Coventry City Council
Urban Extension Design Guide

Supplementary Planning Document

August 2019

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Introduction

This guidance will inform the sustainable and high quality delivery of larger developments within the city's Ancient Arden landscape area. Although in itself it does not supersede previous guidance it does provide an update to it in response to the development allocations set out in the Council's Local Plan. In this respect it responds primarily (but not exclusively) to the two Sustainable Urban Extensions (SUE's) at Eastern Green and Keresley.

Context of the SPD

The Council have previously issued design guidance for the Ancient Arden area, the most recent of these documents being in 1995. This guidance primarily related however to small scale developments of limited infill or property extensions etc. With the new Local Plan introducing significant development proposals this guidance needs to be expanded upon and reconsidered within a very different development context. This Design Guidance SPD does that.

This SPD is therefore intended to provide a clear guide and steer for how new larger developments within the area should be designed and delivered. It will help inform the master planning process and detailed design proposals. As a guide this should apply to any developments of 6 or more dwellings or any other multiple property developments not accessed from a private drive. It should also apply to commercial and community developments. Extensions to existing properties, single dwelling proposals or small multiple developments off private drives or shared drives will continue to be considered under the 1995 guidance until such time as it is formally updated.

As a starting point this guidance emphasises the importance of the Ancient Arden character, drawing specific inspiration from materials and characteristics of local buildings, landscape and vernacular. It does not however require a slavish copy of existing buildings and styles. Instead it highlights clear examples for consideration and inspiration which will help to inform creative and modern interpretations of the 'Ancient Arden' theme.

To support this, the guidance draws primarily on best practice examples from both the local and national arena, whilst also highlighting, where relevant, poor examples of design and interpretation. The Council have identified a number of high quality examples where historic design characteristics have been positively interpreted to create an appropriate high quality built and natural environment. This has helped us focus on the Importance of design as a concept and a component of what makes an excellent development. This is exactly what the city council wants to see delivered through its two SUE's and other relevant developments.

Notwithstanding, the Council recognises that design often brings with it a degree of subjectivity. It is for this reason that this guidance is not intended to be overly prescriptive. It also reflects the context of this document as a platform from which detailed proposals can evolve and flourish. To support this, the Council are committed to working jointly and proactively with applicants to ensure the vision for this area is realised.

Context of the SPD

Wider Policy Framework
The following section highlights the importance of promoting and delivering high quality, excellently designed schemes to help promote the creation and delivery of new homes, jobs and communities. High quality design is a golden thread that runs through national policy and into the city's new Local Plan. It is also an issue that was regularly highlighted through the consultation on the Local Plan and is therefore a key priority to existing communities that reside in close proximity to planned development.

National
National Planning Policy Framework was updated in July 2018. Its primary ethos continues to be the presumption in favour of sustainable development. The importance of good design has been amplified within the new NPPF making it even more of an important consideration. Chapter 12 of the Framework in particular highlights the importance of good design.

Indeed, Para 124 of the NPPF states that "the creation of high quality buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this". Para 125 then states "plans should set out a clear design vision and expectations, so that applicants have as much certainty as possible about what is likely to be acceptable. Design policies should….. reflect local aspirations, and grounded in an understanding and evaluation of each area's defining characteristics".

The NPPF is supported by a suite of National Planning Practice Guidance (NPPG) which was first issued in 2014. Of particular relevance is the specific NPPG on Design. This highlights the importance of design when considering materials and build quality, new streets and highways, accessibility, connectivity, health, crime prevention and security, resource efficiency, public and open spaces and community cohesion and vibrancy.
Examples of key quotes from the NPPG include:

- "Achieving good design is about creating places, buildings, or spaces that work well for everyone, look good, last well, and will adapt to the needs of future generations";
- "Good design responds in a practical and creative way to both the function and identity of a place";
- "Good design is indivisible from good planning, and should be at the heart of the plan making process"; and
- "Development should seek to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, local man-made and natural heritage and culture, while not preventing or discouraging appropriate innovation".

Regional
The City Council is a constituent member of the West Midlands Combined Authority. As such it works closely with its neighbouring Metropolitan authorities and the elected Mayor.

To support the delivery of the regions housing needs and wider developer requirements the WMCA have published a Land Delivery Action Plan, which highlights a range of priorities and objectives to support, promote and facilitate new development. Within this Action Plan is a commitment to a WMCA Planning Charter, which highlights the importance of high quality design. The Action Plan states:
"Our Local Planning Authorities have an important role to play in setting out the spatial framework for the future housing and employment space development in our areas - **creating unique, strong and prosperous communities, supported by a well-designed built environment, community facilities and infrastructure** to support the economy to grow".

"This will include the commitment for **development across the West Midlands to be of the highest quality in order to enhance the desirability of places and drive values**. This will be driven by WMCA partners, through appropriate delivery models, designed to **act as exemplars of high standards of design and sustainability"**.

Local
The new Local Plan and City Centre Area Action Plan both highlight high quality design as a key aim and objective. Indeed, the new Local Plan sets out nine key objectives, all of which relate to at least one policy within the Plan which will contribute towards high quality design and delivery of new sustainable development and communities. These include:

1. Supporting businesses to grow
2. Enabling the right infrastructure for the city to grow and thrive.
3. Developing a dynamic 21st century city centre
4. Raising the profile of Coventry.
5. Creating an attractive, cleaner and greener city.
6. Maintaining and enhancing an accessible transport network.
7. Housing that meets the needs of all people
8. Improve the health and wellbeing of local residents.
9. Support safer communities.

Through the development of the new Local Plan, the city council was always clear that if it was going to plan positively for the city's first urban extensions in over half a century then it needed to do it in a way which was supported by the appropriate infrastructure and encapsulated high quality design, materials and public realm. These developments in particular need to be areas the city can be proud of and hold up as exemplar and desirable communities within which people aspire to live, work and visit.

Context of the SPD

The following Local Plan policies and objectives are identified as a platform for this Design Guide SPD and should be read alongside this document.

DS3: Sustainable Development
DS4: Masterplan Principles
H2: Housing Allocations
GE1: Green Infrastructure
GE2: Green Space
GE3: Biodiversity, Geological, Landscape and Archaeological Conservation
GE4: Tree Protection
DE1: Ensuring High Quality Design
HE2: Conservation and Heritage Assets
EM1-5: Environmental Management Policies covering drainage and flood risk
R2 / CC1: Coventry City Centre - Development Strategy
CC2 - CC7: Historic and Built Environment in the City Centre

Policy DS4 (parts A, C and D) is of particular relevance to both SUE's. This sets out masterplan principles for both areas and requires consideration of this SPD when developing those masterplans through the detailed planning process.

It is important to note that although this SPD will form part of a wider set of SPD, It is this document that will form the focal point of supporting master planning and planning applications for development within the defined area. For the avoidance of doubt further SPD will focus on design across the city as a whole and include

- An update of the existing Residential Design Guidance SPD – this will focus on residential extensions and infill development plots; and
- Further Design Guidance and briefs for various parts of the City Centre and other major development proposals (as appropriate).

This is not an exclusive list however, and other technical SPD may also be of relevance, most notably in relation to the design of SuDS and highways.

Neighbourhood

Much of the Ancient Arden landscape, in so far as it relates to Coventry's administrative boundaries, sits within the Parishes of Allesley and Keresley. Both have active Parish Councils who have been involved throughout the development of the new Local Plan.

Keresley Parish have indicated a desire to produce an updated Parish Plan which will set out their vision and objectives for the area.

Allesley have commenced work on a Neighbourhood Plan and have consulted on the first stages of this Plan and the defined boundaries.

The City Council is committed to working collaboratively with both Parishes to deliver their neighbourhood documents. This SPD, alongside the new Local Plan is intended to help provide a starting point from which those local documents can progress, and as such should be reflected within those neighbourhood documents.

The document sets out a range of sections to support master planning and design initiatives. These include:

- Materials
- Street scene and layout
- Highways and junctions
- Parking
- The natural environment
- Non-residential developments
- future extensions and conversions

The Ancient Arden – An Historic Context

The Ancient Arden

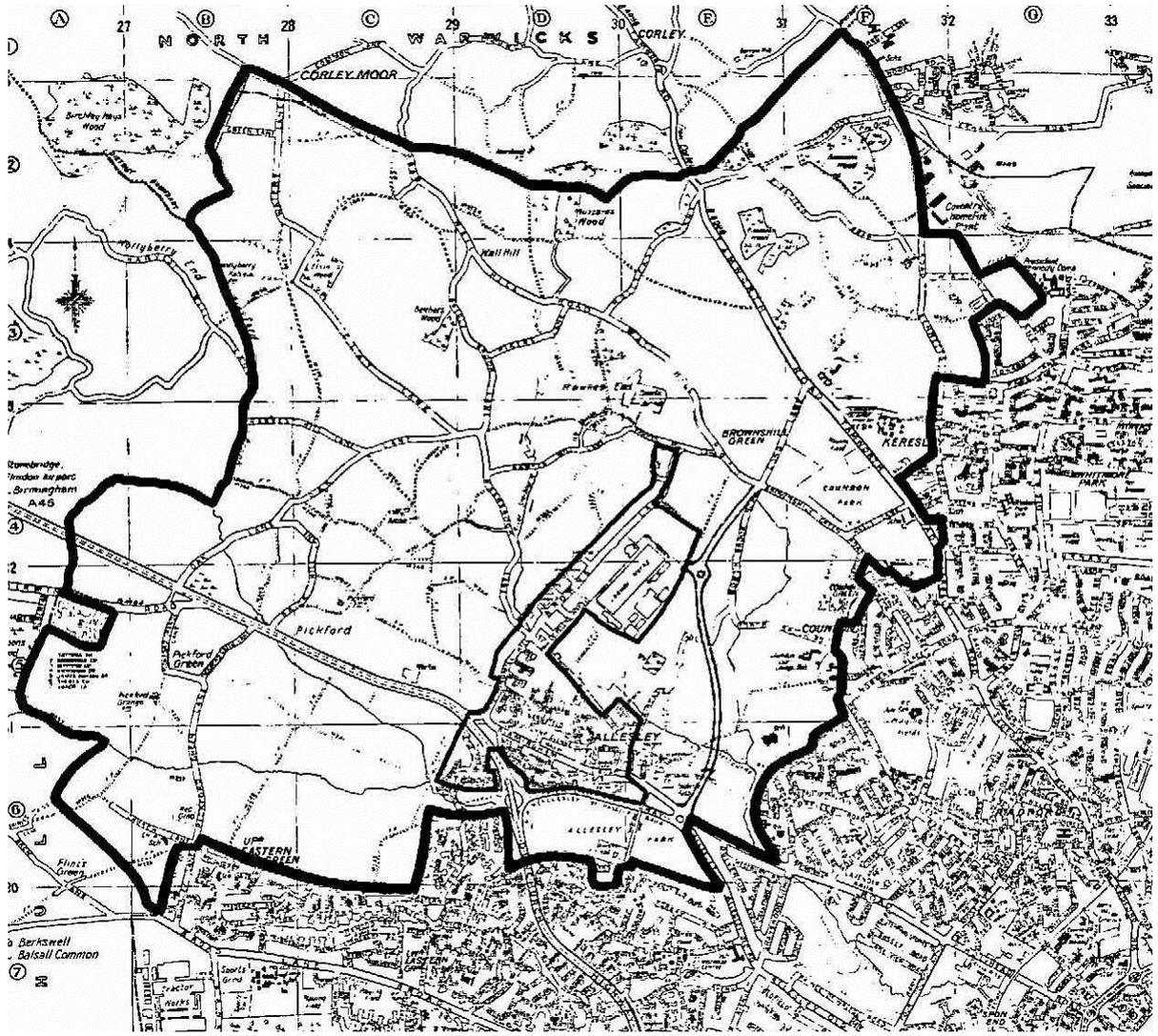
The sites lie within the northern section of the Ancient Arden, an area of ancient countryside that stretches from just south of Atherstone in the North, running to the west of Coventry to Balsall Common in the south. It incorporates Allesley and Keresley Parishes and the Coundon Wedge and is described as being *"especially significant, as it is now the only remaining relatively unspoilt area of ancient countryside left in Warwickshire".*

The classification of 'ancient' applies to areas not affected by the great planned Parliamentary Enclosures of the 18th and 19th Centuries. Approximately half of England's countryside was recreated in the Georgian era, areas untouched by this transformation exhibit a more ancient landscape which has evolved through many planned and unplanned stages. In these areas many landscape features such as field boundaries, hedge-banks, sunken lanes, woods and commons have survived from the earliest dates of human settlement.

The Arden landscape in Coventry exhibits all these features with little in the way of built development. What development there is, is typically individual farmsteads or small groupings of buildings.

In order to ensure that new development reflected and enhance the character of the Arden a set of guidelines was published in May 1995 (Ancient Arden Design Guidelines). These set out to define the character of the locality and outline the type of design that would be appropriate for any new development emphasising the link between landscape and the buildings within it. Whilst is was only ever intended for small scale development – a single building or a small group of buildings- the principles of building design and materials can still be applied to larger scale development. It is this guidance that is being updated through this SPD to ensure the key elements of these principles can also be applied in an appropriate way to larger scale developments (as wel as smaler scale traditional proposals), the sort of which were not envisaged in 1995.

To help identify the historic character of the area, the folowing pages outline the architectural and material characteristics of Arden buildings. These should be used as the basis for informing building design in this area. It is important to note that whilst this is very much a traditional vernacular it wil not be used as a basis to preclude creative, wel thought out and innovativedesigns. As previously highlighted, modern interpretationof these historic characteristics are welcomed and encouraged and ,wil always be treated on their own merits.



The Ancient Arden in Coventry – taken from Ancient Arden Design Guidance

Arden Building Characteristics

The following provides an overview of some of the traditional features and characteristics of buildings within the existing Ancient Arden area. There is no fundamental expectation that these will be replicated verbatim across new developments, however these are intended to provide a helpful reference for how the more traditional elements of Ancient Arden design can be incorporated and interpreted within new development proposals. The pages that follow provide examples across Coventry to help clarify these points within a real life context.

- Buildings generally have a simple gable roof with low eaves lines. Larger forms are generally broken up into 2 or 3 smaller interconnecting elements with small roof spans as opposed to bulky boxes like buildings.
- Roof's have a typical pitch of 40 degrees and are generally covered with brindle/brown sand faced plain tiles, but slate is also used.
- Tile verges are the most predominant edge treatment.
- General walling material is a mellow mixed stock brick in light red/brown tones typical of central Warwickshire. Wirecut or strongly textured rustic facing brickwork in a single colour are not considered acceptable.
- Contrasting brick colours for lintels, sills, plinths, dentil coursesetc are generally not used. Whereas segmental brick arch window heads to the ground floor windows and doors are a more typical local feature which may be usefully employed.
- Dormer windows are a common feature due to the eaves generally sitting below a full two storeys level.
- Chimney stacks and pots are strong feature of traditional buildings and in the Arden they usually take the form of a substantial stack topped with one pot of traditional design. Whilst an expensive feature their use on visually prominent parts of the development and key nodes/intersections etc. will be strongly encouraged.
- Windows generally have an horizontal emphasis with widths generally exceed height. Sash windows are common and could be used on more traditionally design dwellings.
- Doors are generally plain in design and dark in colour.
- Guttering and down pipes are generally black.
- Porches and door canopies are generally simple gabled or lean to roofs in plain tiles to match the main gable roof.
- Driveways are generally informal in nature with light colour surfacing materials.

Brick built farmhouse, Bridle Brook Lane – from Google Street View and Google Earth.

Arden Building Characteristics

Simple brindle/brown plain tile gable roof with low eaves line

First floor largely within the roof space with traditional pitched dormers

Simple chimney stacks

Black rainwater goods

Simple solid wooden front door set in a simple lean to enclosed porch

Timber frame with infill panel construction

The extensions and additions added over the life of this building have made for an interesting and complex multiple pitched roof form which isn't obvious from the road.

Washbrook Lane, timber frame cottage – from Google Street View and Google Earth.

Arden Building Characteristics

Simple brindle/brown plain tile gable roof with low eaves line

Simple chimney stack with pot

mellow mixed stock brick in light red/brown

Timber frame with infill panel construction

Local stone plinth to base of building

Sub-divided windows, wider than they are high

An interesting grouping of buildings that have again grown and evolved over time with yet more interesting and complex multiple pitched roof forms which aren't obvious from the road.

Timber frame and brick cottage, Wall Hill Road– from Google Street View and Google Earth.

Arden Building Characteristics

Simple brindle/brown plain tile gable roof with low eaves line

First floor partly within the roof space with traditional pitched dormers

Slightly more ornate chimney stacks with pots

Tile verges

mellow mixed stock brick in light red/brown

Black rainwater goods

Overall form broken up into smaller interconnecting elements with small roof spans that reduce overall height.

A small farmstead. Note again the farmhouse has probably grown and evolved over time with yet more interesting and complex multiple pitched roof forms.

Brick built farmhouse, Bridle Brook Lane – from Google Street View and Google Earth.

Arden Building Characteristics

Slightly more ornate chimney stacks with pots

First floor partly within the roof space with traditional pitched dormers

Simple brindle/brown plain tile gable roof with low eaves line

Simple barge boards

Gabled plain tiled porch

Simple dark painted front door

Plinth detail

Black rainwater goods

A small farmstead with an interesting 'u'-shape collection of barns.

Farmhouse and out-buildings, Pikers Lane – from Google Street View and Google Earth.

Arden Building Characteristics

Examples of building groupings in the Arden area with interesting roof forms **– from Google Earth.**

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Housing Design

A diverse approach to housing design is encouraged not just across each development site, but also within the larger sites themselves. This will ensure that there is a variety of character and texture across the developments as opposed to a homogeneous swathe of development.

Given this it is felt that there is scope for both traditional versions of the Arden vernacular and modern interpretations. What is important about each approach is that there is an integrity to the design. Traditional approaches should use the form and proportions of Arden dwellings as inspiration and pick up on their architectural elements, whilst modern interpretations should use the Arden typology as the basis for their design and should be accompanied by a design statement that sets out the rationale for the design.

Examples of traditional interpretations of the Arden vernacular are shown overleaf along with examples from elsewhere of how traditional vernacular has been interpreted in a modern way.

Other aspects of housing design that need consideration are:

- the way in which dwellings sit alongside each other
- how they address corners and bends
- the location and design of bin and cycle storage.

These are also covered in this section.

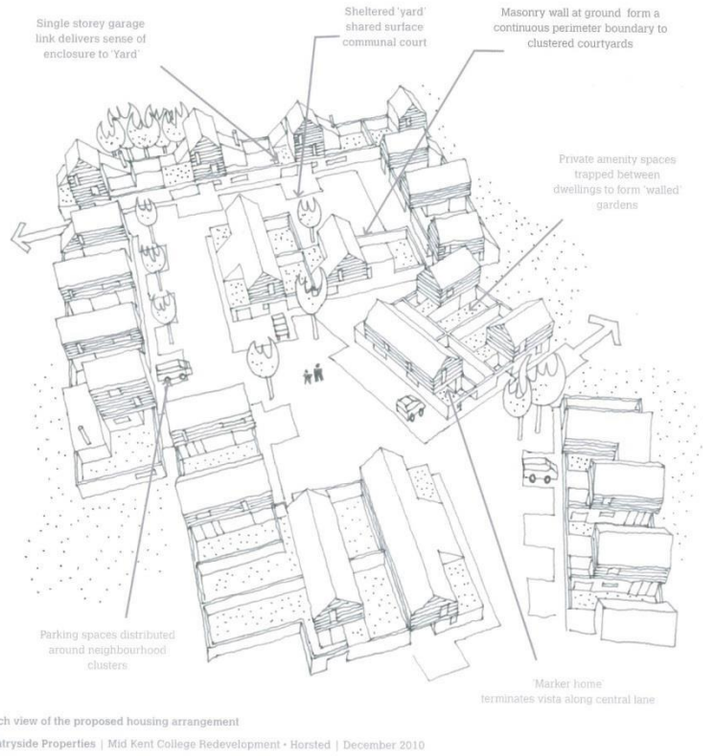
Well Designed New Traditional Buildings

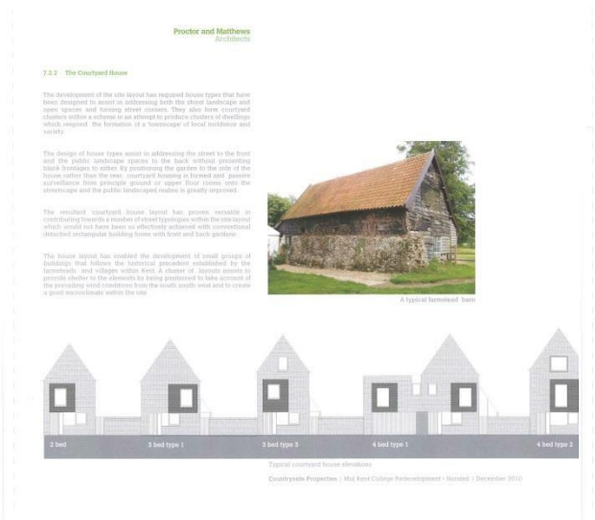
The Old Dairy, Washbrook Lane, is a new build dwelling that has taken the materials and the essence of the Arden vernacular to create a well proportioned and detailed traditional dwelling.

New build timber frame building. Designed and constructed to a very high standard. This demonstrates that a traditional building technique such as this can be recreated if done properly. Given that this style of building is prevalent in the Arden it should not be dismissed off hand but caveated that any proposal for this form would need to be to this standard.

Images from planning and monitoring files

Examples of local vernacular interpreted in a modern style



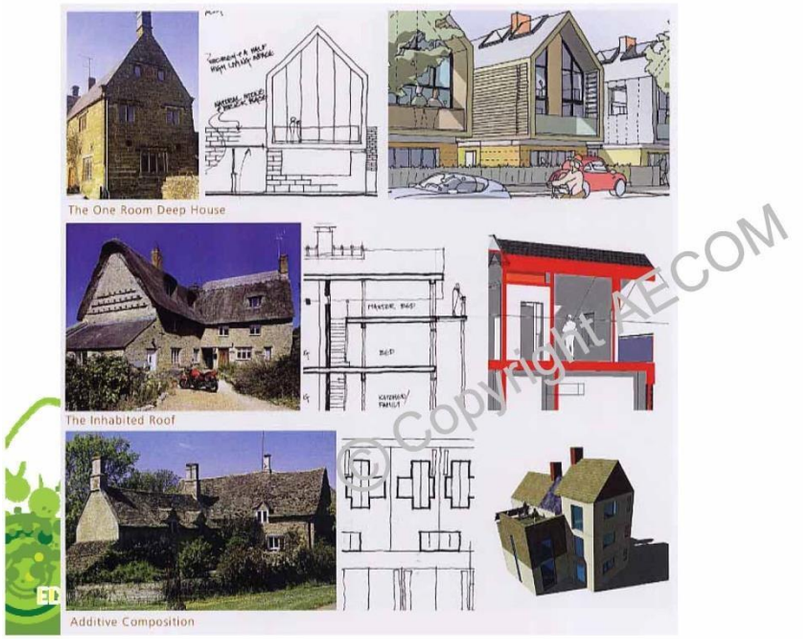


The Horstead Park development in Chatham, Kent takes the typical form of a farmstead as the basis for the layout of the development., and uses the typical 'big roof' barn as an influence on the dwelling design. The dwellings pick up on and interpret local brick work forms in the design of the elevations.

Images from Google Street View and Planning files.

Examples of local vernacular interpreted in a modern style

Northamptonshire Vernacular



Architectural Interpretation

The David Wilson Homes development at Upton, Northampton takes the traditional form of the Northampton Farmhouse and uses it to create large and imposing modern dwellings. Using the same basic form – a three storey gable fronted volume – and treating it differently with either materials or architectural features creates a streetscene with a consistent overall form and silhouette but interest and variety on the elevations and facades.

Images from Planning records and site monitoring

Examples of local vernacular interpreted in a modern style

Sketch elevation of plot 4

Sketch view of plot 1 frontage

Ground Floor Plan

First Floor Plan

Draycote Reach, Rugby, is an example of a blend of traditional farm style architectural elements and materials with more modern features such as the expansive floor to ceiling glazing and large open plan volumes. The interconnected volumes and the cluster/farmyard arrangement of the dwellings makes reference to the rural countryside setting.

Images from Planning Records and site monitoring.

Examples of local vernacular interpreted in a modern style

Private house, Creaton, Northants. A modern interpretation of the barn typology which maximises its hill side location with floor to ceiling windows, terraces and balconies that look out over the sweeping countryside.

Images from planning records

Linked Dwellings

Within this guidance all the street types contain linked dwellings, either in the illustrations or within the examples. Linked dwellings can play an important part in the creation of visually harmonious street scenes. The guidance is not prescribing their wholesale use but it is expected that they should be used along with detached house types on any development proposal. Linked dwellings should be used as they:

- create a visually harmonious streetscene;
- create a good sense of enclosure;
- avoids the awkward situation of blank gables siting close together which makes for a unsightly streetscene that is jarring on the eye;
- make more efficient use of land;
- allows for a built form that follows the lines of the street.

Concern over noise transfer between dwellings can be overcome with appropriate sound proofing.

Beaulieu, Chelmsford. Well designed, high quality linked dwellings that turn the corner and follow the bend in the road. Note the integrated parking.

Images – from Google Street View and planning records.

Well designed, high quality linked dwellings, Horsted Park, Chatham, Kent.

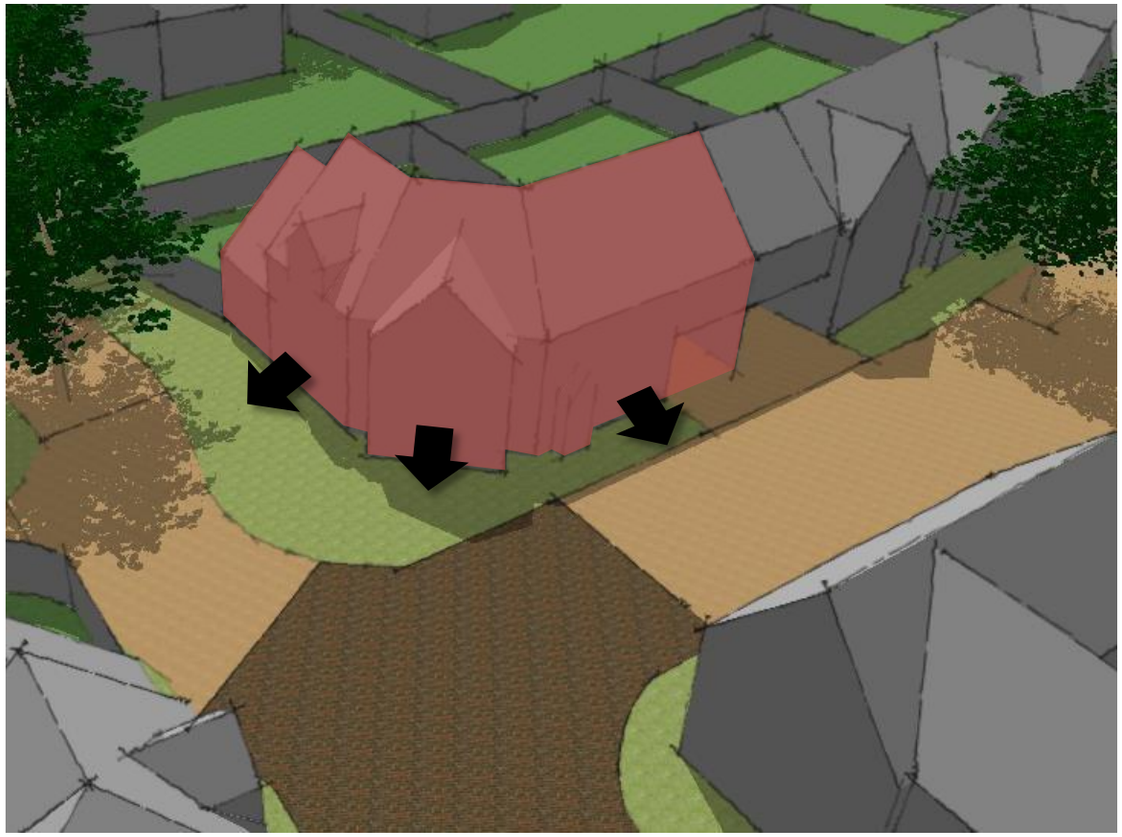
Poorly positioned detached dwellings creating a visually jarring street scene.

These dwellings are well designed in their own right, but the slavishly repetitive placement of them combined with the fact that they are 'crammed' so closely together makes for a monotonous and visually jarring street-scene.

Corner & Landmark Buildings

How corner sites are designed is very important. In most cases corners sites will need to address both frontages in an equal way to ensure both elevations have active frontage to provide over looking and natural surveillance of the public realm and are well detailed architecturally. They have the opportunity to provide additional visual interest in the streetscene and they may also have a role to play in aiding legibility through the development.

The design and placement of buildings around the junctions will be crucial in ensuring that first and foremost they are well overlooked and have a good degree of natural surveillance but also that the dwellings engage positively with active frontages and architecturally interesting elevations.

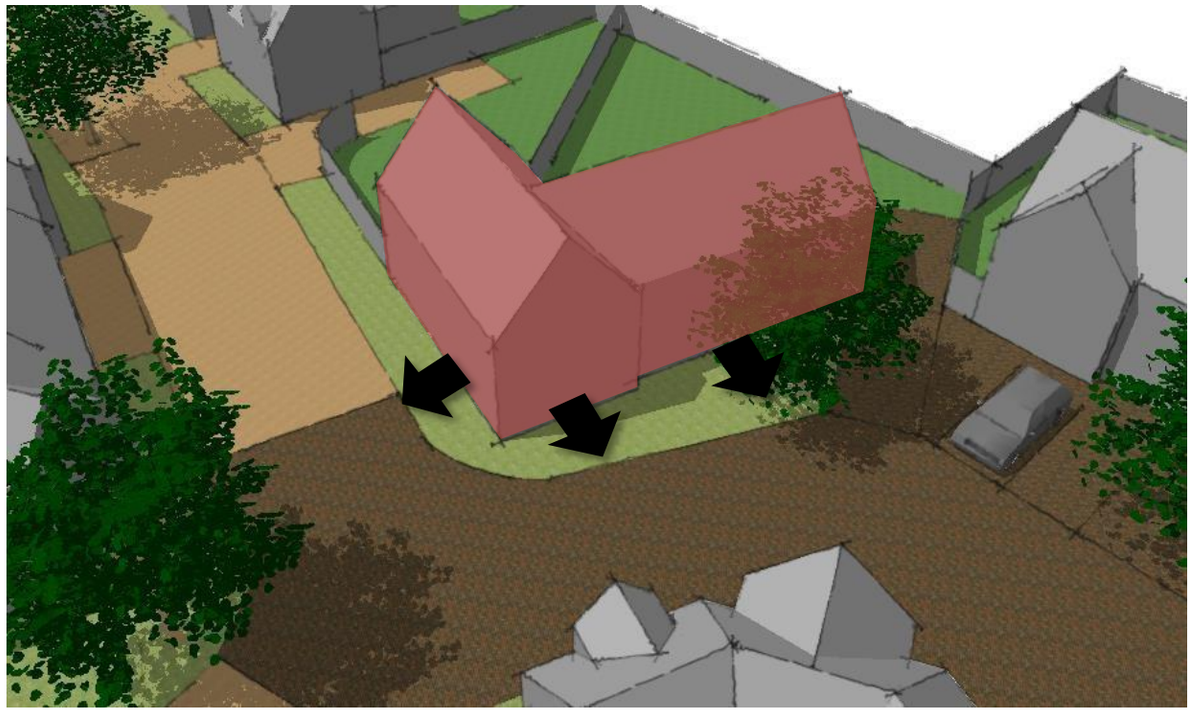


The cranked building at the end of the mews again makes for an interesting focal point whilst again suggesting the mews is not a dead end.

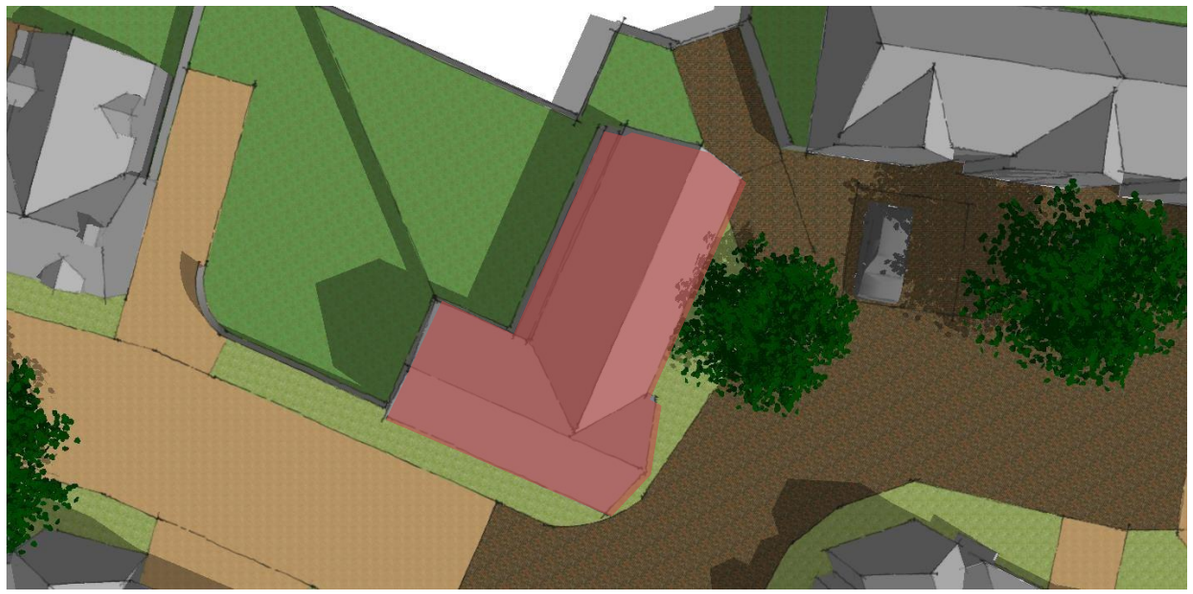
Whilst the decorative gable terminates the view down the Mews the cranked arms either side offer a deflected view telling users that the street is not necessarily a dead end.

Images from site monitoring.

Corner & Landmark Buildings



The clever placement of dwellings at right angles on a corner can create positive facades to the public realm whilst still creating dwellings with a practical internal layout and good sized rear gardens. In these circumstances parking could be provided to the side or rear of the property or in a suitable on street alternative close to the property.



Images from Google Street View – Arden character homes

Corner & Landmark Buildings

Unusually designed buildings can become local landmarks that not only act as points of interest adding richness and variety to the streetscene but can also help with legibility and wayfinding.

Images from Google Street View and site monitoring.

Dutch Style Gable.
Upton, Northampton

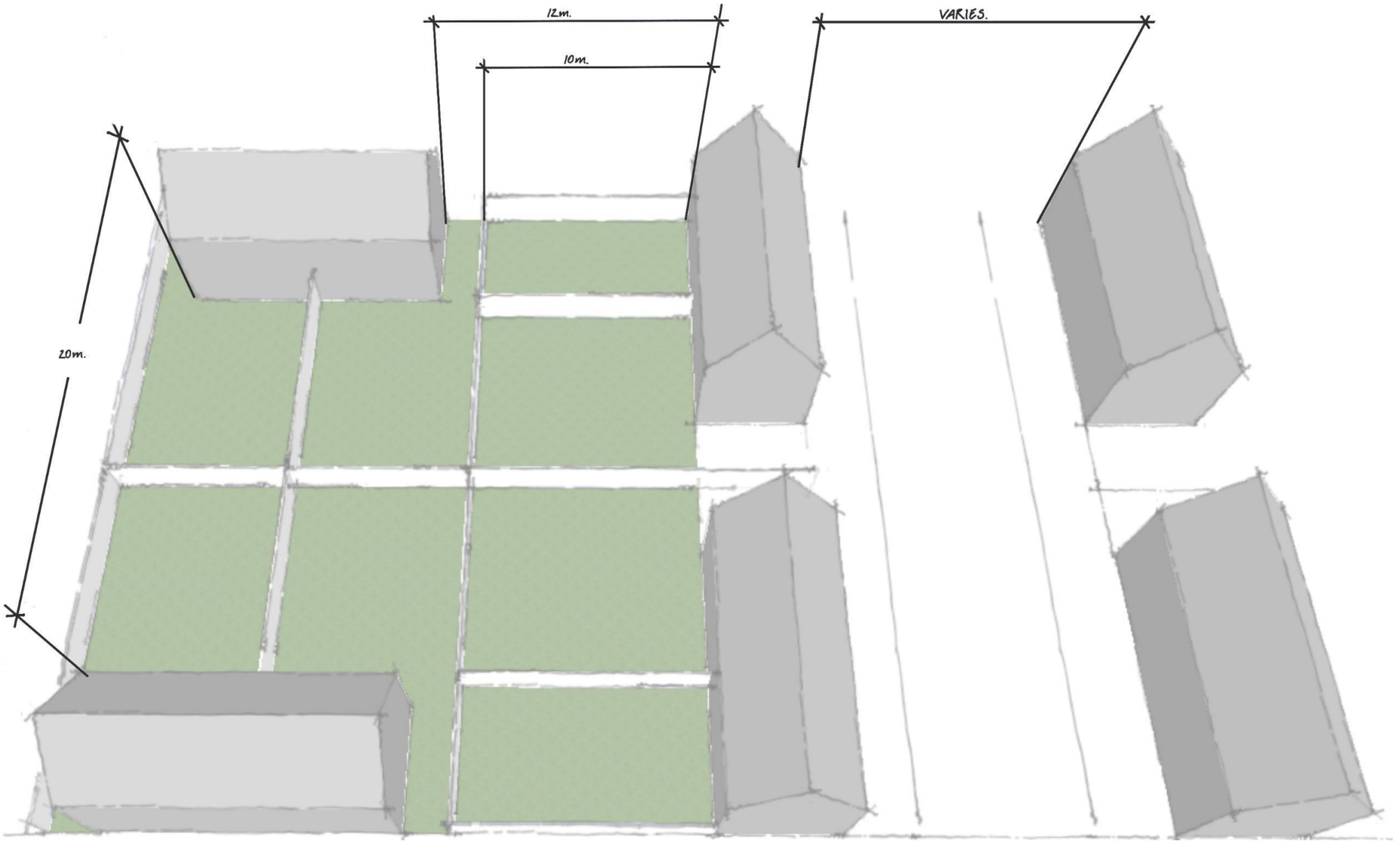
New Timber frame building, Far Gosford St, Coventry

Upton, Northampton

Corner & Landmark Buildings

Examples of interesting and thoughtfully designed corner buildings – Images from Google Earth, Google Street View and site monitoring

Separation Distances



To protect the amenity of residents a minimum back to back distance of 20m (A) will be required. This distance should be equally subdivided into two rear gardens that are 10m deep. This will ensure that acceptable levels of daylighting to rear gardens is achieved whilst also maintaining privacy.

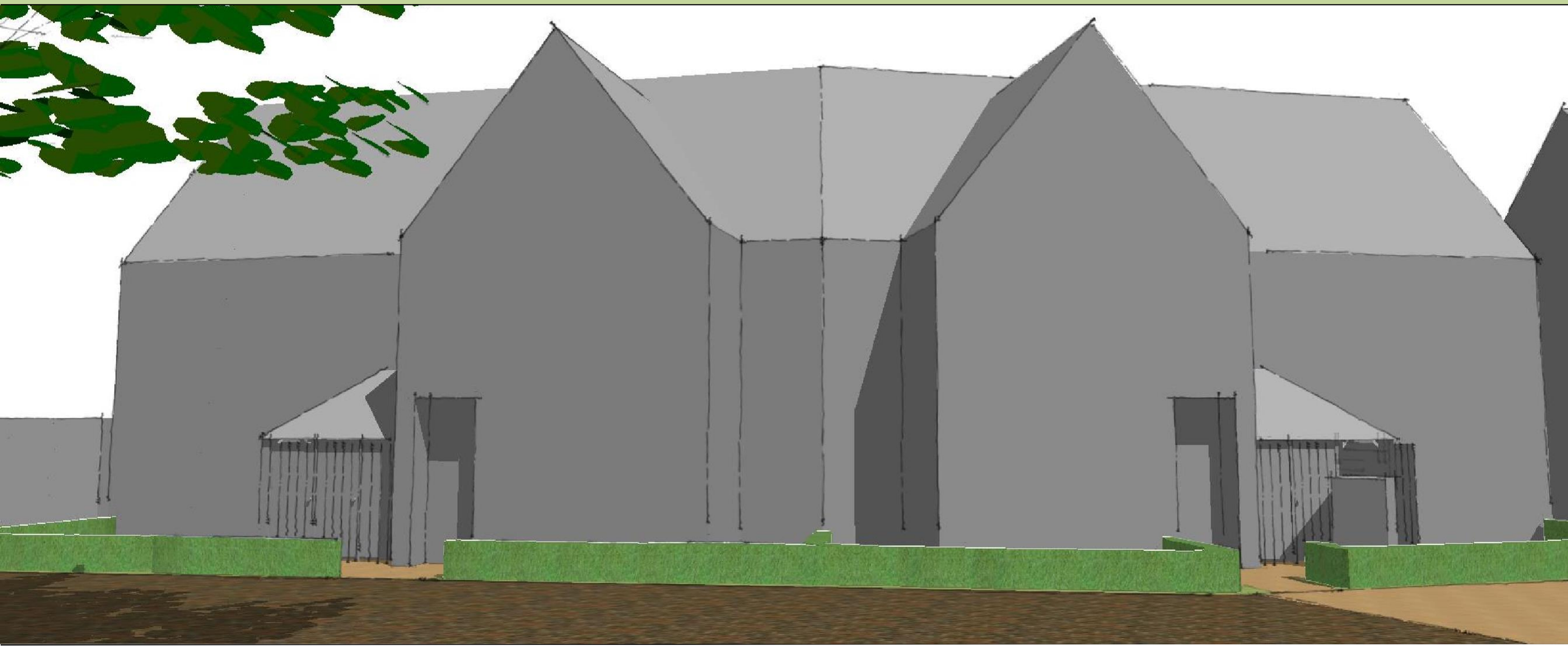
This distance will need to be increased where dwellings exceed two storeys in height and will have an impact on the daylighting and privacy of the adjoining gardens/dwellings.

Where a dwelling fronts/backs onto the gable of a neighbouring dwelling, a separation distance of 12m will be required (B). This is comprised of a 10m garden depth (C) and a 2m access/maintenance strip.

Rear garden walls of 1.8m will be required on all sides to rear gardens (D)

The distance between the fronts of dwellings will vary (E) depending on the street typology being developed, however consideration will need to be given to the placement of dwellings and the position of windows to ensure that no overlooking loss of privacy issues arise.

Cycle and Bin Storage

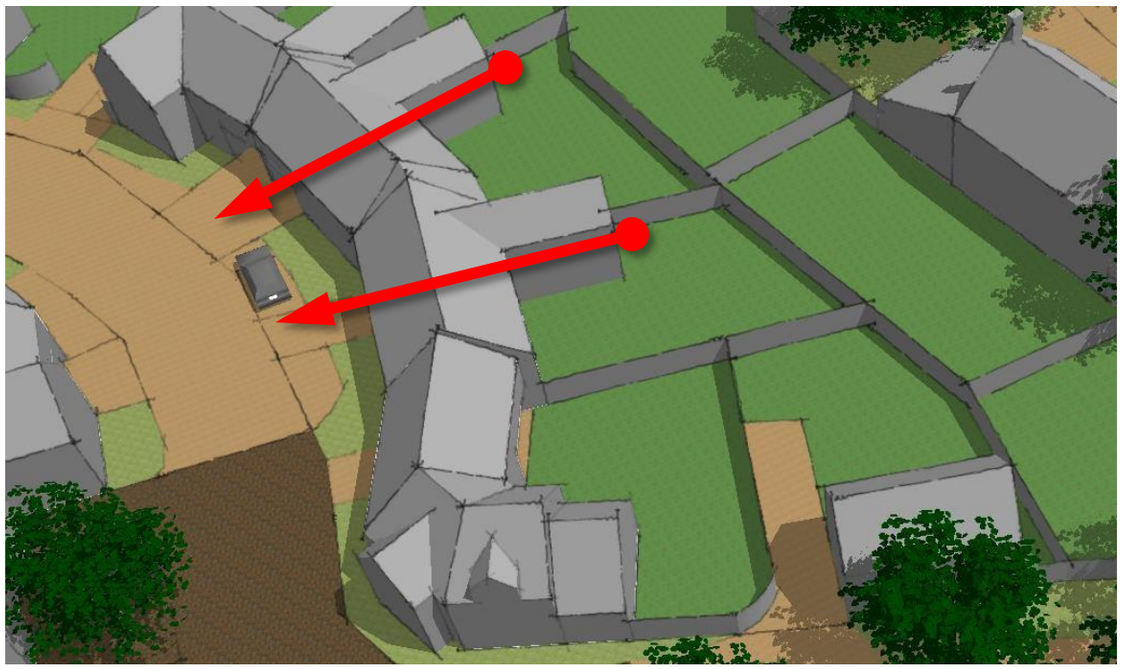


Whilst wheelie bins are perfectly functional for their intended purpose they are unsightly if left permanently to the front of dwellings and can become a nuisance and a hazard if left permanently on the footway, so where ever possible storage provision for wheelie bins (and cycles) should be made to the rear of properties. To ensure that bins are not left at the front of properties, access to the rear that is as direct as possible, is of adequate width and with no steps should be provided where ever possible. Long convoluted paths/alleyways to the rear of properties will not be acceptable.

Where wheelie bins can only be stored in a location that will be in public view they should be housed either in a storage unit that is integrated with the dwelling or, if this is not possible in an appropriately designed free standing storage unit. In either case they should allows for the easy disposal of waste/recycling and allow for the bins to be easily pulled out for emptying. The examples over leaf illustrate some aesthetically pleasing and practical storage solutions.

Consideration should also be given to cycle storage and the movement of cycles from the rear to the front of properties.

Cycle and Bin Storage



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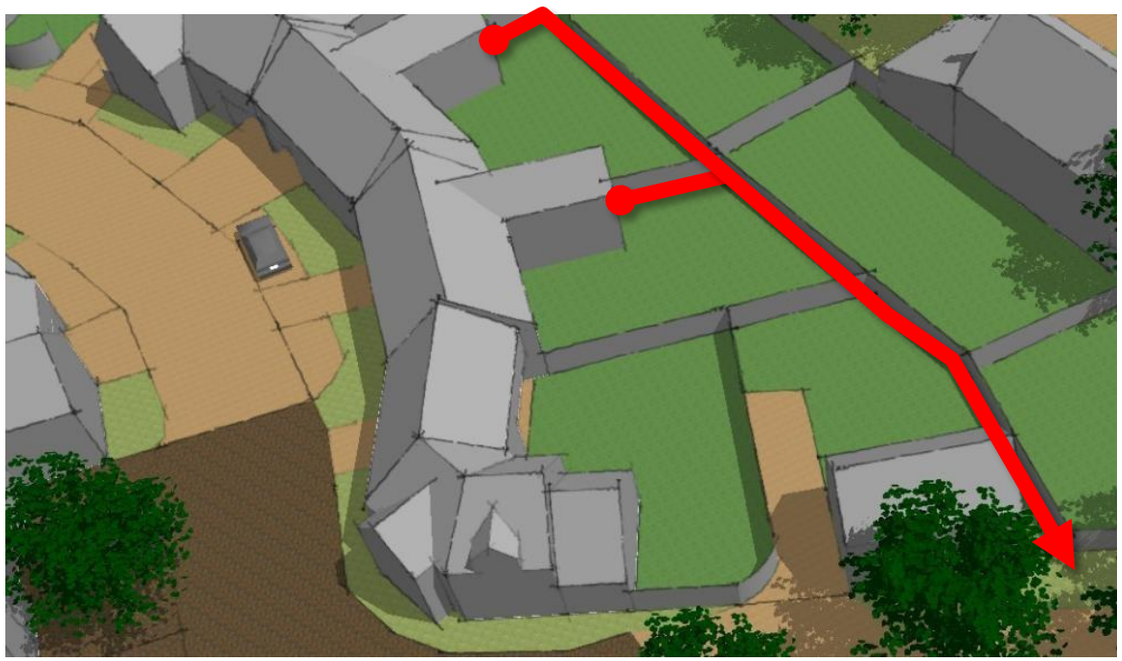
Rear access should be direct and easy with adequate width the moving wheelie bins and cycles



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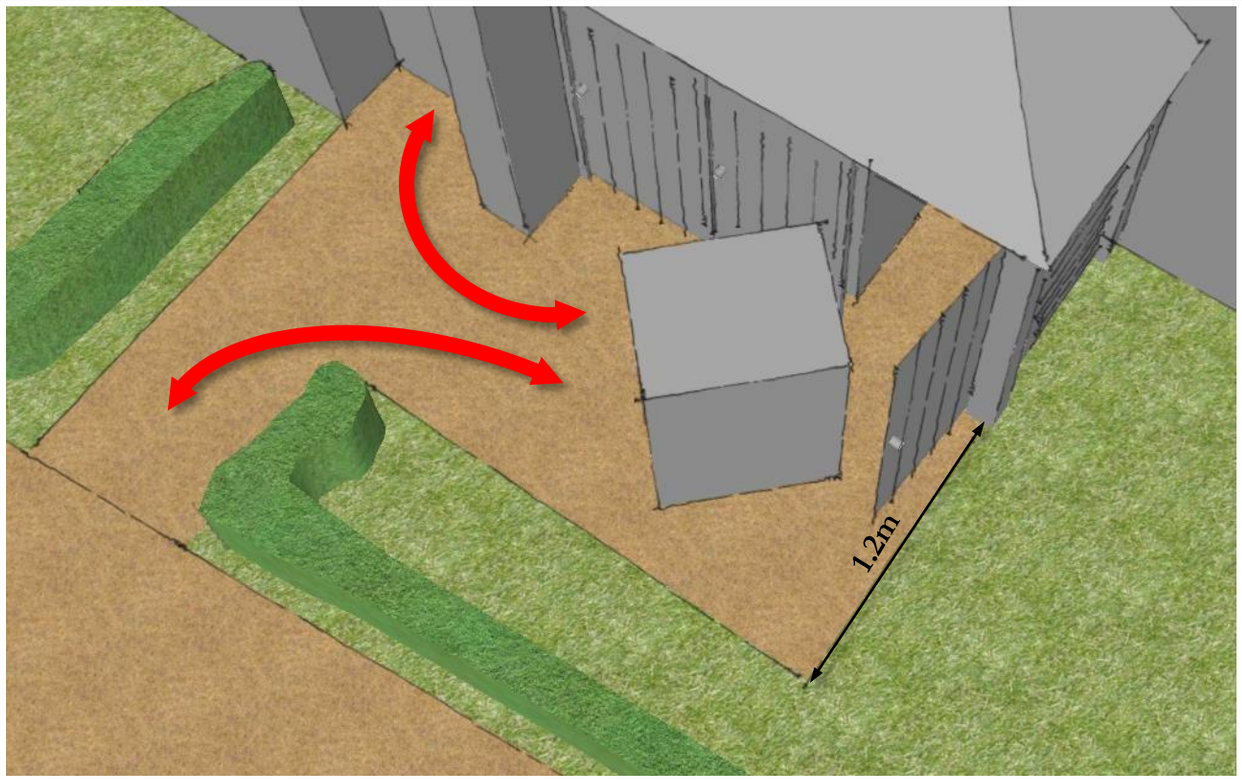
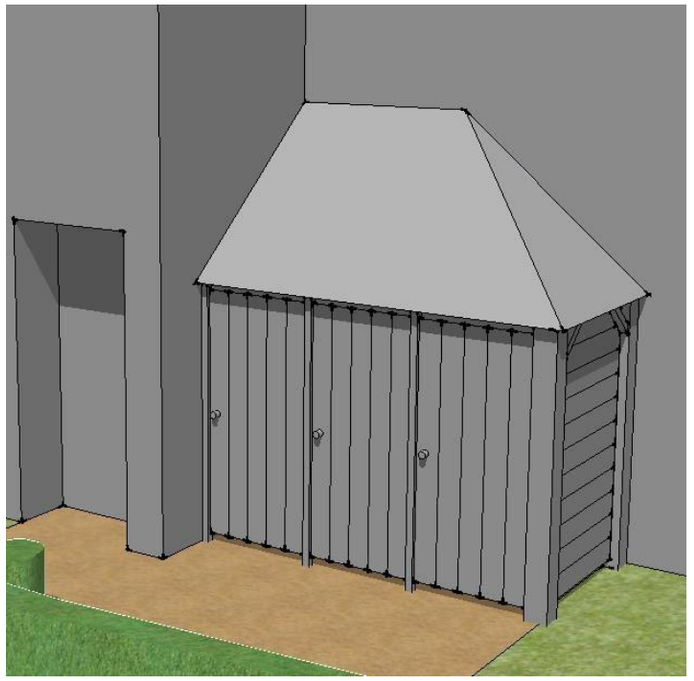
Long convoluted rear access and routes for wheelie bins will not be acceptable

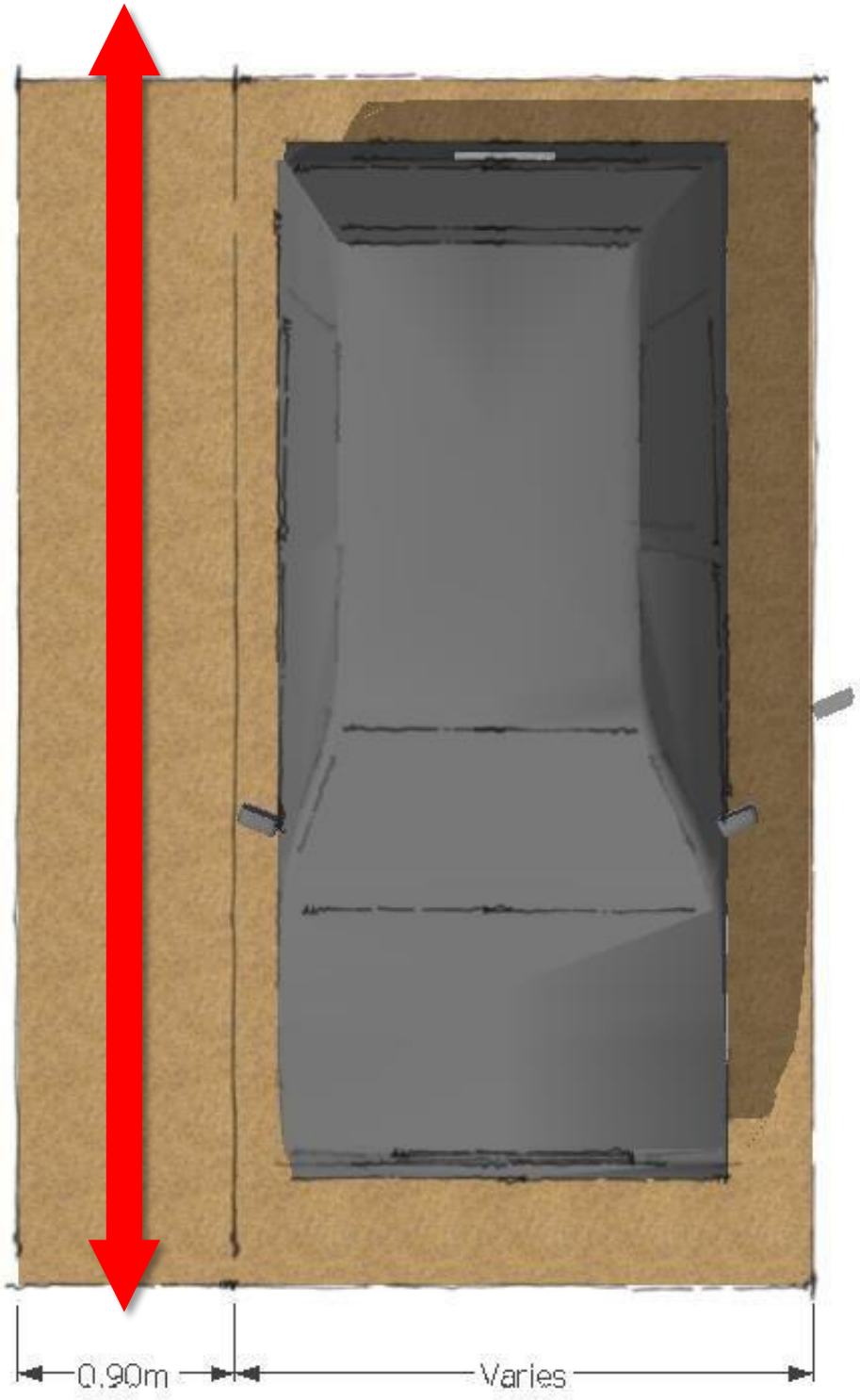


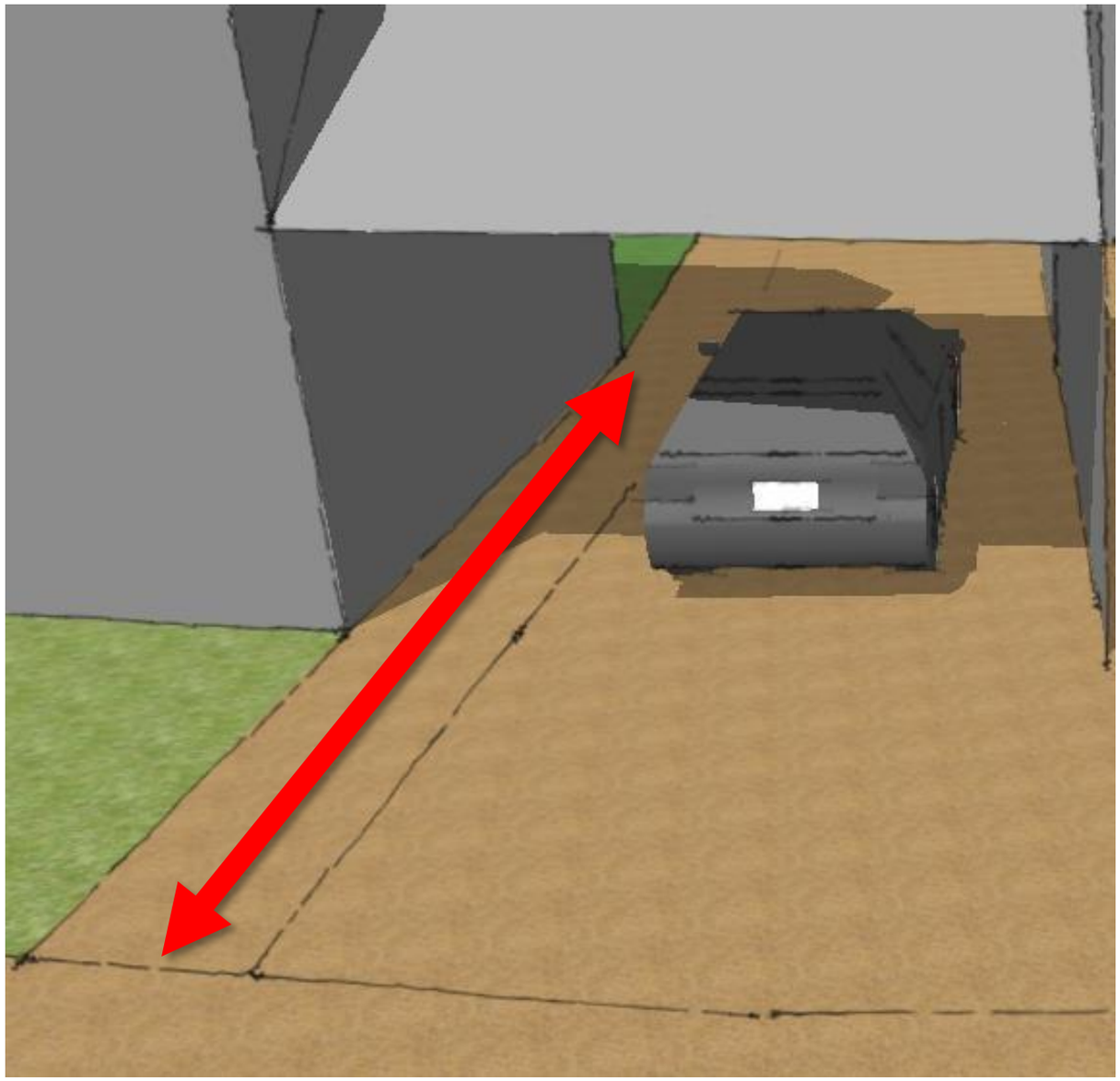


Where wheelie bins can only be stored in public view they should where ever possible be in storage units designed into the dwelling, using the same architectural form and materials to complement the dwelling. An adequate hard standing area should be provided in front of the store to allow for the easy removal of the bins on collection day. The location of the kitchen should be as close to the bin store as possible to ensure that visits to the bin store are as short and easy as possible.

The example here is of a simple lean-to barn style store with a simple timber frame, 40 degree hipped roof, ship lap clad side and ledged and braced doors with sufficient air gaps above and below to allow for ventilation.

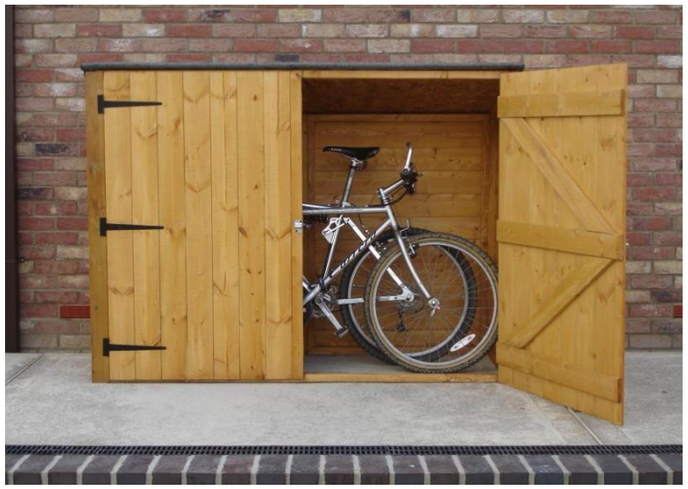
Cycle and Bin Storage





Where driveways, parking spaces and garages will also act as the route for wheelie bins and cycles to be bought from the backs to the fronts of properties they will need to allow for a minimum 0.9m width clear route alongside a parked vehicle.

Cycle and Bin Storage



Examples of free-standing wheelie bin and cycle storage. Images from planning records and Google Images

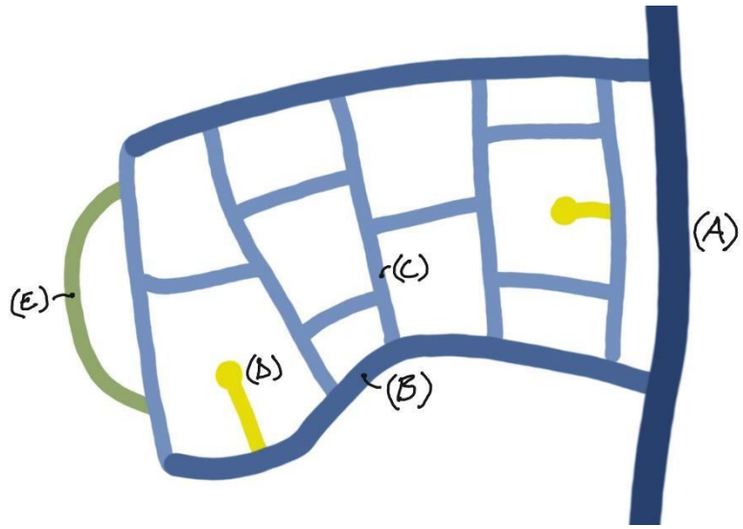
Street Hierarchy

A street hierarchy has been devised for use on the future development proposals. Which streets are used will depend on the scale and location of the proposed development. The hierarchy is as follows:

- Link Road
- Avenue (A)
- Internal Roads (B)
- Lanes (C)
- Courtyards (D)
- Edge Roads (E)

Where relevant matters relating to turning heads and cul-de-sacs are referenced within the consideration of the street typologies.

Each street type is outlined on the following pages.



Link Road

This road type will primarily apply to the Keresley urban extension and is envisaged to provide a road linking Winding House Lane in the North to Long Lane in the south effectively linking the M6/A444 to the A45. This road will carry reasonable high volumes of traffic and so access points into the Keresley development will be limited. Notwithstanding it is imperative that the route is designed in a way that is pleasant and comfortable to use and cross by pedestrians and cyclists as much as possible (1), with overlooking and natural surveillance provided by development fronting the link road. (2) In order to facilitate this it is envisaged that residential roads (3) and or private drives (4) will run parallel to the link road. These will also provide wide footways/cycleways that have a substantial landscaped and tree lined buffer between them and the link road (5).

Dwellings fronting onto link road. There is scope for taller dwelling and buildings to provide an appropriate sense of enclosure and scale.

Private front gardens to dwellings. These can be bounded by a low wall, railings or hedge.

Footway/ cycle way to run parallel to link road with the tree and landscape buffer providing a degree of separation.

Access road to dwellings fronting link road. This can take the form of short private drives or shared space roads. This road/drive can be combined with the footway/cycleway and the overall width reduced subject to agreement with the Highway Authority.

Tree and landscape buffer. Tree planting and low level landscaping will soften link road and provide a green buffer between it and the residential development.

Link road. Carriageway. designed to carry all types of vehicles. Final width, materials and construction to be agreed with the Highway Authority. This will be reflective of the environment through which it travels or expected to travel upon completion of the SUE.

Tree and landscape buffer. Tree planting and low level landscaping will soften link road and provide a green buffer between it and the residential development.

Access road to dwellings fronting link road. This can take the form of short private drives or shared space roads. This road/drive can be combined with the footway/cycleway and the overall width reduced subject to agreement with the Highway Authority.

Footway/ cycle way to run parallel to link road with the tree and landscape buffer providing a degree of separation.

Private front gardens to dwellings. These can be bounded by a low wall, railings or hedge.

Dwellings fronting onto link road. There is scope for taller dwelling and buildings to provide an appropriate sense of enclosure and scale.

Indicative Link Road Section

Link Road

The link road typology will need to have regard to the environment within which it will travel or is expected to travel. The majority of a link road is expected to function through a predominantly residential environment, helping serve all parts of the wider development and not act as a 'barrier'. Therefore every effort should be made to integrate active frontages, with properties having a frontage to the road (as shown in the subsequent examples and diagrams). This should be designed having regard to noise and air quality issues, especially in rear gardens.

Good Link Road Example, where properties front onto the road and are supported by a good quality natural environment.

Beaulieu Boulevard, Chelmsford

Images from Google Street View and Google Earth

Link Road

LEFT: Poor Link Road Example, where properties either turn their back on the road or front it sideways on with blank facades. The road is then bounded by garden fences and hedge rows. It lacks in natural surveilance and encourages higher speeds.

Brookfield Way, Lutterworth

Images from Google Street View and Google Earth

RIGHT: Good Link Road Example, where properties front onto the road and are supported by a good quality natural environment.

Beaulieu Boulevard, Chelmsford

Images from Google Street View and Google Earth

Avenue

Entrance to development. Wider street with landscape buffer to carriageway.

Scope for on-street parking.

Standard carriageway with 60mm kerb upstand.

Junction on raised table with direct pedestrian crossings, no or flush kerb lines.

Sharp change in direction and reduction in street width.

Gable designed as focal point. Pulled forward to break linearity of the street.

Avenues are intended to act as the main access routes into the larger development parcels. Whilst designed with a more formal footway/carriageway arrangement they should be sufficiently wide enough to allow for substantial tree planting and landscaping to give them a softer/greener character. Parking should be provided on plot but opportunities for parking on street in properly designated bays is a possibility. Junctions with spur roads should be designed to give pedestrians priority with crossing points on desire lines not set back from the junctions. They should also be designed to slow vehicles down. Other traffic calming features such as carriageway narrowing and buildouts should be designed in to read as part of the street.

Avenue

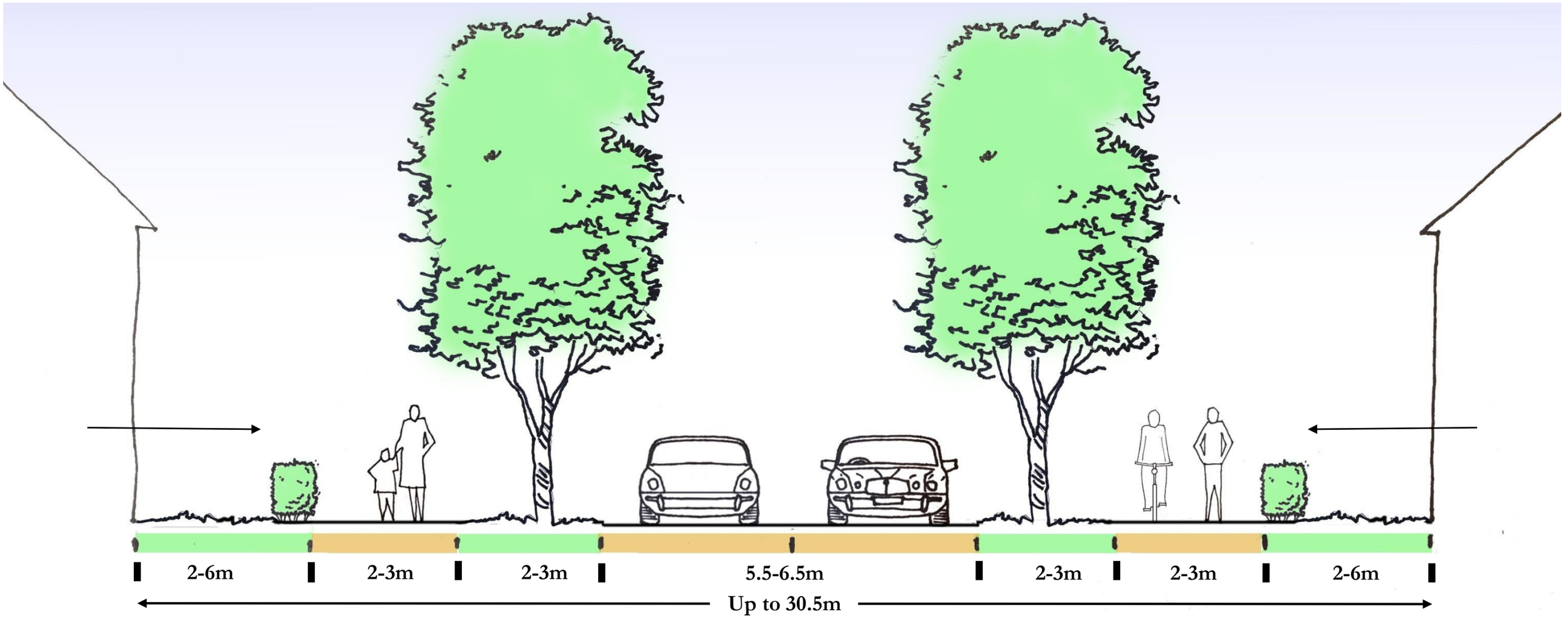
Slight variation in building line to create visual interest.

Street trees. Species, size and tree pit detail to CCC approval.

Low level planting to partially screen parking.

Trees to help delineate appropriate width of carriageway.

Buildings set back to reduce impact of parking on the street.



Dwellings fronting onto Avenue. These should be of sufficient height to provide an appropriate sense of enclosure.

Private front gardens to dwellings. These can be bounded by a low wall, railings or hedge. Should there be incidences where parking to the front of dwellings is required this width can be extended to 6m.

Footway/ cycle way to run parallel to the Avenue with the avenue of trees providing a degree of separation.

Avenue of trees set in grass or possibly some low level planting. This will soften the road and provide a green buffer between the road and the residential development.

The Avenue will act as the main road into large developments. It's overall width can be up to 6.5m should it need to accommodate a bus service. This will have a raised kerb of a minimum of 60mm and can be surfaced in conventional black top with contrasting materials being used at key junctions and crossing points. At these locations raised tables and shared surface principles should be incorporated.

Avenue of trees set in grass or possibly some low level planting. This will soften the road and provide a green buffer between the road and the residential development.

Footway/ cycle way to run parallel to the Avenue with the avenue of trees providing a degree of separation.

Private front gardens to dwellings. These can be bounded by a low wall, railings or hedge. Should there be incidences where parking to the front of dwellings is required this width can be extended to 6m.

Dwellings fronting onto Avenue. These should be of sufficient height to provide an appropriate sense of enclosure.

Indicative Avenue Section

Good Avenue Example

The Chase, Harlow

Image from Google Earth

Avenue

The parades of trees will frame the space once matured. However they could have been used to demarcate the ends of on street parking bays. This would have gone some way to reduced the dominance that the on street parking has on the overall streetscene.

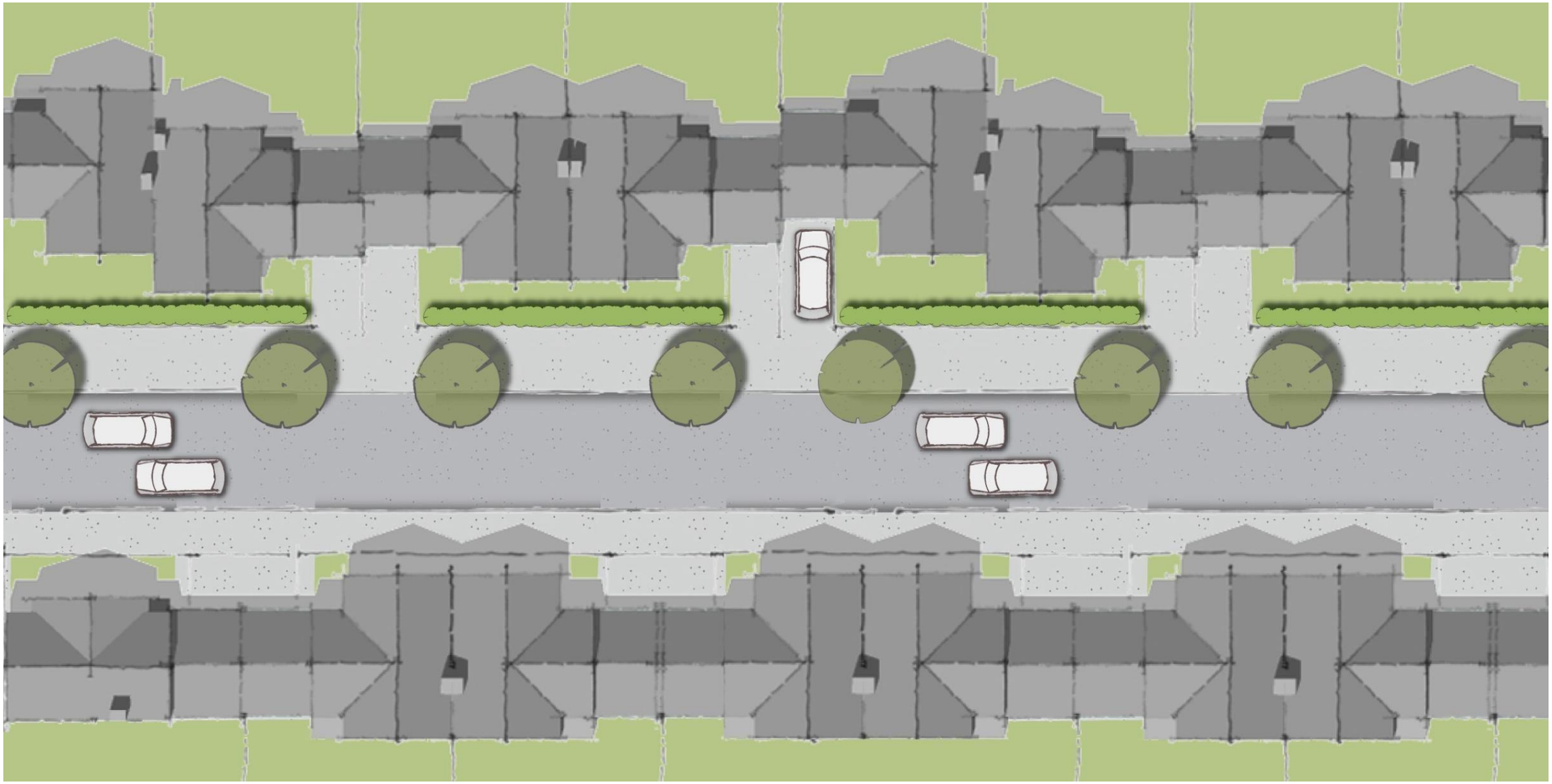
Junction Radii could have been tightened to help control vehicle speeds .

Rumble strips in the carriageway will do little to slow vehicles, but combined with junctions on raised tables they should slow vehicles and allow pedestrians to cross on the desire line.

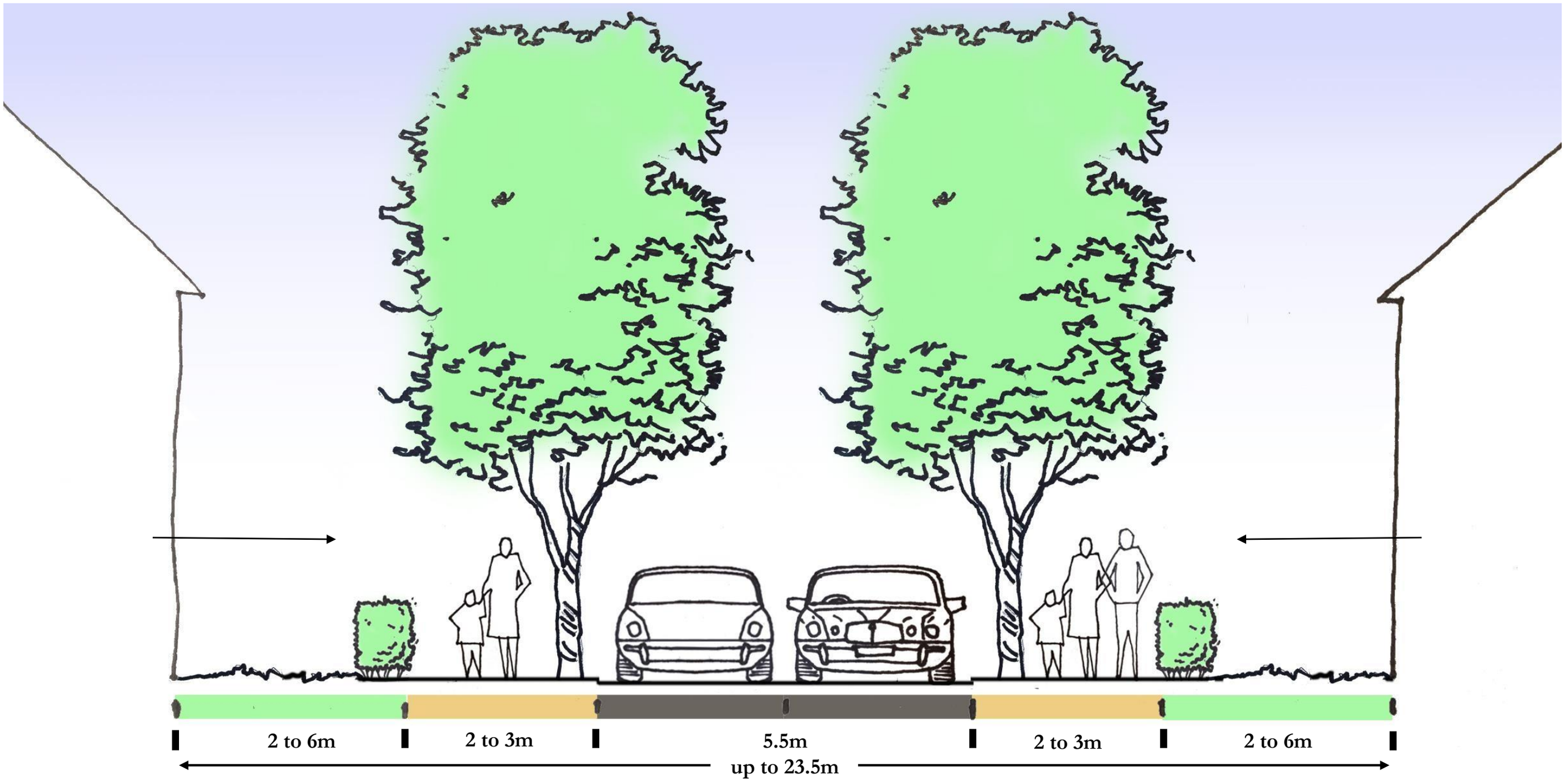
Rumble strips forming the ramps to this raised table pedestrian crossing will slow vehicles allow pedestrians to cross on the desire line.

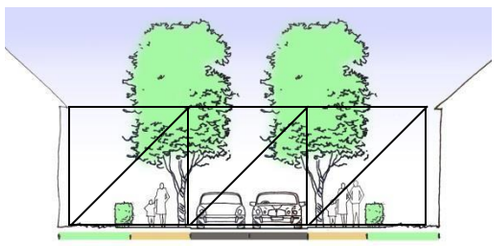
Images from Google Street View

Internal Roads



Internal roads are intended to act as the main access route into medium sized development parcels or as an interface between boulevards and the more intimate less formal routes and spaces. They share the same characteristics as avenues – footways with kerb upstands and conventional carriageways. However they should have the feel of an organically formed central village street with changes in geometry and carriageway narrowing. This will help both control vehicle speeds and add visual interest. Whilst narrower than avenues tree planting and informal landscaping should be included to help green and soften the routes. Parking should be provided on plot but on street provision can be designed in and could be used to aid traffic calming. Junctions with spur roads should be designed to give pedestrians priority with crossing points on desire lines not set back from the junctions. They should also be designed to slow vehicles down.





Demarcated footway with scope for tree planting.

Standard carriageway design and construction with kerb upstands…

Demarcated footway with scope for tree planting.

Dwellings should be set back sufficiently to allow for adequate privacy. Scope for boundary treatment in the form of hedging or low brick wall/railings.

Height to width ratio should be around 3:1 as this generally provides a good sense of enclosure that doesn't feel too narrow and over-bearing.

Internal Road Section

Lanes

Lanes are more intimate shared spaces where there is no designated footway or carriageway. They should have no overtly direct vehicle route through, with trees, planting beds and street furniture placed in such a way as to slow vehicle speeds. They are narrower in width than Internal Roads and are surfaced with more materials such as blocks, resin bonded gravel or coloured tarmac as these will re-inforce the more informal nature of this street type and help create a more intimate feel and character.

Continuous built frontages should be used along Lanes with the occasional detached and semi-detached dwellings. Dwellings should not always be placed in a conventional manner – running in straight lines parallel to each other – instead a layout that appears more organic is encouraged as this will provide interest and add to the informality.

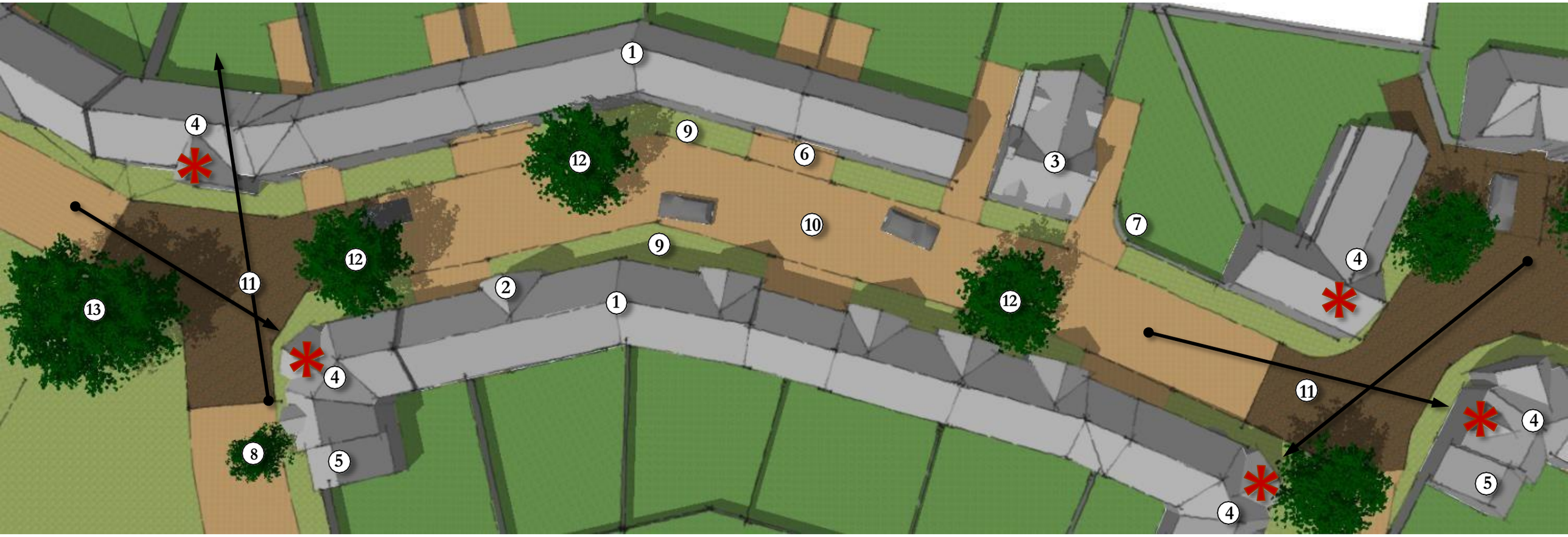
Continuous built frontages can be achieved through a number of means, for example by the linking of dwellings, the use of high masonry walls between dwellings, joined garages and/or appropriately designed carports.

Building heights should for the most part be circa two storeys to correlate with the narrow street widths. However this does not preclude taller or lower dwellings so long as their placement is carefully considered in the design of the street.

Parking can be provided either on-plot or on-street. Where on-street provision is to be included it should be absorbed into the street -scene – by setting back the building line or setting parallel to the street between trees for example (see p.70&71). On-street parking spaces should not be designated by white lines but instead by the use of contrasting block work, surfacing or metal studs. Trees, landscaping and/or street furniture can also be used, in conjunction with one of these options.

More detailed guidance on Lanes is outlined on the following pages.

Lanes



1. The lane has a strong continuous built frontage. Dwellings are typically 2 storeys in height some with the first floor partly within the roof space.

2. The use of projecting gables and varying architectural detailing breaks up the linearity of the street.

3. The use of occasional detached dwellings provides a break in the building line and adds interested to the street.

4. Dwellings to the corners are designed as dual aspect. There is an opportunity on the corners to design distinctive and unusual dwellings that act as focal points and can aid legibility and wayfinding.

5. There is the opportunity to create architecturally interesting rear elevations where they will be highly visible in the public realm.

6. On plot car parking is provided by way of car ports with accommodation above or simply as driveways to the side of dwellings.

7. Curved brick walls should be used to visi-splays where possible to add more interest to the street-scene.

8. Use columnar trees on tight corners to ensure that whilst they help visually narrow the corner they will not obstruct vehicles.

9. Dwellings have informal front gardens with no boundary treatment. of 1m to 2m in width . These help soften the streetscene and preventing the streets from becoming too ‘urban’. They can help with rain water retention, provide a ‘privacy strip’ between residents and street users and allow for planting ‘personalisation’ by residents.

10. The carriageway should be designed as a shared surface with a notional 4.8m wide ‘carriageway’ and a notional 2m wide ‘footway’.

11. Junctions should be designed as informal spaces with no inferred priority. The use of different surfacing such as block paving will further emphasis these spaces.

12. Trees planted within the lane can help act as traffic calming features and add visual interest provided they do not overtly impede vehicular movement. The trees should be planted in appropriately designed tree pits and surfaced in a material that is porous but suitable to walk over and withstand the occasional vehicle over-run.

13. Trees used to help terminate views and contain space, when corner is not built on.

Lanes

Use trees to help terminate views and contain space, when corner is not built on.

The use of projecting gables and varying architectural detailing breaks up the linearity of the lane.

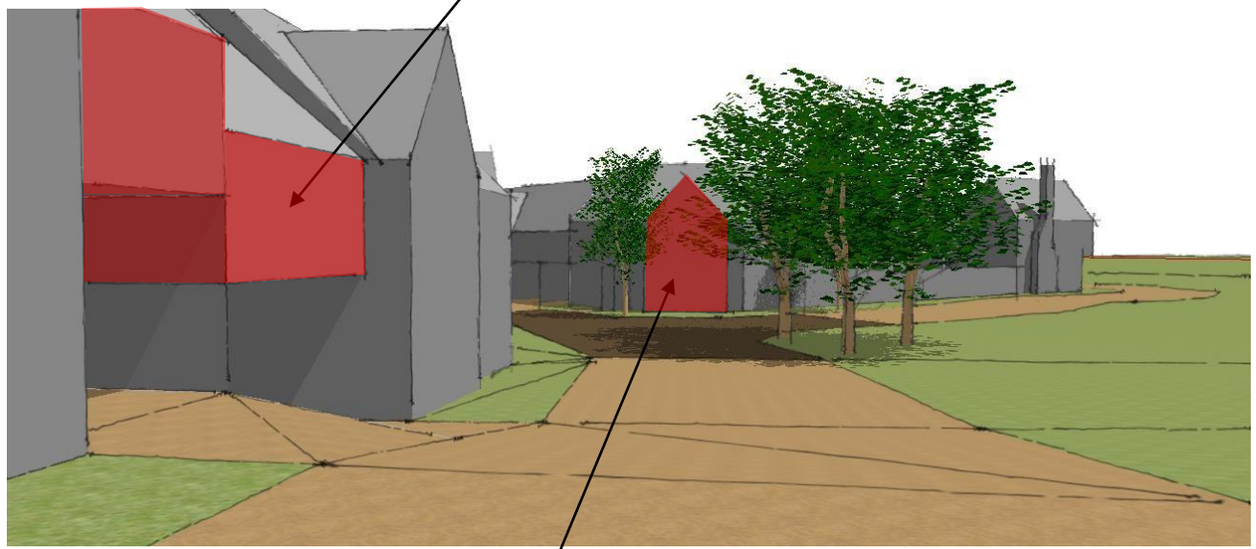
Trees planted within the lane can help act as traffic calming features and add visual interest provided they do not overtly impede vehicular movement. The trees should be planted in appropriately designed tree pits and surfaced in a material that is porous but suitable to walk over and withstand the occasional vehicle over-run.

The lane should be designed as a shared surface with a notional 4.8m wide 'carriageway' and a notional 2m wide 'footway'. In order to control vehicle speed and provide a more organic appearance to the development, long straight sections or carriageway should be avoided.

Dark or 'urban' surface material colours such as black asphalt or grey paving should be avoided. Instead materials such as buff resin bonded gravel or coloured asphalt, or natural brick/block paving should be used.

Where possible kerb upstands should be avoided. Instead a flush kerb or edging should be used.

On plot car parking is provided by way of car ports with accommodation above or simply as driveways to the side of dwellings.



Gabled building provides an interesting focal point at the junction point

Use slightly taller buildings to emphasise corners.

Use trees to help frame views and contain space, when corner is not built on.

Use columnar trees on tight corners to ensure that whilst they help visually narrow the corner they will not obstruct vehicles.

Lanes

1. Different house types with varying roof heights, roof pitches create a more varied street scene. Whilst features such as chimneys, porches, dormers and gables add interest. Although there are different house types and large gaps between some dwellings there is still an overall building line.

2. The use of 1.8m high brick walls helps give an element of continuity to the streetscene.

3. Dwellings to the corners are designed as dual aspect. There is an opportunity on the corners to design distinctive and unusual dwellings that act as focal points and can aid legibility and wayfinding. Here there is an example of a two dwellings joined to create a 90 degree corner-tuner (3a). The use of 'cranked buildings' at the end of streets will make for an interesting focal points whilst at the same time suggesting the mews is not a dead end (3b).

4. There is the opportunity to create architecturally interesting rear elevations where they will be highly visible in the public realm.

5. On plot car parking is provided by way of car ports with accommodation above or garages or simply as driveways to the side of dwellings.

7. Curved brick walls should be used to visi-splays where possible to add more interest to the street-scene

8. Dwellings have informal front gardens with no boundary treatment. of 1m to 2m in width . These help soften the streetscene and preventing the streets from becoming too 'urban'. They can help with rain water retention, provide a 'privacy strip' between residents and street users and allow for planting 'personalisation' by residents.

9. The carriageway should be designed as a shared surface with a notional 4.8m wide 'carriageway' and a notional 2m wide 'footway.

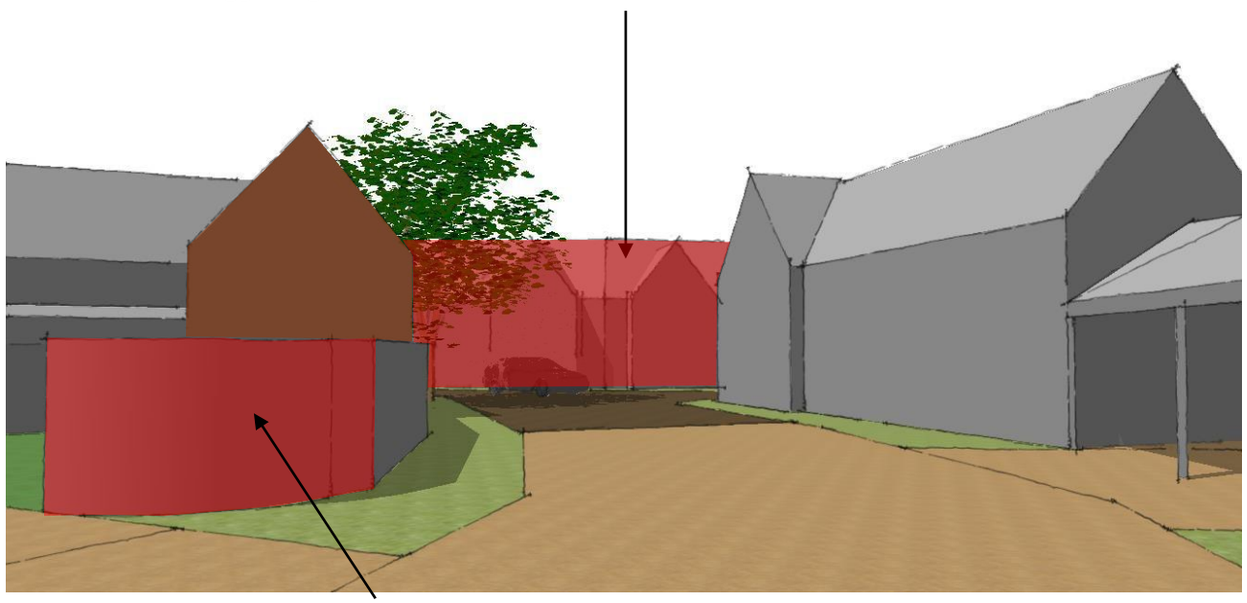
10. Trees should be planted informally within the grass verges to create vertical interest.

Lanes

Different house types with varying roof heights, roof pitches and features such as chimneys and the use of garages and carports should be used to create visual interest in the street whilst keeping a fairly consistent building line.

Curve to the street draws the eye and adds interest to the streetscene.

The use of 'cranked buildings' at the end of streets will make for an interesting focal points whilst at the same time suggesting the mews is not a dead end.



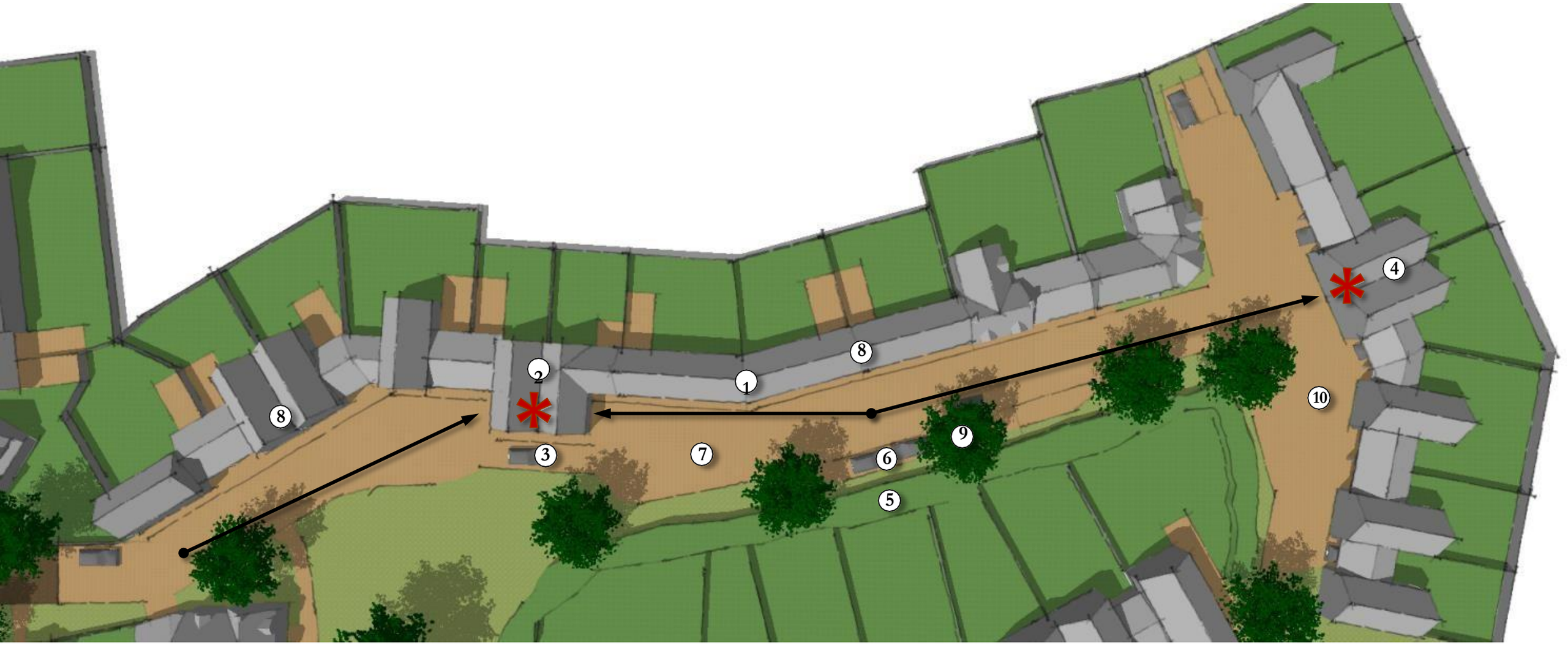
Curved walls to visi-splays adds interest to the street-scene.

Trees should be planted informally within the grass verges to create vertical interest.

Grass verges of 1m to 2m in width should be used to help soften the streetscene and prevent them becoming too 'urban'. Grass verges can help with rain water retention, provide a 'privacy strip' between residents and street users and will allow for planting 'personalisation' by residents

Rear gables such as this which are prominent focal points in the street scene should be designed to be architecturally interesting.

Lanes



1. The street has a strong continuous built frontage. Dwellings are typically 2 storeys in height some with the first floor partly within the roofspace.

2. Dwellings brought forward to visually break line the of the linearity of the street and provide visual interest.

3. Points like this can also be used to narrow the 'carriageway' as a form of vehicle speed control. A narrowing of 3m will require cars to give way but still be sufficiently wide enough for refuse vehicles.

4. Dwellings like these need to be designed to terminate views and act as focal points.

5. Use opportunities to incorporate existing hedgerows in a positive manner such as here where a hedgerow is used as a rear boundary to gardens and is also a green feature in the street. A grass verge can be used as a buffer between the carriageway and the hedge.

6. Visitor/additional parking can be provided on street, such as here in parallel bays 'book ended' by trees. Bays should be 6m x 2.4m.

7. The carriageway should be designed as a shared surface with a notional 4.8m wide 'carriageway' and a notional 2m wide 'footway'.

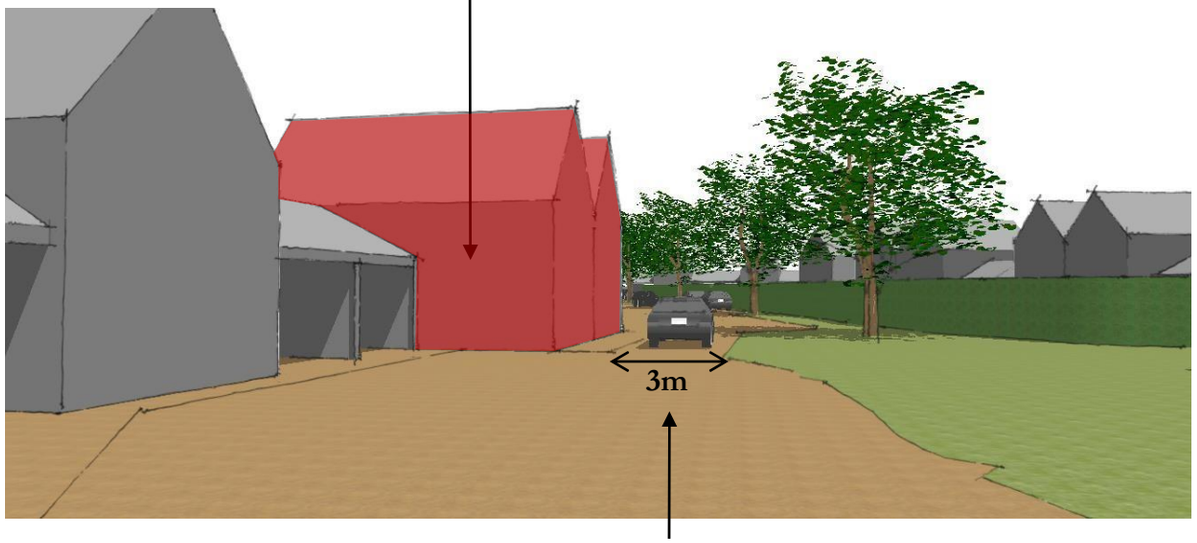
8. Due to the low level of traffic on the street dwellings have no front garden.

9. Trees planted to add vertical interest in the street.

10. Turning heads can act like cul-de-sacs but should be 'hidden' within the street.

Lanes

Dwellings brought forward to visually break line the of the street.



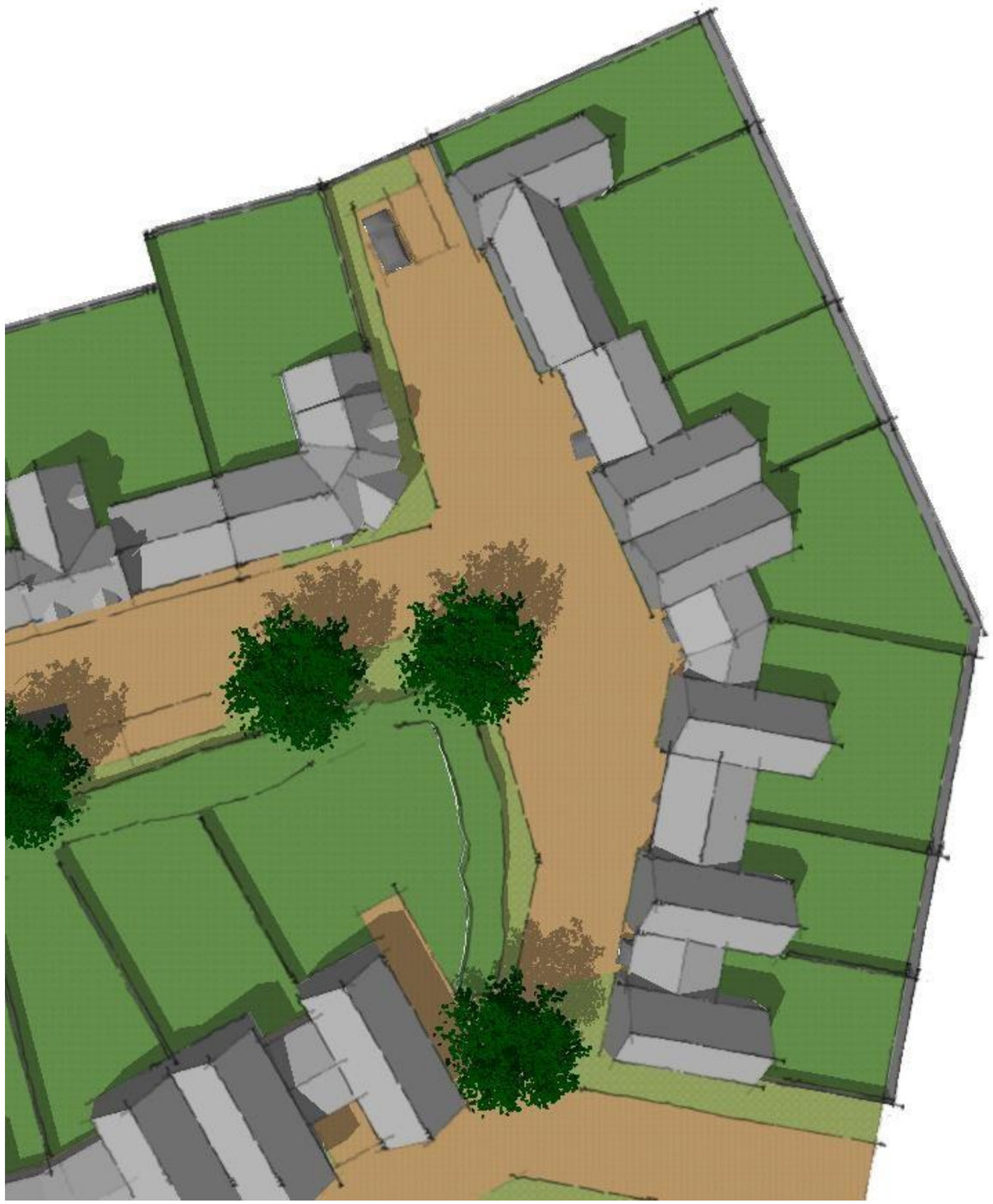
Points like this can also be used to narrow the 'carriageway' as a form of vehicle speed control.

View down street terminated by gable fronted dwellings.

Visitor/additional parking can be provided on street, such as here in parallel bays 'book ended' by trees. Bays should be 6m x 2.4m.

Turning heads should be 'hidden' within the street.

Lanes



Whilst turning heads need to be designed to accommodate refuse vehicles they can still be designed to create intimate and interesting spaces.

3m min

6.8m

3m min

12.8m min

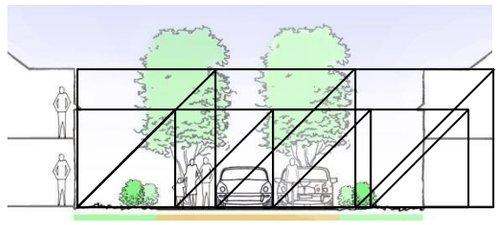
Consider the placement of windows to avoid issues of overlooking between dwellings..

Dwellings should be set back sufficiently to allow for informal front gardens with no enclosure. Scope for low level landscaping.

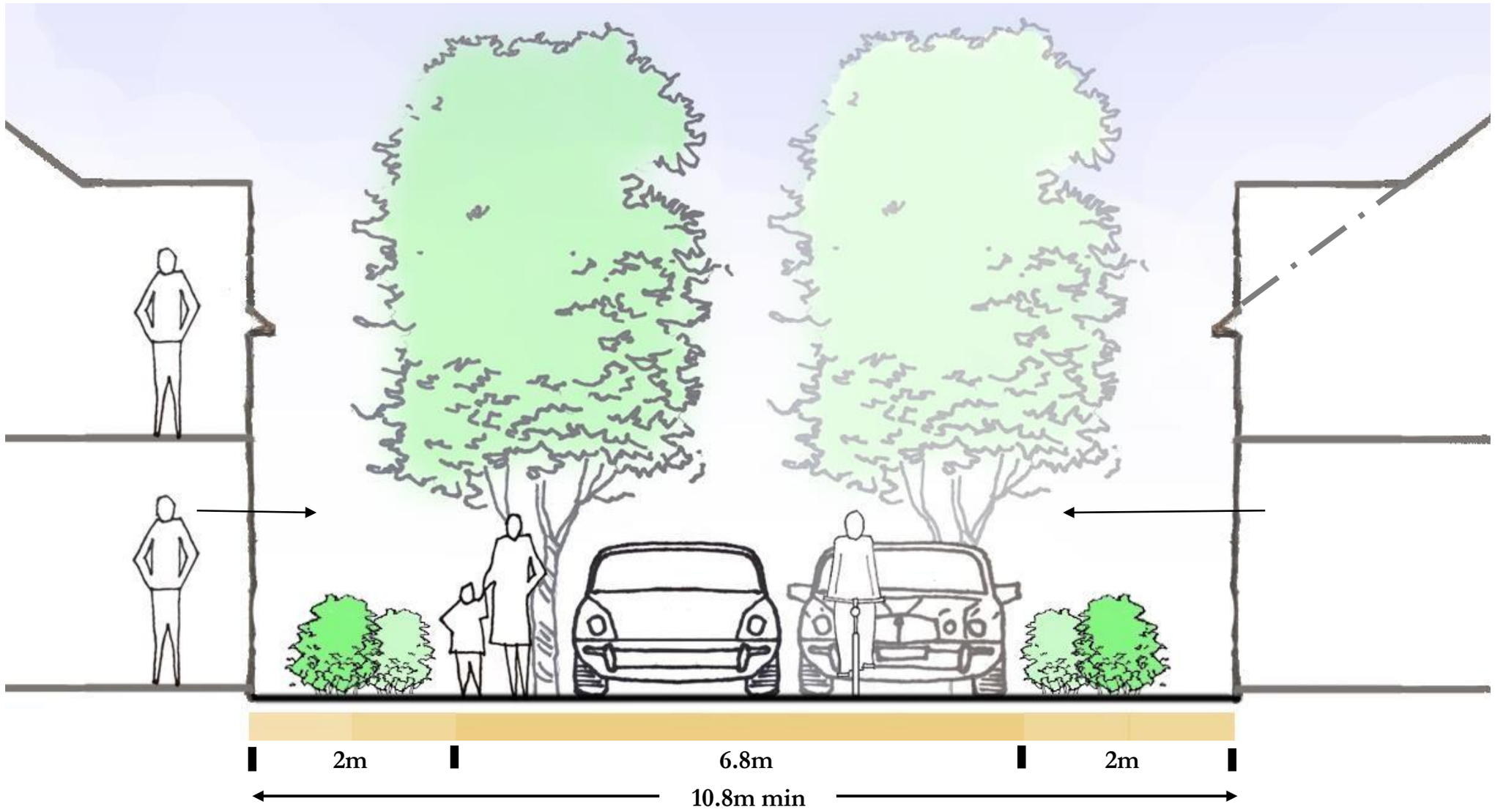
The carriageway and footway should be designed as a shared-space and surfaced in a material such as buff asphalt, which is tonally softer than black top and tells drivers this is not a conventional road.. The use of kerb upstands should be avoided with a flush kerb or edging used instead. There is scope for tree planting in the carriageway to help soften the street and act as a traffic calming measure.

Dwellings should be set back sufficiently to allow for informal front gardens with no enclosure. Scope for low level landscaping.

Height to width ratio needs careful consideration on Lanes to ensure that they don't too narrow and over-bearing. The ratio can be increased by setting the first floor partly in the roof-space with dormers.



Indicative Lanes Section



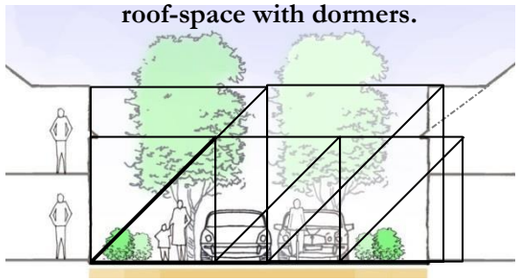
Consider the placement of windows to avoid issues of overlooking between dwellings..

Threshold strip, demarcated from carriageway with scope for low level landscaping.

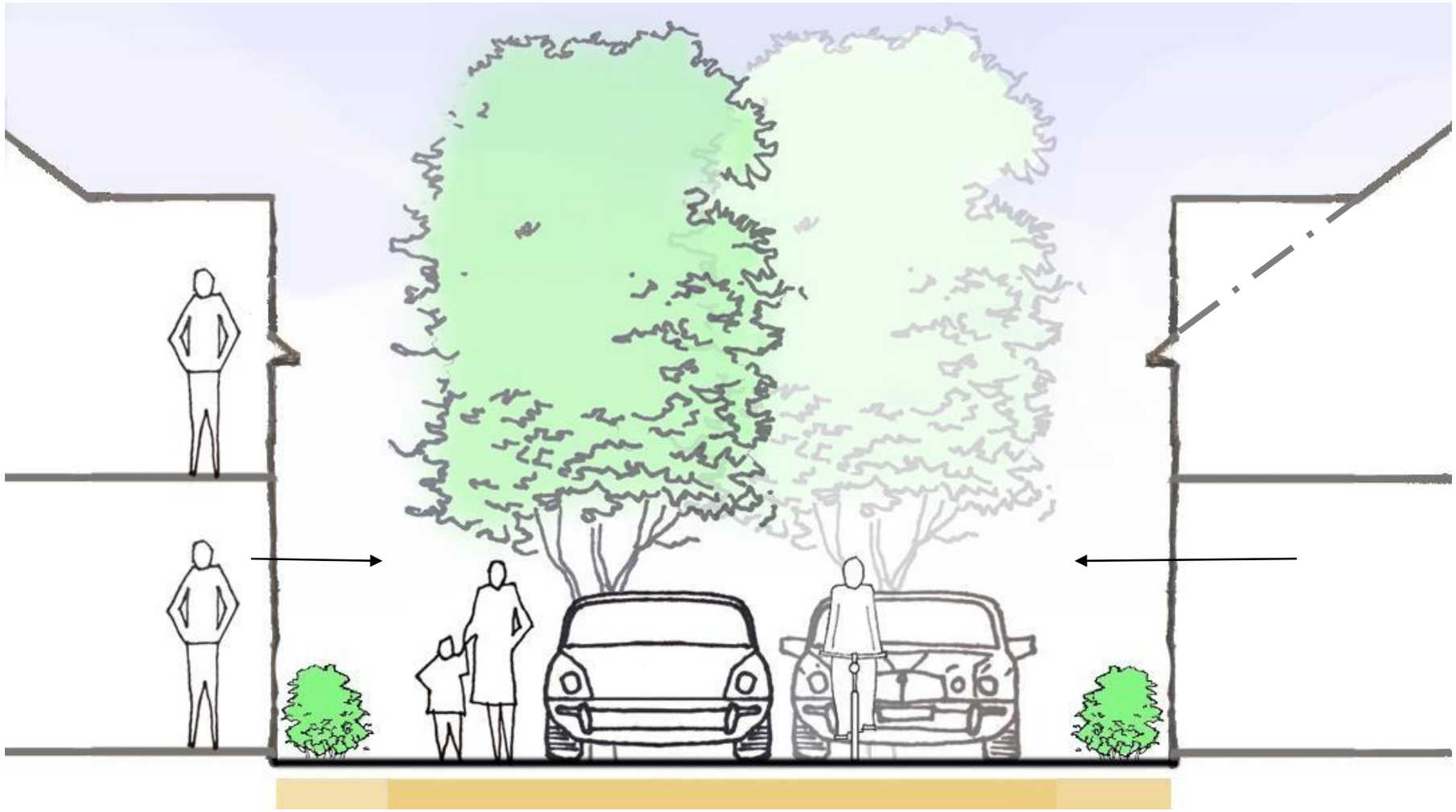
The carriageway and footway should be designed as a shared-space and surfaced in a material such as buff asphalt, which is tonally softer than black top and tells drivers this is not a conventional road.. The use of kerb upstands should be avoided with a flush kerb or edging used instead. There is scope for tree planting in the carriageway to help soften the street and act as a traffic calming measure.

Threshold strip, demarcated from carriageway with scope for low level landscaping.

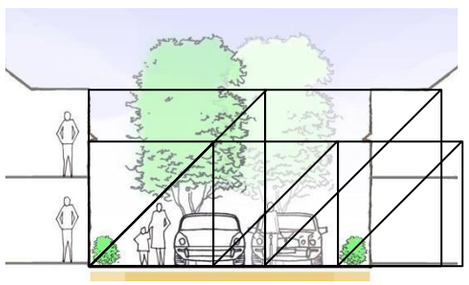
Height to width ratio needs careful consideration to avoid creating a street-scene that feels too narrow and over-bearing. The ratio can be increased by setting the first floor partly in the roof-space with dormers.



Indicative Narrow Lanes Section



Consider the placement of windows to avoid issues of overlooking between dwellings..



Threshold strip, demarcated from carriageway with scope for some low level landscaping..

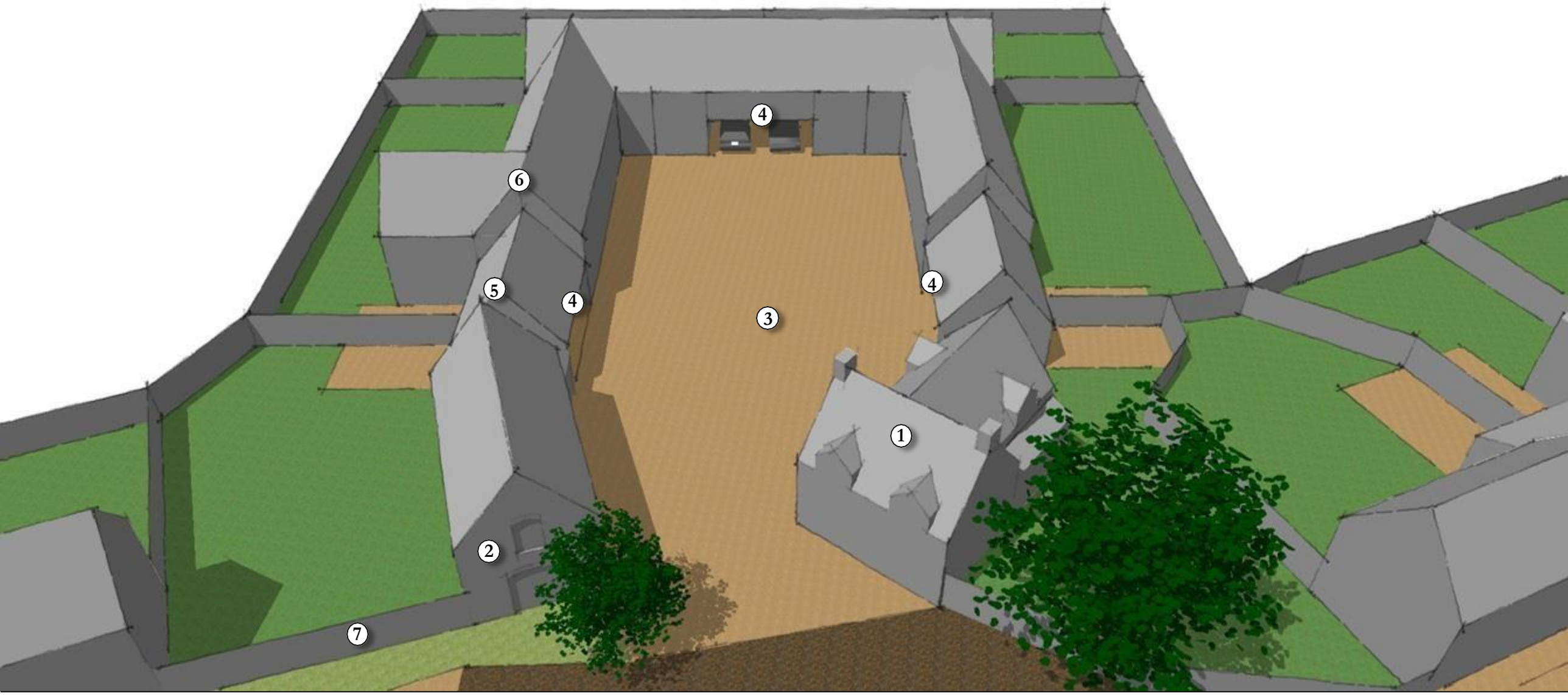
The carriageway and footway should be designed as a shared-space and surfaced in a material such as buff asphalt, which is tonally softer than black top and tells drivers this is not a conventional road.. The use of kerb upstands should be avoided with a flush kerb or edging used instead. There is scope for tree planting in the carriageway to help soften the street and act as a traffic calming measure.

Threshold strip, demarcated from carriageway with scope for some low level landscaping

This width should not be used for long runs but instead only to provide points of interest in the street-scene. Again the height to width ratio needs careful consideration to avoid creating a street-scene that feels too narrow and over-bearing. The ratio can be increased by setting the first floor partly in the roof-space with dormers.

Indicative 'Pinch-point' Lanes Section

Courtyards



Courtyard clusters of dwellings present the opportunity to reflect/reinterpret the farm yard typology that is prevalent throughout the Arden area. They can also be used as way of developing awkward or difficult pockets of land in an efficient and effective manner.

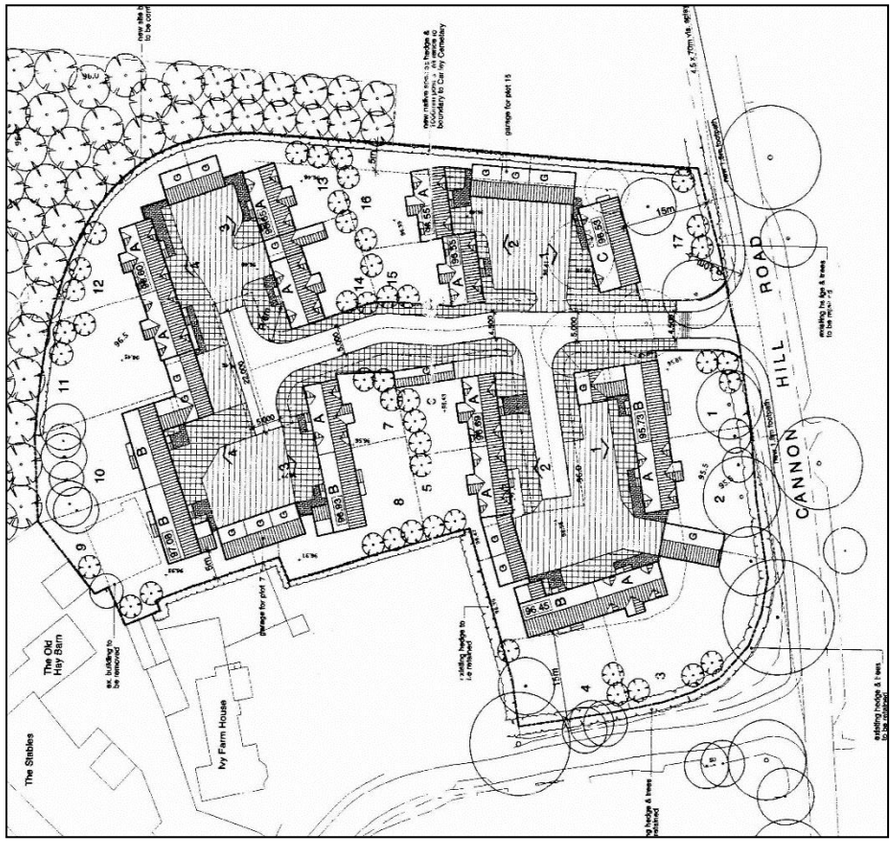
Careful thought should be given to the appearance and arrangement of the dwellings that form the perimeter of the court. These should ideally be barn like in their massing, and architecture and linked together.

There is scope for a 'farm house' dwelling to be 'tied' to the courtyard and placed at the entrance to the court. Car ports should be integrated into the layout to ensure that the courts do not become dominated by parked cars.

The courtyard should be wholly surfaced in a single material such as block paving, laid to a simple pattern only broken by drainage channels that are formed from the same material. There should be no 'front gardens' or boundary treatments to the fronts of the dwellings.

1. 'Farm house' at entrance to the courtyard
2. Active frontage to gable end of the barn
3. Single surface material
4. Integrated car ports
5. Variation in roofline
6. Building heights 1.5 to 2 storeys
7. Brick built boundary walls to street

Courtyards



The housing scheme at Ivy Farm Lane, Coventry involved the development of land around two farms in a conservation area. In order to respect the setting of the two farm houses and existing barns and preserve the character of the conservation area, the new development was arranged in a series of 'farmyard style' courtyards. The grouping of the dwellings that are linked together has helped spatially define the courtyards. Their architectural detailing is more farmhouse than 'barn' like but they are well designed nonetheless. A more simple approach to the courtyard surfacing would have worked better – no need for the black-top spur.

Images from Google Earth, Google Street View and planning records

Edge Roads

Edge roads will play an important part in both integrating the new developments with the wider open countryside whilst at the same time providing the views from the open countryside into the new development.

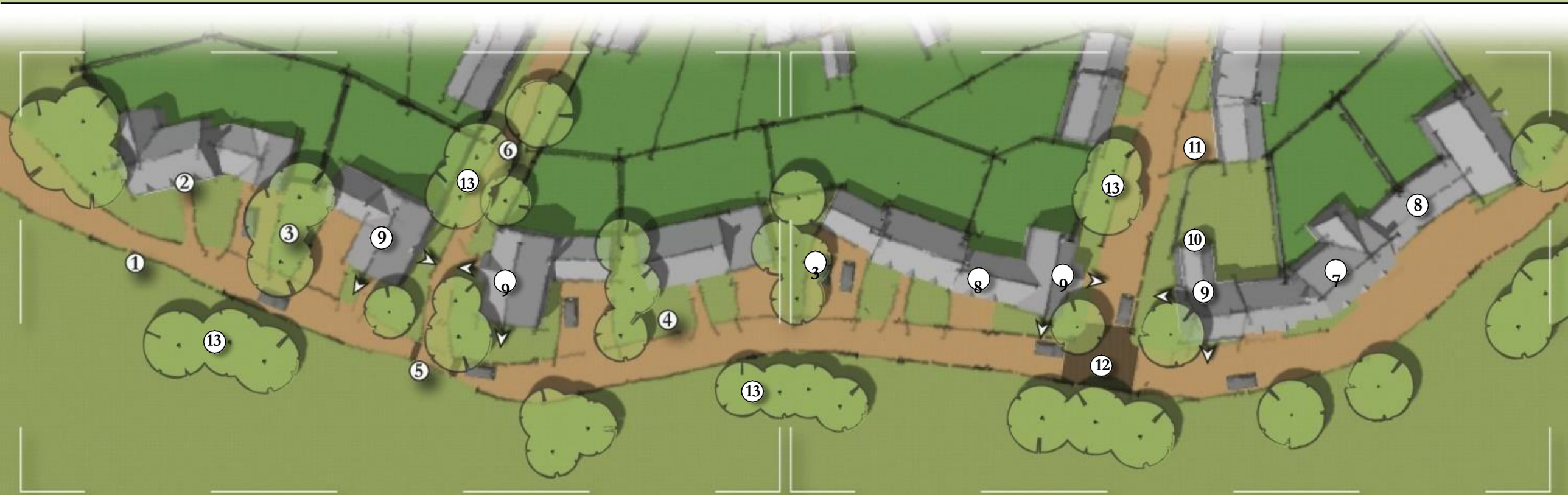
It is important that these parts of the proposed development integrate positively with the wider area with dwellings and other uses that overlook it providing natural surveillance and a pleasant outlook for the residents.

The roads along these edges should not act as physical barriers but should instead be designed to blend in with the natural landscape and ensure that vehicle speeds are kept to a minimum.

Where ever possible clear, safe and direct pedestrian and cycle routes should connect the wider area into the heart of the developments.

Private drives in these locations could also be used provided they are designed to fulfil the same purpose.

Edge Roads



Detatched dwellings

1. There is a complete informality between the edge of the development and the open space. The gentle meandering of the road surfaced in a buff or natural coloured material further adds to the effect.

2. Irregular placement of dwellings, no consistent built line and dwellings are placed quite far apart and have varying form and architectural detailing.

3. Extensive tree planting between dwellings to soften the building line and further blur the boundary between the open space and the edge of the housing development.

4. Dwellings have informal front gardens with no boundary treatment. Footpaths and driveways surfaced as per the carriageway.

5. Carriageway at crossing points narrowed to 2.75m emphasises the crossing point and requires vehicles to give way. The use of rumble strips combined with the placement of trees and/or bollards adds vertical emphasis to the narrowing and will help reduce vehicle speeds.

6. Pedestrian and cycle route overlooked by dwellings. Upto 3m wide with no formal edging and informal tree planting. Garden walls facing footpath constructed in brick.

Linked dwellings

7. Dwellings linked to provide a continuous but informal street frontage.

8. On plot car parking is provided by way of car ports with either a simple pitched roof or accommodation above.

9. Dwellings to the corners are designed as dual aspect. There is an opportunity on the corners to design distinctive and unusual dwellings that act as focal points and can aid legibility and wayfinding.

10. There is the opportunity to create architecturally interesting rear elevations where they will be highly visible in the public realm.

11. Curved brick walls should be used to visi-splays where possible to add more interest to the street-scene.

12. Junctions should be designed as informal spaces with no inferred priority. The use of different surfacing such as block paving will further emphasis these spaces.

13. Tree planting in general should be informal and either planted singly or grouped, this will be in keeping with the local hedge rows and copses. Formal avenues should be avoided. The placement of trees in views and to screen parking should be carefully considered.

	2-3m	varies	4.5-6.8m	2-6m	
open space/countryside	**Scope for dedicated footway/ cycleway with the trees providing a degree of separation from the carriageway.**	There is scope to either utilise existing trees or plant additional ones here to help soften the edge to the development. Trees here should be planted in an informal manner. Avenue planting should be avoided.	**The carriageway and footway should be designed as a shared-space and surfaced in a material such as buff asphalt, which is tonally softer than black top and tells drivers this is not a conventional road. Their respective width will depend on the location of the footpath and cycle way relative to the road. The use of kerb usptands should be avoided with a flush kerb or edging used instead. This will allow blurring of the grass verge and carriageway adding to the more informal nature of this environment.**	Dwellings fronting edge road should be set back sufficiently to allow for substantial informal tree planting and should have informal front gardens with no enclosure. This will help soften the edge of the development as it 'transitions' into the wider informal open-space/countryside. Where existing trees are to be incorporated their RPA will determine the setting out of the built form/carriageway.	**Dwellings predominantly two storeys in height but with scope for three storeys where they will act as focal points such as prominent corner buildings.**

Indicative Edge Road Section

Good Edge Road Example
Holmead Walk, Poundbury
Image edited from Google Earth

Edge Roads

There is a complete informality between the edge of the development and the open space the gentle meandering of the road further adds to the effect.

The use of bollards to narrow the carriageway at crossing points will help reduce speeds. Note the complete lack of any formal crossing points.

The absence of a kerb upstand allows the grass to grow over the edge of the road.

Landscaping is generally informal with no clear plot demarcation.

Images from Google Street View

Edge Roads

Examples of modern house types that could be used to maximise the views and outlook from edge road locations.. Additional height (above traditional 2 story dwellings) will be acceptable where it provides focal buildings such as corner plots.

Images from Planning records and site monitoring

Internal Junctions

Junctions are crucial in aiding permeability, helping with legibility and can act as focal/meeting points. As such they should be designed and treated as spaces and points of interest in their own right rather than merely as locations to facilitate vehicular movement through the development. Where ever possible roads should intersect at junctions in a way that does not infer one route has priority over another. This combined with an absence of road markings will help to ensure that vehicles enter the junctions and manoeuvre by way of negotiation with other users (including pedestrians). Swept paths and generous radii should be avoided and instead tight corners should be used to help reduce vehicle speeds. The diagrams on p.60 illustrate that irregularly designed junctions can be achieved whilst still allowing for refuse vehicles to comfortably manoeuvre through the spaces.

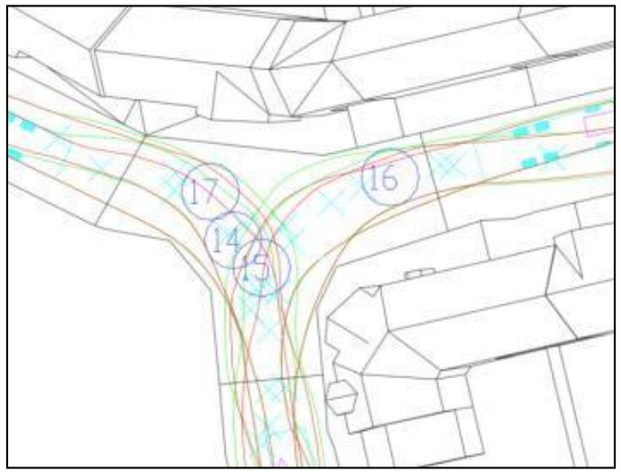
Surface treatment should be contrasting to the road to the adjoining carriageway to emphasis the uniqueness of the space whilst the careful placement of trees and appropriate street furniture can add interest, offer additional uses for the space and subtly infer an appropriate width for the carriageway.

The design and placement of buildings around the junctions will be crucial in ensuring that first and foremost they are well overlooked and have a good degree of natural surveillance but also that the dwellings engage positively with active frontages and architecturally interesting elevations.

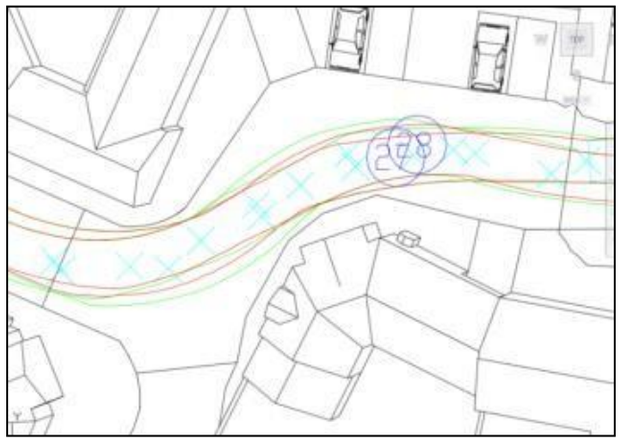
Visibility Splays

When designing both roads and junctions, care should be given to ensuring that vehicle speeds are kept as low as possible to ensure that forward visibility splays and junctions visibility splays can be as small as possible and do not become detrimental to the design and placement of buildings. Early engagement with the Local Highway Authority in the design process on the proposed layout is strongly recommended.

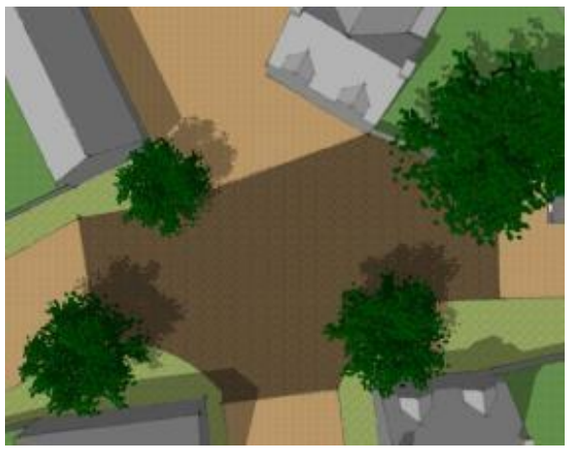
Internal Junctions









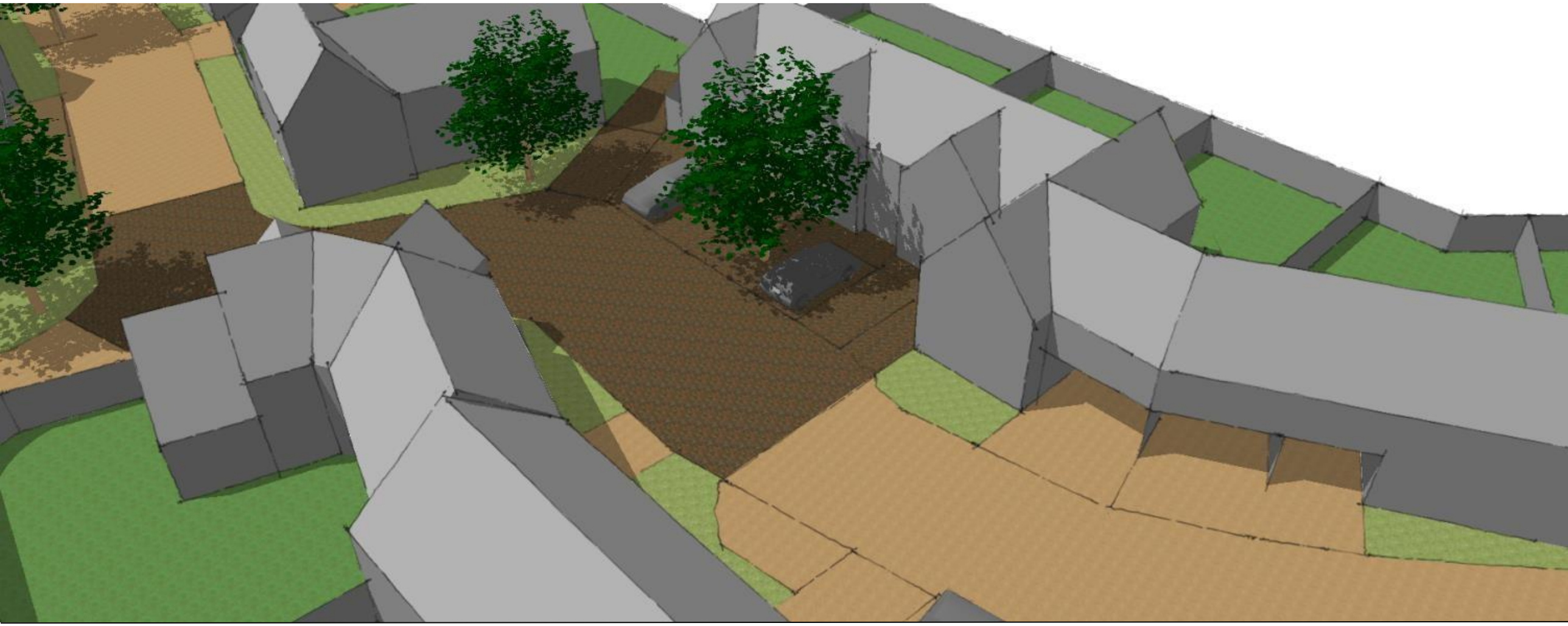

Examples demonstrating that irregularly shaped junctions can comfortably accommodate refuse vehicles.

Internal Junctions

Good examples of informal junctions at Newhall. Note the use of trees to help define the appropriate width of the 'carriageway'. The use of contrasting materials helps create points of interest.

Images from Google Street view

Parking



Previous housing design policy and guidance advocated an approach where car parking was removed from the street and located to the rear of dwellings normally in communal parking courts. Whilst this guidance was drafted with the intention of creating less car dominated street-scenes the reality is that in many circumstances residents did not choose to park in the parking courts but instead on the street in front of their property. The reasons for this are varied but range from concern that the parking courts are perceived as not safe to use (rightly or wrongly), are too far away from the properties they serve or are just not convenient to use. Whether or not these views are correct does not take away from the fact that on schemes where residents do not use the parking courts as intended; the streets are blighted by cars parked on footways, grass verges and other places that they were not intended to be. This not only looks unsightly but can also inconvenience pedestrians and cyclists can hamper refuse collections and potentially delay emergency vehicles.

Furthermore initial research suggests that the provision of parking courts on 'traditional' medium density residential developments does not always make for an efficient use of land, with a higher percentage of land area being used for car circulation and parking, usually to the detriment of garden space.

Whilst it will be impossible to eliminate ill considered parking completely it is felt that in order to minimise its likely impact parking should be provided on plot or as near to the relevant dwelling as possible. This does not mean that layouts should revert to the traditional semi-detached format but should look to create ways to 'absorb' the parking into the built-form so as to not create monotonous street-scenes.

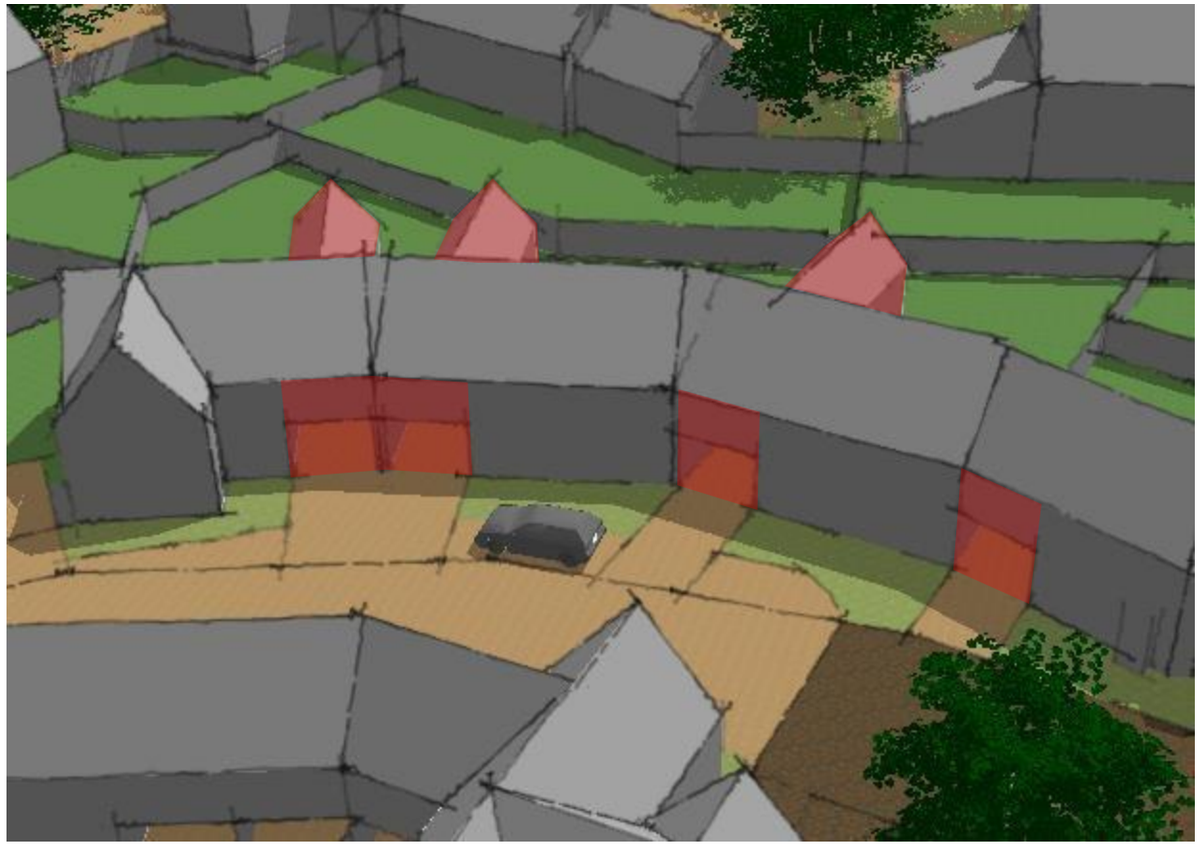
On street parking should be carefully considered and restricted to short runs that are softened by tree planting and/or landscaping or 'framed' within the built form.

Parking

Examples of inappropriate on-street parking.

Images from Google Street View

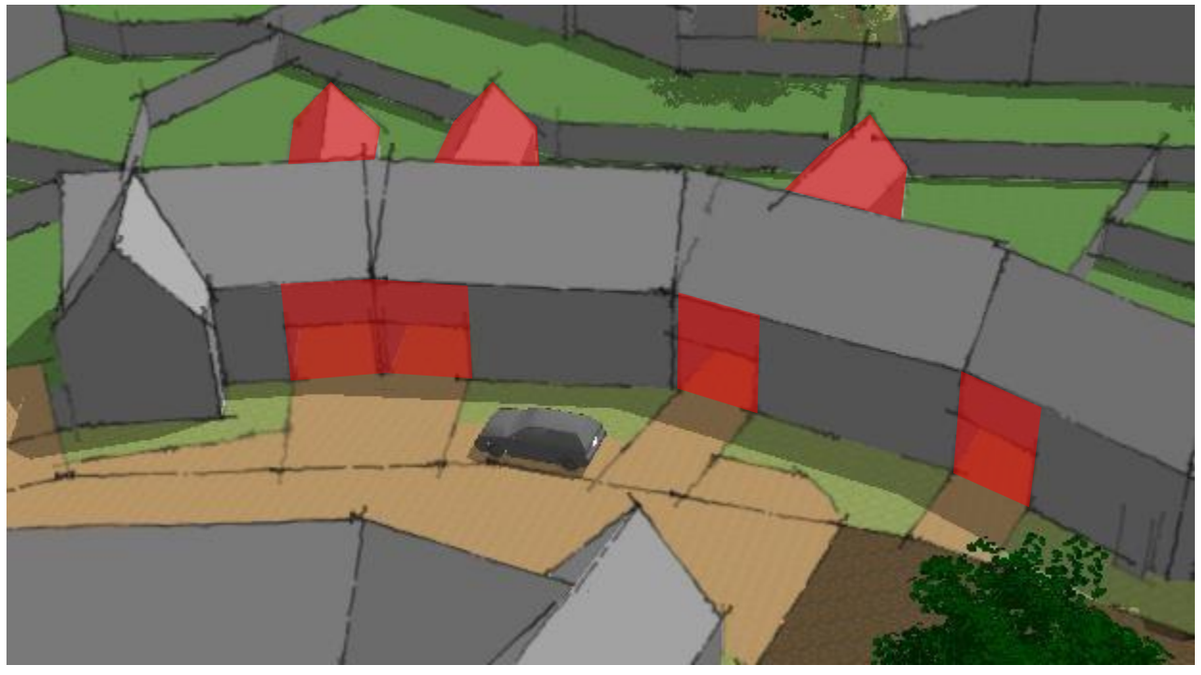
Parking – Suggested Designs

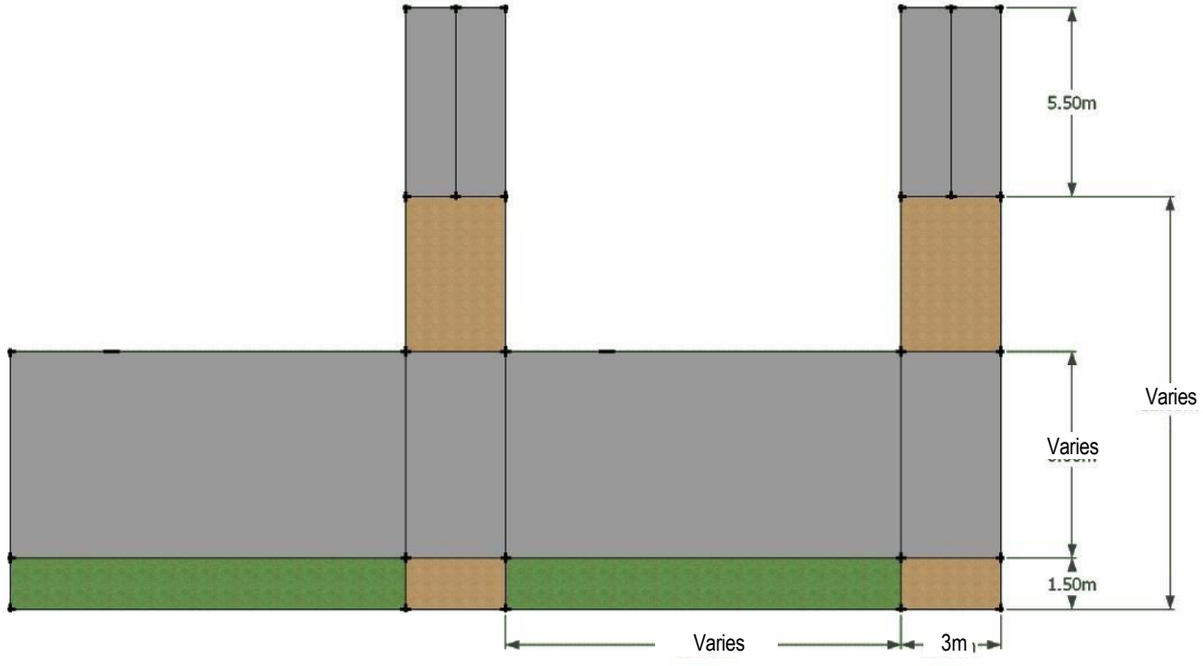


Parking with accommodation above

Dwellings linked via carports

Parking – Suggested Designs

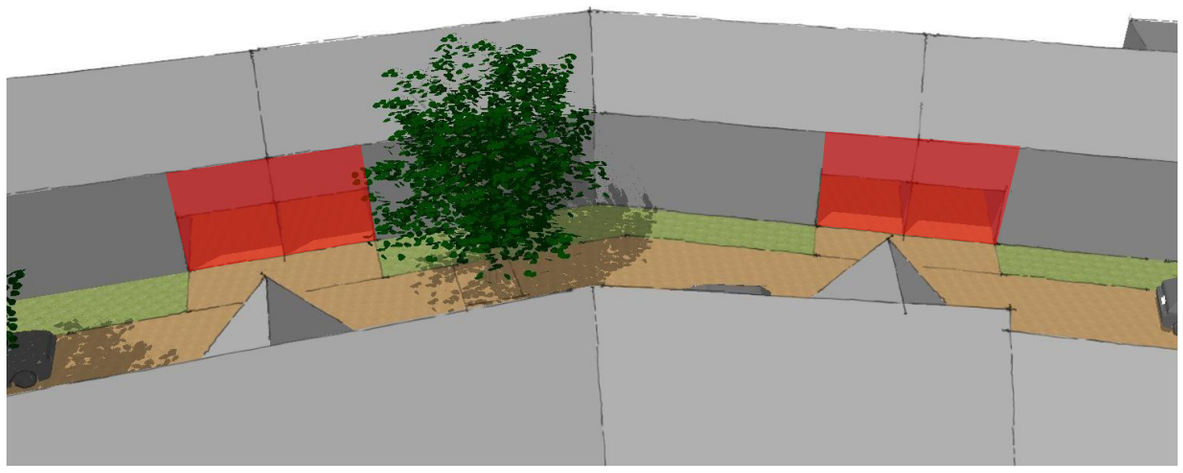


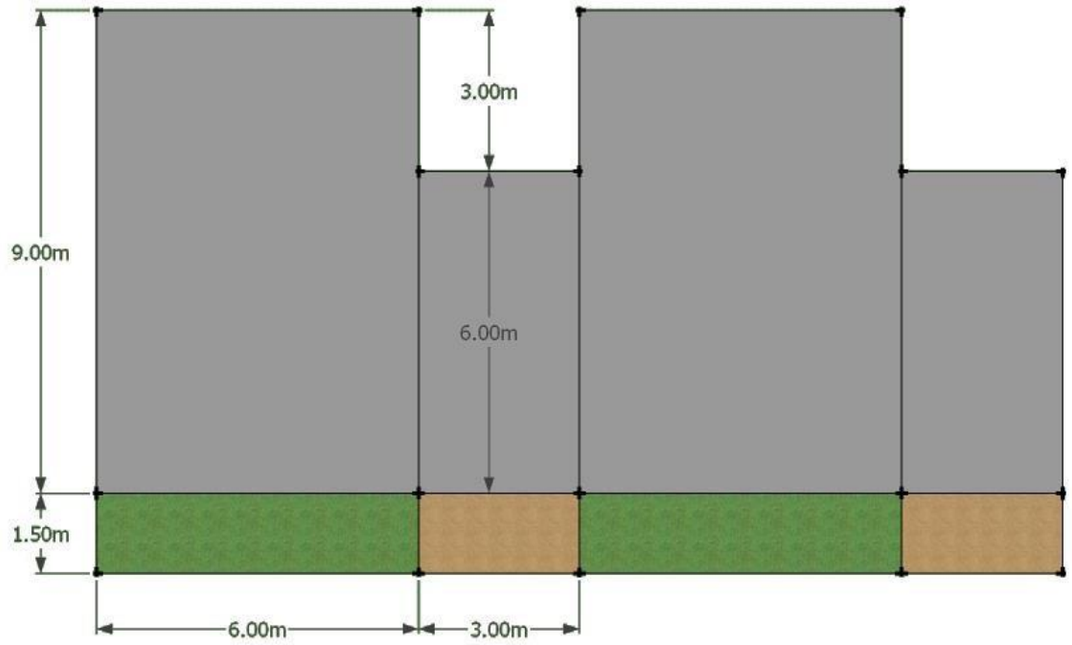


Albermarle Link, Beaulieu – figures above reflect site example.

Images from Google Street View

Parking – Suggested Designs

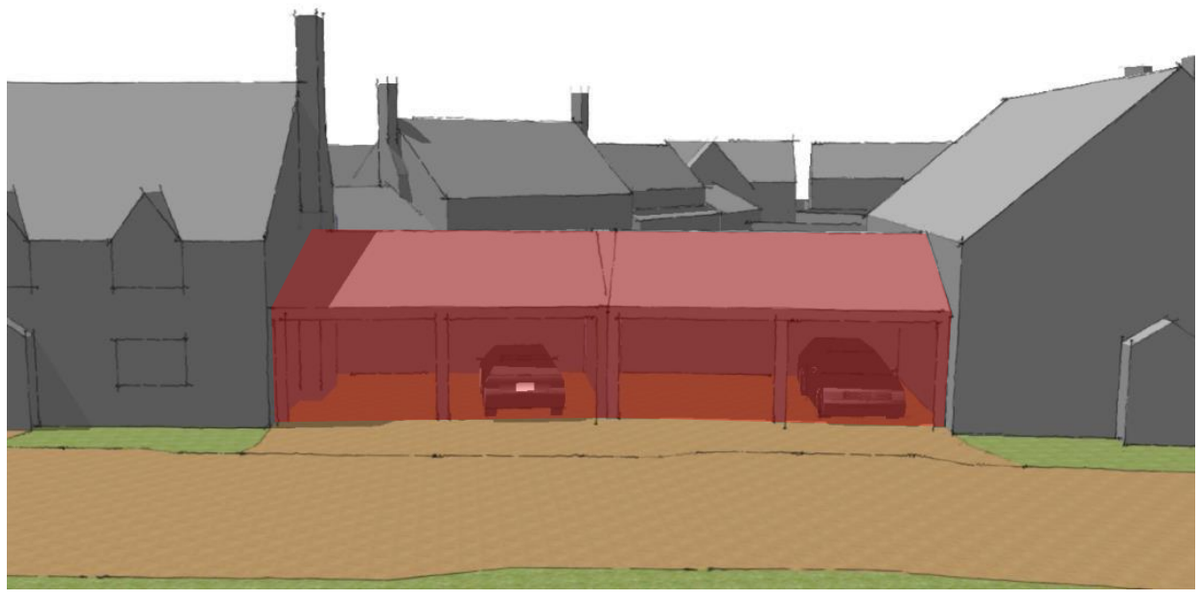




Harrow Rd, Newhall – figures above reflect site example.

Images from Google Street View

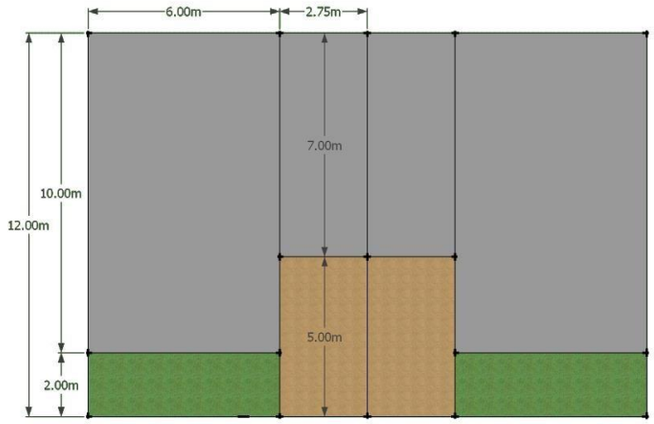
Parking – Suggested Designs



The Old Dairy, Henlow

Images from Google Street View

Parking – Suggested Designs



Gunners Rise, Shoeburyness.

Images from Google Street View and Google Earth

Parking – Suggested Designs

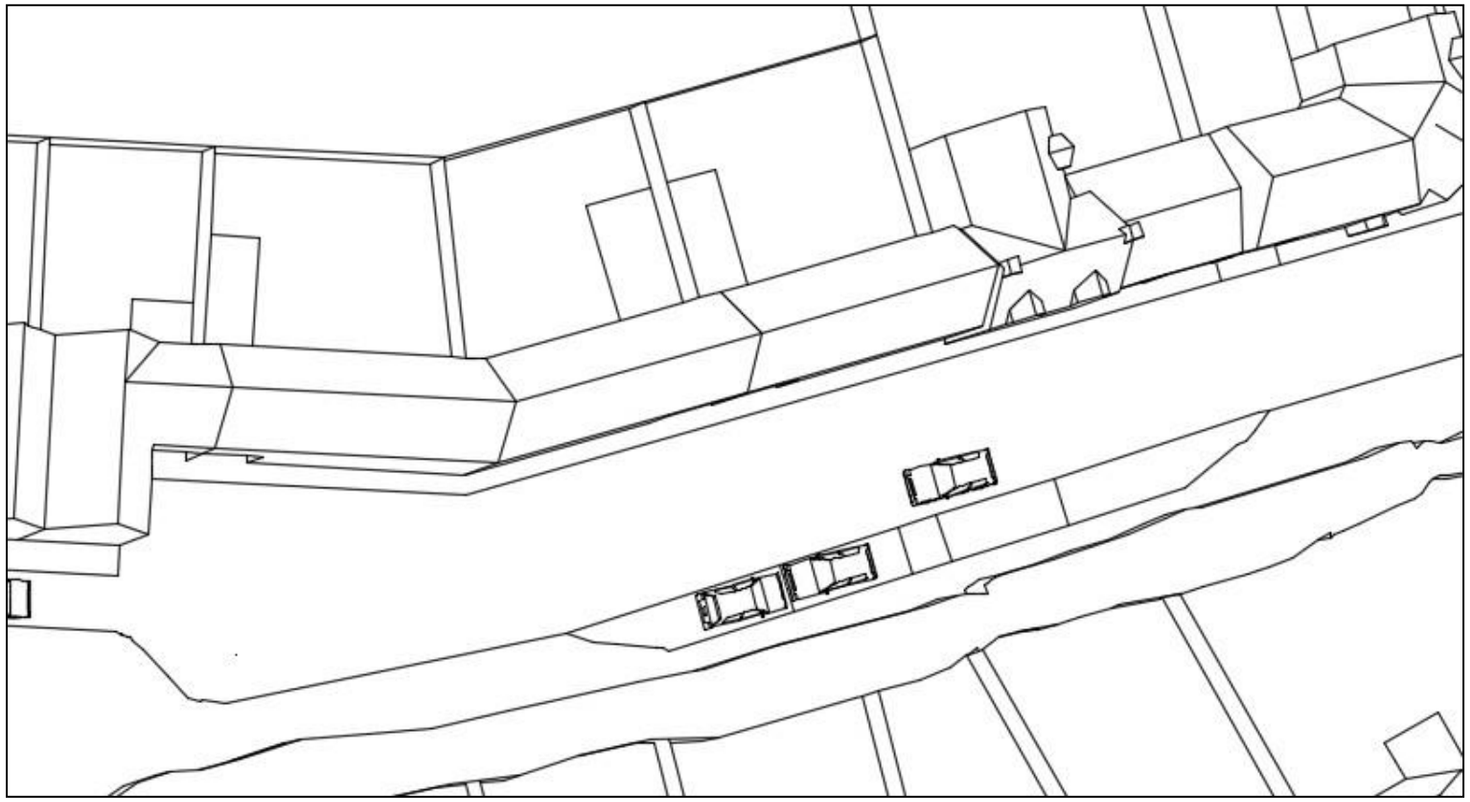
Parking to the front of dwellings should be carefully considered and restricted to short runs to ensure that it does not dominate the street scene. The example here demonstrates how the buildings can be used to 'frame' the parking bays to ensure they are not overly visible in the street. The use of the same material for this section of road and the parking spaces creates a pseudo square. The trees add an element of vertical interest and soften the space.

The size of parking spaces should be agreed with the highways authority at the application stage, however the following are identified as being reflective of absolute minimum sizes:

- On plot spaces – 2.4m x 4.8m
- Parallel bays – 2.2m x 6m

Where appropriate, opportunities to provide spaces above the absolute minimum standard should be taken.

Parking – Suggested Designs



On street parking should be carefully considered and restricted to short runs that are softened by tree planting and/or landscaping or 'framed' within the built form.

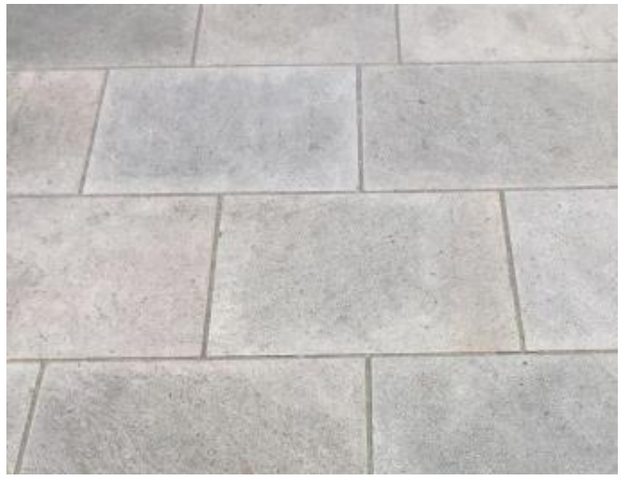
Public Realm Materials Palette

A major programme of public realm works has been carried out over the last 7 years across Coventry City Centre. This has helped to achieve a step change in the quality of the city centre environment and pedestrian connectivity. These developments offer a prime opportunity to apply such schemes within a residential environment. Therefore high quality hard and soft landscaping will be expected throughout. In order to demonstrate a high standard of landscape design the hard and soft landscape elements will need to be considered together and integrated early in the design stage. Where appropriate this should include permeable paving that supports sustainable drainage. The following slides provide good (but not exhaustive) examples of appropriate materials

Avenue and Internal Road

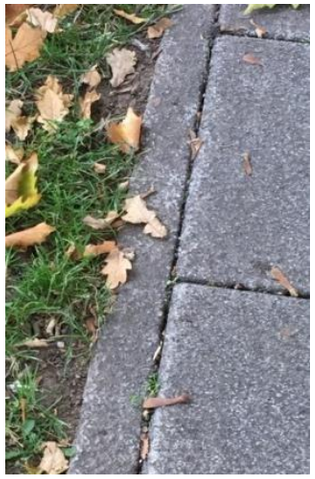
HRA with buff chippings or similar – main carriageway

Buff Asphalt or similar – for crossing points, junctions, key points along the street



Natural stone paving or high quality reconstituted stone paving – for key spaces, entrances to developments, junctions etc.

Conservation kerb or similar



Conservation edging or similar

Charcoal Tactile – for crossing points. They provide a suitable contrast to light paving. Not suitable for tarmac foot paths.

Arboresin or similar to tree pit – where they are location in the footway or carriageway

Timber Bollards – more durable than metal

Images from Google Images and marketing documentation

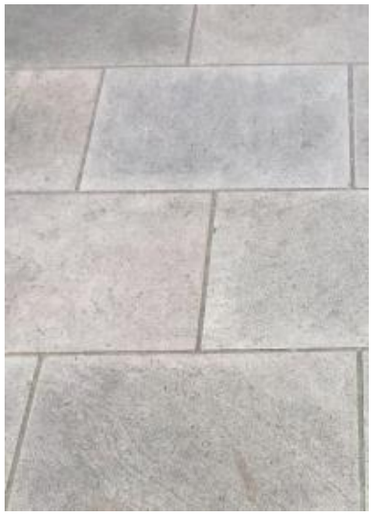
Lanes, Turning Heads and Courtyards

Buff Asphalt or similar – for crossing points, junctions, key points along the street

Natural Stone Setts

Granite Setts

Granite Cobbles

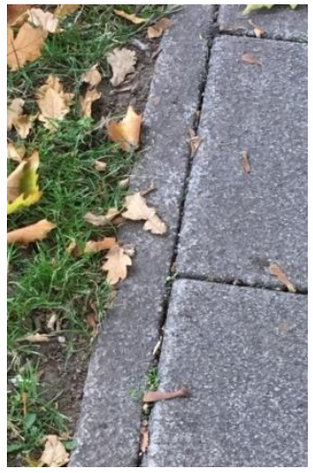


Natural stone paving or high quality reconstituted stone paving – for key spaces, entrances to developments, junctions etc.

Granite Cobble drainage channel

Conservation Kerbs to Parking Bays with bay laid with setts

Conservation kerb or similar



Conservation edging or similar

Charcoal Tactile – for crossing points. They provide a suitable contrast to light paving. Not suitable for tarmac foot paths.

Arboresin or similar to tree pit – where they are location in the footway or carriageway

Timber Bollards – more durable than metal

Images from Google Images and marketing documentation

Public Realm Materials Palette

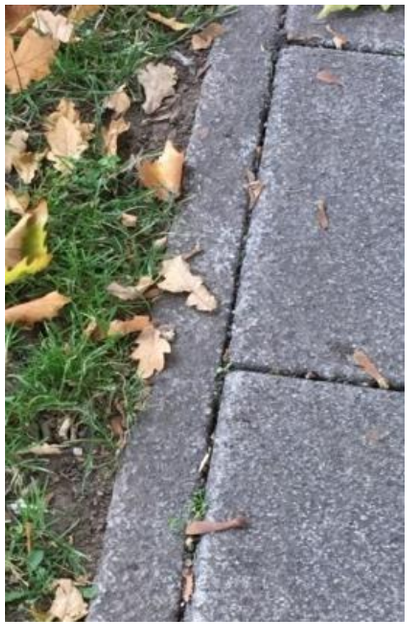
Edge Road

Buff Asphalt or similar – carriageway material

Resin Bound Gravel – Private drives

Block Paving Natural Stone or Reconstituted Stone – Private drives

Conservation kerb or similar



Conservation edging or similar

Timber Bollards – more durable than metal

Unbound Quality Gravel – foot path/cycle paths through open space and open countryside

Images from Google Images and marketing documentation and site monitoring

Boundary demarcation

There are a number of options for front garden boundary demarcation. These can be formal in nature – brick wall or railings – or informal – hedgerow or planting. Of the streets listed in the hierarchy, formal types would be best suited to the Link Road, Avenue and Internal Road street types. These could be combined with some form of hedging and landscaping to help soften the street scene.

Due to the more informal, intimate nature of the Lanes these either have no boundary demarcation or have some form of planting to keep pedestrians away from ground floor windows.

In all cases planting needs to be carefully considered and located so as to ensure that it is clear who owns it/is responsible for its maintenance, can be maintained relatively easily (pruning/clipping, low watering requirements) and is located so as to ensure that it is not going to be trampled on – on a corner, or a desire line for example.

Brick boundary walls need to be of a style that ties in with the overall character of the development – brick type, coping type etc. Railings also need to reflect the character of the scheme and consideration should be given to the fixing details so as to ensure that they are not overly obtrusive.

Materials such as concrete blocks and concrete post and wire fences will not be acceptable. Timber should be avoided as it has a relatively limited lifespan and requires regular maintenance, and if not properly maintained it can quickly look unsightly and detract from the street scene.

Front boundary treatment is only there to demarcate the front of a property and not there to create a privacy screen, therefore it should not exceed 1m in height.

In the case of edge roads, as these have no form of front boundary, careful consideration needs to be given to vehicle parking prevention and corner cutting deterrents. In these cases robust informal landscaping can be used.

Rear boundary walls should be 1.8m in height and constructed in brick where they will be visible in the public realm. Should visibility splays need to be created consideration should be given to curved walls as opposed to angled walls as these are more aesthetically pleasing.

Where rear boundaries are not in the public realm, good quality timber fencing will be considered appropriate. This should be 1.8m in height and should be solid – i.e close boarded etc. This includes fences that divide gardens. Lower or open fences will not be acceptable.

However, boundary treatments should include permeable features such as small gaps in walls and fences and gaps below gates. This will help support the movement of wildlife and support their valuable habitats.

Masonry wall topped with railings.

Stone wall with stone coping.

Structured landscaping to front of dwellings.

Open informal front boundary treatment.

Images from Google Street View and site monitoring

Railings to front boundary

Boundary walls designed in the style of the buildings they are attached to.

Brick wall with brick and tile coping.

Lighting

Lighting wil form an important part of both the public realm, the street scene and the natural environment.

Lighting proposals wil need to be agreed with the highways authority and should be designed in accordance with Coventry City Council's Street Lighting Standard Development specification which is based on current British and European Standards.

Lighting within community areas and designated centres should contribute towardsa high quality public realm and could incorp orate appropriate lighting of buildings and public spaces.

Lighting within and adjacent open spaces and green/blue corridors wil need to be carefuly designed and have regard to the impact lighting can have on ecology and biodiversity. Excessive lighting in natural environments has been shown to reduce productivity and overwinter survival of birds as well as impacts on invertebrates and bats. In this respect applicants should have regard to the most recent version of the Bat Conservation Trust Guidance – Bats and Artificial Lighting in the UK, and other appropriate guidance and British Standards.

Images from Google images

Commercial and Community Centres

These centres have the potential to form the heart of the new developments. Therefore they should be designed as local landmarks with an emphasis on high quality architecture and materials. They should also integrate positively with the surrounding street network to ensure that they can be easily and safely reached on foot or by bike from all parts of their catchment area.

Consideration should be given to creating centres that are mixed use at ground floor with residential accommodation above. This will ensure that not only do the buildings have more 'presence' architecturally but they make more efficient use of the land rather than merely being single storey flat roof boxes.

Where residential accommodation is included careful consideration will need to be given to the location of entrances, bin and bike stores. The location of service yards will also need careful consideration so as to ensure that they are screened from public view and their operation does not adversely affect any residents either above the premises' or nearby.
Car parking should be designed to act as multi-use spaces for activities such as community events or local markets etc. Therefore surfacing materials and elements such as tree planting and even kerb upstands will need careful consideration.

Heights of apartment buildings above commercial or community space will normally be limited to 4 or 5 storeys. This will need to be varefully considered alongisde the surrounding land uses.

With regard to larger format commercial units, there is a tendency to try and disguise these or blend them with the landscape. In practice this is generally difficult to achieve and so these buildings should be designed to be architecturally interesting through either form and/or materials (see examples on p.80 and 81) Building heights will need to be considered on a case by case basis having regard to their location and surrounding land uses.

Commercial and Community Centres

Good Example – Poundbury, Dorset
The Local centre in Poundbury, Dorset has been designed in the form of a traditional market square. This square has a real sense of place and the residential accommodation above the retail units ensures that there is life and activity at all times of the day. Its is unfortunate however that the resin bonded gravel has worn away so quickly and this does detract slightly from the overall appearance of the space. This demonstrates that materials for heavily trafficked spaces such as these need very careful consideration.

The height of commercial buildings will be considered on a case by case basis and will have regard to their location within the development and prominence to the highway network, green infrastructure and other uses. Buildings within the community centres will, where appropriate be mixed use, and incorporate apartments above shops etc. these will normally not exceed 4-5 storeys

Images from Google Earth and Google Street View

Commercial and Community Centres

Good Example – Houlton, Rugby.
The community space in the urban extension of Houtlon, Rugby, has been designed around an existing farm house and outbuilding. The buildings are arranged to form a type of 'farm yard' with the new build elements taking the farm shed vernacular and interpreting it in a very modern way.

Images from Google Street View, site monitoring and Planning records

Commercial Developments

Good Examples – Morrison Distribution Centre, Bridgewater (Left) and Audi, Leicester (Above & Right).
Where developments will include larger scale employment type uses these will be expected to be designed to a high standard, with high quality materials and careful thought given to making unusual and interesting designs.

Images from Google Images and site monitoring

Commercial Developments

Good Examples – National Battery Plant (Left) WMG at University of Warwick (bottom Left) and NAIC at University of Warwick (bottom Right).

Where developments will include larger scale employment type uses these will be expected to be designed to a high standard, with high quality materials and careful thought given to making unusual and interesting designs. Opportunities to maximise the integration of natural features such as trees, landscaped lawns and water features are strongly encouraged.

Images from planning records

The Natural Landscape

Where developments are located on sites with existing trees, hedgerows or other significant vegetation' every effort should be made to integrate these elements into the development. They can help bed schemes more quickly into the surrounding area, provide instant character, help maintain ecological habitats and make developments more attractive to prospective buyers.

Where these elements are to be retained they should do so in a way that ensures that they will survive and remain healthy, will not become maintenance liabilities or adversely affect residents.

The location of mature trees will need careful consideration not only in terms of respecting their root protection area (RPA) but also in ensuring that maintenance of them does not fall onto residents. Therefore they should be located where ever possible in public areas that are maintained by a dedicated maintenance organisation or the city council. Mature trees that are located within the curtilage of a dwelling invariably come under pressure to be cut back or felled, due to real or perceived structural issues caused to properties or due to them impacting on light and out look.

Hedgerows by their very nature lend themselves to use as boundary demarcation either for public spaces or private property. This will be dependent on the species that comprise the hedge and their suitability for the intended use. Where used for private property consideration must be given to long term maintenance and protection of the hedge.

The landscape within the Arden area has a number of important water features. The benefits of these should be maximised in terms of blue infrastructure and where appropriate support multi-functional green/blue areas. This will include brook corridors, pools, swales and attenuation basins etc. Such features will not only provide public amenity and an attractive natural environment but will also provide sustainable management of drainage and flood risk.

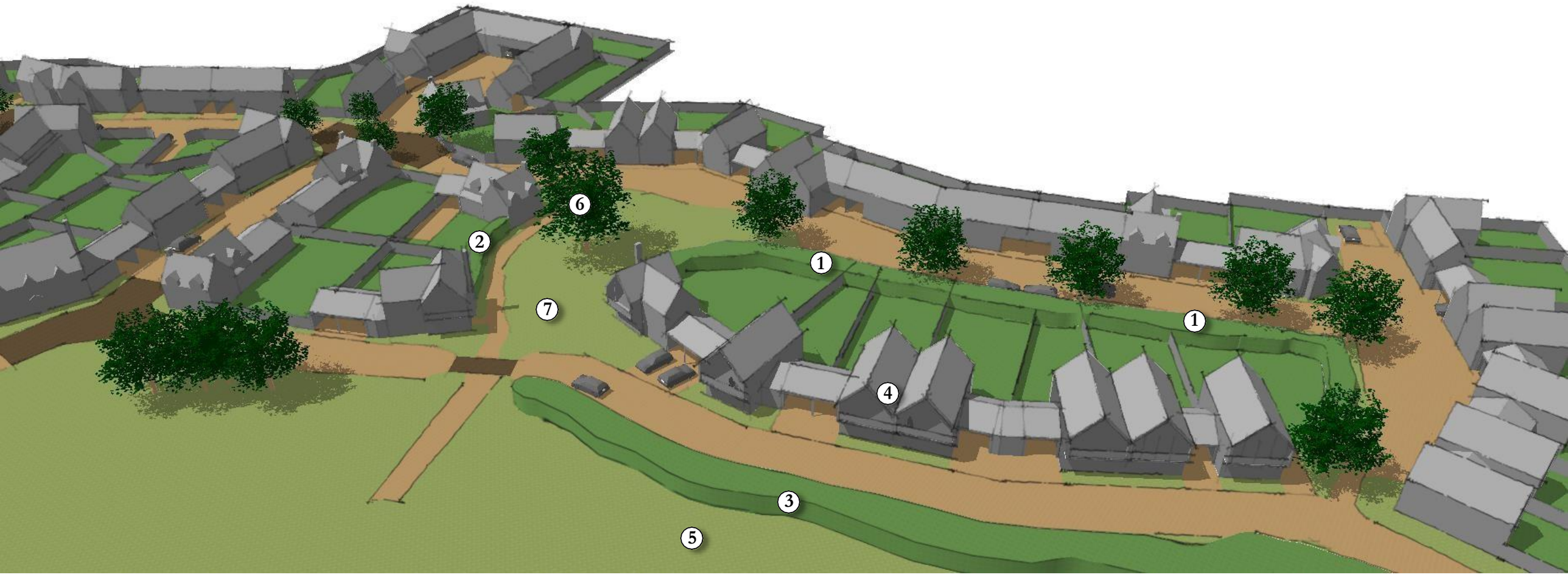
In more general terms developments within the SUE areas should meet the requirements of Policy GE3 of the Local Plan and support an overall net gain in biodiversity across the SUE as a whole.

The Natural Landscape

Topography
There will be areas where the housing developments sit below view points and so it is especially important to ensure that the roof-scape and street layout add visual interest and appear more organic in layout – as would be the case in a long established hamlet/village.

Housing layouts need to respond to the topography of the sites and dwellings should be designed to 'step' up hills.

Image from Google Street View



Trees, Hedgerows & Open-space

Use opportunities to incorporate existing hedgerows in a positive manner such as at (1.) where a hedgerow is used as a rear boundary to gardens and is also a green feature in the street. A grass verge can be used as a buffer between the carriageway and the hedge. Hedgerows can also form front boundaries such as at (2.) where as in this case the hedge forms a green boundary to the open-space. Where hedges are to be used like this it should be done in a way that ensures that they will survive and remain healthy, will not become maintenance liabilities or adversely affect residents. Their use will be dependent on the species that comprise the hedge and their suitability for the intended use.

Hedgerows can also be useful elements to help define the edge of the development and the wider open-space. In situations like this there is the opportunity to use house types that have balconies and/or living space at first floor level such as at (4.) which maximises the aspect afforded by the edge location and ensures that there is a form of over-looking/passive surveillance of the open-space as well as visual interest when viewing the development from the open-space (5.)

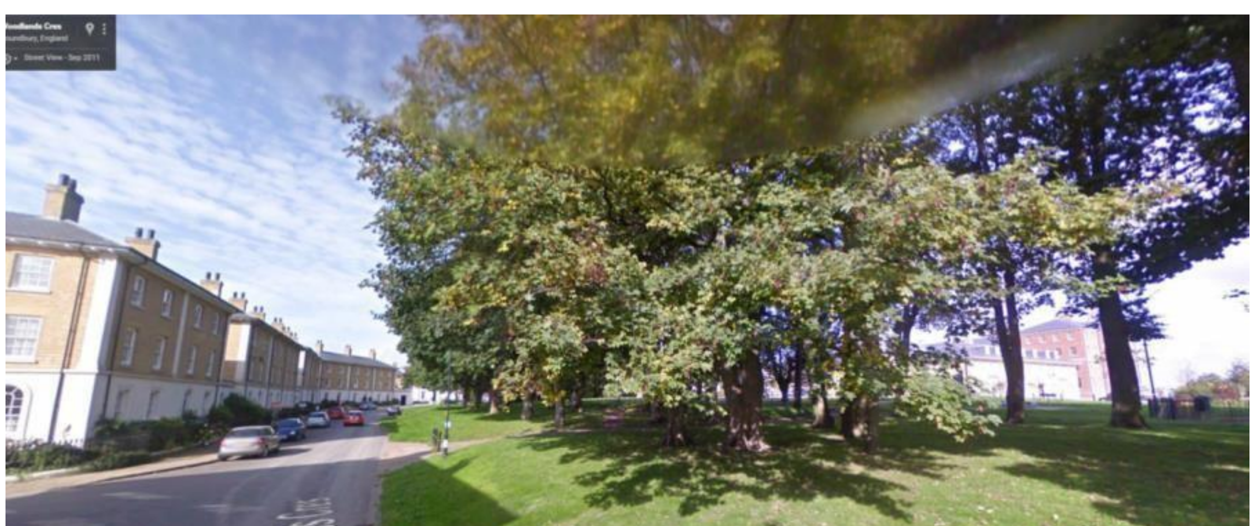
Where existing mature trees (6) are to be retained within the development, they should be done so in a positive manner and used as an opportunity to create small areas of informal open-space (7) that are well over looked by dwellings. These will ensure the root protection areas of the trees are not damaged and ensure that the trees are sufficiently far enough away from dwellings so as to cause issues in the future – overshadowing, subsidence etc.

When used like this existing features can create 'instant landscape' which would otherwise take decades to develop. In all cases though ongoing and long term maintenance strategies will be essential to ensure the hedgerows, trees and open spaces are retained and protected.

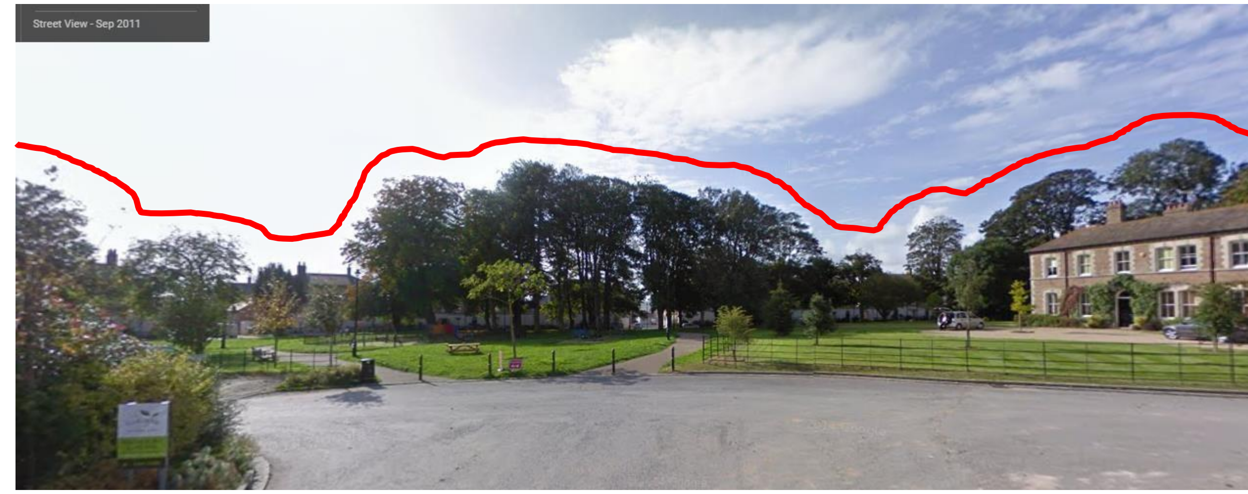
Upton, Northampton. Dwellings balconies to living accommodation or bedrooms at first and second floor.

Image from site monitoring

The Natural Landscape



This small copse of trees adds interest
to and softens the roof-scape.



Mature oak tree makes for a strong focal point in the long view down this street. The buildings with their horizontal emphasis lead the eye down to the street to the   oak.

Positive use of existing trees to create 'instant landscape' at Poundbury, Dorset. The trees also act as a strong focal point in the view down the street above.
Images from Google Street View and Google Earth

The Natural Landscape

Poor integration of existing hedgerow at Beaulieu, Chelmsford. The hedgerow is fenced in and is too close to dwellings making it overbearing and a maintenance liability.

Images from Google Earth and Google Street View

Water retention features at Upton, Northampton have been positively integrated into the design

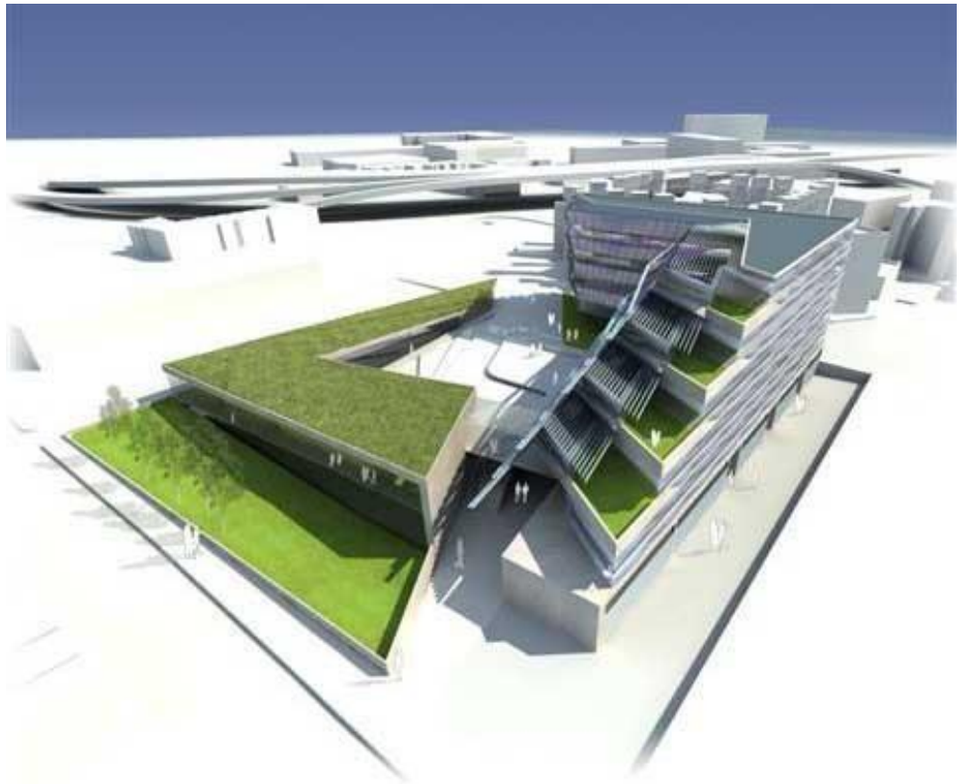
Drainage and Flood Risk

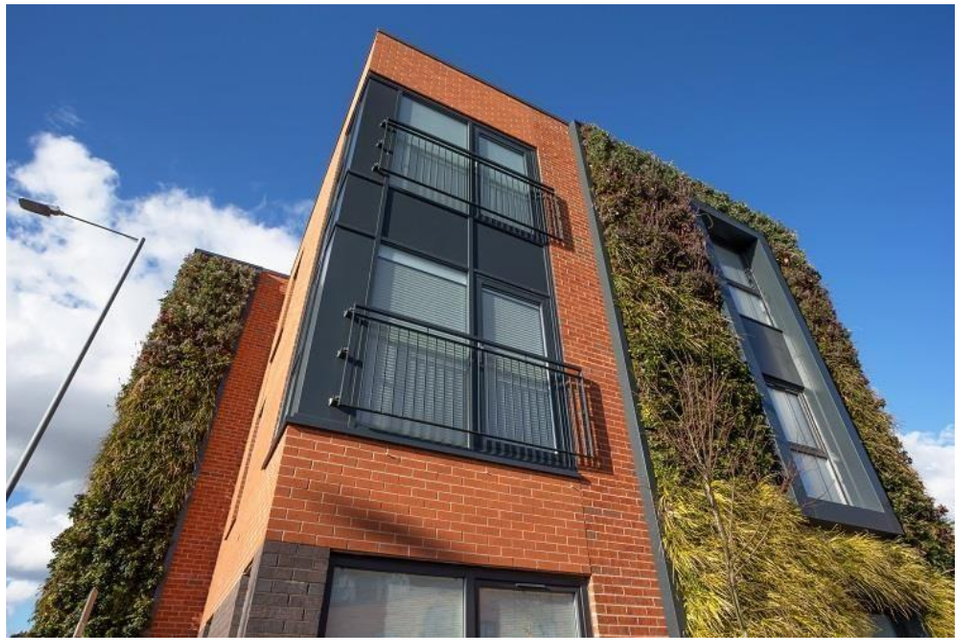
Water retention will form a crucial element of any future development sites' drainage and flood risk strategy . Where ever possible existing elements such as water features, natural depressions and surface water flow path should be considered as part of this strategy. Where these are not suitable or additional measures are required these should be designed to create positive and attractive features that offer visual amenity, support improvements to water quality and contribute to the local habitat. Where appropriate areas for drainage and flood mitigation measures should be utilised as multi-functional green/blue infrastructure in accordance with Local Plan policy and to support efficient and effective use of land. Further guidance on these elements can be found in the Local Plan and via supporting guidance from the Environment Agency and Lead Local Flood Authority.

Grey to Green, Sheffield (left) and reed beds, Upton (above). Swales are used to retain rainwater and clean it of its pollutants via the stone, underlying soils and planting.

Images from Google Street View and planning records

The Natural Landscape



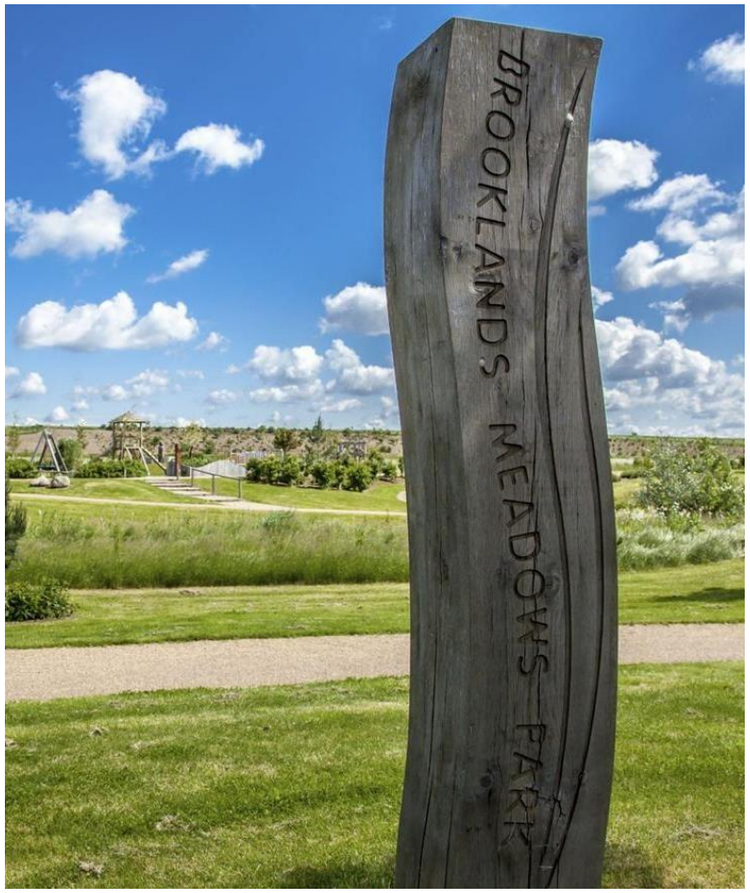


On Plot drainage and attenuation options.

Where developers opt to incorporate on plot measures to support drainage mitigation requirements, the Council are supportive of options such as green roofs and green walls, but only where they are well designed and well maintained. They can also help 'soften' the appearance of a building within the natural landscape. Other low key options can include the provision of on-plot water buts to collect rainwater and other garden features such as green sheds, rain gardens and rock pools.

Pictures from site promotional material. Top left Coventry University, bottom left, Deeley's scheme Stratford on Avon, top centre and top right local garden examples. From google Images.

The Natural Landscape



Brook Corridors, pools and blue infrastructure.

Blue infrastructure will provide a key component of incorporating high quality design as well as supporting the overall drainage and flood risk strategy . This can take the form of individual pools, or in the case of Keresley and Eastern Green in particular existing and established brook corridors. These brook corridors should become focal points for the green and blue infrastructure strategy and provide a high quality useable route through the wider developments – connecting with the wider natural landscape both within the sites and beyond. They should incorporate high quality footpaths and cycle ways whilst also providing a magnet for ecology and biodiversity to thrive across the sites. Although highway crossings through these corridors will be required they should be kept to a minimum.

Good Examples – David Wilson Homes at Brooklands, Milton Keynes.
Images from site promotional website and Google Images

END

NB: The following pages contain images lifted from a range of publicly available internet sources, including Google images, street view and planning application files and masterplans. They are replicated within this document on a not for profit basis and are used solely to support the wider content of the SPD. The Council is not making this document available for purchase and is only issuing it on its website for use by relevant stakeholders. Should you have any issues or concerns with this approach please contact us via localplan@coventry.gov.uk

Pages – 7-12, 14-19, 21-23, 28, 32-33, 37-38, 53, 57-59, 62, 64, 66-69, 72-76, 78-81, 83-89

Recommended Trees

TREES FOR NARROW STREETS

Narrow heads or narrowly conical outline, good hardiness rating.

ULTIMATE SIZE *	SPECIES	ORNAMENTAL FEATURES	APPROX SIZE AFTER 25 YRS (height x spread in m)
S	Acer campestre 'Streetwise'	Yellow autumn colour	7 x 3
L	Acer platanoides 'Columnare'	Yellow flowers, yellow autumn colour	7 x 2.5
M/L	Acer platanoides 'Crimson Sentry'	Purple leaves	8 x 3
M/L	Alnus cordata	Yellow catkins	12 x 3
M/L	Carpinius betulus 'Streetwise'	Yellow autumn colour	9 x 3
M	Carpinus betulus 'Frans Fontaine'	Tight columnar form	9 x 2.5
L	Corylus colurna	Yellow autumn colour	8 x 3
L	Fagus sylvatica 'Dawyck'	Golden foliage	8 x 2
L	Fagus sylvatica 'Dawyck Gold'	Yellow foliage fading to green	8 x 2
L	Fagus sylvatica 'Dawyck Purple'	Purple leaves	8 x 2
S/M	Malus trilobata	Red/purple autumn colour	6 x 2.5
S/M	Malus tschonoskii	Purple/red/yellow autumn colour	6 x 4
S	Prunus 'Amanogawa'	Pink flowers, double	7 x 1
S	Prunus 'Ichiyo'	Pink flowers, double	7 x 4
M	Prunus padus 'Albertii'	Racemes of white flowers	7 x 3.5
S	Prunus sargentii 'Rancho'	Pink single flowers red autumn colour	7 x 2
M	Prunus schmittii	Small pink flowers. Attractive bark	10 x 4
S	Prunus 'Snow Goose'	White flowers. Bright green leaves	6 x 3
S	Prunus 'Spire'	Single pink flowers. Purple/red autumn colour	6 x 3
M	Prunus 'Sunset Boulevard'	Pink flowers, red autumn colour	10 x 3
M	Pyrus calleryana 'Chanticleer'	White flowers. Orange/yellow autumn colour	8 x 3
L	Quercus robur 'Fastigiata'	Columnar habit	15 x 4
S/M	Sorbus aucuparia 'Streetwise'	Brilliant autumn colour	7 x 3
S	Sorbus aucuparia 'Cardinal Royal'	Dark red fruits	9 x 4
L	Tilia platyphyllos 'Streetwise'	Red winter shoots	12 x 4

TREES FOR WIDE ROADS AND AVENUES

Generally large trees with a dense canopy, good hardiness rating

ULTIMATE SIZE *	SPECIES	ORNAMENTAL FEATURES	APPROX SIZE AFTER 25 YRS (height x spread in m)
L	Acer platanoides 'Emerald Queen'	Yellow flowers, yellow autumn colour	12 x 7
L	Acer platanoides 'Crimson King'	Black/purple leaves	10 x 6
L	Acer platanoides 'Deborah' ('Schwedlen')	Red/purple young leaves Red/orange/yellow autumn colour	12 x 7
L	Acer rubrum 'Armstrong'	Spectacular autumncolour	10 x 7
L	Aesculus x carnea 'Briottii'	Red "candles". Produces conkers	7 x 3
L	Aesculus hippocastanum	White "candles". Produces conkers	8 x 4
L	Aesculus indica	Large pink "candles". Orange/yellow autumn colour	8 x 4
M	Betula utilisjacquemontii	Chalk white bark	10 X 4
M/L	Carpinuus betulus	Yellow autumn colour	8 x 4
L	Castanea sativa	White flowerspikes	12 x 6
L	Fagus sylvatica	Yellow/brown autumn colour	8 x 4
L	Fagus sylvatica 'Purpurea'	Purple foliage	8 x 4
M/L	Fraxinus angustifolia "Raywood"	Fine texture. Purple autumn colour	8 x 5
L	Fraxinus excelsior "Westholf's Glorie'	Young foliage bronze	8 x 5
M	Fraxinus ornus	Masses of white flowers	8 x 4
L	Juglans nigra	Furrowed bark, pinnate leaves	12 x 6
L	Juglans regia	Pinnate leaves, walnuts	10 x 5
L	Liriodendron tulipfera	Yellow autumn colour	12 x 6
L	Platanus hispanica	Bold foliage, flaking bark	12 x 7
M/L	Prunus avium 'Plena'	Double white flowers	10 x 6
M	Prunus padus 'Watereri'	White flowerspikes	12 x 8
L	Pterocarya fraxinifolia 'Heerenplein'	Pinnate leaves, catkins	15 x 7
L	Quercus cerris	Glossy lobed leaves	12 x 8
L	Quercus frainetto 'Hungarian Crown'	Large dark green leaves	15 x 10
L	Quercus ilex	Evergreen	7 x 4
L	Quercus palustris	Red autumn colour	10 x 5
M	Robinia pseudoacacia 'Bessoniana'	Pinnate leaves, white flowers	10 x 8
M	Sorbus thibetica 'John Mitchell'	Large grey leaves	7 x 5
M/L	Tilia cordata 'Greenspire'	Fragrant ivory flowers	10 x 5
M	Tilia x euchlora	No aphid problems	10 x 6
L	Tilia platyphyllos 'Aurea'	Yellow twigs in winter. Upright	8 x 4
L	Tilia platyphyllos 'Princes Street'	Red twigs in winter. Upright	12 x 5
L	Tilia tomentosa 'Brabant'	Grey foliage. No aphid problem	10 x 6

Note: All proposed tree types, tree pit details and locations to be agreed with the City Council

Appendix 1- Indicative Keresley Masterplan

Introduction

The attached indicative Masterplan is intended to provide a high-level basis from which to support the delivery of the Keresley Sustainable Urban Extension (SUE). The Indicative Masterplan primarily reflects the Masterplan Principles policy (DS4) and Housing Allocation policy (H2:1) within the new Local Plan and the overarching aim to ensure the SUE is delivered in acomprehensive way having full regard to key infrastructure requirements and landscape characteristics.

The indicative Masterplan itself is not intended to be rigid or fixed. It is intended to provide a clear steer as to the key developable areas and key areas of green infrastructure. Points of access and specificlocation of key services, facilities, routes and linkages are moveable and can be negotiated as certain phases of the development move through the planning process.

As the SUE evolves through the planning process and development stages, this Indicative Masterplan will be updated to reflect approvals and delivery.

Background

The proposed development at Keresley has been promoted to the Council since 2007, when it was first considered as part of the Council's then Core Strategy document. The area was considered in detail during the Core Strategies 2009 examination and the Inspectors conclusionsincludedapproving the allocation but indicating aneed to ensure its delivery was considered comprehensively to ensure the appropriate delivery of infrastructure and retention of the most important landscape features.

Due to changes in the planning system in 2010, the Coventry Core Strategy did not proceed to formal adoption. Subsequently workcommenced on anew Local Plan in 2013, and the Keresleysitewas again promoted and considered through this process.

The New Local Plan was subsequentlysubmitted to the Secretary of State on April 1st 2016, examined between July 2016 and January 2017 and the Inspectors report received in October 2017. The Local Plan was formally adopted by the City Council on the 5th December 2017 and came into effect the following day. The new Local Plan includes an Allocationfora Sustainable Urban Extension at Keresley (Policy H2) and provides Masterplan Principles in Policy DS4. The allocation makes provision for:

- Approximately 3,100 homes.
- Approximately 2,500sq.m of new retail-based space split across 2 separate local centres (policy R1). This is to include arange of small-scaleunits providing a range of local community uses and top up provisions. Local Centres are to be located at separate ends (north and south) of the SUE.
- A new distributorlink road connecting Long Lane and Winding House Lane, which is to be fully operational prior to the full completion of the SUE.
- Surrounding junction improvements as appropriate and identified through a robust TA but with specificfocus on the existing highway and junctions at Bennetts Road, Tamworth Road,

Fivefield Road, Sandpits Lane, Thompsons Lane, Long Lane and Watery Lane to ensure they continue to operate in a safe and appropriate way.

- Provision of 1 x 2FE primary school and contributions towards a 8FE secondary school.
- Retention of medieval fishponds, ancient woodlands and important (ancient) hedgerows.
- The creation of a publicly accessible green and blue corridor focused around the Ancient Woodlands, Hounds Hilland the Hall Brook. Thiscorridorshould run north-south betweenthe Burrow Hill Fort to the north and the Jubilee Woodland to the south east.
- Enhanced connectivity between the Ancient Woodlands and protection of the Jubilee Woodland.
- Inclusion of appropriate screening to existing residential areas.

Further to the development and adoption of the Local Plan, an outline planning application was submitted to the City Council in July 2014 for the first phase of the Keresley SUE area. This made provision for approximately 800 homes, the southern local centre, a new 2xFE primary school and contributions towards the highway requirements and green and blue infrastructure corridor. This application was subsequently referred to the Secretary of State who has now indicated he will not be giving the application any further consideration. Planning Permission was formally grantedin February 2018.

Key Points of the Indicative Masterplan

1. Development Plots. The indicative Masterplan identifies arange of developable areas across the SUE area. These have been informed through the Council's SHLAA [1] work, the Local Plan examination process and publicconsultation. They have also had regard to the first phase of the SUE which now has planning approval. The way the SUE is structured in terms of developable areas, land ownership and site promotion, suggests an opportunity to deliver a host of smaller 'hamlet' or 'village' style developments each potentially with a slightly different take on the Arden character, but each integrated into the overall fabricof the SUE. We would support the wider consideration of this concept through site specific Masterplanning at the planning application stage. Althoughnot all developable areashighlight smallerscale opportunities forgreen infrastructure, it is expected that as each development plot is brought forward in greaterdetailthat existing trees,hedgerows and landscape features will continue to be integrated into the scheme as well as small scale amenity green spaces in accordance with the Council's Green Space Strategy and density policies (as appropriate).

2. The Green and Blue Infrastructure Corridor. This corridoris clearlyshown running throughthe centre of the site from the Burrow Hill Fort in the north along Hounds Hill (between the ancient woodlands) and then picking up the Hall Brook sweeping round to the south east of the site toward the Jubilee Woodland. The identification of this corridor reflects landscape characterand sensitivity as wellas heritagevalue and considerations relating to the Scheduled Ancient Monument (SAM) at the Burrow Hill Fort. The principle of the corridor has been developed in partnership with Historic England whilst the element around the Hall Brook has also been developed in partnership with the Environment Agency and the Lead Local Flood

[1] SHLAA – Strategic Housing Land Availability Assessment (2016)

Authority. This corridorwill be the focal point foron-site green infrastructure within the SUE as a whole. It should provide a mixture of formal and informal green spaces, which, where appropriate, should be multi-functional to maximise land efficiency. Where appropriate and in accordance with wider Green Infrastructure requirements and landscape design of individual phases, developer contributions towards green infrastructure within this corridor will be accepted. This will have regard to land ownership and how the specific phase of development relates to the targeted corridor.

3. The Keresley Link Road. The link road is considered important to helping manage traffic distribution through and around the site. The intention has always been to run the link road between Long Lane and Winding House Lane, although the exact route is not yet finalised. This Indicative Masterplan does not finalise the route, but does show an indicative example of how it may travel through the site between the two known points. The exact alignment of the road should be considered furtherthrough the panning application stages, having regard to Transport Assessments and Junction analysis. The exact point of connectivity at Winding House Lane will also need to be considered in greater detail having regard to its impact on Prologis Park and the wider operations of that site. The transport modelling which underpinned the Local Plan highlighted the importance of focusing the initial delivery of the road towards the western side of the site, with the full completion to the east necessary by the end of the SUE's development programme (expected to be approximately 2031). This is also expected to link in with wider highway improvements to the A444 and M6 Junction 3.

   The road itself will be reflective of the environment through which it travels or expected to travel upon completion of the SUE. This is expected to include a predominantly residential area, although the eastern end of the road, where it heads towards Winding House Lane for example, is likely to include more of a natural environment to the south (as it passes by the Jubilee Woodland) orcommercial to the north (as it passes and linksto Prologis Park. As such, the carriageway should be designed to carry all types of vehicles. The environment through which it passes should then be reflected in terms of width, materials, junction access and speed restriction. This should beagreedwith the Highways Authority as part of the application process.

   In terms of how the road is expected to move through the site, it should only cross the Hall Brook once, therefore minimising the need for 'bridging' and limiting the environmental impact on the brook. In terms of access junction pointsalong the link road, theseare expected to be limited to help maximisetrafficflow along the route. Key junction upgrades are already planned at Long Lane/Tamworth Road. Furtherenhancementsare expectedat Bennetts Road South and Watery Lane. The exact provision of further junctions in and within the SUE itself will be considered on a phase specific basis having regard to the supporting transport assessment and site design.

4. Woodlands. The Plan highlights the 4 Ancient Woodlands at The Alders, Pickhorne Wood, Bunson's Wood and Hall Yard Wood. It also highlights the relatively newly planted area at Jubilee Woodland. All woodlands are identified within Policy H2 as needing to be protected and incorporated into the wider SUE.

5. Water Features (Blue Infrastructure). The Keresley areacontains anumberof waterfeatures, most notably the Hall Brook. These are shown on the indicative Masterplan and are expected to provide a focal point for blue infrastructure, biodiversity enhancements and drainage infrastructure.

6. Protected Wildlife Sites. Within the wider Keresley SUEarea, anumberof specificwildlifesites have been identified. The 4 Ancient Woodlands are identifiedas Local Wildlife Sites as are the Houldsworth Crescent Corridor to the far east of the site, the Sandpits Lane Meadows and Pastures to the south and the Keresley Mere to the west. Given the area is previously undeveloped though, surveys of current ecology and biodiversityvalue should be undertaken at the planning stageto help support connectivity ofspeciesand the appropriatemaintenance or mitigation of areas of biodiversity and ecology value.

7. Trees and Hedgerows. In additionto the Ancient Woodlands and Jubilee Wood,the indicative Masterplan also highlights a number of other tree groupings and established hedgerows. Indeed, such features are symbolicof the widerhistoriclandscape and should beretained and incorporated wherever possible into new developments. Site level assessments should be undertaken of all trees and hedgerows (as appropriate) at the application stage. Where these assets are retained they will need to be supported by a robust maintenance plan to ensure their long term retention.

8. Key View Points. These are highlighted at Burrow Hill Fort and the top of Hounds Hill. These are considered of strategic importance linked to the setting of the SAM. Other key view corridors should be considered as part of wider design considerations within respective phases of development.

9. Primary Access Points. Primary access points are shown on the indicative Masterplan for information only. This shows potential for access points to be realised along Bennet's Road, Tamworth Road, Watery Lane and Fivefield Road. There may also be opportunities to secure wideraccess from the Link Road to help support its integration into the widerdevelopment. The extent of any access and the number of dwellings it will serve will be assessed through the Transport Assessment that accompanies a specific planning application.

10. Key Connectivity Routes. The development of the site brings with the opportunity to extend pedestrian and cycle routes and integrate existing and new public rights of way. To help integrate the site into the landscape and the surrounding area it will be important to ensure pedestrians, vehicles, cyclists and publictransport can move in and out of the site as well as through it in a clear and coherent manner. The indicative Masterplan highlights a small numberof connecting throughroutes,alongsidethe potential access points to help showhow key linkages should work through the site. The routes here should be considered aminimum with every opportunity taken to integrate key routes and linkages to support movement through and around the site, especially to the benefit of active travel. The indicative Plan also shows how the development parcels should interact with the green corridorto support good accessibility and connectivity between the built and natural environment.

11. ‘Urban’ Edges. The indicative Masterplan highlights key areas of interaction between the identified development plots and the green corridor and widercountryside. These areas will need to be carefully designed to ensure they provide ahigh quality interface with the natural environment. This will be particularly true where development sits adjacent to the Woodland areas, Hounds Hill and the Hall Brook corridor. The SUE Design Guidance provides acharacter definition of ‘edge road development’ which should provide the ini tial basis for how development is designed within these areas. The indicative Masterplan also highlights areas of primary street frontage where new development will be expected to integrate with the existing street scene.

Moving Forward

As already highlighted, this indicative Masterplan is intended to provide a platform from which to support the delivery of the wider Keresley SUE. It is fully expected that as individual development parcels come forward they will be supported by their own more extensive Masterplans, however when they do so they will need to ensure they reflect the wider considerations and requirements associated with the SUEas awhole. This is reflectiveof Policy DS4 in the Local Planand will help ensure the sustainable delivery of the SUE as a whole.

It is also important to clarify that the indicative Masterplan will be kept underreview and updated as and when it is appropriate. This willmost commonly reflect any relevant planning decision and willbe communicated through the Annual Monitoring Report.

The Indicative Masterplan