

# 04.10 Primary Street 3

This street typology represents a variation where the street transitions between character areas. It features a 6.2m wide carriageway and is designed to accommodate a frequently used bus route.

The active travel route, enables large verges to be included with the potential of sustainable urban drainage. The continuation of a 1m wide planting strip follows the residential development, intended to be landscaped with a hedgerow and shrub planting.

## Planting Guidance

- Regularly spaced trees within verge
- Verge to be grass or meadow flower mix
- Tree planting to be regularly spaced and/or in a coordinated manner

## Material Guidance

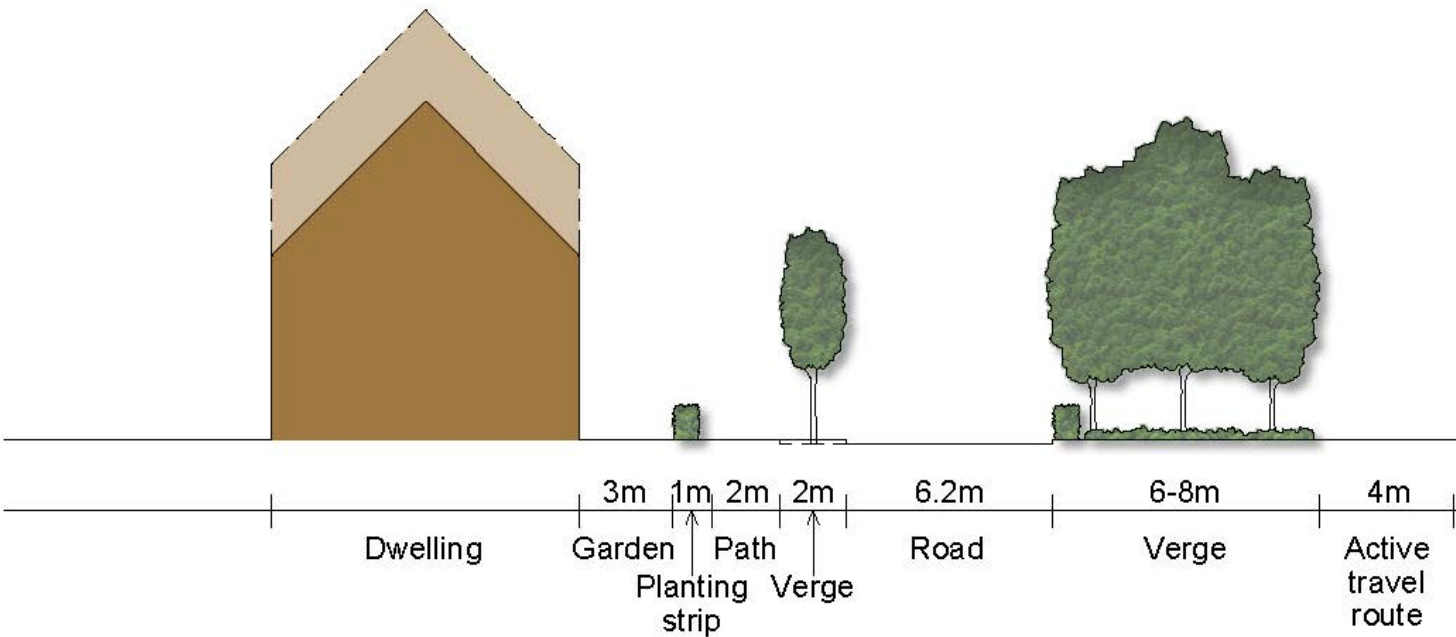
- The majority of the carriageway should be tarmac with the use of block paving and planting where there are raised tables, nodal spaces, crossings and traffic calming features.

## Parking Guidance

- Parking to be provided, to the side of the plot allowing residents direct access.

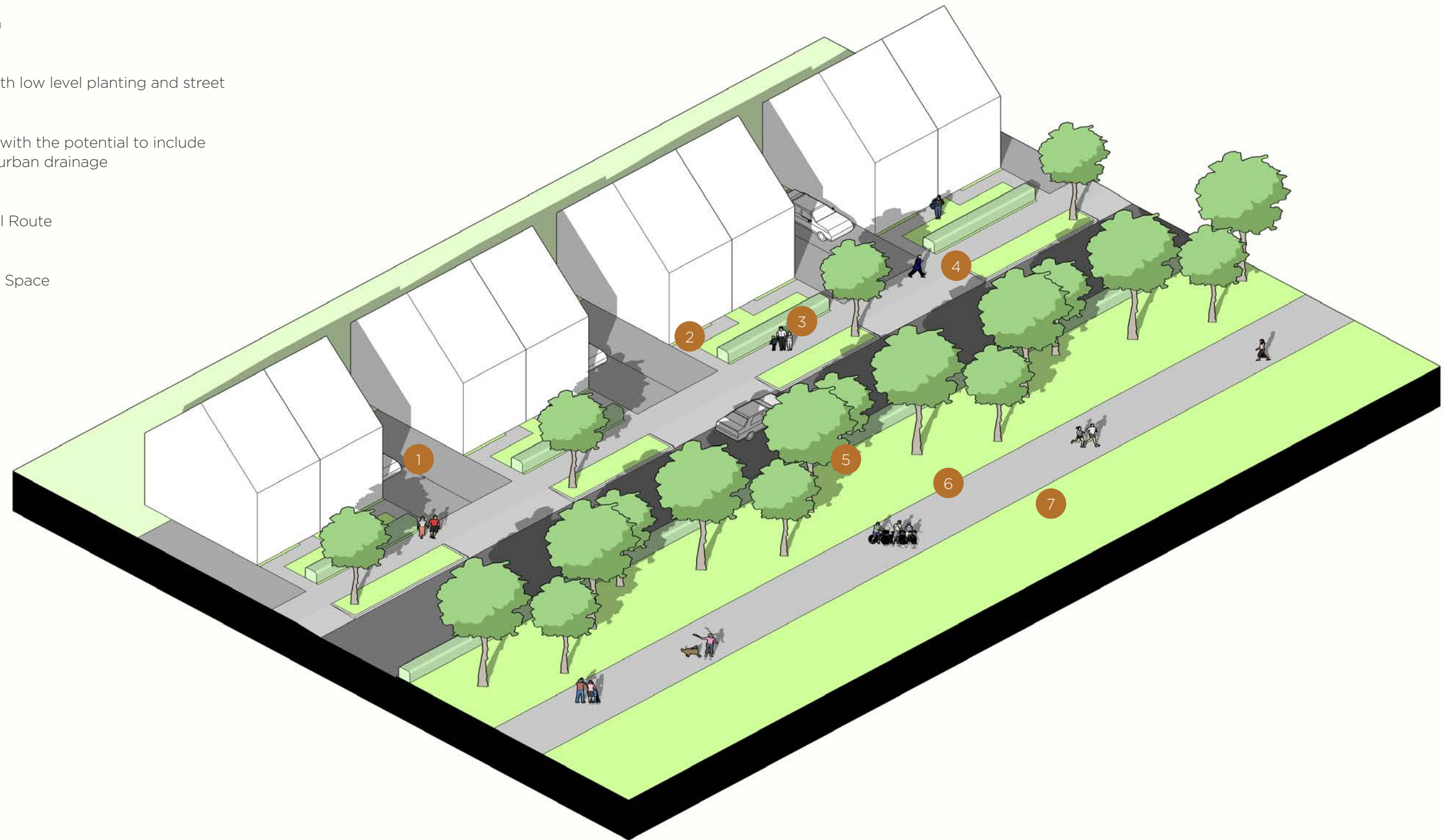


| Technical Specification |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Type                    | Two way street                                                                                                        |
| Carriage width          | 6.2m carriage way                                                                                                     |
| Verge                   | 2-8m double sided verge with low level planting and street trees. The potential to include sustainable urban drianage |
| Green street element    | Planting/hedge to garden fronts                                                                                       |
| Footpath                | 3-4m on both sides                                                                                                    |
| Cycle path              | On footpath                                                                                                           |
| Bus Route               | Yes                                                                                                                   |
| Bus Stop                | N/A                                                                                                                   |
| Design Speed            | 20mph                                                                                                                 |
| Road Marking            | White Lining                                                                                                          |
| Visitor Parking         | N/A                                                                                                                   |
| Traffic Calming         | Raised tables or build outs                                                                                           |
| Dwelling Setback        | 8m from back of carriageway                                                                                           |
| Direct Access           | Yes                                                                                                                   |
| Junction Visibility     | 2.4m                                                                                                                  |
| Forward Visibility      | 25m                                                                                                                   |





- 1 Parking to the side of the plot
- 2 Large front gardens with a 1m planting strip
- 3 2m footpath
- 4 2m verge with low level planting and street trees
- 5 6-8m verge with the potential to include sustainable urban drainage
- 6 Active Travel Route
- 7 Public Open Space





# 04.11 Secondary Street

The secondary street transitions to a 5-5.5m wide carriageway without verges, incorporating alternative parking arrangements. Low-level planting and regularly spaced trees are proposed along the street to enhance its character.

### Planting Guidance

- Front gardens to be grass
- Tree planting to be regularly spaced and/or in a coordinated manner

### Material Guidance

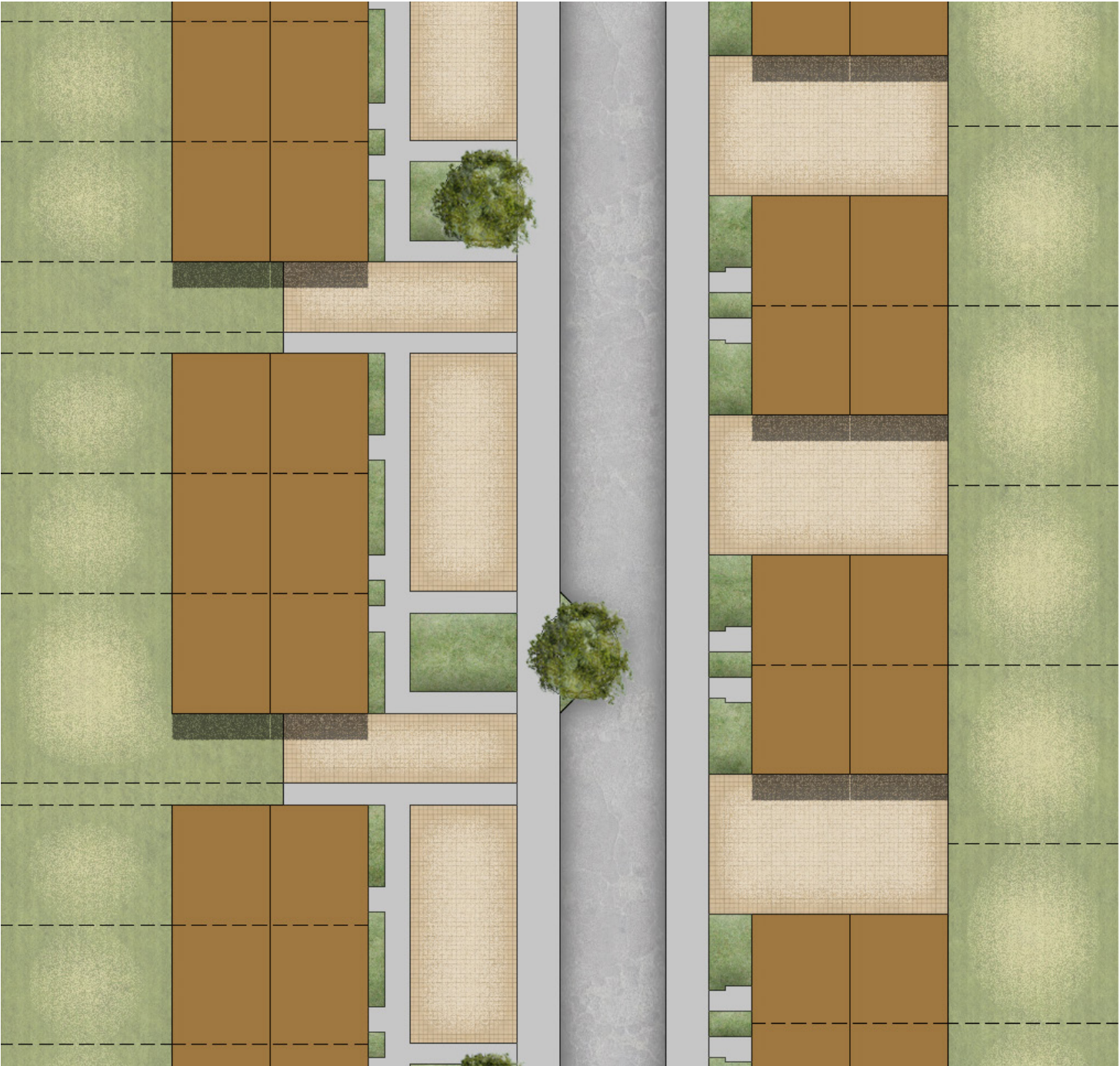
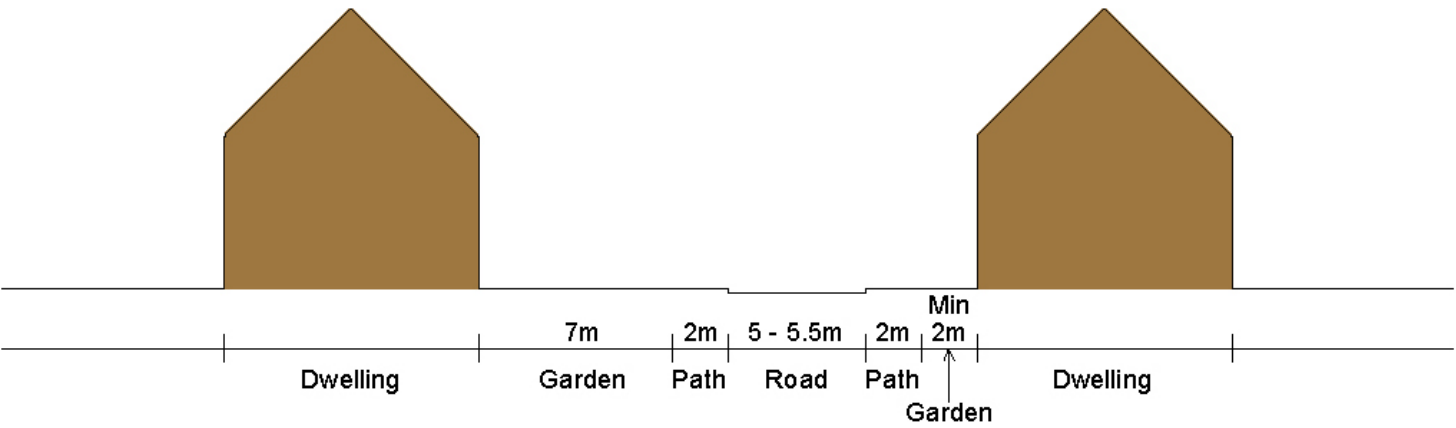
- The majority of the carriageway should be tarmac with the use of block paving and planting where there are raised tables, nodal spaces, crossings and traffic calming features.

### Parking Guidance

- Alternating parking to be provided, to the side of the plot as well as frontage parking.

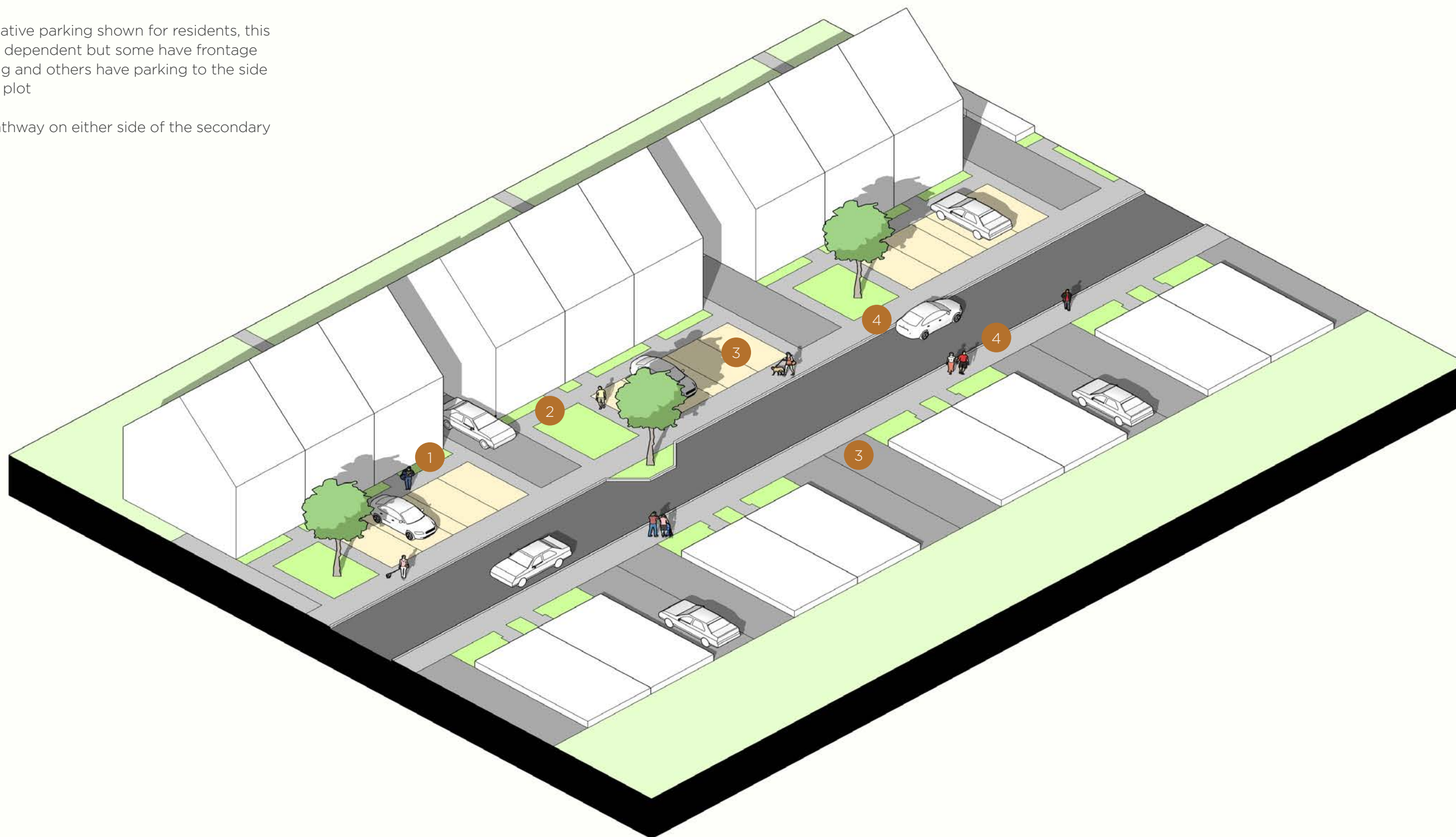


| Technical Specification |                                                                |
|-------------------------|----------------------------------------------------------------|
| Type                    | Two way street                                                 |
| Carriage width          | 5-5.5m carriage way                                            |
| Verge                   | N/A                                                            |
| Green street element    | Low level planted garden fronts, with regularly planted trees. |
| Footpath                | 2m on both sides                                               |
| Cycle path              | On Street                                                      |
| Bus Route               | N/A                                                            |
| Bus Stop                | N/A                                                            |
| Design Speed            | 20mph                                                          |
| Road Marking            | White Lining                                                   |
| Visitor Parking         | N/A                                                            |
| Traffic Calming         | Raised tables or build outs                                    |
| Dwelling Setback        | 4-9m from back of carriageway                                  |
| Direct Access           | Yes                                                            |
| Junction Visibility     | TBC                                                            |
| Forward Visibility      | TBC                                                            |





- 1 1m low level planting to front dwellings
- 2 1m footpath to dwellings
- 3 Alternative parking shown for residents, this is plot dependent but some have frontage parking and others have parking to the side of the plot
- 4 2m pathway on either side of the secondary street





# 04.12 Tertiary Streets

The tertiary street transitions to a 7m shared surface carriageway with no verges and alternative parking provision. The inclusion of low level planting and regularly spaced trees to be plotted.

### Planting Guidance

- Front gardens to be grass
- Tree planting to be regularly spaced and/or in a coordinated manner

### Material Guidance

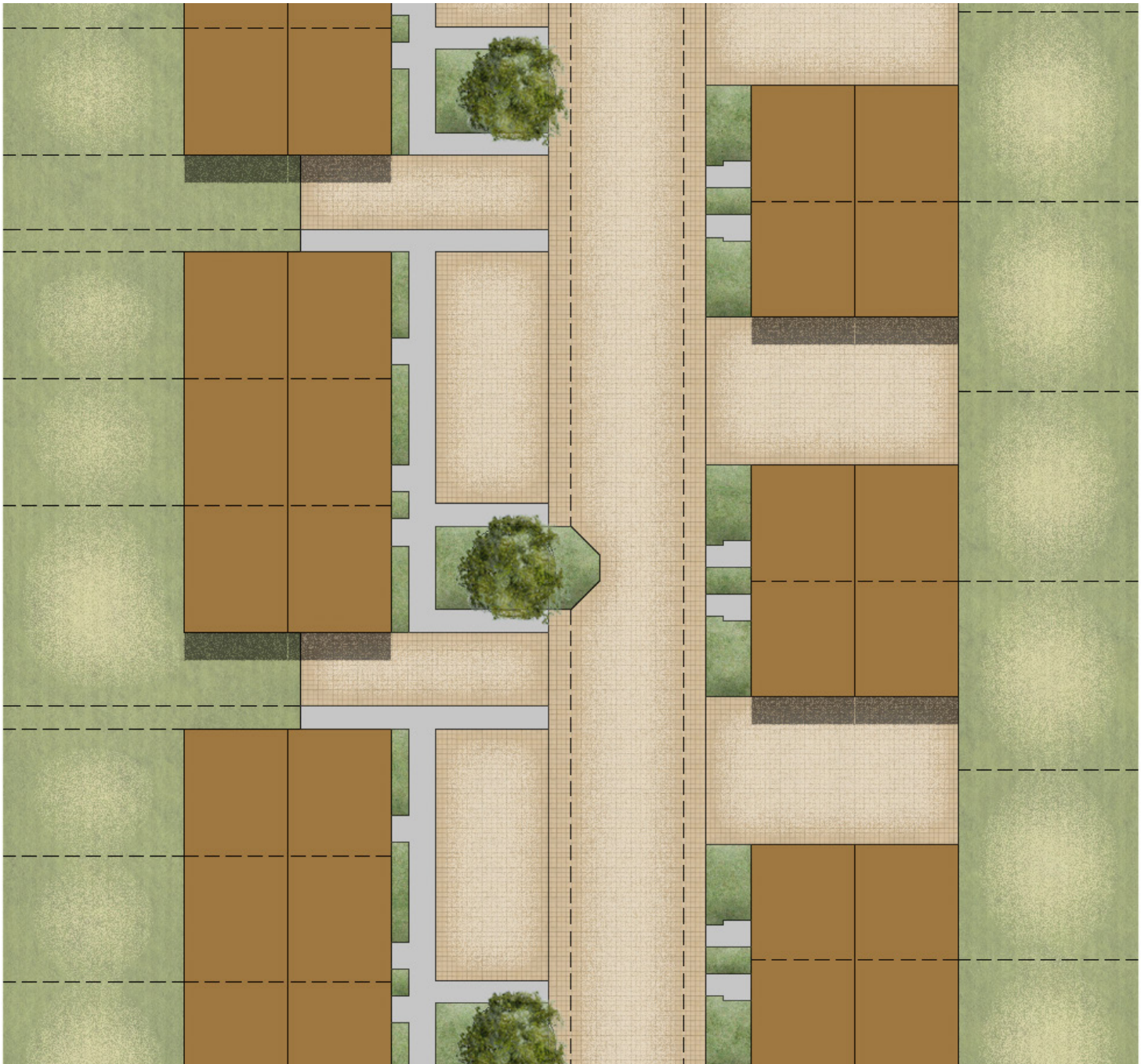
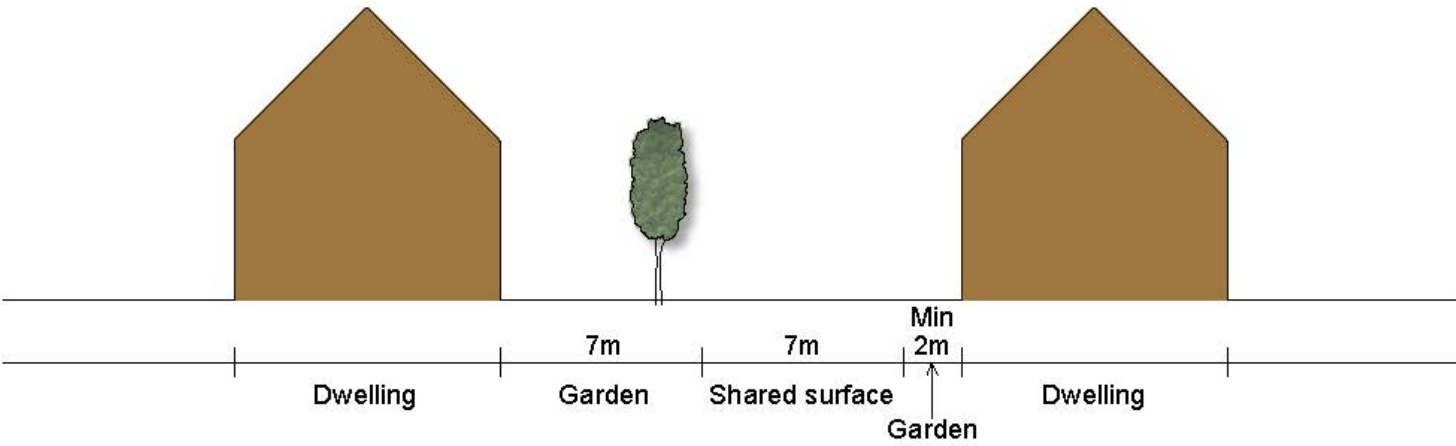
- The majority of the carriageway should be block paving.

### Parking Guidance

- Alternating parking to be provided, to the side of the plot as well as frontage parking.

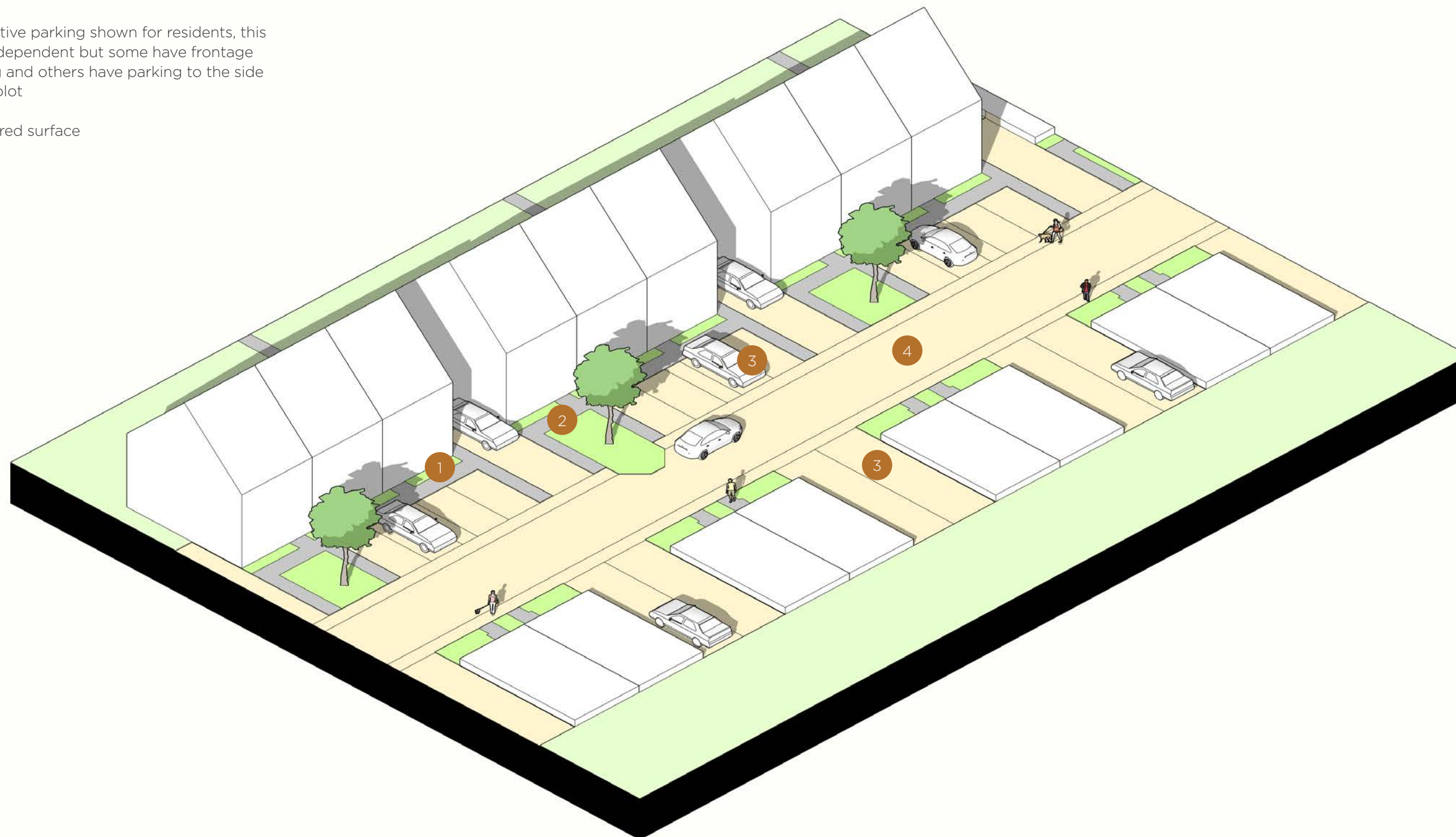


| Technical Specification |                                                                |
|-------------------------|----------------------------------------------------------------|
| Type                    | Two way street                                                 |
| Carriage width          | 7m carriage way                                                |
| Verge                   | N/A                                                            |
| Green street element    | Low level planted garden fronts, with regularly planted trees. |
| Footpath                | On Street                                                      |
| Cycle path              | On Street                                                      |
| Bus Route               | N/A                                                            |
| Bus Stop                | N/A                                                            |
| Design Speed            | 20mph                                                          |
| Road Marking            | Block Paving                                                   |
| Visitor Parking         | N/A                                                            |
| Traffic Calming         | Raised tables or build outs                                    |
| Dwelling Setback        | 2-7m from back of carriageway                                  |
| Direct Access           | Yes                                                            |
| Junction Visibility     | TBC                                                            |
| Forward Visibility      | TBC                                                            |





- 1 1m low level planting to front dwellings
- 2 1m footpath to dwellings
- 3 Alternative parking shown for residents, this is plot dependent but some have frontage parking and others have parking to the side of the plot
- 4 7m shared surface





# 04.13 Perimeter Street 1

The perimeter street narrows to a 5m carriageway, featuring single sided residential development. Low-level planting is introduced in front of the dwellings, providing outlooks onto existing trees and hedgerows

## Planting Guidance

- Front gardens to be grass

## Material Guidance

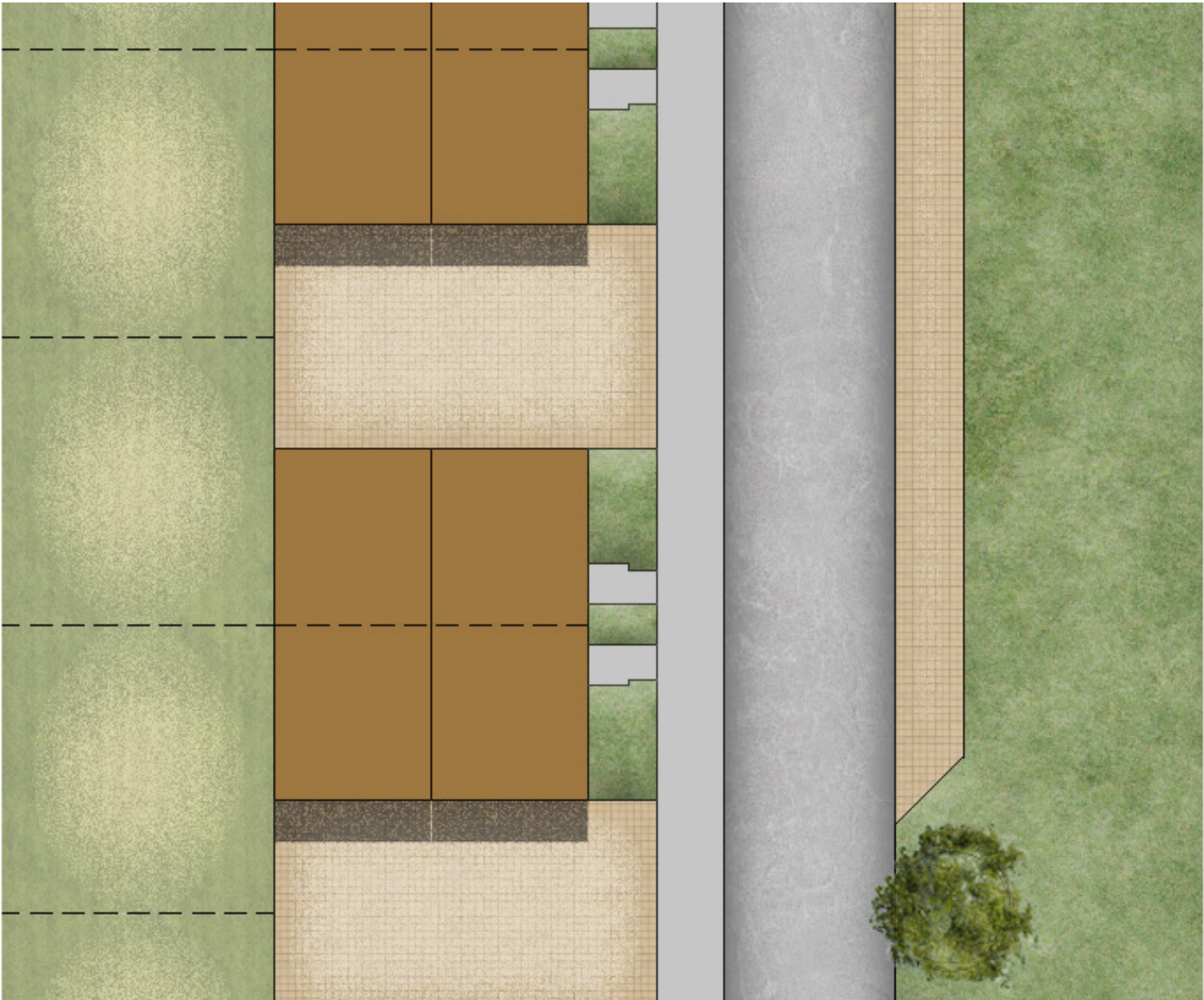
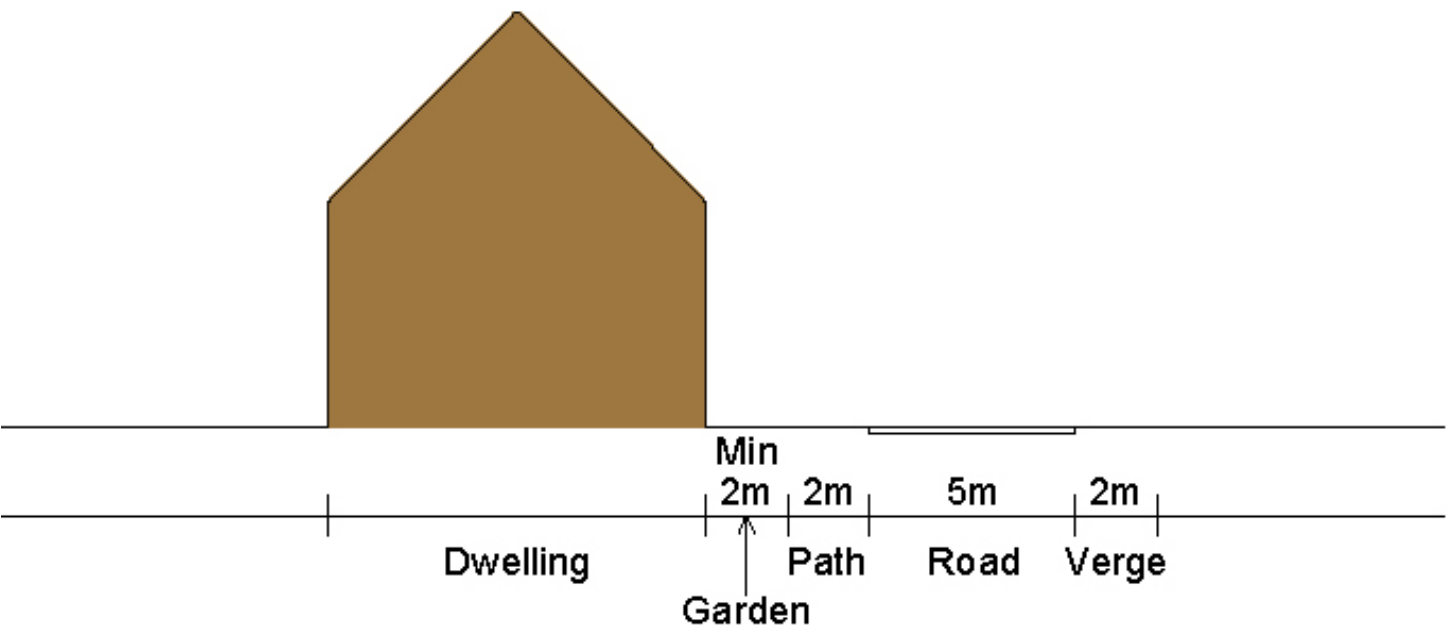
- The majority of the carriageway should be tarmac with the use of block paving and planting where there are raised tables, nodal spaces, crossings and traffic calming features.

## Parking Guidance

- Parking to be provided, to the side of the plot allowing residents direct access.



| Technical Specification |                                 |
|-------------------------|---------------------------------|
| Type                    | Two way street                  |
| Carriage width          | 5m carriage way                 |
| Verge                   | 2m verge with parking           |
| Green street element    | Low level planted garden fronts |
| Footpath                | On Street                       |
| Cycle path              | On Street                       |
| Bus Route               | N/A                             |
| Bus Stop                | N/A                             |
| Design Speed            | 20mph                           |
| Road Marking            | White lining                    |
| Visitor Parking         | Yes                             |
| Traffic Calming         | Raised tables or build outs     |
| Dwelling Setback        | 4m from back of carriageway     |
| Direct Access           | Yes                             |
| Junction Visibility     | TBC                             |
| Forward Visibility      | TBC                             |



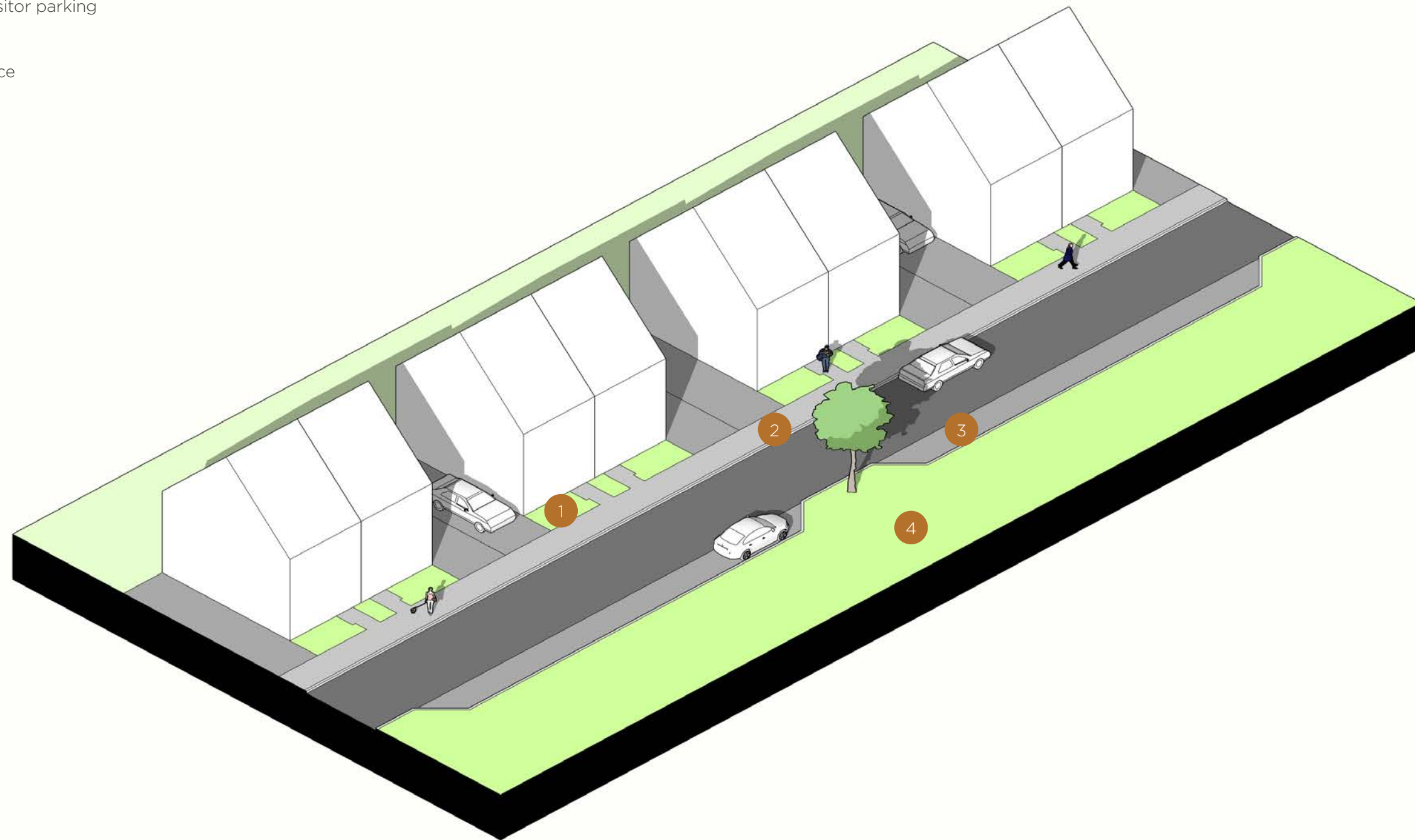


1 2m low level planting to front dwellings

2 2m footpath

3 2m verge with visitor parking

4 Public Open Space





# 04.14 Perimeter Street 2

The perimeter street narrows to a 5m carriageway, accommodating single sided residential development with views over the Green Belt, natural landscaping, and recreational spaces. Dwellings will feature low-level planting, regularly spaced trees, and individual hedges to enhance the streetscape.

- Planting Guidance
- Large front gardens to be grass, with low level planting
- Hedgerows on either side of the road to create a separation between public and private spaces.
- Tree planting to be regularly spaced and/or in a coordinated manner

### Material Guidance

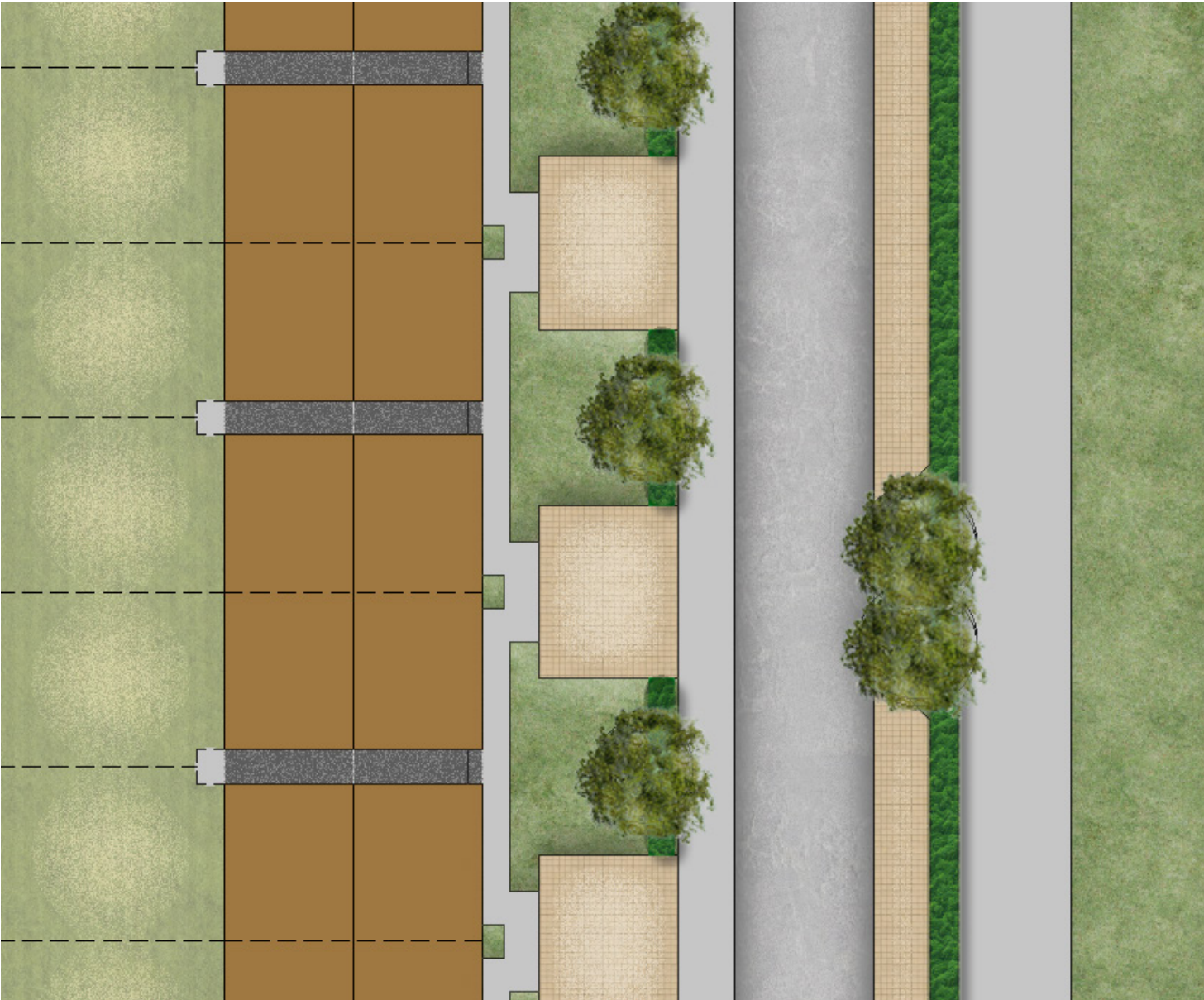
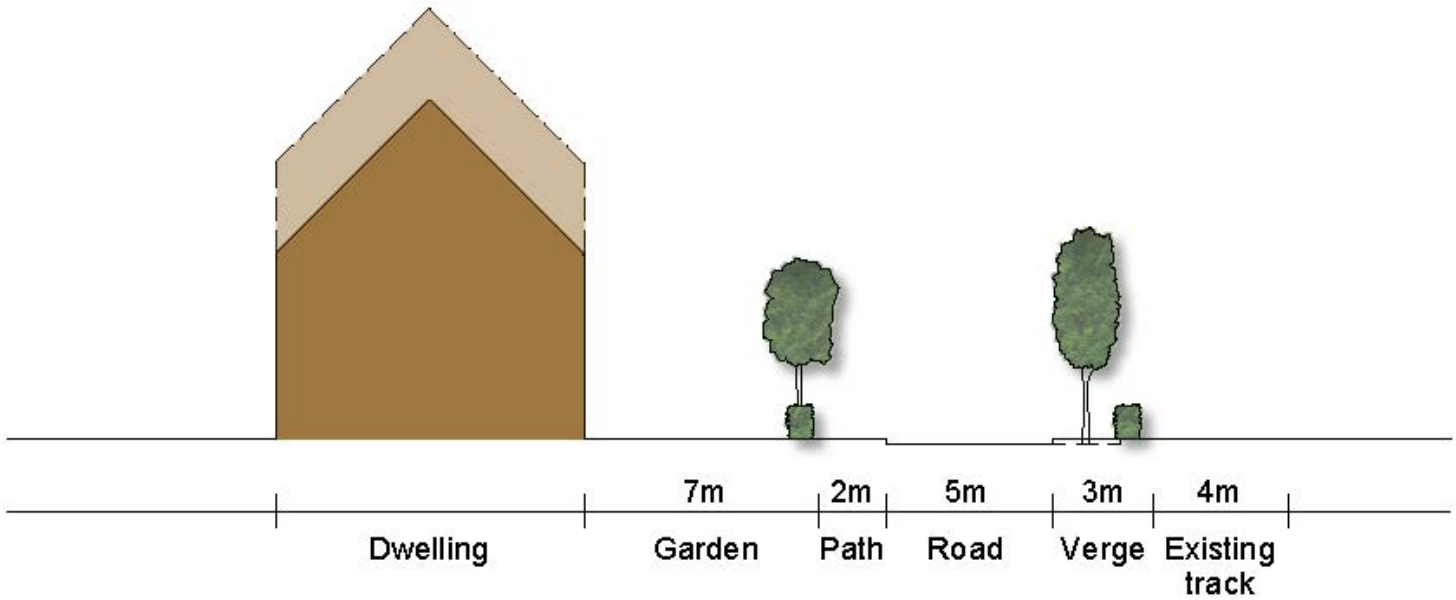
- The majority of the carriageway should be tarmac with the use of block paving and planting where there are raised tables, nodal spaces, crossings and traffic calming features.

### Parking Guidance

- Frontage parking to be provided, with additional spaces on the other side of the road.

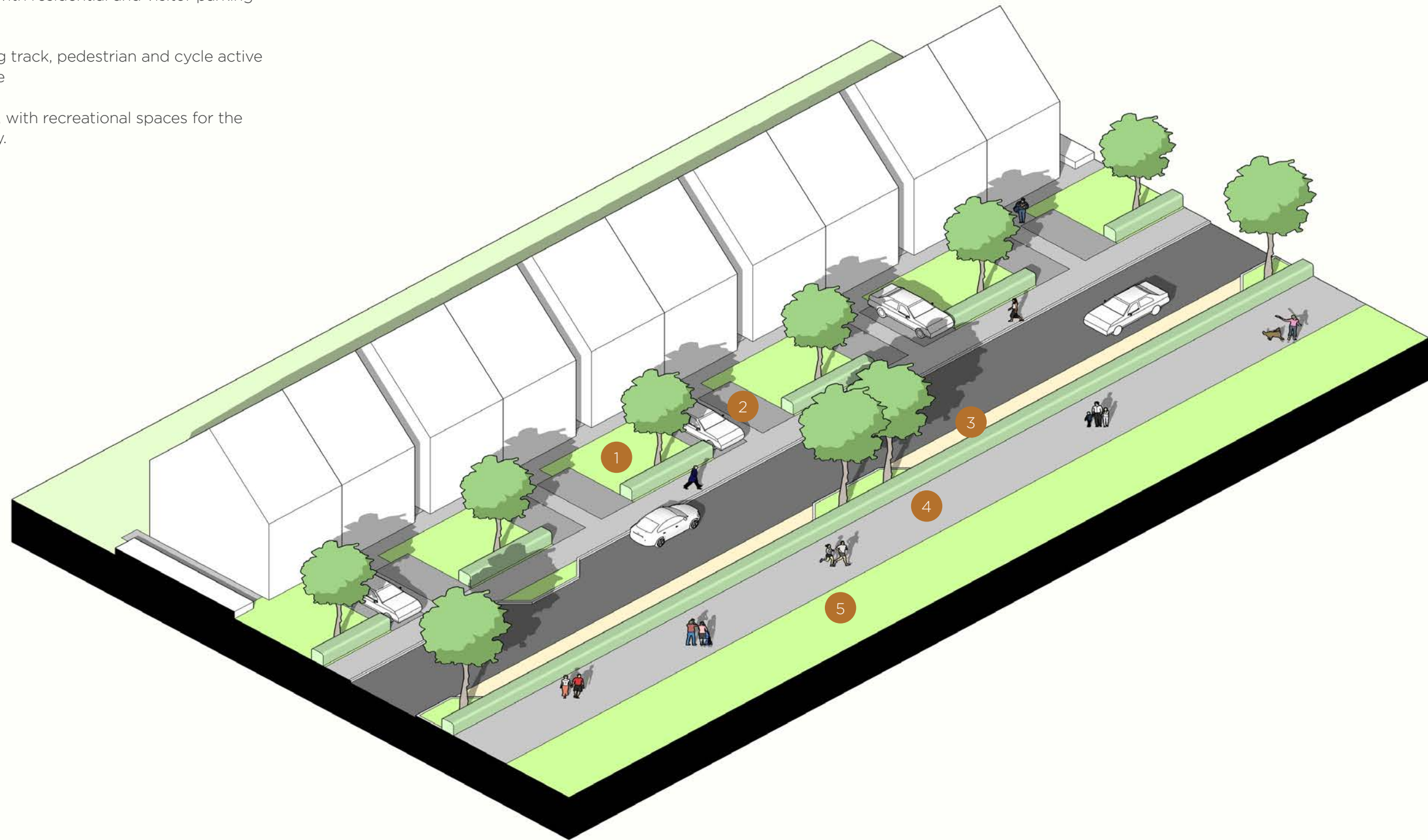


| Technical Specification |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| Type                    | Two way street                                                             |
| Carriage width          | 5m carriage way                                                            |
| Verge                   | 2m verge with parking                                                      |
| Green street element    | Large garden fronts with low level planting, with regularly planted trees. |
| Footpath                | 2-4m footpath on either side                                               |
| Cycle path              | On footpath                                                                |
| Bus Route               | N/A                                                                        |
| Bus Stop                | N/A                                                                        |
| Design Speed            | 20mph                                                                      |
| Road Marking            | White lining                                                               |
| Visitor Parking         | Yes                                                                        |
| Traffic Calming         | Raised tables or build outs                                                |
| Dwelling Setback        | 7-9m from back of carriageway                                              |
| Direct Access           | Yes                                                                        |
| Junction Visibility     | TBC                                                                        |
| Forward Visibility      | TBC                                                                        |





- 1 Large front gardens with low level planting, hedges and trees
- 2 Frontage parking
- 3 2m verge with residential and visitor parking
- 4 4m existing track, pedestrian and cycle active travel route
- 5 Green belt, with recreational spaces for the community.

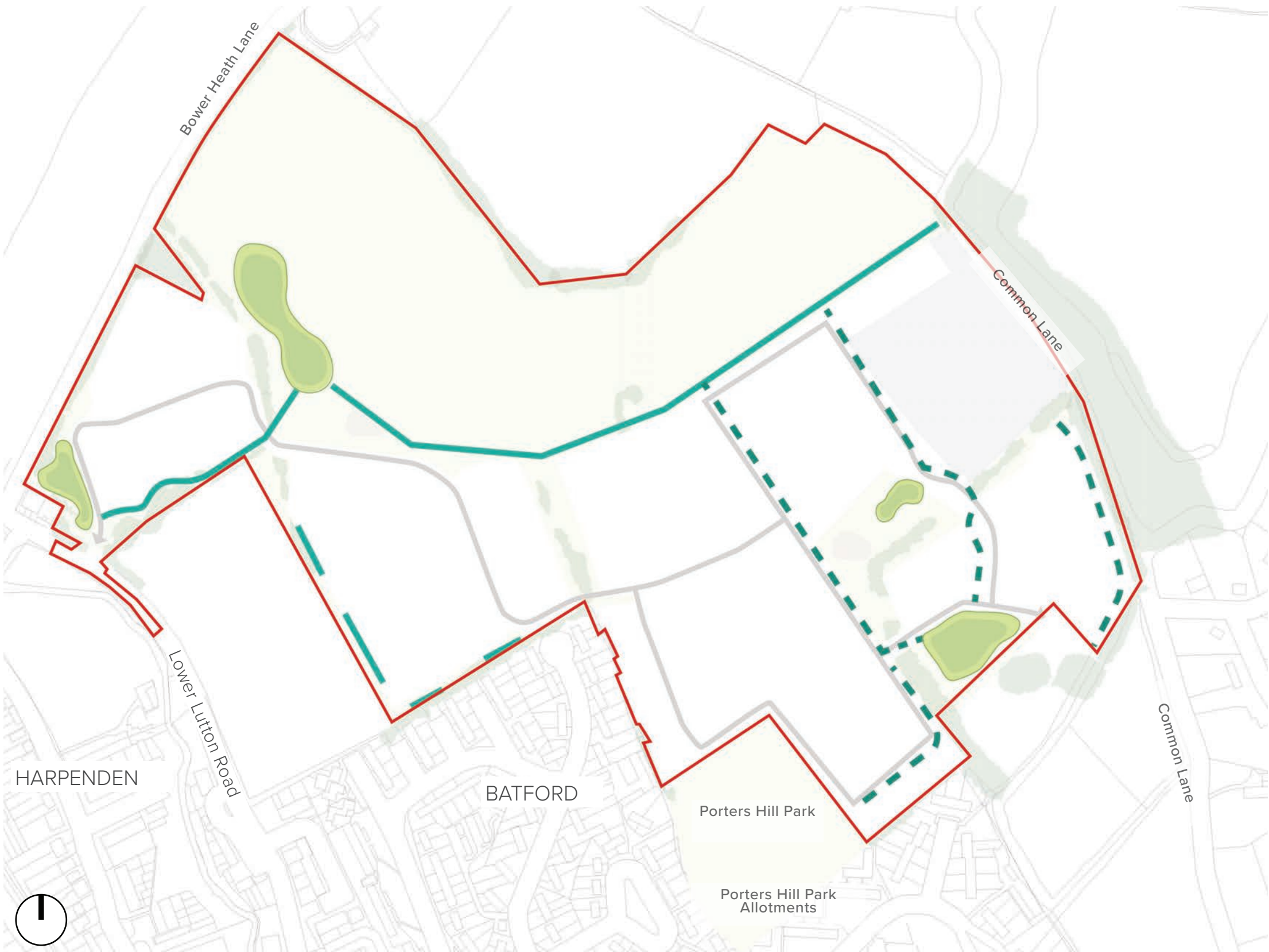




# 04.15 Surface Water Drainage Strategy

## Sustainable Drainage Systems (SuDS)

- The surface water is managed through infiltration into the ground source using dry infiltration systems.
- In line with local policy and the Lead Local Flood Authority (LLFA) guidance, surface water runoff from the Site will be restricted to the 1 in 1 year greenfield rate, with attenuation provided to accommodate up to the 1 in 100 year plus 45% climate change rainfall event.
- At the outline planning stage, the strategic SuDS features are illustrated indicatively on the plan and in sections.
- The detailed design and implementation of these features will be refined and developed at the Reserved Matters Application (RMA) stage.
- All SuDS features will be designed in accordance with **CIRIA's SuDS Manual (C753)** and **National standards for sustainable drainage systems (SuDS)** published 19 June 2025
- Native water and drought tolerant species will be proposed within the SuDS to provide year round interest and a climate resilient scheme that will thrive in times of extreme weather.
- Wherever possible, SuDS solutions must have secondary or added value – for example, through creation of biodiverse habitats and wetlands, or opportunities for informal play.



Key

Indicative Dry Infiltration SuDS

Indicative Linear Swales

Indicative Rain Gardens

SuDS Strategy



# 04.16 SuDS Typologies

## Dry Infiltration Basins - Entrance Gateway

Dry basins form a vegetated depression that is normally dry except following storm events. Infiltration basins are similar to retention basins except that the stored water soaks into the ground below the basin

### Key Design Principles

- Allow infiltration of water to the ground. Can store water on the ground but are dry except in periods of heavy rainfall
- Multi-functional landscape feature that combines sustainable drainage, biodiversity and amenity value.
- Slopes down to the water's edge are as shallow as possible and will not exceed 1 in 3 gradients. This allows for successful vegetation establishment, safe public and maintenance access.
- Basin sizes are based upon predicted run off generated by development area and naturalised to avoid square engineered pond profiles.
- Basins are designed with shallow sloping sides to allow access for maintenance.
- Basins feature swathes of low level planting (grasses and native mixes), boulders and tree planting on banks and the sides - to add biodiversity, visual and amenity interest - avoiding grass mown empty basins.



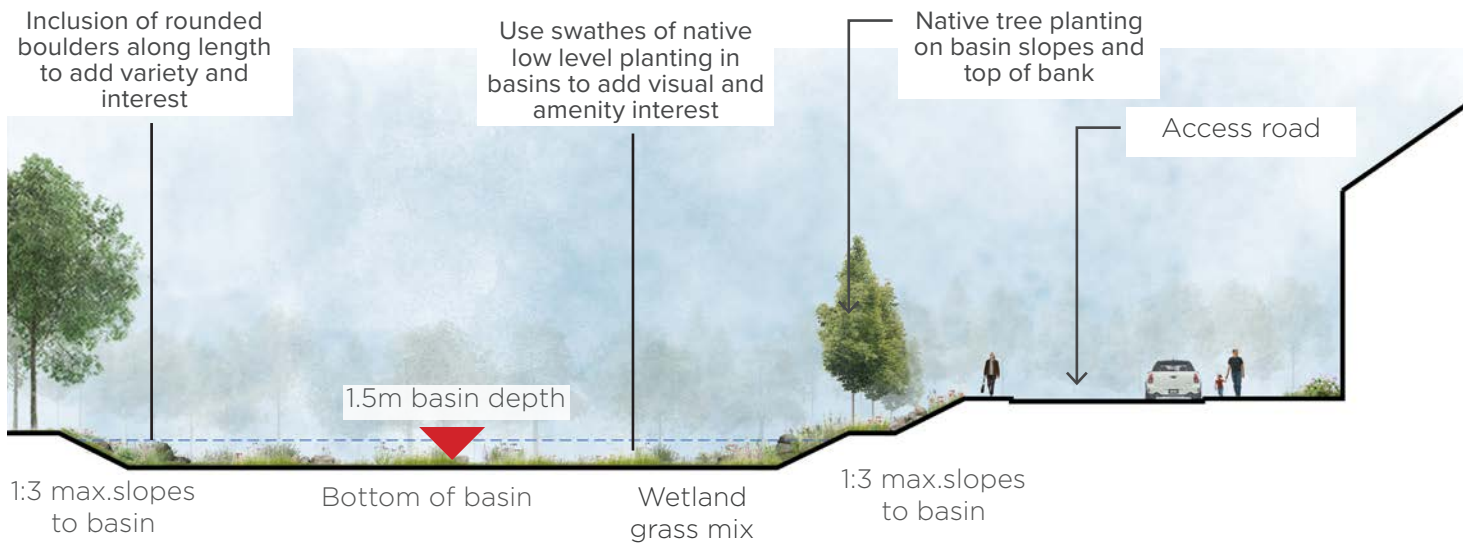
Illustrative Sketch Masterplan



Example of planted SuDS basin in Countesswells, Aberdeen



Example of a SuDS basin planted on its edges with wetland species including willow, alder & poplar species



Illustrative Section of Entrance Basin



Example of Llanelli Rainscape - Shallow basins, filled with swathes of plants, catch and clean the surface water runoff before soaking into the ground



Dry Infiltration Basin - Valley Park

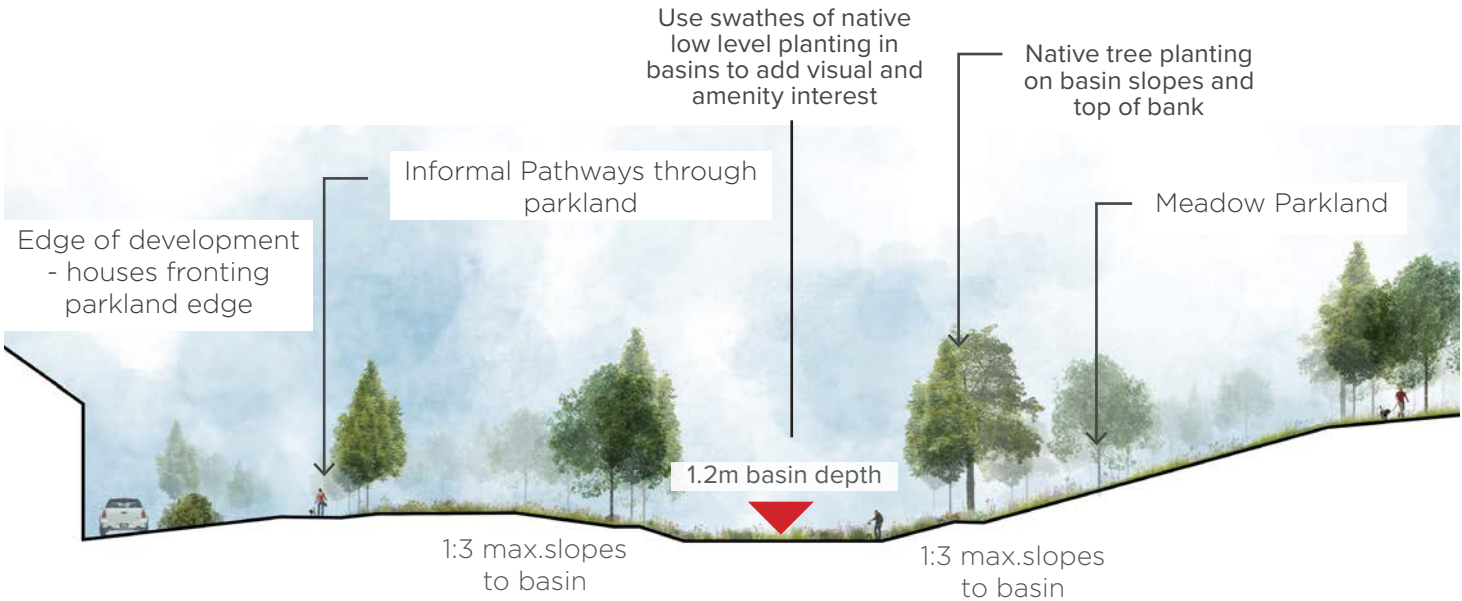
The large dry infiltration in valley park, lies at the foot of the slopes and will follow the contours and the line of the existing public footpath (Harpenden O34).

Key Design Principles

- A large linear basin that provides short term storage for excess surface rainwater
- The dry infiltration basin in the park, designed as a vegetated depression that is normally dry except following storm events, then allow infiltration in to the ground
- It should form a continuous flow and landscape treatment to the surrounding parkland, featuring swathes of meadow grassland on slopes and wetland wildflower grass mixes to basin base.
- Future detailed proposals should seek to maximise the basin size to maintain shallow basin depths, where possible
- Multi-functional landscape feature that combines sustainable drainage, biodiversity and amenity value.
- Slopes down to the water's edge are as shallow as possible and will not exceed 1 in 3 gradients. This allows for successful vegetation establishment, safe public and maintenance access.
- Basin sizes are based upon predicted run off generated by development area and naturalised to avoid square engineered pond profiles.
- Basins are designed with shallow sloping sides to allow access for maintenance.
- Basins feature swathes of low level planting (wildflower grass mixes), boulders and tree planting on banks and the sides - to add biodiversity, visual and amenity interest - avoiding grass mown empty basins.



Illustrative Sketch Masterplan



Illustrative Section of Valley Park Basin



Example of a dry infiltration basin alongside residential development, Woodhurst Park, Berkshire



Example of natural informal play integrated into dry SuDS basin in Solihull



Example of dry infiltration basin as a vegetated depression in a parkland setting, using swathes of species rich and wet tolerant grassland species



Linear Swales

Designed to transport water from one location to another in a controlled and sustainable manner, reducing the risk of flooding, managing water quality, and promoting ecological health.

Key Design Principles

- Shallow, open, vegetated naturalistic swales to store and/or convey run off and aid habitat connectivity - designed to allow infiltration.
- Swales also act as a form of water quality treatment by absorbing and intercepting pollutants and debris.
- A minimum of 4.5m overall width of swales.
- For health and safety reasons, swales would be as shallow as possible and side slopes would normally be less than 1 in 3.
- The swales designed to be naturalistic and feature native wetland grasses and planting swathes.



Example of an edge of parkland swale, planted with wetland grasses & plug planting - managed to be naturalistic as part of the overall parkland setting



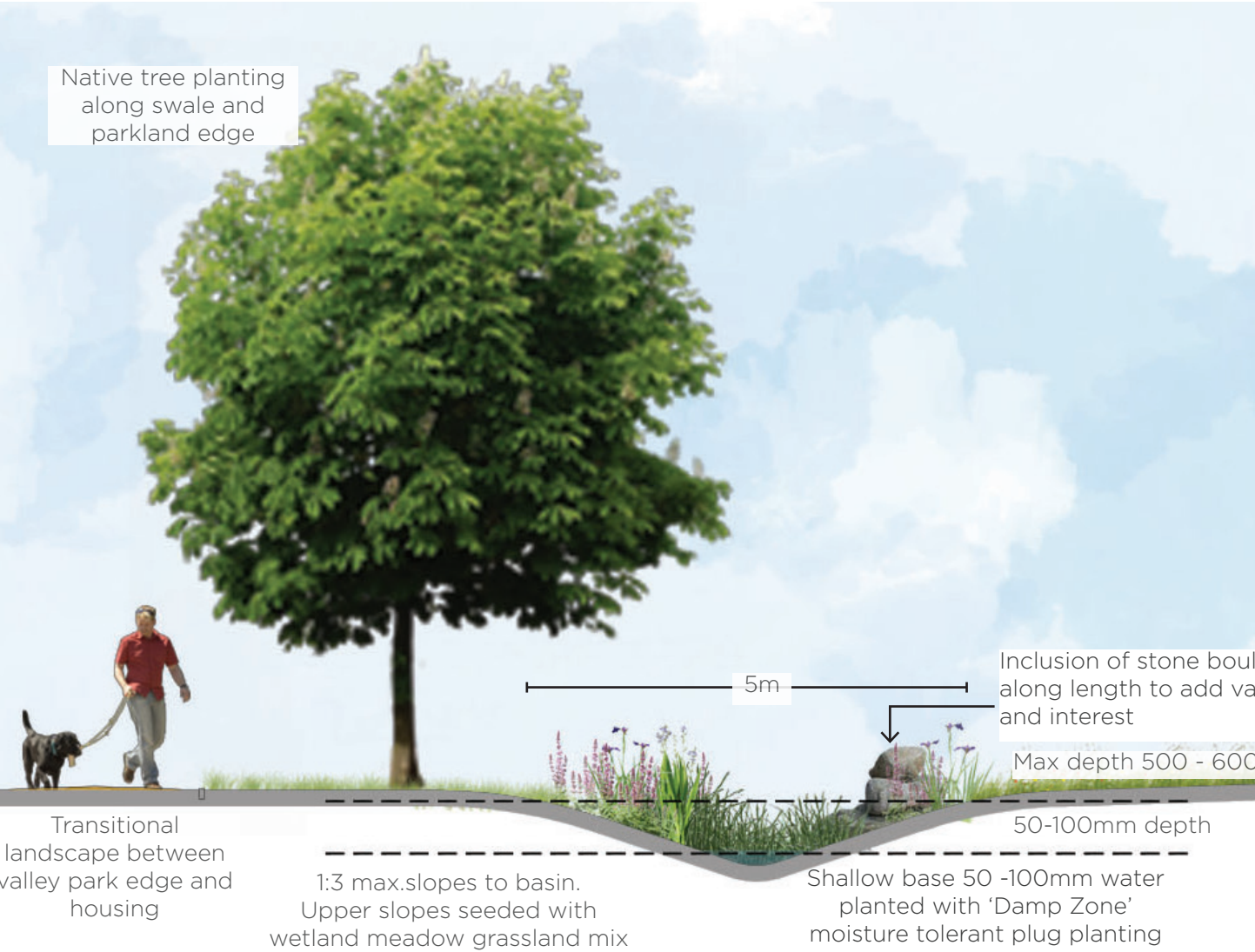
Example of a vegetated linear parkland swale, planted with wetland grasses



Example of an edge of parkland swale going downhill, featuring check dams to slow the flow



Example of bridge thresholds over a naturalised linear swale to the parkland open space





# Rain Gardens

Rain gardens are shallow landscaped depressions that reduce rainfall runoff and mitigate the impact of pollution. They can be used to enhance the capacity of the surface water piped drainage network by capturing and storing rainfall, allowing it to soak into the ground or release it slowly back into the piped network.

## Key Design Principles

- Consistent and appropriate gravel surface layer medium
- Proposed planting will be chosen for resilient properties to ensure successful establishment
- Vis splays in highways will be considered to propose appropriate planting





# 04.17 Landscape Maintenance Strategy

A key challenge for the delivery of high quality Green Infrastructure and landscape is effective long-term maintenance and management. ‘Sustainable’ design must consider the long-term management and maintenance of the landscape, not just the elements and implications at ‘day one’.

The establishment and future success of the landscape is largely dependent on the standard and frequency of the subsequent maintenance and management it receives. To this end, proposals for North East Harpenden will look to deliver an appropriate and considered approach that is rooted in selection of appropriate species and processes to maximise the chances of establishment and minimise the intensity of management.

Key objectives for landscape maintenance and management include:

- To work towards a key objective of landscape and nature restoration across the development, and using low intensity, sustainable methods wherever appropriate
- To facilitate an efficient and sustainable landscape management and maintenance regime through the lifetime of the development
- To provide a safe, high quality external environment for all site users
- To maintain a robust and visually appealing landscape setting
- To ensure that the landscape develops in a manner commensurate with the original design intentions
- To ensure the successful establishment and continued growth through to maturity of the trees and other planting

- The scheme will seek to establish a sustainable long term approach to the maintenance and management of landscape, for which there are a range of options. These include adoption by the Local Authority, maintenance as part of the general estate management or transfer to a not for profit trust company for the benefit of the local community.
- Landscape management options will be considered further at a more detailed stage of design and will be subject to consultations with the local planning authority and other stakeholders.
- A range of approaches compatible with our stated objective of landscape and nature restoration will be brought forward and incorporate initiatives such as lower intensity maintenance regimes, extensive native planting, rotational cutting and selection of resilient species.





Hillside

The Ridge

Plateau

Batford Point

Sauncey View



# 04.18 Appearance

## Urban form

The development predominantly follows a perimeter block arrangement, with building frontages oriented towards the public realm. This approach creates a clearly defined street edge, enhancing natural surveillance, reinforcing the sense of enclosure, and contributing to a cohesive and legible urban form. By facing streets, squares, and open spaces, the layout encourages active frontages and interaction between private and public domains, strengthening the overall character and vitality of the area.

## Building typology

Within the residential areas, the built form is predominantly composed of detached, semi-detached, and terraced housing. Apartment blocks are incorporated in specific locations where higher density and increased building heights are appropriate, and these are typically positioned around public open spaces, reinforcing activity and overlooking key communal areas.

Non-residential uses are concentrated in the north-eastern section of the site. These have been carefully sited to align with the surrounding residential blocks while maximising accessibility and connections to pedestrian routes. This strategic arrangement ensures that non-residential functions are well integrated into the overall layout, supporting both connectivity and the creation of a coherent, legible neighbourhood structure.

## Building lines

While some of the more historic precedents reflect an organic pattern of development, there is generally a tendency towards regular geometry and linear alignment, particularly along streets and movement corridors. Larger detached dwellings, however, are often arranged more informally, creating variation in layout and contributing to a less regimented streetscape character.

## Street hierarchy

A clear hierarchy of streets is evident, ranging from lower-order streets and shared-surface areas to primary thoroughfares. Higher-order streets are generally characterised by the inclusion of green verges and street trees within the public realm, enhancing visual amenity and reinforcing a structured, landscaped streetscape.

## Roof scape

Traditional pitched roof forms are the predominant feature, often enhanced through the inclusion of gables, dormer windows, hipped roofs, and chimneys. These elements contribute a sense of depth and complexity, adding visual interest and variety to the streetscape. Collectively, they enrich the architectural character of the area, creating a rhythm and silhouette that reinforces a traditional and cohesive townscape.

## Detailing

There is a considerable degree of variation in architectural detailing, largely influenced by the surrounding context. Openings are often given additional emphasis through detailed treatments such as lintels, brick heads, and stone cills, which add visual interest and articulation to façades. Ground floor storeys are frequently punctuated with projecting elements, including bay windows and porches, which provide depth and rhythm to the building elevations. These features not only enhance the aesthetic quality of individual buildings but also contribute to the overall character and richness of the streetscape.

## Landscape

Soft planting is a prominent feature along street frontages, with hedgerows particularly prevalent on higher-order streets, contributing to a green and cohesive streetscape. On the edges of developments, front gardens are often set back further from the carriageway, creating a more informal and open character. These areas typically combine expanses of lawn and soft landscaping, occasionally complemented by a vertical boundary element such as low walls, railings, or hedging. This approach not only enhances visual amenity and reinforces a sense of transition between public and private spaces, but also softens the overall edge of the development within the wider landscape.

## Parking

Parking is predominantly provided on-plot, either to the side of properties or along street frontages, and is often softened by the introduction of landscaping to reduce its visual impact. Visitor parking, by contrast, is generally unallocated and accommodated on-street, with designated bays created through localized widening of the carriageway. This approach helps to integrate parking provision sensitively within the streetscape while maintaining accessibility and minimizing disruption to the overall character of the area.

## Density

A variety of development densities can be observed, often occurring even within a single study area. The most successful examples are those that carefully balance the intensity of development with the overall scale and sense of enclosure, thereby reinforcing a distinct sense of character and place. By thoughtfully managing density, these areas achieve a harmonious relationship between buildings, streets, and open spaces, enhancing legibility, fostering community, and contributing positively to the overall quality of the environment.

## Massing

Residential development is typically two storeys in height; however, there is notable variation, with buildings ranging from single-storey dwellings up to three storeys. Non-residential uses, by contrast, often feature increased floor-to-ceiling heights—generally equivalent to three storeys of residential accommodation or more—combined with larger building footprints. This results in a more substantial massing and presence within the streetscape, distinguishing these uses from the predominantly domestic scale of surrounding housing.

## Materiality

The architectural character is largely defined by the use of traditional facing brickwork, complemented by roof coverings in shades of red, brown, and grey tiles. Red and buff brickwork are particularly prevalent, creating a warm and varied palette across building façades. Render is employed more sparingly, typically reserved for accentuating key architectural features or providing subtle contrast to the predominant brickwork.

## Boundary treatments

Soft landscaping is typically defined by the use of native hedgerows, particularly within larger or higher-order spaces, where they contribute to a naturalistic and cohesive character. Railings are generally reserved for more formal or set-piece locations, providing a sense of structure and emphasis. Along street frontages, boundary treatments often take the form of brick or stone walls, a feature that is especially prevalent in historic areas, where such materials reinforce the traditional character and sense of place.

## Permeability

In most of the study areas, provision is made for pedestrian and cycle movement through dedicated routes that are integrated within the green infrastructure and open spaces. These pathways are generally separated from the primary vehicular circulation network, ensuring safer, more pleasant, and more sustainable modes of movement. This approach not only encourages active travel but also enhances the accessibility and recreational value of open spaces, while reducing potential conflicts between vehicles and more vulnerable users.

The elements outlined above can inform a strategy for the creating of a scheme which responds to the existing and surrounding context, taking design decisions from local and adjacent development to help tie the proposals into the fabric.



HILLSIDE









# 04.19 Hillside Appearance

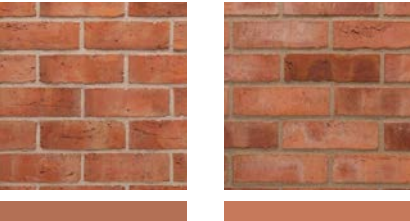


The Hillside character area is located to the west of the masterplan. The proposed massing for this area is loosely plotted with massing varying up to 3 storey.

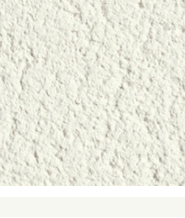
The architectural style and detailing within this character area are intended to remain traditional, consistent with the wider development. The primary facing material will be brick, selected in colours that reflect those used in adjacent character areas to maintain continuity. Red brick is expected to be the predominant material, complemented by selective use of render and weatherboarding to ensure cohesion across the development. Weatherboarding will be applied primarily along the perimeter edges, while render will be introduced along the primary street.

The detailing should be consistent throughout within the overall development and variations will be considered to suit massing and use.

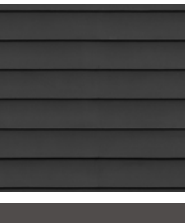
Primary Brick Facing Materials



Render Facing Materials



Accent Materials - Weatherboarding



Roofing Materials



Precedents



Chilton - IDP



Camphill - IDP



Hardingstone - IDP



Crest Nicholson



