should ensure that a network of play weaves like a thread through the site with key focus elements creating play
- Opportunities should be explored within the streets to build in storage for playing out supporting residents to temporarily close their streets for community use.

### 4. Destinations for all

- Seek to design accessible public spaces that are welcoming, enjoyable and safe for everyone
- This should promote creative and sustainable design solutions prioritising access and inclusion for everyone who lives, works and plays in the community and local area.

### 5. Biophilic trim trails

- The trim trails which circumnavigate the site should design out any level or materiality changes that create perceived or physical barriers for individuals
- Designs must increase everyday opportunities to access and connect with nature, creating biophilic opportunity.





## Materiality and elements

**The design of public spaces including street networks must be brought together using a small and coordinated palette of materials and details.**

The definition of key spaces should be supported by the use of surfaces and planting. Designs should emphasise the overall shape, sense of enclosure, and multi-use nature of the space, rather than highlighting e.g. vehicle use.

The combination of surfaces, planted landscape and signage should be coordinated with surrounding building designs to create a sense of place such as visual gateways, activity, and calm.

### Lighting

**The lighting palette for the scheme should be muted in nature, concealing itself into landscaping where possible. Lighting is a detailed subject, and as such a lighting strategy needs to be developed in the future to specify equipment and look into the specifics of lighting surfaces, avoidance of glare and other detailed issues.**

Artificial lighting must be designed to minimise affecting wildlife habitats, features and green corridors with essential 'task' lighting, such as along cycleways, limited to the minimum for safe travel and either being responsive to use by people or turned off completely for part of the night.

Direct lighting of, or light spill on to, retained mature trees and hedgerows which have the potential to support bat roosts and/or bat foraging and commuting features, must be avoided.

### Street furniture

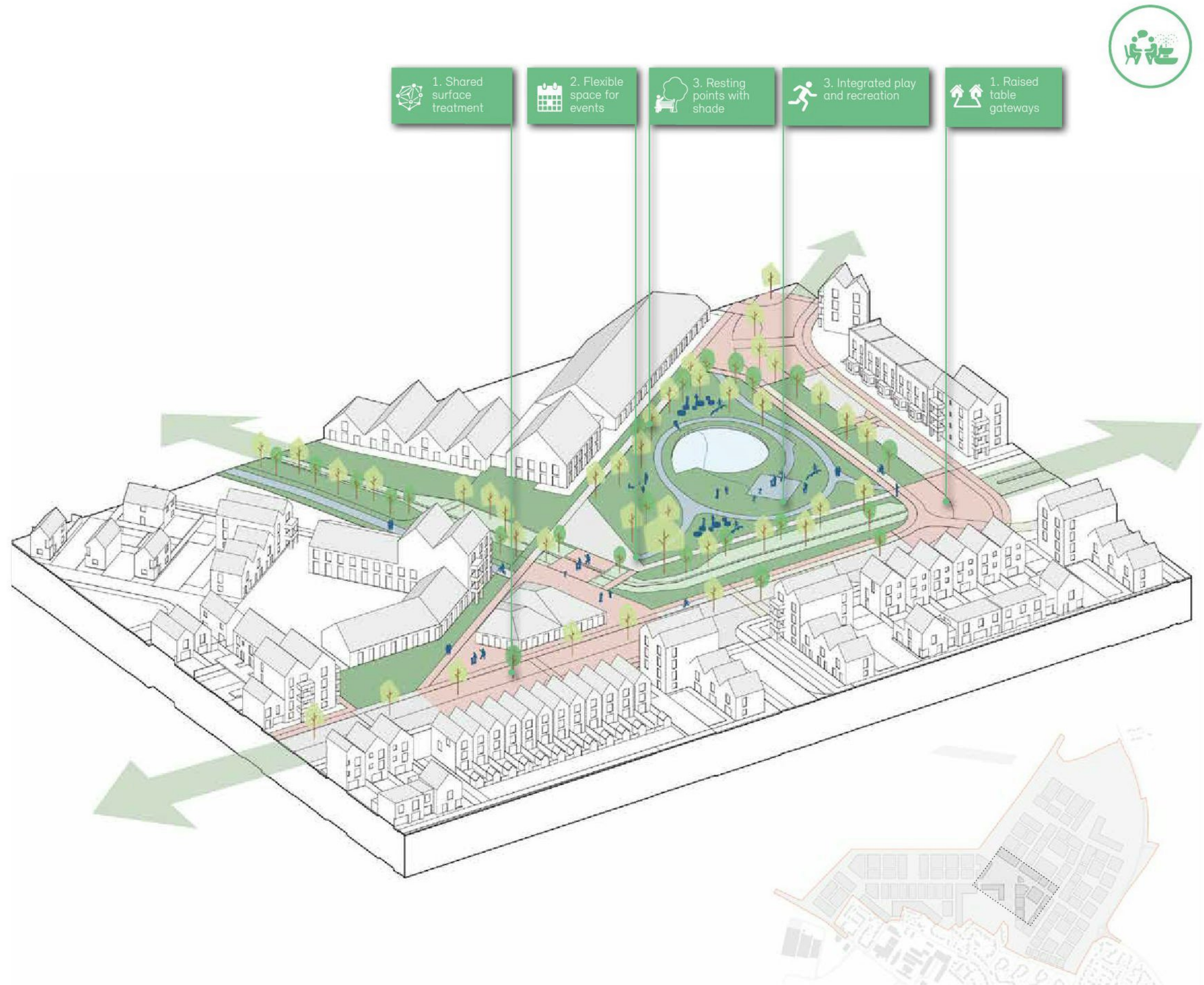
**Street furniture should have a simple but elegant aesthetic and emphasise the use of natural hard-wearing materials.**

Wooden benches should be used for seating, and should be nestled into planting beds.

### Public art

**Public art should be located at focal points and key nodal points.**

Public art can form part of the play strategy, creating special moments within the street and landscape.





### Designing hard surfaces

**With the exception of Market Square, large areas of hard surfaces should be minimised or avoided. Where this is not possible, trees should be included to provide summer shading and cooling.**

### Material palette

**Hard surface materials should have natural tones, incorporating subtle variation, and reflect a walking and cycling prioritised environment:**

Using the material palette:

- Materials must be used in a consistent way to avoid a patchwork appearance
- Paving colours and textures must be chosen to work harmoniously alongside surrounding building finishes. These combinations and laying patterns must be tested with sample panels
- Where paved shared/unified surface treatments occur, any required demarcation within the space should be handled by the incorporation of subtle changes in paving direction, texture or kerb levels. Significant variations in colour or tone should be avoided.

All public spaces must be designed for inclusivity including textured paving blocks, level surfaces and 20mm kerbs.

### Robustness and practicality

**Surfaces must be robust and accessible to all.**

Within adopted streets and landscapes, the handling of materials must reflect the design principles of the Code. Detail of specific materials used are to be agreed with council and highways officers to allow for future adoption.

Within non-highways adopted streets and park areas, surface water runoff must be minimised and all surfaces should be capable of being permeable.

Gravels can be self binding on low trafficked areas, but loose gravel paths must be avoided.



Asphalt with chippings



Tinted bike lanes



Tumbled concrete paving



Resin bound gravel



Conservation kerb



Self-binding gravel



Bench recessed into natural planting



Subtle lighting in key public spaces



Subtle lighting in key public spaces



## 5 Resources

The development will be energy efficient, and designed to be gas free from the outset. Climate change resilience will be built-in, with buildings and green spaces that avoid overheating and conserve water and energy resources by design.

The development will focus on using passive principles, maximising benefit of green spaces and reducing running costs by encouraging sustainable lifestyles.

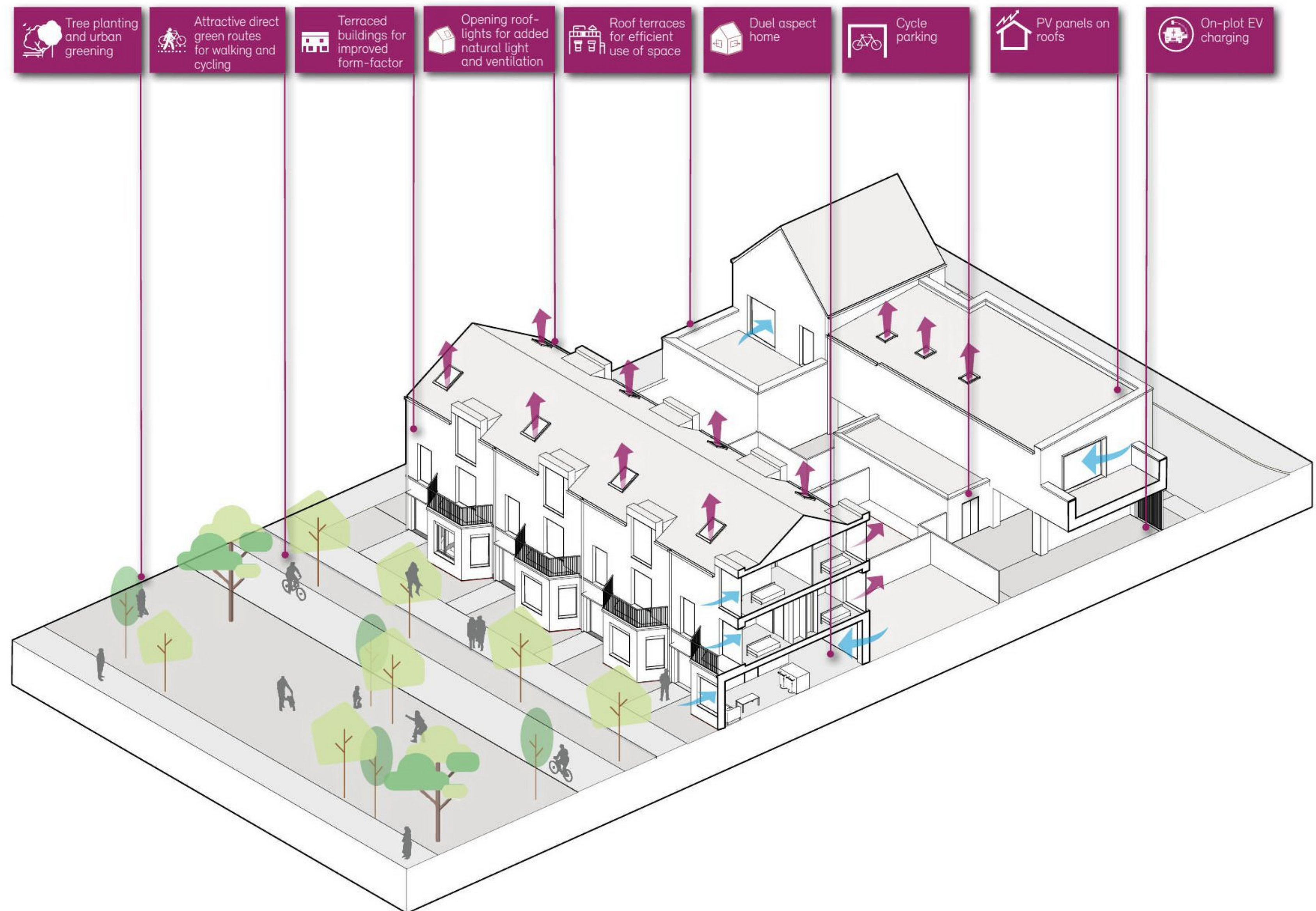
### Using the energy hierarchy

Building designs must follow the energy hierarchy. This means prioritising lowering energy demand, before looking to more technical solutions such as renewable energy generation with Photo Voltaic (PV) panels.

“Fabric First” passive principles should be used; the form of the building, its orientation, surrounding landscapes, and fabric efficiency all help contribute to reduced energy consumption. These include:

- Dual aspect homes
- Water saving fittings and appliances
- Natural light and ventilation to communal areas in flats
- Reducing hard surfaces and increasing summer shading with green spaces, water, and trees near homes
- Use simple building forms which limit thermal breaks
- Reduce embodied carbon during the manufacture, transport, and construction of building materials as well as end of life emissions
- Designing out waste of construction materials
- Consider offsite manufacture where possible.

Building typologies with an efficient form factor should be used, for example by including terraced houses and flats.



Naturally ventilated homes



## Supporting sustainable lifestyles

### Supporting sustainable lifestyles

The development must support people to have healthy, active and sustainable lifestyles. This will include:

- Street networks that promote walking and cycling to schools, community facilities and shops
- Access to buses and public transport
- Car sharing and the use of electric vehicles
- Spaces for home working, or to work locally
- Homes that are adaptable to changing lifestyles or circumstances
- Spaces to socialise through play, exercise, gardening, food growing and resting.

### Climate change resilience

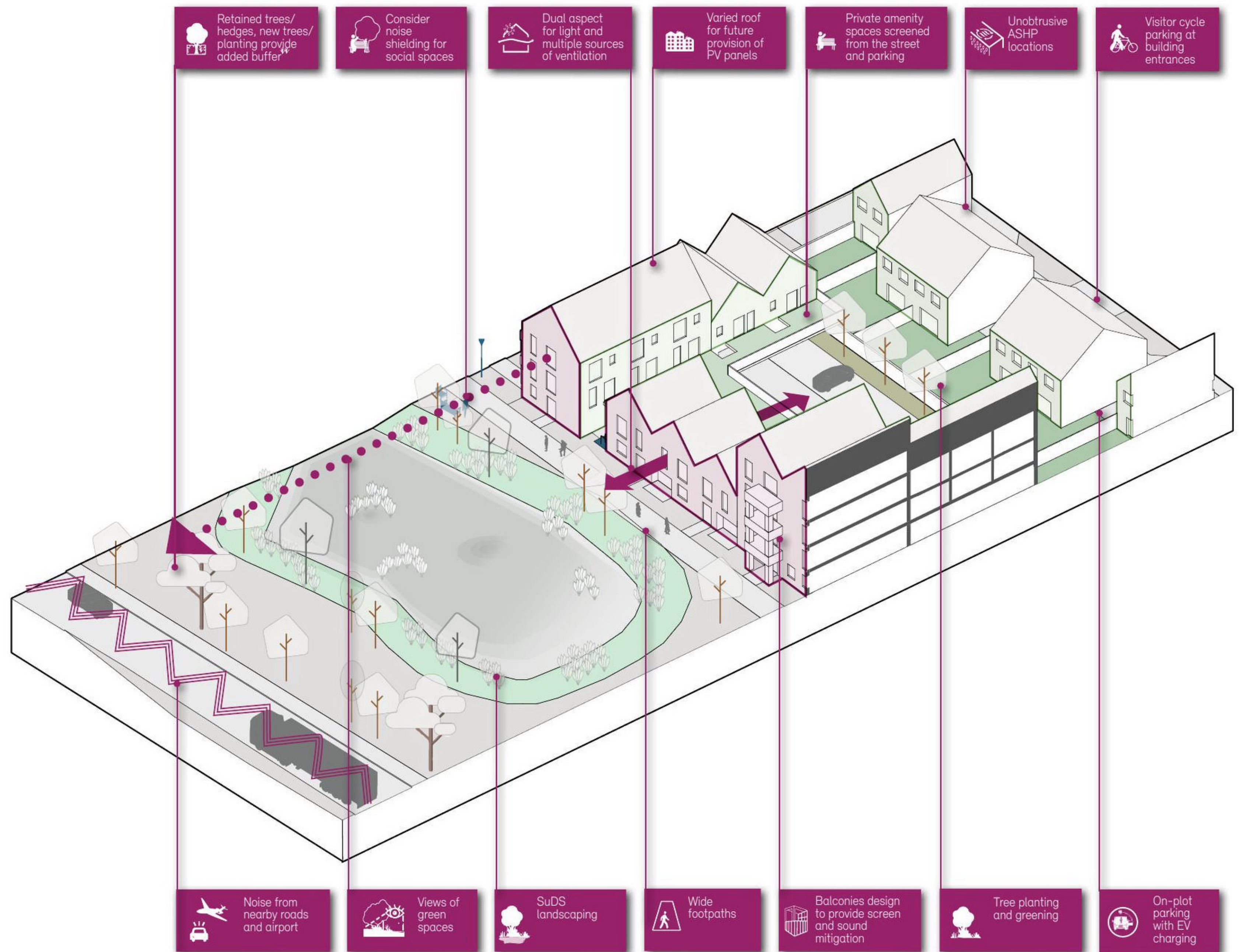
Proposals must consider climate change resilience across both buildings and landscape. This will include:

- Mitigating overheating risks for building users, prioritising passive measures e.g. dual aspects, natural ventilation strategies, and shading
- Any shading devices on proposed elevations be integrated with the window openings
- Addressing the risk of urban heat island effects and overheating in public spaces e.g. minimising hard landscaping and using cool materials, incorporating water, and including deciduous tree planting to provide shade to when it is needed
- Landscape planting selection for drought resistance
- Sustainable Drainage Systems (SuDS) to manage surface water, flood risk and designed to anticipate significant changes in rainfall.

Where there is a risk of airport or road noise, these should be addressed using passive design measures wherever possible. These include:

- Location of amenity spaces away from noise sources
- Integration of sound absorbent materials and surfaces
- Acoustic protection of balconies
- Where mechanical ventilation is unavoidable, any vents must be unobtrusively integrated into the elevation design.

Further guidance on integrating sustainable building design can be found within the [Homes and Buildings](#) section.





## Integration of services

Utility service boxes, air source heat pumps, cables, wires, flues, satellite dishes must be kept off frontage elevations and be discretely incorporated.

Vents must be carried out to match the surrounding wall finishes and be carefully coordinated with openings.

All buildings must provide sufficient internal storage to allow for the segregation of recyclable materials and food waste. Design of waste storage must not detract from the street scene.

Bin storage for waste must be screened from the public realm, and to help with this the stores should be located behind the building line.

### Energy generation

**Where air source heat pumps are used, these should be located in rear gardens, or screened from the street frontage.**

Any potential noise from pumps should be considered during the design stage and mitigated if required.

Where possible, roofs should be designed to optimise solar orientation to allow for future PV generation. Where PV panels are placed on sloping roofs these must be carefully coordinated with the building design and mounted in line with the roof finish.

Enclosure and location of service buildings such as substations must follow the Design Code.

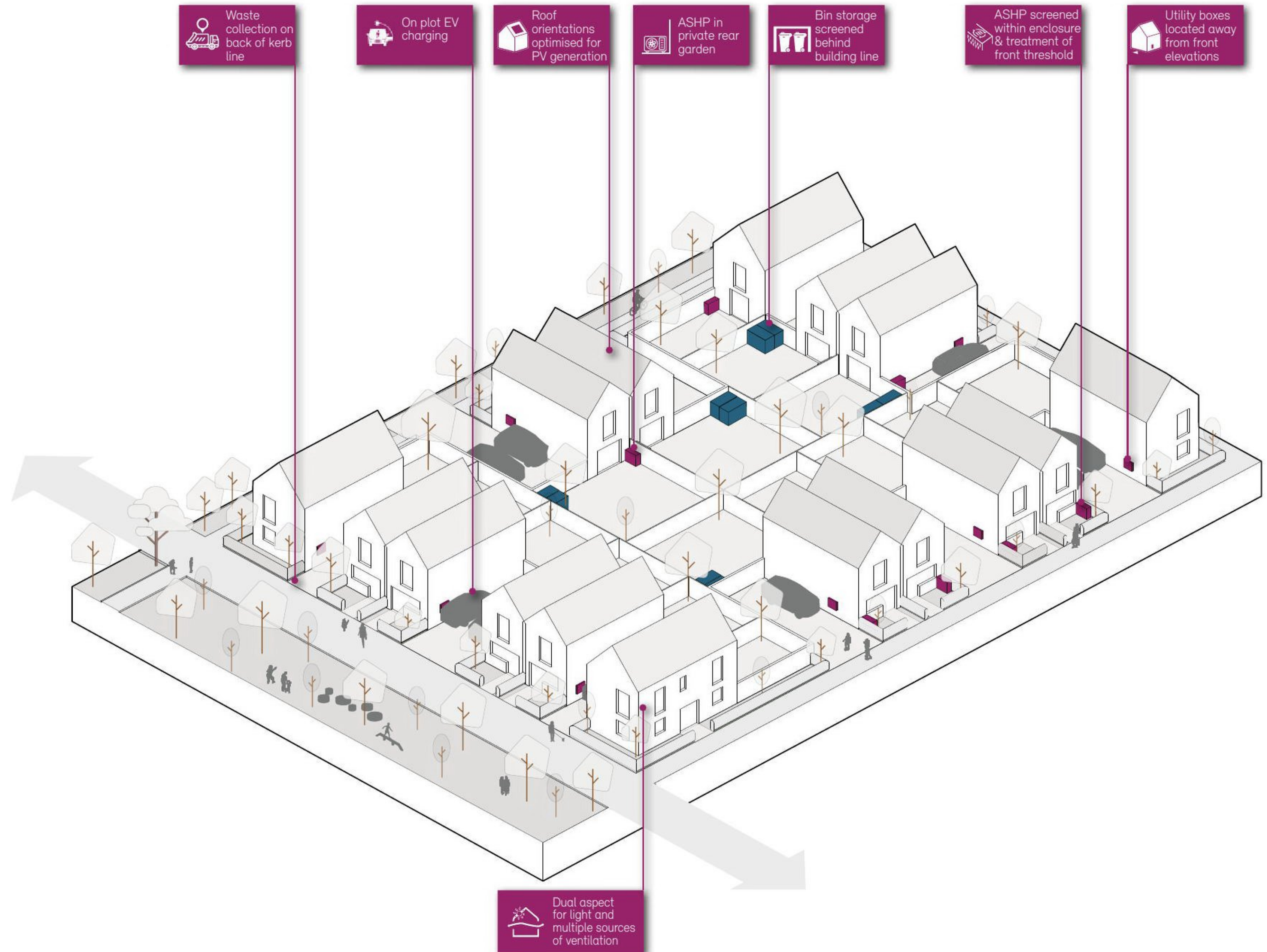
### Noise

**Where there is a risk of airport or road noise, these should be addressed using passive design measures wherever possible.**

These should include:

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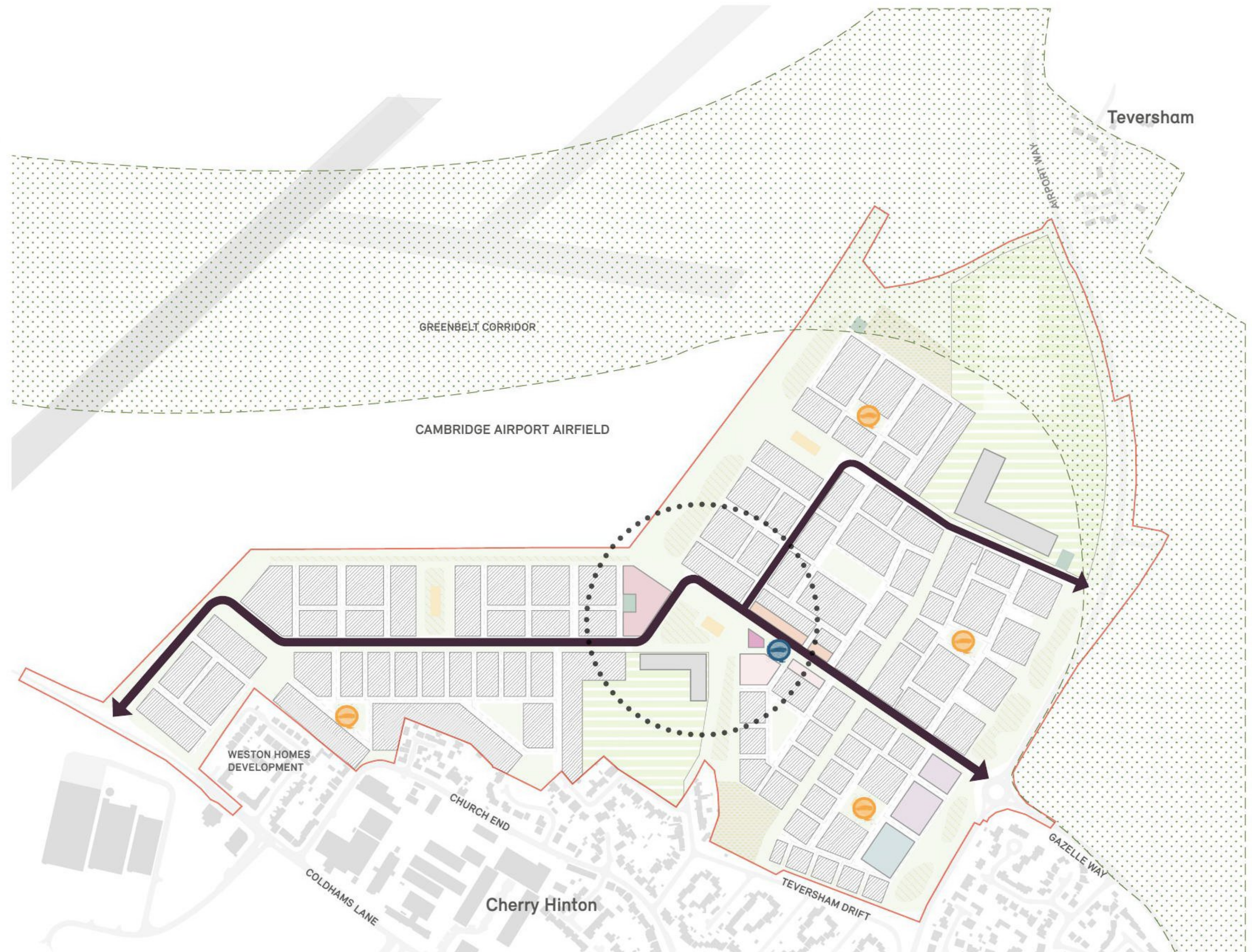
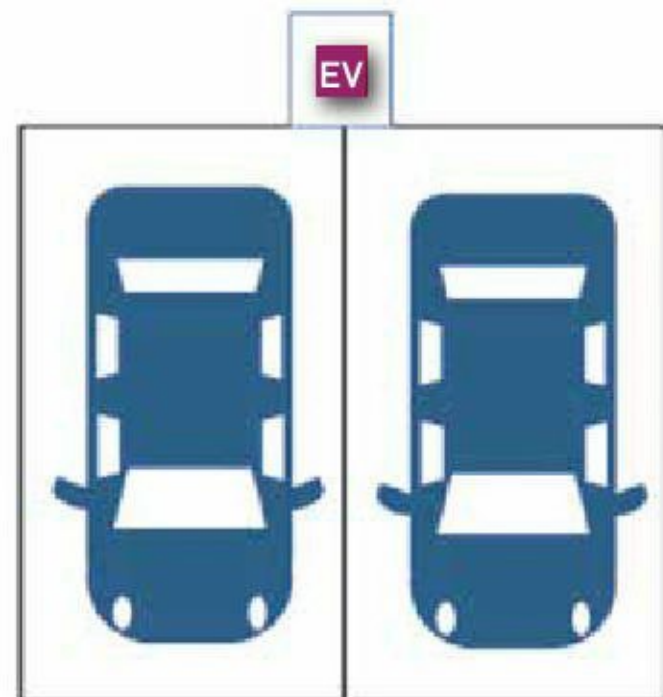




*Electric Vehicle (EV) strategy*

**Every home must include provision for charging of Electric Vehicles, with an initial minimum of 50% of the residential EV chargers active.**

Rapid charging hubs must be provided at strategic locations for the use of both residents and non-residents. A central rapid car charging hub can be provided within the market square, while other smaller hubs can be located within surrounding neighbourhoods parks.



Recommended locations for strategic Rapid Charging Hubs



# Living Communities

We have grouped the four characteristics of **Identity**, **Built Form**, **Uses** and **Homes and Buildings** under a shared heading of Living Communities.

This is to emphasise the importance to the Code of taking an integrated design approach to all aspects of building design. Buildings must be understood in the groups they form, explaining their practical and aesthetic coordination, and the streets that they create, in an integrated and coordinated way.



## Materiality

Materials will help integrate the proposal into the surrounding area by complementing the existing materials, while also reducing embodied carbon.



## Neighbourhood

Creating a design-led development, providing spaces to excite and spark local interactions and help build a strong community.



## Building design

Buildings will contribute to both the sense of identity of the individual home, and how it belongs in the street.



## Detailing

How buildings and neighborhoods are detailed, and the clarity and consistency of that detailing, is a key contributor to their character.



## Sustainable homes

Taking a design led approach to delivering high quality, low/zero carbon, affordable, adaptable, family homes fit for the future.



## Tenure blind

Providing a tenure-blind, sustainable and vibrant community that knits into the surrounding neighborhoods.



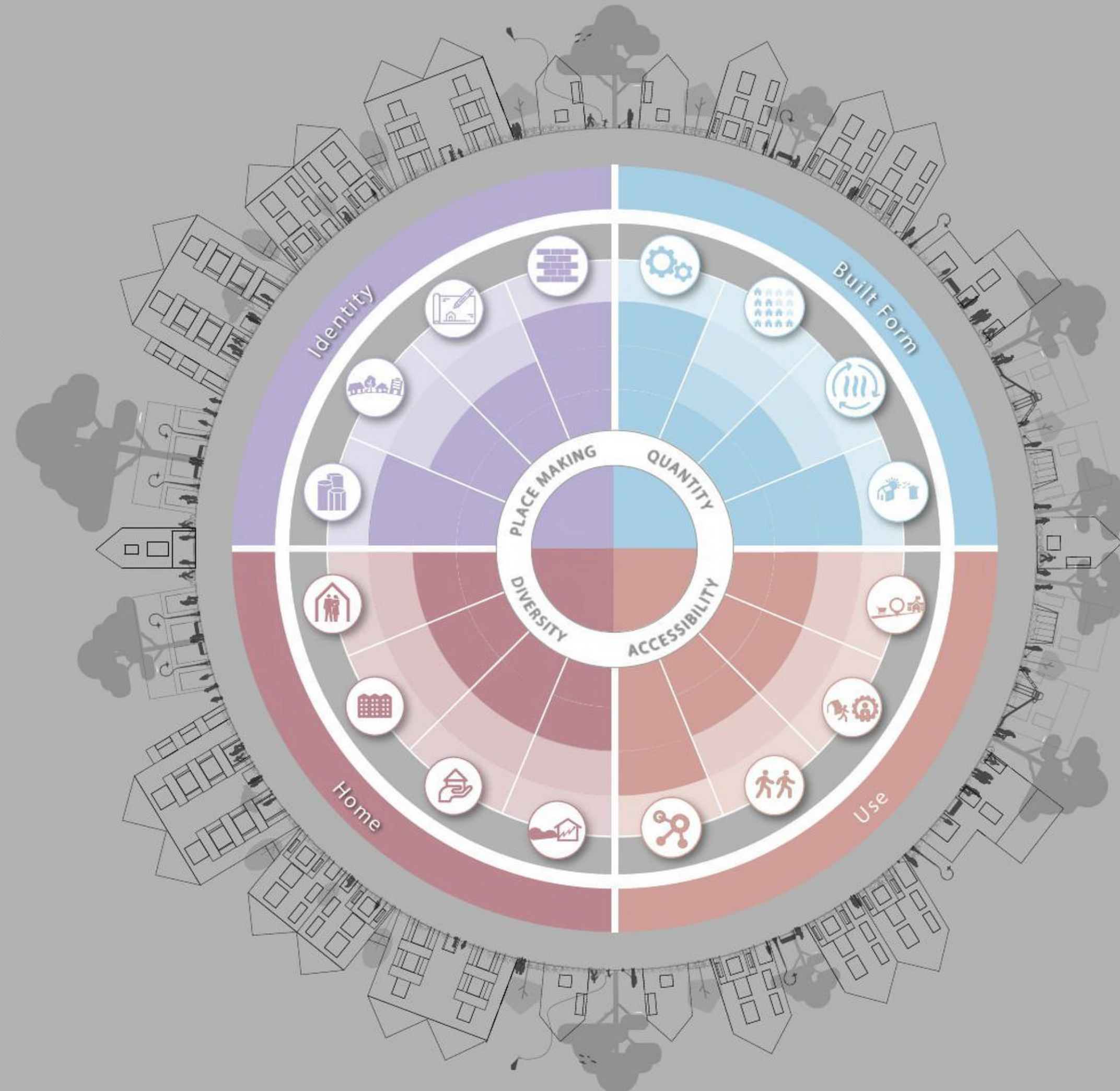
## Choice

Providing a choice of high quality homes.



## Fabric First

Fabric First design for both climate change mitigation and resilience.



## Street design

Streets and spaces will be recognisable and defined at their edges by buildings and landscape to make them easy to navigate with priority given to sustainable transport modes.



## Density

A variety of scales, and forms of development will be used as part of the distinctiveness between different low-rise urban, suburban, and rural inspired areas.



## Resource management

Renewable/circular resource management including heat, energy and water.



## Environmental sustainability

Environmental sustainability and reducing environmental impact at the heart of every design decision, including innovative technologies for energy and waste to create a sustainable community.



## Social sustainability

Create an active center with shops, schools and other 'social infrastructure'.



## Home working

Homes and neighborhoods designed for the post pandemic world with space and infrastructure to support home working.



## Accessible

Providing high quality infrastructure to connect residents with the world beyond. Prioritising sustainable transport modes.



## Amenity

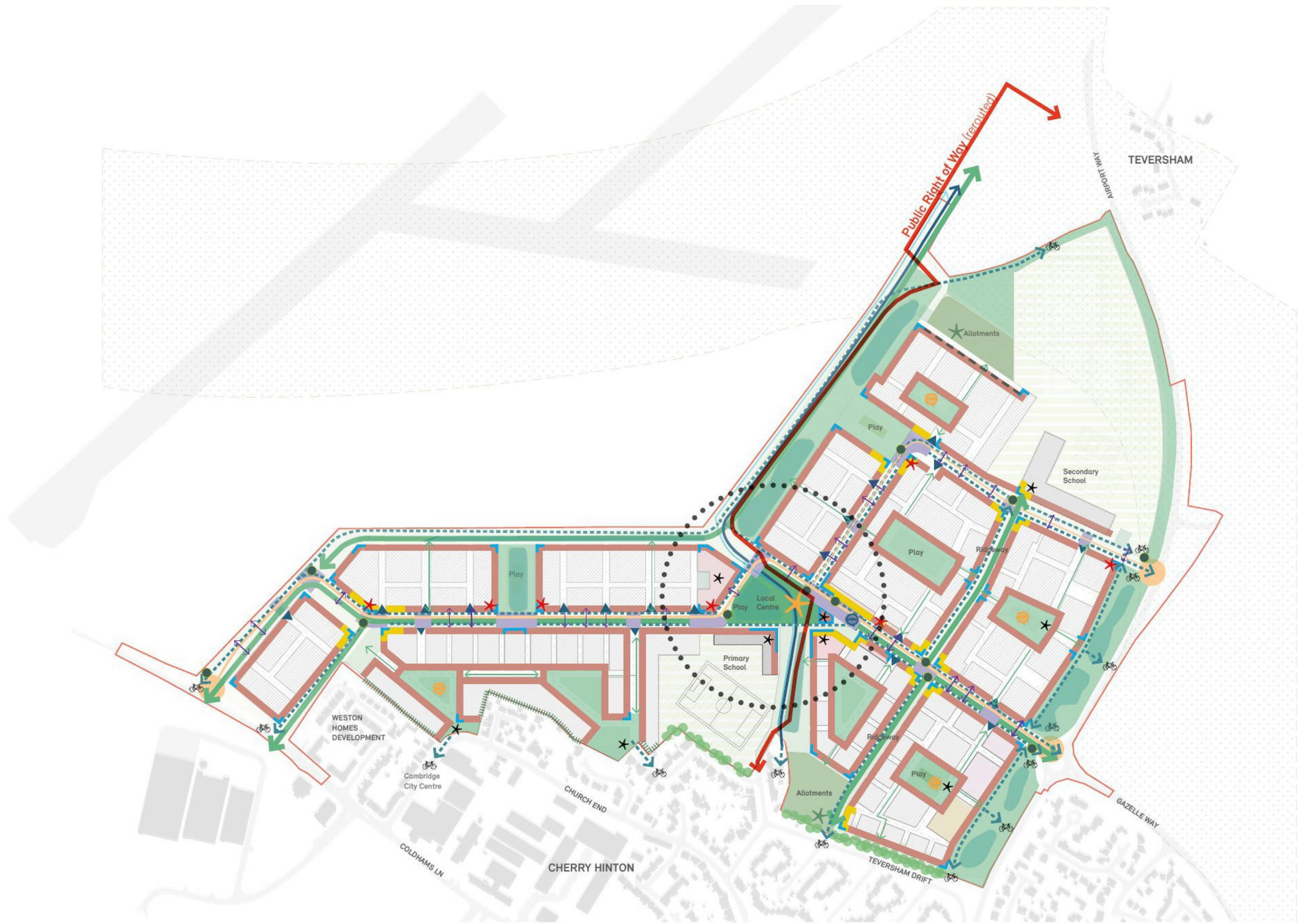
Providing spaces for local interactions and help build a strong community.



Character Area & Neighbourhood Detailed Framework

**KEY**

- Application Boundary
- Village Green
- Allotments meeting point
- Focal points
- Pinch point building location
- Large specimen tree for wayfinding
- Entrance to Neighbourhood
- Village Centre EV Chargers (Rapid Charging Hub)
- Neighbourhood Visitor Parking EV Chargers (Rapid Charging Hub)
- Continuous frontage
- Wayfinding building group
- Key corners
- Back to Back Relationship
- Exposed Frontages
- Key nodal spaces
- Crossings
- Pedestrian and Cycle routes
- Green corridors
- Public Right of Way (rerouted)
- Minimum 15m boundary garden
- Vehicular access points



Framework masterplan



## 6 Identity

LNCH will be visibly rooted in the surrounding area, bringing homes together into small neighbourhoods, each with their own character and with a village green and market square at their heart. Both building and landscape designs will have a locally inspired, refined, and contemporary details using a traditional and lasting material palette.



Marmalade Lane, Cambridge **Mole Architects**

Local character precedent, Cambridge

Accordia, Cambridge **Maccleanor Lavington**

Accordia, Cambridge **Grant Associates and FeildenCleggBradleyStudios**

Local character precedent, Cambridge

Knights Park, Eddington, North West Cambridge **Pollard Thomas Edwards and Alison Brooks Architects**

Accordia, Cambridge **Grant Associates and FeildenCleggBradleyStudios**

Abode, Cambridge **Proctor Matthews Architects**

Marmalade Lane, Cambridge **Mole Architects**

Abode, Cambridge **Proctor Matthews Architects**

Trumpington Meadows **Allies and Morrison**



# Palette of materials

## Bricks

The development should reflect the mixed use of materials in the local area. The dominant material should be brick.

Gault brick, the yellow-grey-white Cambridge brick, is highly distinctive but nonetheless includes within it an attractive variety of shades, from almost white, to pale buff and darker grey buffs.

A mixture of bricks should be used to help provide variation across the development. The brick palette opposite illustrates a range of yellow-grey-white shades, including light and dark tones – alongside soft reds. It also shows the importance of mortar choices.

## Accent materials

The brick selection should be combined and composed with the other accent materials on the palette. Accent materials and decorative techniques should be used generously and with consistency – creating families of accent buildings and focal points, rather than isolated decorative flourishes.

- Bricks can be contrasted to create decorative patterns.
- Weatherboarding, reflecting its use in rural and agricultural buildings in the area. Boarding finishes should have dark or natural tones.
- Tile/shingle hanging can also be used. Where openings appear within areas of tile/shingle hanging the window opening must be consistently lined to provide a crisp edge detail.
- Render can only be used on small low-rise buildings, and must be carefully detailed with lined openings.
- Where cast masonry stone is used, for example around window openings, this must be contemporary in detail.

## Roofs

Roof materials must be selected to harmonise or provide an attractive contrast with the host building.

Roof finishes should generally be varied to give a variety of textures and tones across the development, including the use of plain and pan tiles.

Standing seam roofing reflects agricultural precedents, providing a versatile finish that can be laid at varying roof pitches, as well as used as a wall finish. It should be used with the Village character area, for example on focal point buildings.

Roof verges and eaves must all be detailed to be consistent, unfussy and contemporary.

Rainwater goods and other metalwork must be simple and contemporary in character and colour-matched or otherwise harmonised.

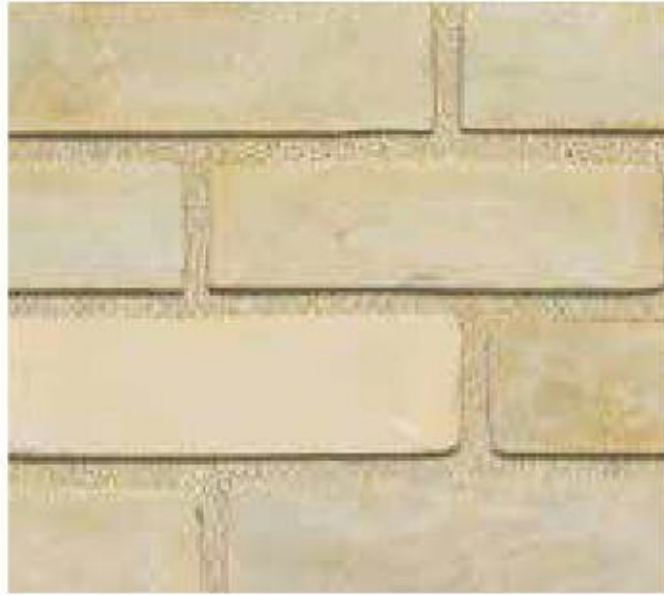
## Other materials

The material palette opposite is not intended to be exhaustive. The palette can be added to with other quality materials where these support the character of the development.

## Dominant material



Light buff brick with light mortar



Light buff brick with matching mortar



Mid buff brick with matching mortar



Gault brick - Light

## Accent materials



Soft light red brick



Dark grey brick



Decorative brick bonds



Masonry surround



Dark painted boarding/painted weatherboard



Shingles



Mortared roof verge



Dark tiles

## Roof materials



Mottled red pan tiles



Dark grey roof tiles



Folded standing seam roof and walls



Tiles across roof and walls



## Using materials

Decoration and accent materials should be used to help emphasise important frontages where they appear at key moments in the masterplan, such as when enclosing neighbourhood squares, at focal points and at street corners.

The use of materials, and changes in materials and decoration, should be used to create a plot-based rhythm, and to help explain the structure of the underlining form such as its roof, or how it meets the ground, or to give prominence to entrances or other important architectural openings.

Materials and decoration should be used coherently to create visual interest, richness, and texture, and create a degree of complexity to create attractive facades from both near and far.

### *Detailing*

**Detailing should be contemporary and unfussy. This will be a key contributor to building character, and should be consistent through all details.**

Examples of the detail quality expected by the code are illustrated opposite.

In order to ensure development quality, critical details and a materials must be provided as part of reserved matters applications, including:

- Window reveals, sills and heads
- Roof eaves and verges
- Decorative features
- Materials.

This should form a materials and details strategy, and can act as a 'details handbook' to guide the specification of materials and details during the discharge of condition stage.

Details should be provided at 1:5 unless agreed otherwise.

A varied brick palette used to emphasise a plot based, finer grain rhythm. Generous window reveals framed with accent material create modelling and depth. Marmalade Lane, Cambridge **Mole Architects**

**Pollard Thomas Edwards**





## Windows

**Windows at Cherry Hinton North must be simple, elegant and contemporary with slim profiles using a minimum number of mullions and transoms to be functional.**

The location and design of window openings must be composed as part of the street design – creating animated street frontages, well overlooked public spaces, and a clear hierarchy of openings.

Window design must optimise daylight, sunlight and natural ventilation within the building.

Stuck-on glazing bars, fake sash windows, and ad-hoc combinations of varying or fat profile depths must not be used.

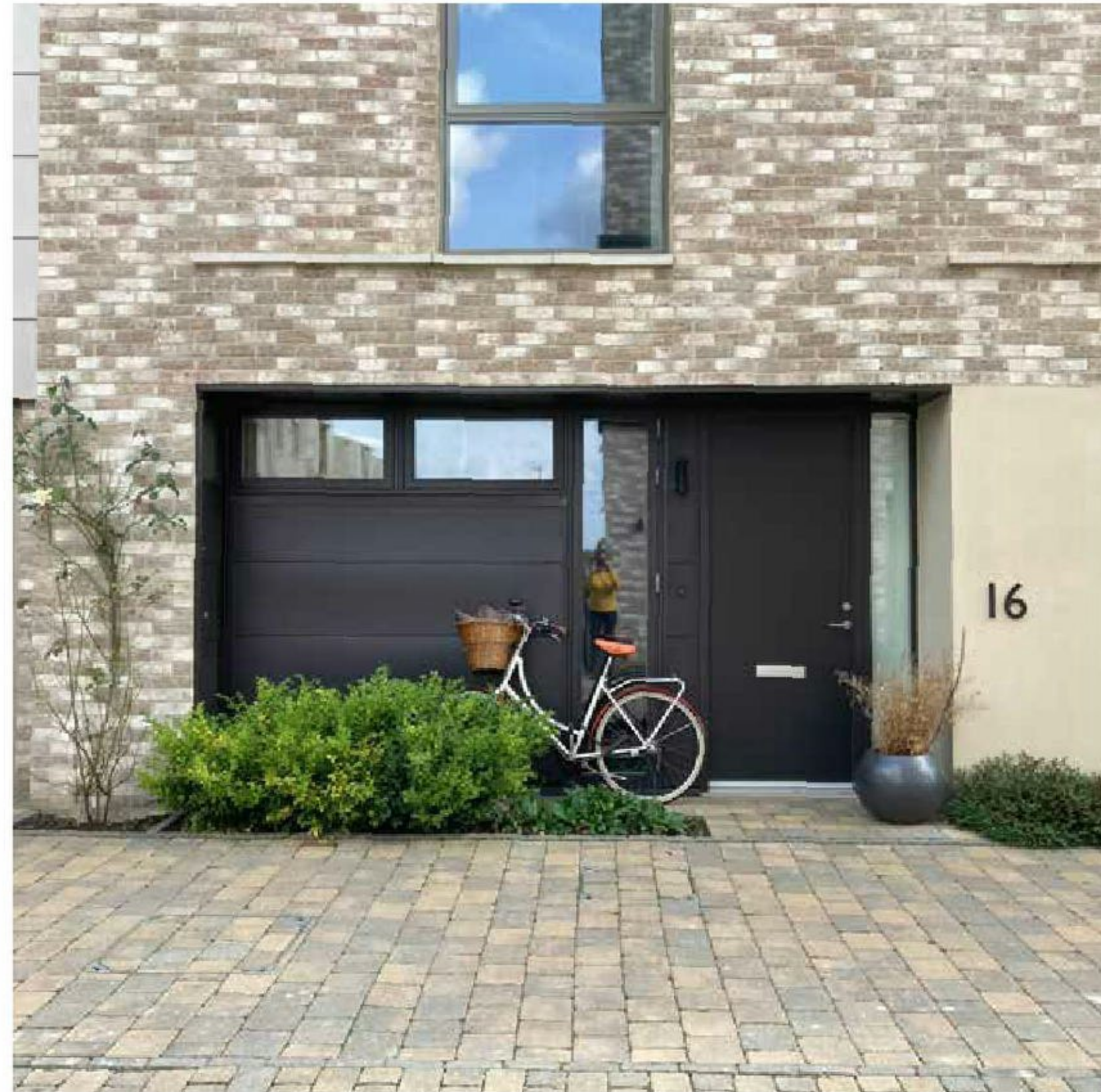
All openings should be recessed a minimum of 90mm from the face of the building elevation (with the exception or timber-clad or tile-hung buildings with lined openings). Larger apartments and forms should consider deeper reveals to increase façade modelling and depth.

As part of climate change resilience, window design must consider overheating risks, prioritising well integrated passive design measures for openings such as:

- Orientation and dual aspect to achieve effective cross ventilation
- Landscape planting, street design as well as
- Building modelling, including deep reveals
- Burglar resistance, for example secure night ventilation.

Mechanical ventilation would be provided within habitable rooms where internal noise levels considered unacceptable.

Roofs must be designed at the planning stage to maximise solar generation potential and to avoid unsightly and contorted flashing details and intrusive untidy rainwater goods.



Thoughtfully composed entrance on a mews. Knights Park, Eddington **Pollard Thomas Edwards and Alison Brooks Architects**



Simple window openings and feature entrances. Knights Park **Pollard Thomas Edwards and Alison Brooks Architects**



Special corner window. The Avenue, Saffron Walden **Pollard Thomas Edwards**



Window with integrated ventilation screen. Future Homes, Passivhaus, Southwark **Maccleanor Lavington**



Recessed lined entrance. Marmalade Lane, Cambridge **Mole Architects**



Patterned brickwork highlighting individual homes. Abode, Cambridge **Proctor Matthews Architects**



X Pastiche building components



X Pastiche building components



X Pastiche building components



X Pastiche building components