cmyk
PLANNING AND DESIGN

# PROPOSED RESIDENTIAL DEVELOPMENT AT: MERCER ROAD HORSHAM

DECEMBER 2024

## DESIGN & ACCESS STATEMENT

INCL. DESIGN CODING

Riverdale
DEVELOPMENTS LTD

# 1.0 Introduction

# Purpose of the Document

## Purpose of the Document

This Design and Access Statement (including Design Coding) accompanies a Full Planning Application made by Riverdale Developments Ltd to Horsham District Council for the development of the land off Mercer Road.

The proposed development is for 304 no. residential dwellings, a car park to serve the adjacent railway station, a convenience store, public open space and strategic landscaping.

During pre-application meetings it was agreed that as a precursor, a 'Design Coding' section would be incorporated within the Design and Access Statement, defining the parameters and guiding principles that inform the detailed design.

The primary purpose of the 'Design Coding' is to establish clear, urban design guidance and instruction for the planning and regulation of this development.

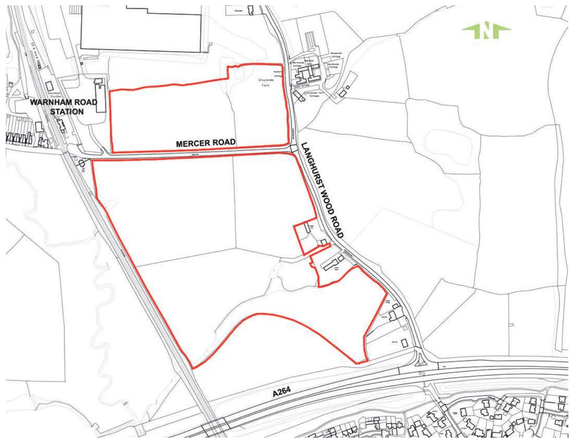
This document should be read in conjunction with the submitted drawings as prepared by CMYK (Planning and Design) Limited, together with other documents produced by other members of the design team.



# Location


West Sussex County Plan


Local Plan




O.S. Plan

## Location

The development site is located on the northern edge of Horsham.

Horsham is a market town, located in the county of West Sussex, South East England, seven miles south-west of the major town of Crawley, and 33 miles south of London.

Nearby towns also include Billingshurst to the south-east (approximately 10km away) with Haywards Heath and Burgess Hill to the south-east (17km and 19km away respectively).

Horsham lies four miles south of the Surrey border, and falls within the district council of Horsham, under the county council of West Sussex.

Horsham is 50 metres (160 ft) above sea level. It lies within the Low Weald, at the western edge of the High Weald, with the Surrey Hills of the North Downs to the north and the Sussex Downs of the South Downs to the south.

The Low Weald lies north of the Wealden Green and forms a horseshoe shape around the High Weald. It is a low-lying gently undulating landscape of clay vales and gentle ridges of limestone and sandstone.

The sites proximity to Horsham offers access to transport and infrastructure together with facilities such as schools and shops. This will be further improved with the arrival of a new Local Centre provided within this development, and by the implementation the mixed use strategic development of Land to the North of Horsham, which will deliver an extensive range of services and facilities, including a new secondary and primary schools.

## Community Facilities

The scheme must aim to reduce the reliance on private cars and encourage alternative modes of travel. In doing this, the sites proximity to local facilities (both existing and imminent) and infrastructure plays a key role in reducing car use.

The proposed development will be accessed from Mercer Road which provides pedestrian links to the nearby village of Warnham to the west, and from Langhurst Wood Road which, via the A264, provides connection to Horsham, immediately to the south.

The site is well situated for families with children due to a good provision of educational facilities in the area. There are many infant / junior schools nearby; the nearest currently being Holbrook Primary School, North Heath Community Primary School and All Saints C of E Primary School, all of which are situated less than 2 kilometres from the application site.

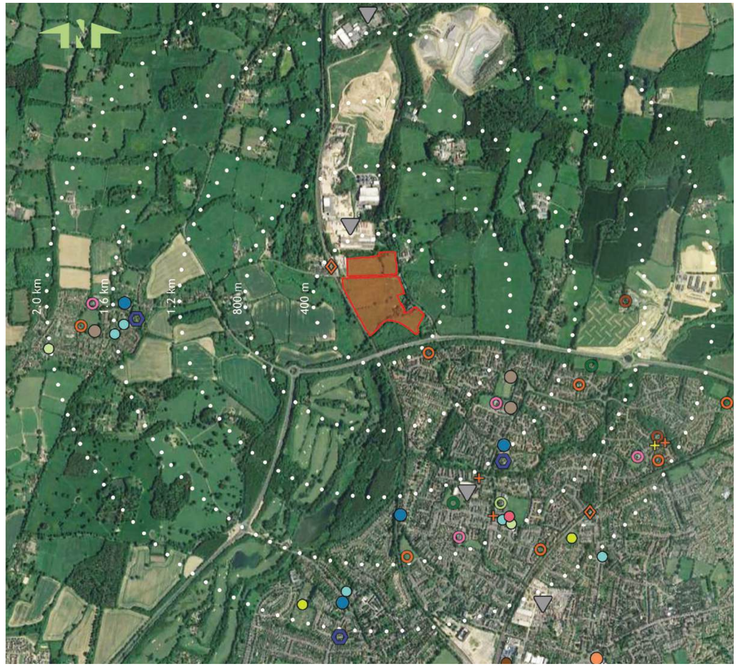
Several secondary schools are to be found in the vicinity, including Tanbridge House School, Millais School and The Forest School.

Further education is also available at the College of Richard Collyer, a sixth form facility, located less than 2.5 km to the south.

There are a wide range of employment opportunities close to the site with Horsham, Crawley and Billingshurst town centres nearby as well as Central London being within realistic commuting range.

Being close to Horsham the site is well placed for access to the whole spectrum of public amenity.

The land is also well placed for nearby open space and access to the countryside. Warnham Local Nature Reserve is located less than a kilometre to the south of the site and offers 92 acres of grassland meadow, ancient woodland and conifer and mixed broad leaf plantation, as well as, marshland and areas of wet grassland. These areas offer recreational opportunities as well as access to a wealth of biodiverse trees, plants and animal species.

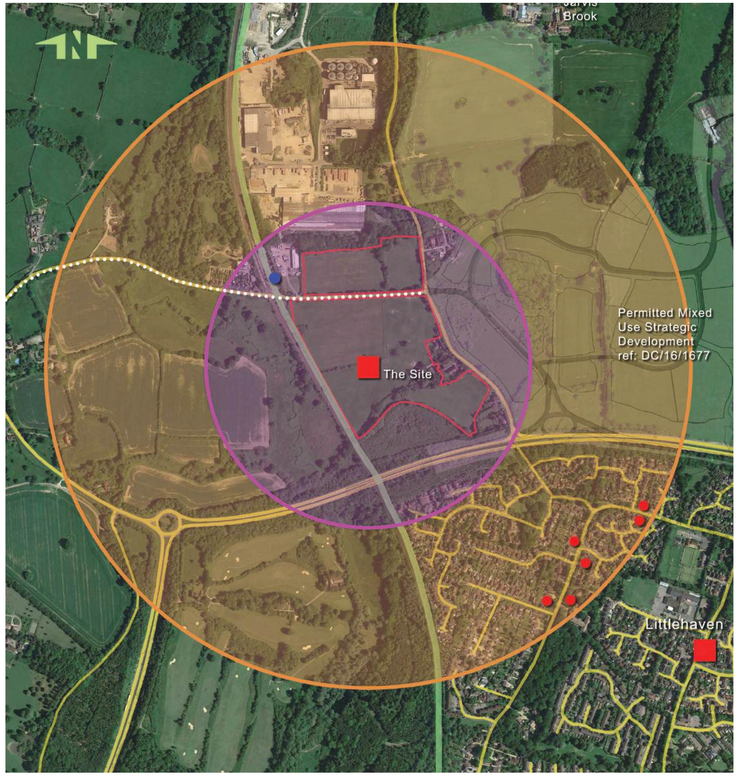



Aerial view of the site showing Local Service and Facilities.

Legend

- Site Boundary
- Train Station
- Allotments
- Nursery
- Primary School
- Sports Centre
- Recreation Ground
- Equipped Play Area
- Church
- Community Centre
- Employment Area
- Public House
- Supermarket
- Restaurant
- Post Office
- Local Shop
- Garage
- GP Surgery
- Pharmacy






Vehicular & Transport Links Diagram

## Vehicular & Transport Links

The application site is situated directly to the north of Horsham. The A264 runs alongside the southern boundary providing connections to Crawley to the east, as well as the M23 and Gatwick Airport.

To the west the A264 provides connection to the A24, which in turn connects to the M25 (Junction 9) some 23km north of the site.

The nearest railway station is Warnham, which is located approximately 100m to the west of the North Parcel. It lies on the Sutton and Mole Valley line, between London Victoria (to the North) and Horsham Station (to the south). The station currently has no dedicated car parking facilities.

There are currently no regular bus services serving Warnham railway station. The adjacent level crossing is now permanently closed except for pedestrians and cyclists.

The nearest bus stops are currently located to the south of the A264, the closest one is on Pondtail Road, approximately 700m to the south-east. This stop is served by Route 61 North Horsham Circular to Horsham Rail and Bus Stations from Pondtail Road and North Heath Lane.

Airports within the vicinity include;

London Gatwick 12 kilometres away.

London Heathrow 65 kilometres away.

A Public Right of Way (ROW1574) runs along Mercer Road, so the site is accessible to the existing wider PRoW network, linking the site to Warnham to the west (including good access to Warnham Station), and into the permitted North Horsham development to the east. This link will be retained.

**Legend**

- Train Station
- Bus Stop
- 5 Minute Walk
- 10 Minute Walk
- Road
- Railway Line
- Public RIghts of Way (1574)

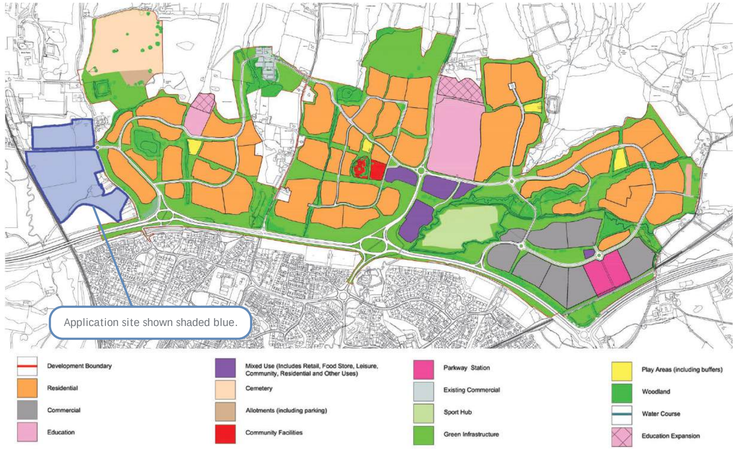
## Adjacent Development

To the east of the application site lies an MDA identified as a strategic allocation, known as 'Land North of Horsham', in the adopted Horsham Development Planning Framework (HDPF) (November 2015).

Land North of Horsham, covers 249.60 hectares of land, comprising the area north of the A264 between Langhurstwood Road and Wimland Road.

The Outline Approval is for the creation of a mixed-use strategic development at Land North of Horsham to include housing, a business park, retail, community centres, leisure facilities, education facilities, public open space, landscaping and related infrastructure. The development will include:

- Up to 2,750 homes, with a mix of house types and tenures to meet local needs;
- 46,450 m² (500,000 ft2) business park;
- Two primary schools;
- a secondary school;
- Provision for special educational needs;
- 'Early years' provision;
- Local centres and community facilities;
- Retail provision of 4,900 m² (52,744 ft²) sales floorspace, together with other appropriate local shopping facilities multi-use community centre;
- Land safeguarded for a parkway railway station and associated uses including car parking;
- Open space including a nature park, sport and recreation facilities, and allotments;
- Landscape buffers;
- A cemetery;
- Commercial leisure facilities of 5,100 m² (54,896 ft2)




Land North of Horsham Parameter Plan: Land Use 2153A-100J part of the Outline Approval DC/16/1677 (Application Site shaded blue).

Local transport infrastructure to include delivery of and/or contributions towards highway improvements, comprising:

- Closure of Langhurstwood Road left in / left out junction onto A264 and re-alignment of Langhurstwood Road to the east with a new signalised roundabout on the A264;
- Upgrade of the Rusper Road roundabout to a signalised roundabout;
- a new left in left out junction into the development east of Rusper Road;
- a new roundabout on Rusper Road;
- a new roundabout on Langhurstwood Road, replacing the junction with Mercer Road;
- a new crossroads junction on Old Holbrook;
- a new emergency access on Wimland Road;
- priority access for buses to/from Pondtail Drive;
- new pedestrian and cycle crossing points on the A264; and
- a number of off-site highways improvements.

The proposed development was granted outline approval on the 1st March 2018 (ref: DC/16/1677) since then detailed approval has been given for Area 2 (ref: DC/21/0066), whilst Area 7 awaits decision (ref: DC/21/1427).

It can be seen that the development parcels, the subject of this application, present a natural culmination to development along northern edge of Horsham.




Land North of Horsham Illustrative Masterplan 2153A-150Q part of the Outline Approval DC/16/1677.

## Character of the Land

The application site comprises of two parcels of land (north and south), separated by Mercer Road; a tree-lined, single carriageway with a junction to Langhurst Wood Road to the east.

The **Northern Parcel** is made up of two fields, which create a well-contained rectangular piece of land covering approximately 3.6 hectares (8.9 acres).

The northern boundary is defined by 1.2m high post and rail fencing beyond which lies a tract of ancient woodland, averaging 50m in depth. To the north of the woodland lies the Warnham Brickworks. The eastern boundary of the parcel is defined by a combination of post and wire fencing and native hedgerow and tree planting, beyond which lies Langhurst Wood Road.

The southern boundary is again defined by a combination of native hedgerow and tree planting with gated access points located in the south east corner of each field. These are served from Mercer Road, which runs alongside the entire southern boundary.

The western boundary abuts the 'Transport Depot'; a light industrial/ commercial estate supporting a number of small businesses. The boundary itself, again being established by low native hedgerow and tree planting.

The land in the parcel exhibits a moderate gradient falling north to south, at approximately 1 in 14.

The **Southern Parcel** is larger and more irregular in shape. The land covers an area of 10.6 hectares (26.4 acres) and comprises three fields subdivided by post and wire fencing. To the north the parcel is bounded by Mercer Road set behind native hedgerow. This edge is characterised by tree-planting with partial views in.

The eastern boundary, as with the Northern Parcel, is defined by post and wire fencing and hedgerow planting which flanks Langhurst Wood Road. In addition to this the eastern boundary also wraps around a handful of residential properties situated midway along the boundary and in the south-eastern corner.

The southern boundary curves around an area of lower lying ground, populated with tree-planting. This area forms a natural buffer from the A264, an east-west running section of dual-carriageway located further to the south.

The long western boundary runs alongside the Sutton and Mole Valley railway line, separated by native hedgerow planting.

The land in this parcel generally demonstrates slower gradients falling from the north-west corner to the south and from the south-eastern corner to the west at approximately 1 in 50. A swathe of more steeply contoured land runs from the southwest corner through to the north eastern corner, and a number of ponds and ditches are located in this parcel.


Character of the Land Diagram




South easterly view across the southern land parcel, taken from the northern boundary of the southern parcel.


North westerly view across the northern land parcel, taken from within the northern parcel.


Westerly view along Mercer Road


North easterly view across the northern land parcel, taken from Mercer Road.


South easterly view of the North West corner of the southern parcel, taken from mercer Road.


Westerly view along Mercer Road

## Opportunities and Constraints

- Application Boundary
- Langhurst Wood Road – provides opportunity for access along eastern boundary of both parcels.
- Mercer Road – provides opportunities for access to Northern Parcel along its southern boundary and to southern parcel along its northern boundary. Includes PRoW 1574 opportunity to reroute this within bounds of the proposal to improve safety.
- A264 – Stretch of busy dual carriageway running to the south.
- Opportunity to provide vehicular / pedestrian access points into the development without significant disturbance to existing trees & hedgerows.
- Existing field division within northern parcel comprises extensive native tree and hedgerow planting – opportunity to retain within area of open space for ecological benefit.
- Existing trees – opportunity to retain within areas of public open space.
- Veteran tree situated within southern parcel to be afforded appropriate buffer in line with current aboricultural good practice.
- Substantial area of trees and vegetation to the south affords a high level of acoustic and visual separation from the A264.
- The northern parcel exhibits a gradient sloping down from the north to south. The southern parcel exhibits a gentle gradient sloping from north to south in the northern part of the parcel and from south east to north west in the south eastern corner. All proposed development should consider this topography.
- Existing pedestrian crossing point over the A264 provides pedestrian/cycle links with Horsham.
- Opportunity to locate new car parking area serving Warnham Railway Station on the western side of the north parcel, adjacent to the 'Transport Depot'; an area of light industrial/commercial business.


Opportunities and Constraints Diagram



## Opportunities and Constraints /cont.

- Low points provide opportunities for surface-water attenuation as part of the sustainable drainage strategy for the development.
- Area of ancient woodland (off-site) to the north provides separation and visual buffering from Warnham Brickworks beyond.
- 15m off set required from Ancient Woodland to avoid root damage. This buffer provides the opportunity to contribute to the wider ecological networks.
- Warnham Brickworks to the north, potential noise source.
- Existing surrounding residential properties – proposed development to respect the existing dwellings on Langhurst Wood Road and Mercer Road.
- Warnham Railway Station.
- Sutton and Mole Valley line, leading to London Victoria to the North and Horsham Station to the south.
- Proposed Mixed-use Strategic Development at Land North of Horsham, comprising the area north of the A264 between Langhurstwood Road and Wimland Road. This will provide housing, a business park, retail, community centres, leisure facilities, education facilities, public open space, landscaping and related infrastructure.
- Overlooking of neighbouring residential dwellings to be avoided.
- Opportunity to increase the boundary planting by providing green corridors to the peripheries of the site.
- Potential to provide links to the proposed pedestrian and cycle paths within the neighbouring development.
- Potential traffic noise from the A264 to be considered.

| No. | Constraints / Issues | Opportunities / Responses |
|---|---|---|
| 1 | Access points into the development off Mercer Road and Langhurst Wood Road. | Opportunity to provide vehicular and pedestrian access off Langhurst Wood Road and Mercer Road. These will be strategically located to minimise ecological and aboricultural impact whilst also achieving all necessary highway requirements, visibility splays etc. |
| 2 | Low lying areas in southern parcel. | Suitable location for semi-natural open space to enhance biodiversity, further soften the development from the south and afford appropriate location for drainage attenuation. |
| 3 | Area of Ancient Woodland and associated 15m off set zone. | Opportunity to integrate the Ancient Woodland off-set zone into a substantial swathe of landscape buffer, creating and preserving ecological habitats and reinforcing the biodiversity credentials of the scheme. |
| 4 | Boundary Vegetation. | Green corridors to be incorporated around the site boundary, designed to provide screening of development and potential habitats for wildlife.<br><br>The proposals will retain many of the existing trees within the site and provide adequate protection for those off-site located adjacent to the site boundaries by avoiding impact to root protection zones.<br><br>Opportunity for new tree planting within green corridors along the site boundaries and within areas of public open space and along streets. |
| 5 | Public Right of Way. | The existing public right of way (1574) which runs along Mercer Road will be relocated so as to be within the development boundary. This will enable a safer, well-surveyed pedestrian route to be provided. |
| 6 | Warnham Railway Car Parking. | The western edge of the northern parcel provides the opportunity to provide additional car parking provision to serve Warnham Railway Station. This will also provide separation for the residential development from the 'Transport Depot'; an area of light industrial/commercial business. |
| 7 | Emergency Vehicular Access. | Opportunity to provide an emergency vehicular access point from Langhurst Wood Road affording direct access to the south eastern corner of the site. |
| 8 | Direct pedestrian/cycle link to Horsham. | Opportunity to provide a direct connection with Horsham by means of an improved, safer pedestrian/cycle crossover point on the A264. |
| 9 | Veteran Tree | Opportunity to integrate the Veteran Tree into a substantial area of open space, creating and preserving ecological habitats and reinforcing the biodiversity credentials of the scheme.<br><br>This open space also enables considerable offset to be provided between the proposals and Pondtail house. |

## Planning Policy Background

The Horsham development plan consists of:

Horsham District Planning Framework which was approved in November 2015

Polices to note in the adopted Horsham District Planning Framework include:

**Policy 1 Strategic Policy: Sustainable Development -**
When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development.

**Policy 2 Strategic Policy: Strategic Development -**
To maintain the district's unique rural character whilst ensuring that the needs of the community are met through sustainable growth and suitable access to services and local employment, the spatial strategy to 2031 is to:

1. Focus development in and around the key settlement of Horsham, and allow for growth in the rest of the district in accordance with the identified settlement hierarchy.

**Policy 4 Strategic Policy: Settlement Expansion -**
The growth of settlements across the District will continue to be supported in order to meet identified local housing,

**Policy 15 Strategic Allocations -** allocates 2500 homes north of Horsham(to the east of this site)

**Policy 16** requires 35% affordable home on development sites

**Policy SD1** provides the details for the allocation of 2500 homes north of Horsham(to the east of this site).

**Policy 24 Strategic Policy: Environmental Protection -**
The high quality of the district's environment will be protected through the planning process and the provision of local guidance documents. Taking into account any relevant Planning Guidance Documents, developments will be expected to minimise exposure to and the emission of pollutants including noise, odour, air and light pollution.

**Policy 25 Strategic Policy: The Natural Environment and Landscape Character -**
The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which:

1. Protects, conserves and enhances the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintains settlement separation.
2. Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.
3. Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible.

**Green Infrastructure and Biodiversity**
1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.
2. Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological network

**Policy 32 Strategic Policy: The Quality of New Development -**
High quality and inclusive design for all development in the district will be required based on a clear understanding of the local, physical, social, economic, environmental and policy context for development.

**Policy 33 Development Principles -**
In order to conserve and enhance the natural and built environment developments shall be required to:
1. Make efficient use of land, and prioritise the use of previously developed land and buildings whilst respecting any constraints that exist;
2. Ensure that it is designed to avoid unacceptable harm to the amenity of occupiers/users of nearby property and land, for example through overlooking or noise, whilst having regard to the sensitivities of surrounding development;
3. Ensure that the scale, massing and appearance of the development is of a high standard of design and layout and where relevant relates sympathetically with the built surroundings, landscape, open spaces and routes within and adjoining the site, including any impact on the skyline and important views;
4. Are locally distinctive in character, respect the character of the surrounding area (including its overall setting, townscape features, views and green corridors) and, where available and applicable, take account of the recommendations/policies of the relevant Design Statements and Character Assessments;
5. Use high standards of building materials, finishes and landscaping; and includes the provision of street furniture and public art where appropriate;
6. Presume in favour of the retention of existing important landscape and natural features, for example trees, hedges, banks and watercourses. Development must relate sympathetically to the local landscape and justify and mitigate against any losses that may occur through the development;
and,
7. Ensure buildings and spaces are orientated to gain maximum benefit from sunlight and passive solar energy, unless this conflicts with the character of the surrounding townscape, landscape or topography where it is of good quality.

**Policy 35 Strategic Policy: Climate Change -**
Development will be supported where it makes a clear contribution to mitigating and adapting to the impacts of climate change and to meeting the district's carbon reduction targets as set out in the Council's Acting Together on Climate Change Strategy, 2009.

**Policy 36 Strategic Policy: Appropriate Energy Use**
Energy hierarchy
All development will be required to contribute to clean, efficient energy in
Horsham based on the following hierarchy:
1. Lean – use less energy – e.g. through demand reduction
2. Clean – supply energy efficiently – e.g. through heat networks
3. Green – use renewable energy sources.

**Policy 37 Sustainable Construction -**
Proposals must seek to improve the sustainability of development. To deliver sustainable design, development should incorporate the following measures where appropriate according to the type of development and location:
1. Maximise energy efficiency and integrate the use of decentralised, renewable and low carbon energy;
2. Limit water use to 110 litres/person/day;
3. Use design measures to minimise vulnerability to flooding and heatwave events;
4. Be designed to encourage the use of natural lighting and ventilation;
5. Be designed to encourage walking, cycling, cycle storage and accessibility to sustainable forms of transport;
6. Minimise construction and demolition waste and utilise recycled and low-impact materials;
7. Be flexible to allow future modification of use or layout, facilitating future adaptation, refurbishment and retrofitting;
8. Incorporate measures which enhance the biodiversity value of development.

**Policy 41 Parking**
1. Parking provision must ensure a balance between good urban design, highway safety, residential amenity and promoting town centre attractiveness and vitality.
2. Adequate parking and facilities must be provided within developments to meet the needs of anticipated users. Consideration should be given to the needs of cycle parking, motorcycle parking, charging plug-in or other low emission vehicles and the mobility impaired.

**Site Specific Allocations of land 2007**
There are no policies of note in this document.

**Supplementary Planning Guidance**
Planning Obligations SPD September 2017
Facilitating Appropriate Development document October 2022.
Biodiversity and Green Infrastructure Planning Advice Note October 2022.

The site currently lies outside of any settlement boundary and is not covered by any development plan designations or allocations except for being within the countryside.



The emerging Horsham Local Plan had reached the Reg 19 stage but consultation was postponed in July 2021 due to changes to the NPPF.

The plan has been on hold since then. Then proposed policies of note in the Reg 19 draft plan were as follows -

**Strategic Policy 14: Housing Provision**
Provision is made for the development of at least 18,700 homes associated infrastructure within the period 2021-2038 at an average delivery rate of 1,100 homes per year. The target for the first five years of the plan will be 900 homes a year, rising to 1,180 for the remainder of the plan period. This figure will be achieved by
4. At least 2,200 homes from smaller scale allocations to be allocated in this Local Plan or in Neighbourhood Plans.

**Strategic Policy 15 - Meeting Local Housing Needs**
1. Residential development will be supported where it provides a mix of housing sizes and types to meet the needs of the District's communities as evidenced in the latest Strategic Housing Market Assessment or any subsequent updates.

**Strategic Policy 16: Affordable Housing**
Residential development will only be supported provided that:
1. On self-contained residential developments (C2 and C3, including retirement and other specialist care housing) that are proposed for, or have a capacity for, 10 or more homes (gross*) or exceed 0.5 hectares, a proportion of the homes or units shall be provided as affordable homes (as defined in the Glossary). The proportions will be as follows:
a) On greenfield sites** providing self-contained dwellings (houses and/or flats), a minimum 45% of the total (gross*);
2. At least 70% of the affordable homes are provided as social rented and affordable rented homes, 25% are provided as First Homes with a 40% discount compared with the open market value, and the remaining proportion (5%) provided as other intermediate /shared ownership homes.
4. Affordable homes must be integrated throughout the development and be of visually indistinguishable design. They should be located throughout the site in a manner that supports integration but can also be managed efficiently by the relevant housing associations.

**Policy 17: Improving Housing Standards in the District**
Residential development will only be supported provided that:
1. All dwellings meet the Nationally Described Space Standards (or any subsequent Government update) for internal floor areas and storage space. These standards will apply to all open market dwellings and affordable housing, including those created through subdivision and conversion.
Adaptable and Accessible Homes
2. All new dwellings meet the Optional Standards for Accessible and Adaptable dwellings as set out in the Building Regulations Approved Document M4(2) (or any subsequent Government update).
3. On sites providing 20 or more units (gross) and where there is an identified need on the Housing Register, a minimum of 5% of dwellings provided as affordable housing will be required to meet the Optional Standards for Wheelchair User dwellings as set out in the Building Regulations Approved Document M4(3) (or any subsequent Government update).

**Policy 24: Strategic Policy: Environmental Protection**
The high quality of the District's environment will be protected through the planning process and the provision of local guidance documents. Taking into account any relevant Planning and Technical Guidance Documents, developments will be expected to minimise exposure to, and the emission of, pollutants including noise, odour, vibration, air and light pollution arising from all stages of development.

**Strategic Policy 25: Air Quality**
The Council recognises the direct effects air quality has on public health, natural habitats and biodiversity, including its contribution to climate change, and the importance of the management of air quality. Taking into account any relevant Planning Guidance Documents and / or policies within this plan, proposals will be required to:
1. Adhere to the Air Quality and Emissions Mitigation Guidance for Sussex (2020), or any future updates, to identify if an Air Quality Impact Assessment and / or an Emissions Mitigation Statement is required;
2. Contribute to the implementation of local Air Quality Action Plans, and not conflict with the set objectives;
3. Minimise traffic generation and congestion through access to sustainable transport modes, maximising the provision for cycling and pedestrian facilities;
4. Encourage the use of cleaner transport fuels, including through the provision of electric car charging points.
5. Take into account habitats or biodiversity designations that are sensitive to air quality changes, including ancient woodland. Habitats identified as sensitive to such changes, including proposals within 7km of The Mens, will require a relevant impact assessment and appropriate mitigation measures to be put in place.

**Strategic Policy 26: The Natural Environment and Landscape Character**

The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats, will be protected against inappropriate development. The Council will expect development proposals to be landscape led from the outset so that they clearly inform the design and layout. Proposals will also be required to:

1. Protect, conserve and enhance the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintain settlement separation;
2. Maintain and enhance the Green Infrastructure Network, the emerging Nature Recovery Network and, where practicable, help to address any identified deficiencies in these networks across the District;
3. Maintain and enhance the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and secure measurable net gains in biodiversity; and
4. Incorporate SUDS into a scheme in an optimal location for their purpose whilst also securing landscape and biodiversity enhancements and delivering high-quality green spaces. Proposals will be expected to provide details to demonstrate that the whole life management and maintenance of the SUDS are appropriate, deliverable and will not cause harm to the natural environment and/or landscape.

**Policy 30: Strategic Policy: Green Infrastructure and Biodiversity**

**Green Infrastructure**

1. Development will be supported where it can demonstrate that it maintains and enhances the existing network of green infrastructure and contributes to the delivery of the emerging Nature Recovery Network, natural capital and biodiversity.
2. Proposals that would result in any loss, degradation or harmful impacts to green infrastructure, or Core Areas of the Nature Recovery Network will be resisted unless it can be demonstrated that new opportunities will be provided that appropriately mitigates and / or compensates for the respective harm and ensures that the ecosystem services of the area are retained and enhanced. Development proposals will be expected to remove invasive species.
3. Proposals will be expected to retain and enhance existing priority habitats. Habitat enhancement including additional hedgerow and tree planting must take account of the local landscape and habitat context. It should seek to optimise biodiversity, ecological connectivity, and function and climate change resilience.
4. Development likely to affect a watercourse and its associated corridor should seek to conserve and enhance its ecological, landscape and recreational value. This should include providing adequate natural buffer zones to the watercourse.

Biodiversity

5. Where the felling of a tree is necessary, for example due to disease, replacement planting with a suitable tree species, age and location to retain the link with the wider network of habitats and Green Infrastructure, will be required. Around Ancient Woodland a minimum 15m buffer will be required and consideration should be given to the potential for protected species, e.g. bats.
6. Major development proposals will be expected to submit a Biodiversity Net Gain report to demonstrate a minimum 10% biodiversity net gain on application of the Defra Metric, or subsequent updates. The net gain must be achieved through the delivery of appropriate on-site biodiversity net gain or, where this is not practicable, through off-site net gain within the emerging District's Nature Recovery Network or as agreed by the Council.
7. Proposals must give appropriate consideration to protected and notable species. They will be expected to protect priority species and seek to aid their recovery, and must conserve, restore and enhance priority habitats, and should create and manage appropriate new habitats, taking into account pollination, where practicable.
8. The Council will support appropriate new development which:

a) Retains and enhances significant features of nature conservation value on development sites;

b) Makes a positive contribution to biodiversity and where appropriate the emerging Nature Recovery Network, through the creation of appropriate green spaces, that provide linkages between habitats to create local and regional ecological networks that enable the movement of wildlife through development sites; and / or

c) Following the principle of 'right habitat in the right place', significantly increases woodland or other habitats for the purpose of appropriately enhancing biodiversity, carbon sequestration, pollution control, and / or flood mitigation.

Protected Sites and Species

9. Particular consideration will be given to the hierarchy of sites and habitats within, or functionally linked to, the District as follows:

a) Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites;

b) Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Ancient Woodland and Veteran Trees;

c) Local Wildlife Sites (LWS), Local Nature Reserves (LNRs) and any areas of priority habitats including traditional orchards, local geodiversity, Core Sites in the emerging NRN or other irreplaceable habitats not already identified in a & b above.

10. Where development is anticipated to have a direct or indirect adverse impact on sites or features of importance to nature conservation, development will be refused unless it can be demonstrated that:

a) The mitigation hierarchy has been applied and the objectives of a site's designation, where applicable, and integrity of the area will not be undermined;

b) The reason for the development clearly outweighs the likely impact to notified features and / or the need to protect the value of the site; and

c) Appropriate mitigation and compensation measures will be provided

11. Any development with the potential to impact the Arun Valley SPA / SAC / Ramsar site, The Mens SAC and / or Ebernoe Common SAC will be subject to a Habitats Regulation Assessment to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

**Strategic Policy 32 - Development Quality**

High-quality and inclusive design for all development in the District will be required based on a clear understanding of the local, physical, social, economic, environmental and policy context. In particular, development will be supported provided that it meets all the following relevant criteria:

1. It provides an attractive, functional, accessible, safe and adaptable environment in accordance with the principles of the National Design Guide, or any future updates;
2. It complements and responds to locally distinctive characters and heritage of the District. In appropriate locations where context permits, contemporary architecture can be considered;
3. It contributes a sense of place both in the buildings and spaces themselves, having consideration to the built historic environment and townscape, and in the way they integrate with their structural surroundings and the landscape in which they sit;
4. It makes efficient use of land and optimises the provision and use of buildings and open space within a site, taking into account the character, appearance and needs of the site itself, together with the appearance and needs of the surrounding area;
5. It contributes to, and enhances, the green and blue infrastructure that makes the District a pleasant place to live. Existing landscape belts, trees, hedgerows and watercourses that form the character of the landscape should be retained;
6. It helps secure a framework of high-quality open spaces which meets the identified needs of the community, and where relevant to reflect the Neighbourhood Plan,

Design Statement and/or Character Statement for that area; and

**Strategic Policy 33: Development Principles**

In order to conserve and enhance the natural and built environment, proposals for development will supported provided that it meets all of the following:

1. Makes efficient use of land, and prioritises the use of previously developed land and buildings, whilst respecting any constraints that exist and meet the requirements of, and accord with, other Local Plan policies and designations;
2. Provides or retains a good standard of amenity for all existing and future occupants of land and buildings of the proposed site;
3. Is designed to avoid unacceptable harm to the amenity of existing and future occupiers or users of nearby property and land, for example due to overlooking, over dominance or overshadowing, light pollution, traffic generation, and general activity, noise, odour and/or vibration, and having regard to the sensitivities/ impact of surrounding development;
4. Ensures that the scale, massing and appearance of the development is of a high standard of design and layout and relates sympathetically with the built surroundings, landscape, open spaces and routes within and adjoining the site, including any impact on the skyline and important views;
5. Ensures that it is locally distinctive in character, respects and responds to the character of the surrounding area (including the overall setting, townscape features, views and green corridors) and, where available and applicable, takes account of the guidance in relevant Council endorsed Supplementary Planning Documents, Design Statements, Character Assessments and/or masterplans;
6. Uses high standards of building materials, finishes and landscaping and demonstrates sustainable use of resources in design and construction, incorporating best practice in resource management, energy efficiency and climate change adaptation;
7. Includes the provision of street furniture, public art and street scene improvements where appropriate;
8. Relates sympathetically to the local landscape and nature. Any losses or harm to landscape and natural features that may occur through the development will require justification and evidence that new opportunities will be provided or that mitigation or compensation for any loss will be provided;
9. Ensures buildings and spaces are orientated to gain maximum benefit from sunlight and passive solar energy, unless this conflicts with the positive character features of the surrounding townscape, landscape or topography or otherwise significantly compromises other design principles;
10. Provides pedestrian, cycle and public transport priority over the use of private vehicles, incorporating the provision of safe recreational/utility routes, public rights of way and connectivity within the development and to the surrounding area
11. Incorporates convenient, safe and visually attractive areas for the parking of vehicles and cycles, and the storage of bins/ recycling facilities;
12. Incorporates measures to reduce actual or perceived opportunities for crime or antisocial behaviour both on the site and in the surrounding area. Measures expected include the creation of visually attractive active frontages with windows and doors that provide informal surveillance of public areas by occupants of the site, adjoining streets and public spaces; and
13. Make a clear distinction between the public and private spaces.

**Strategic Policy 36 - Climate Change**

Carbon Reduction

1. Development proposals will only be supported where they include measures which contribute to achieving net zero carbon emissions across the District by 2050 at the latest. The Council will be supportive of a range of measures to achieve this target, including but not limited to:

a) Design which incorporates high standards of energy efficiency including optimal levels of thermal insulation, passive ventilation and cooling and passive solar design;

b) The use of renewable and low carbon energy supply systems and connection to renewable and low carbon heat networks;

c) The efficient use of natural resources used in new buildings to reduce the environmental impacts of construction;

d) Design that influences the behaviour of occupants to reduce energy use;

e) Using patterns of development and providing sustainable transport infrastructure which reduce the need to travel, encourage walking and cycling and include good accessibility to public transport and other forms of sustainable transport and ensure residents have access to services and facilities that are within walking distance;

f) Reduce whole life carbon emissions by retaining and reusing existing buildings, components or materials, including on-site where possible.

Climate Change Adaptation

2. Development will only be supported if it includes site and building level measures to adapt to the future impacts of climate change and reduce vulnerability, particularly in terms of the comfort, health and well-being of current and future occupiers. Flood risk, water supply, overheating and changes to the District's landscape should also be considered. Measures should include but are not limited to:

a) Use of site and interior building layout: new buildings should be orientated to maximise the opportunities for both natural heating and ventilation and to reduce the exposure to wind and other elements, and the potential for overheating;

b) The conservation of water supplies to minimise the risk and impact of drought and flooding;

c) The use of green/blue infrastructure and dual use Sustainable Urban Drainage Systems (SUDS) to provide multifunctional benefits such as helping to absorb heat, reduce surface water runoff, provide flood storage capacity and assist habitat migration; and

d) Moderating external temperatures through the use of green walls and roofs, tree planting or other nature-based solutions and landscaping for shade and drainage design.

3. Development will be supported providing it avoids responses to climate impacts which lead to increases in energy use and carbon dioxide emissions. In considering the likely impact of climate change over the lifetime of the development reference should be made to the most recent climate change projections.

Sustainability Statement

4. Development will be supported provided a Sustainability Statement is submitted which demonstrates how the development has taken measures to mitigate and adapt to the effects of climate change.

**Policy 37: Appropriate Energy Use**

Energy Hierarchy

1. Development will be supported provided that it contributes to clean, efficient energy in Horsham based on the following cascade:

a) Be Lean – use less energy – for example, by minimising energy demand through energy efficiency measures such as fabric performance and passive design;

b) Be Clean - supply energy efficiently and exploit local energy resources such as secondary heat and district energy networks where available. Preference must be given to technologies with greater efficiencies and fuels with lower carbon emissions to achieve the highest total life-cycle carbon emission savings, in accordance with Part 2 of this policy;

c) Be Green – maximise the use of renewable energy sources. Zero and Low Carbon Heating

2. Development proposals must demonstrate how they will provide zero and low carbon heating in accordance with the following hierarchy. Evidence must be provided that opportunities to meet each level of the hierarchy have been exhausted before cascading to the next level:

a) Connect to local existing or planned heat networks*, in combination with on-site renewable energy generation;

b) Maximise use of on-site renewable energy generation;

c) Use of the optimum means of low or zero-carbon heat supply is demonstrated, based on the in order of preference below:

i. Use of waste heat sources;

ii. Electrically-driven ground, water or air source heat pumps;**

iii. Direct Electric Heating. **

Energy Statements

3. Residential or commercial development will be supported provided that it includes an Energy Statement, (which may be incorporated into the Sustainability Statement), demonstrating how compliance with this policy has been achieved.

Renewable Energy Schemes

4. Stand-alone renewable energy schemes will be supported where they do not conflict with other policies in this plan. Renewable and low carbon energy generation developments that are led by, or meet the needs of, local communities will carry significant weight.

*Where a local heat network is planned but not yet in existence or connection is not currently viable, but may become viable in the future, the development should be designed to allow for the cost effective connection and supply at a later date. In this case the heat should be supplied according to steps 2b and 2c of the above hierarchy.

**Electric heat pumps and direct electric heating are assumed to become zero-carbon when the national grid de-carbonises.

**Strategic Policy 38: Sustainable Design and Construction**

1. Development will be supported where it is demonstrated that sustainable design, including its construction and operation, is integrated into the development from the design stage onwards. To deliver sustainable design, development will only be supported where it meets all of the following requirements that are relevant:
a) New-build homes deliver a minimum 35% overall reduction on the Dwelling Emission Rate (DER) against the Target Emission Rate (TER) based on the 2013 Edition of the 2010 Building Regulations (Part L), of which:
i. A minimum 10% reduction is through energy efficiency measures; and
ii. The residual additional reduction is achieved through on-site renewable energy generation or connection to a heat network.
b) New non-domestic buildings to achieve a BREEAM rating of 'Excellent' unless it can be demonstrated that this would make the scheme un-viable;
c) New residential development achieves a water efficiency of 100 litres/person/day. Development above 200 homes is expected to achieve 80 litres/person/day and incorporate site wide measures to conserve and reduce water consumption, including grey water recycling;
d) New non-domestic buildings to achieve the maximum credits in BREEAM category Wat 01 Water Consumption;
e) Minimise construction and demolition waste, utilise recycled and low-impact materials and incorporate measures that reduce the amount of biodegradable waste sent to landfill;
f) Be designed flexibly to enable future modification of use or layout, facilitating future adaptation, refurbishment and retrofitting;
g) Include the provision of gigabit capable broadband access and enable provision of future communication technologies;
2. Where permission is required to retrofit energy efficiency measures into existing development, schemes will be supported in principle.
3. Development that involves the retrofitting of an existing historic building (heritage asset) will be supported provided that the following criteria are met:
a) It does not result in detriment to the significance of the asset or damage to its fabric;
b) A whole building approach to improving energy efficiency is taken as advocated by Historic England;
c) Micro-renewable technologies do not result in harm to the heritage asset or their setting;
d) Where the proposal involves major development, it is demonstrated that opportunities for the retention and retrofitting of existing historic buildings within the site boundary have been included within the scheme.
4. In order to demonstrate compliance, proposals should be accompanied by a Sustainability Statement to demonstrate how these measures will be incorporated into development design

**Strategic Policy 39: Flooding**

1. Development proposals will only be supported where they follow a sequential approach to flood risk management, so that priority is given to development sites with the lowest risk of flooding, where shown to be safe, and shown not to increase flood risk elsewhere.
2. Development proposals will be supported provided that they meet all of the following that are relevant:
a) Consider flood risk at an early stage in deciding the layout and design of the site;
b) Take a sequential approach to ensure most vulnerable uses are placed in lowest risk areas;
c) Are not located on the functional floodplain (Flood Zone 3b), except for water compatible uses and essential infrastructure;
d) Where located in Flood Zone 2 and 3, have undergone a sequential test and, if necessary, exceptions test, using a 1 in 100 annual probability flood level including an appropriate allowance for climate change;
e) Not result in a net loss of flood storage capacity, and not adversely affect flood routing and thereby increase flood risk elsewhere;
f) If over 1 hectare and in Flood Zone 1, or in Flood Zone 2 and 3, are accompanied by a site-specific Flood Risk Assessment;
g) Comply with the tests and recommendations set out in the Horsham District Strategic Flood Risk Assessments (SFRAs);
h) Where there is the potential to increase flood risk, incorporate the use of sustainable urban drainage systems (SUDS) unless technically un-feasible, or incorporate water management measures which reduce the risk of flooding and ensure flood risk is not increased elsewhere;
i) Make appropriate provision for surface water drainage to ground, water courses or surface water sewer. Development will not be allowed to drain to the foul sewer;
j) Where technically feasible, utilise drainage techniques that mimic natural drainage patterns and manage surface water as close to the source as possible;
k) Comply with the objective of the Water Framework Directive, and with the findings of the Gatwick Sub Region Water Cycle Study, in order to maintain water quality and water availability in rivers and woodlands and wastewater treatment requirements; and
l) Include a management plan to maintain the flood water assets in perpetuity.
3. New development which incorporates SUDS will be supported where it considers amenity value, green infrastructure, local ecological resources including water quality and biodiversity, natural flood management methods, and contributes towards environmental net gain. An appropriately detailed assessment should be submitted to demonstrate an appropriate SUDS strategy

**Strategic Policy 41 - Sustainable Transport**

1. Development will be supported provided the following is demonstrated:
a) For residential development, the need for travel is minimised through provision in all homes for home working, including bespoke-design space within the home and gigabit capable broadband connection;
b) The layout, design and location of facilities and infrastructure maximise the potential for residents and workers to safely and conveniently walk and cycle to meet their day-to-day work, shopping and leisure needs;
c) Walking and cycling routes are designed to be attractive, direct and legible, have priority over motorised traffic, and integrated with the existing and wider network;
3. Proposals for major development shall be accompanied by a transport assessment or statement. Where the potential impact of the development on the network is deemed to be significant, or as a result of needing to address an existing local traffic problem, a Travel Plan will need to be prepared. These should be prepared in line with advice from the Local Highway Authority.

**Policy 42: Parking**

1. Development should seek to improve parking in town centres so it is convenient, safe and secure. Parking provision must ensure a balance between good urban design, highway safety, residential amenity and promoting town centre attractiveness and vitality.
2. Adequate parking facilities must be provided within developments to meet the needs of anticipated users. Consideration should be given to the needs of motorcycle parking, and vehicles for the mobility impaired.
3. Adequate, safe and secure parking and overnight storage facilities for bicycles must be provided within developments to encourage the use of sustainable modes of transport.
4. Adequate parking and plug-in charging facilities must be provided to cater for the anticipated increased use of electric, hybrid or other low emission vehicles.
5. Plug-in charging facilities for all new residential parking spaces must be provided or at minimum the infrastructure to enable easy installation in future.
6. Where off street parking is not provided within a development proposal, the design and layout should incorporate infrastructure to enable the on-street charging of electric or other vehicles.
7. For residential development with communal off-street parking provision, at least 20% of spaces must have active charging facilities and the infrastructure to enable easy activation of all spaces as demand increases.
8. Development which involves the loss of existing parking spaces will only be allowed if suitable alternative provision has been secured elsewhere or the need for the development overrides the loss of parking and where necessary measures are in place to mitigate against the impact.
9. Proposals for additional or replacement airport related parking, including long and short-term parking for passenger vehicles, will not be permitted.



**Strategic Policy HA12: Horsham Housing Allocations**

1. The following sites are allocated, as shown on the Policies Map, for the provision of
at least 400 homes:

HOR2: Land at Mercer Road, 14.3 hectares (300 homes)
2. In addition to meeting national and Local Plan requirements, development will be supported where proposals:
HOR2
a) Complements the masterplan for, and does not prejudice the delivery of, the adjacent Land North of Horsham strategic allocation;
b) Are designed to ensure that residents are not subject to any harmful impacts from neighbouring uses.
c) Are designed to provide links to the northern and southern parcels of land on the site.
d) Provide public open space, children's recreation space in accordance with standards and the respective recommendations in the Open Space, Sport & Recreation Review 2020
e) Provide a temporary means of safe transport connection to Horsham Town across the A264 for non-car modes until the Phase 3 connections to be delivered by the North of Horsham development are complete.
f) Have appropriate regard to the Ancient Woodland on the northern boundary of the site and retain existing trees on the site where practicable.
g) Provide around 50 parking spaces to serve Warnham station.

# 2.0 Design Coding

# DESIGN CODING

## Introduction

Introduction

The Design Coding section establishes the overall vision for the development of the land off Mercer Road, promoting the creation of a place with its own identity. It also seeks to provide a scheme that is well integrated with the permitted mixed-use development to the east, as well as the wider Horsham area.

Key principles include:

- A traditional approach in keeping with the overall character of the Low Weald.
- The creation of a new neighbourhood that forms part of the larger urban extension to be constructed on land to the north of Horsham.
- To deliver a good quality life for future residents.
- To provide open spaces and green corridors to make the urban areas proposed more attractive, developing a strong sense of place, whilst also creating a wide range of ecological habitats.
- To incorporate walking and cycling links which are fully integrated into the sites design to ensure it is fully accessible and encourages non-vehicular journeys.

This Design Coding section will set out in detail, design principles specific to the requirements of the development. These include:

- Development Structure
- Density
- Heights
- Key Spaces Framework
- Movement Network and Connectivity
- Street Hierarchy
- Boundary Treatments

The aspirations and aims of the Design Coding section are demonstrated throughout this document and where a section specifically relates to one of the principles; the following colour coded symbols are displayed:

- DS Development Structure
- D Density
- H Heights
- KS Key Spaces Framework
- MN Movement Network and Connectivity
- SH Street Hierarchy
- BT Boundary Treatments

DESIGN CODING



## Development Structure

Development Structure Diagram

### Development Structure

The purpose of this page is to provide a clear plan demonstrating the different areas of built form and landscaping that the detailed scheme should follow.

It identifies the different elements and illustrates where they should be located. The detailed designs will need to adhere to these parameters and ensure that the Reserved Matters scheme accords. The exact size and location of the different use areas should not be considered prescriptive but should be used as a guideline as to how the different opportunities and constraints could be addressed. Development Parcels, built form and street patterns are shown indicatively to assist legibility.

Existing hedges should be retained as should the majority of existing trees where they are in good condition. Where existing trees are proposed for retention, the area around them provides a good opportunity for open space. This will ensure that the root zones are protected and the trees allowed to flourish. These areas will then serve to break up the development and provide identity and way-finding features.

The northern area open space should be retained as a natural area due to its location, adjacent to the Ancient Woodland & ecological value. An open space will also be created in the centre of the site.

Areas identified are approximate (in size or location). This is to allow some degree of flexibility for the final design stage. However, the detailed scheme should seek to locate the different elements generally where shown and should not seek to significantly reduce the quantum.

**Legend**

- Residential Development areas, including; buildings, streets, gardens and parking.
- Public Open Space areas. To include existing trees, hedges & natural landscaping, together with SUDS features.
- Public Open Space areas along Mercer Road. To include existing trees, hedges & landscaping, together with the diverted PROW to form a wide landscape corridor.
- Public Open Space area adjacent to Ancient Woodland. To include existing trees and hedges together with natural landscaping to promote ecological benefits.
- Public Open Space area, including a LEAP. A more formal area at the heart of the development.
- Community Hub area. To consist of commercial facilities, residential properties and a formal public space (plaza/ piazza).
- New Station Car Park.
- Vehicular access points.

DS

## Density

This page sets the maximum densities for the built form areas of the site. It ensures that development will be in keeping with its surroundings and appropriate for the location.

Where residential development forms the edge with the green buffers, density should be lower to soften the impact of it from the wider setting. As such, there are likely to be more detached dwellings forming an informal edge.

The Community Hub area, which is focussed around the commercial piazza, can support a higher density, reflecting the level of activity and its location at the heart of the scheme. Apartment buildings and more continuous frontage is expected to be a defining characteristic of this area.

Density around the Central Open Space is expected to be lower to reflect the landscape lead setting and should feature increased use of detached, well-spaced properties.

The remainder of the development can be of a slightly higher density in keeping with the neighbouring approved development to the east. Dwellings will be a mixture of detached, semi-detached and small terraces and will have more consistent building lines and set backs.

Suggested Densities:

- Woodland Edge - Medium - 35 to 45 dwellings/ha
- Mercer Road - Medium to High - 40 to 50 dwellings/ha
- Community Hub - Medium - 35 to 45 dwellings/ha
- Central Open Space - Low - 20 to 30 dwellings/ha
- Southern Woodlands - Medium - 30 to 40 dwellings/ha

Note: Density ranges are based on NETT densities i.e. excluding open spaces etc. Where built form is only on one side of the street, the area to be measured should include half of the street width.

Density Diagram

D




Building Heights Diagram

## Building Heights

The purpose of this page is to establish the maximum storey heights for the built form within the development. This is important to ensure that the scheme is appropriate to it's contextual setting.

This plan illustrates the appropriate storey heights for the development.

The scheme will consist of apartment blocks, detached houses, semi-detached houses and small terraces of houses.

1. Building heights in close proximity to the neighbouring properties on Langhurst Wood Road to be a maximum of 2 storeys to respect the existing dwelling. Care should also be taken to ensure that roof piles etc. are sensitive also.
2. Building heights around the Central Open Space should be predominantly 2 storeys to assist in establishing a low density character for this space.
3. Building heights around the Community Hub space should be increased to reinforce the vibrant character of this area. Built form should be a minimum of 2 storeys but 3 and 4 storeys would be most appropriate. The use of apartment blocks in this location is encouraged to frame the space.
4. The use of increased height (minimum 2 storeys / maximum 3 storeys) is also appropriate here to further frame the community hub as a space that Mercer Road passes through.

Legend

- Built form to be a maximum of 2 storeys to respect neighbouring properties.
- Built form should be predominantly 2 storeys with occasional 2.5 storey elements permitted.
- Increased height for the built form in these areas would be appropriate. Buildings should be a minimum of 2 storeys but use of 3 and 4 storeys is encouraged to frame the Community Hub space.

H

## Key Spaces Framework

In seeking to create identity and character for the new development, it is important to ensure that the overall scheme does not become monotonous or ubiquitous. This can be achieved by including a range of 'Key Spaces' that establish character, identity and assist in way-finding.

The locations of these Key Spaces should be designed to reflect the Landscape-lead approach that the overall scheme promotes. In most instances, Key Spaces should be located to include the Principle Open Space elements and the buildings that surround and interact with them.

The intention is not to create areas that will change radically from one to another but to establish a unified scheme that includes subtle changes in characteristic for each area. The fundamental character of the Key Spaces is established by the nature of the Open Spaces within them and the interaction of the buildings around them. A key factor in this is how the buildings relate to the Open Spaces in matters such as density, height, rhythm, mass and appearance.

Whilst the objective is to create an identity for the overall site, the different natures of the various Key Spaces will help create subtly different character areas. Some Open Spaces are more natural and promote excellent ecological credentials whilst others are more formal and offer things such as play Spaces or pedestrianised Piazzas. These Landscape-lead differences begin to distinguish the different Key Spaces.

Buildings within each Key Space should not vary significantly in architectural styling as this could result in a disjointed approach overall. Instead, subtle changes in materials, features and detailing will contribute to the characteristics of the different Key Spaces.

The diagram opposite demonstrates the broad location of each Key Space area and the summaries below outline the key aspirations for each. Further details of each Key Space are contained within the following pages.

***Woodland Edge***

This Key Space is named to reflect its location (to the South of the existing ancient woodland). It is largely informed by the requirement to create a buffer to the ancient woodland which affords the opportunity to provide a semi-natural, linear open space along the Northern edge. This assists in mitigating any potential noise from the adjacent brickworks and creates a generous open space that will provide positive ecological benefits.

The backdrop of mature trees and presence of existing trees and hedging within this area establish a natural space and surrounding buildings should be more rural in character to reflect this. Only limited access to the Open Space should be provided to reinforce its ecological credentials so streets and dwellings orientated to face North should, largely, be avoided.

***Mercer Road***

This Key Space is formed of Mercer Road, the wide Open Spaces to the North and South of it and the built form that address it. Retention of the existing trees and hedges along Mercer Road, together with the Open Spaces, will ensure that the rural characteristics of the lane will be retained.

The open spaces will not only reinforce the open feel but will also allow the existing Public Right of Way along Mercer Road to be relocated within them to improve safety. Landscaping within the open spaces will build on the rural characteristics already present and will provide excellent habitat and bio-diversity.

Built form should be arranged to face on to the open spaces with more formal building lines established. A range of typologies is appropriate to create interest and character whilst framing the space.

***Community Hub***

Located centrally within the overall site, this Key Space includes a pedestrianised piazza, retail facilities and residential development. It will be a more vibrant space linking the Mercer Road Key Space to the other Key Spaces to the South.

Retail premises and a pedestrianised piazza will be provided at the heart of this space and built form should feature increased height and mass to establish character. Whilst elements of open space are included within the Key Space, it will predominantly be more urban in character.

Good street alignment will enable long range views to the open spaces within the scheme and promote permeability and legibility. Built form will be arranged to address the streets and a more urban character will be established through consistent detailing and finishes.

***Central Open Space***

At the heart of the scheme, this Key Space consists of a large public open space, retained trees and the built form surrounding it. The shape of the space is partly informed by the existing trees and affords a generous landscape area. This space will be more formal in character with features such as a play area and use-able open space.

With the open space acting as a 'village green' built form surrounding it will be arranged to overlook it from both the North and South. Predominantly detached houses will overlook the space and densities will be lower to reflect the open nature of the area.

Different building typologies will be used but a commonality of language will feature, including roof piles, finishes and details that will ensure a cohesive overall character for the Key Space.




Key Spaces Framework Diagram

***Southern Woodlands***

Named to reflect the low-lying nature and occurrence of existing water features (ponds / streams), this Key Space is formed of open space, existing trees, water courses, landscaping and residential development parcels.

Three significant areas of public open space inform the overall area, one to the East, one to the South and a buffer along the Western edge. These spaces will afford the retention of existing trees, water courses and landscaping and will contribute both useable amenity and excellent ecology / bio-diversity.

Built form will be arranged in outward facing, back to back, parcels such that the open spaces are framed by single sided streets and dwellings addressing them. A range of building typologies will be used but a subtle architectural language will be employed (such as materials and detailing) that informs the characteristics of this Key Space.

## Woodland Edge Key Space

This Key Space is located in the area directly to the South of the existing woodland area (at the Northern part of the site). It will be largely informed by the backdrop of existing trees, together with a number of mature existing trees that bisect the area in a North-South direction. These features, together with a significant amount of existing hedgerow should be retained to provide excellent habitat and establish a rural character.

There should be good separation between the existing trees and new built form which will provide open space and excellent biodiversity. Limited access to the Open Space should be provided to preserve its biodiversity credentials and protect the woodland edge setting. As such, whilst some dwellings could front out on to the open space, it is also acceptable for others to back on to it. A more natural area is envisaged with the existing landscape setting reinforced with native species and meadow like planting.

New dwellings should be served from new access points created on Mercer Road and street types should consist of lower order hierarchies to reflect the edge setting (such as Shared Surface Lanes). The land exhibits significant level changes in this area, sloping down from the North towards the South. As such, care will need to be taken to ensure that streets are designed at suitable gradients and dwellings follow the contours in a natural fashion. Where steps between floor levels are required, they should be an integral part of the design rather than providing significant amounts of 'cut and fill' to the land.

The character of this area should be informed by the rural vernacular of the barn conversions to the East of Langhurstwood Road. Smaller buildings, often semi detached or in small terraces would be appropriate and building heights should be predominantly 2 storeys. Medium densities (typically between 35 and 45 dwellings per Hectare) should be used to reflect the smaller dwelling types required (Density areas suggested exclude areas of Open Space). Regular building lines, small frontages and varied roof piles will also help establish the character of the area.

Building materials should be predominantly brick with plain tile roof finishes. The use of black boarding is encouraged to further reinforce the rural vernacular. Occasional use of vertical tile hanging could also be utilised to reflect a slightly grander vernacular found on farmhouses such as those to the East. Simple, traditional and consistent detailing will help establish this character area and will ensure that it blends well with the open space and woodland backdrop.

### Precedent Images:


Landscape buffer to Ancient Woodland with natural planting

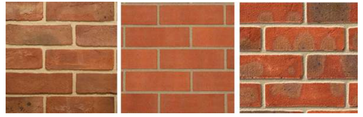

View North towards Ancient Woodland from Mercer Road


Different Roof piles used to create interest


Traditional Farmhouse vernacular featuring decorative hang tiles


Use of dark boarding emphasises the rural theme.

### Appropriate Materials:


Soft red brickwork


Dark horizontal boarding


Red plain tiles


Grey plain tiles


Occasional use of hang tiles



Location plan identifying the location and extent of the Woodland Edge Key Space.

***Legend***

1. Existing woodland
2. Existing trees to be retained
3. Existing hedge / landscape feature to be retained
4. Good separation to be afforded between trees and built form
5. Limited access to the Open Space
6. New dwellings could back on to the open space to discourage its use and preserve its bio-diversity credentials
7. Existing landscape reinforced with native species and meadow like planting
8. New Dwellings served from access points to the South
9. Building vernacular to be informed by the rural design of the barn conversions to the East
10. Smaller dwellings, often semi detached or in small terraces are appropriate
11. Regular building lines but varied roof piles to establish character

Illustrative plan of the Woodland Edge Key Space.

## Mercer Road Key Space

This Key Space is formed by the area containing Mercer Road, together with the newly created open spaces to the North and South of it and the built form that frames them. It will contain the diverted Public Right of Way (previously along Mercer Road) which affords a safer route for pedestrians. It also includes a small section that fronts on to Langhurstwood Road. The existing trees and hedge that currently line Mercer Road will be retained to ensure the rural characteristics of the lane are maintained. Access points serving both the Northern and Southern development areas will be chosen carefully to ensure minimum disruption to the existing trees, hedging and ecology.

To reinforce the rural feel along the lane, built form will be set back from it on both sides. A minimum distance of 20 metres is suggested to building façades. This will afford Open Space to be created between the Lane and the buildings that will not only contribute to the open feel but will also provide good habitat and opportunities for biodiversity.

Dwellings should generally be arranged to address the open spaces and will be predominantly two storeys in height. There is an opportunity to increase storey height to 3 and possible 4 storeys towards the centre of this Character Area to create a space that will form the 'heart' of the development.

Building lines should be fairly regular, although some variation could be created to generate interest. Towards the Eastern end of the Character Area, densities should be lower to respect the neighbouring property (Pondtail Farm). This area should, primarily, consist of detached homes with the occasional semi-detached pairs. To the Western end, densities could be higher, consisting of small terraces of dwellings to establish character. Where additional height is suitable, at the heart of the area, it would be appropriate to locate apartment blocks and thus, densities may be higher again. Overall a Density range of between 40 and 50 dwellings per hectare is considered appropriate (excluding the Open Spaces).

The principle characteristics of this area should be derived from the existing trees and hedges, together with the newly created open spaces and the built form that surround them. However, the design of the buildings will also help establish character within the area and the use of consistent materials and details will ensure a harmonious approach. A traditional vernacular is considered appropriate but roof piles should be varied to create interest. Façades should predominantly be brickwork but elements of render could act as a secondary treatment. Occasional use of vertical tiling or timber boarding would also help this character area marry in with this surrounding it.

### Precedent Images:


View South from Mercer Road where Public Right of Way will be diverted


Existing trees and hedges along Mercer Road define it's character

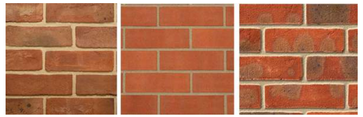

Use of varied roof piles


Traditional vernacular


Occasional use of render


Occasional use of light boarding


Occasional use of tile hanging


Soft red brickwork

### Appropriate Materials:


Buff brickwork


Render as secondary material


Occasional horizontal boarding (possibly in light colour tones)


Occasional vertical tiling


Red tile roofs

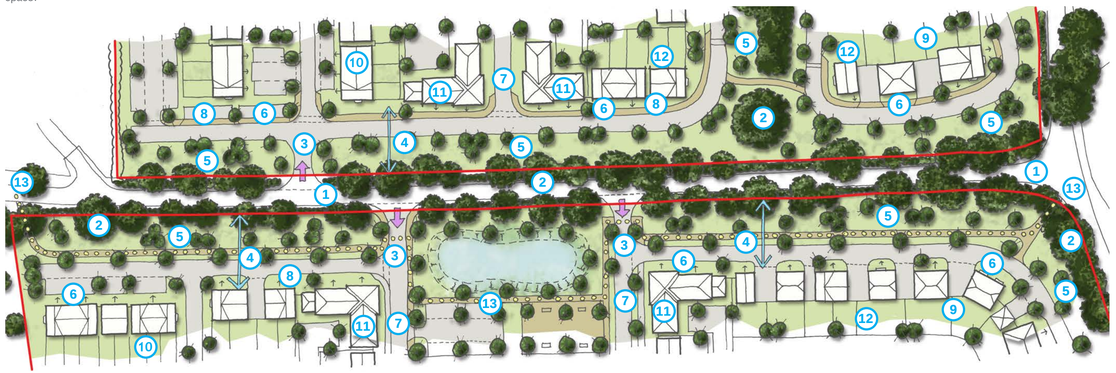

Grey tile roofs




Location plan identifying the location and extent of the Mercer Road Key Space.

***Legend***

1. Mercer Road
2. Existing Trees retained
3. Access points created where least disturbance to existing trees and hedges
4. Good separation between hedge / trees and built form
5. Public Open Space
6. Buildings to address Open Space
7. Increased height and massing at the heart of the area to establish 'place making'
8. Regular building lines with some variation afforded
9. Lower densities at the Eastern end – predominantly detached dwellings
10. Medium densities at the Western end – predominantly small terraces and semis
11. Higher density in the centre – Apartment blocks suitable
12. Traditional vernacular but variation in roof pile forms to establish character
13. Existing Public right of Way diverted through Open Space to improve safety


Illustrative plan of the Mercer Road Key Space.

## Community Hub Key Space

This Key Space sits towards the centre of the overall development. Whilst part of it fronts out North to a new Open Space (to the South of Mercer Road), most of it is more urban and consists of built form.

The central part of this Key Space forms the heart of the scheme, where taller buildings, with more mass and presence, should be located. These could include some non-residential (Commercial) use and areas should be created to act as social spaces (such as a Piazza etc.).

The Community Hub Key Space will be a more vibrant area with more pedestrian, cycle and vehicle movements occurring through it than other areas. As such, higher order street types will feature and serve as arteries to the lower order streets beyond. Good street alignment will also enable long range views to the open spaces within the scheme and promote permeability and legibility.

Dwellings will consist of a mixture of apartments and houses with most houses being 2 storeys in height. Some 3 storey and occasional 4 storey building heights would be acceptable in the heart of the scheme and at appropriate locations. Building lines will mostly be formal and regular and consist of small terraces of dwellings but some detached and semi-detached buildings are suitable too.

All dwellings should address the street that they are served from and development should predominantly be 'back' to back' in form. Densities should be Medium with a range between 35 and 45 dwellings per Hectare being suitable.

A slightly more contemporary appearance could be used to establish the identity of this Key Space and reflect a more urban appearance but using traditional materials (such as brick and horizontal boarding) will ensure its integrity with the surrounding development.

### Precedent Images:

A Public Space (Piazza) will be located at the heart of this Key Space

A more contemporary approach to the architectural language whilst featuring traditional materials

A more vertical emphasis on openings

Occasional boarding

Clean and simple detailing

Taller buildings (such as apartments) at the heart

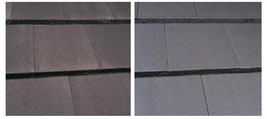
Commercial use (Retail) under apartments in the Hub

### Appropriate Materials:

Soft red brickwork

Buff brickwork

Horizontal boarding as a secondary material



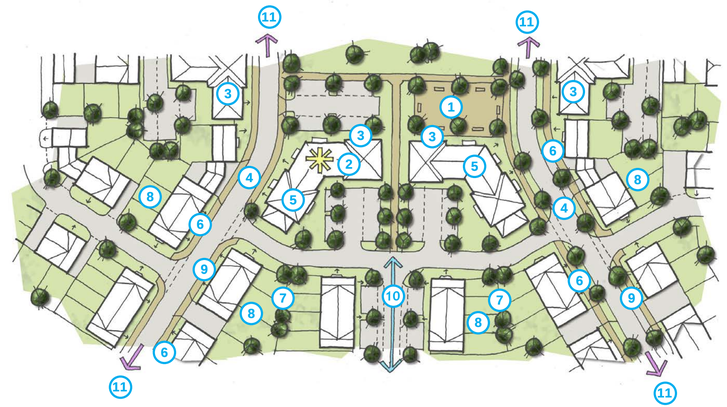
Predominantly Grey tile roofs



Location plan identifying the location and extent of the Community Hub Key Space.

***Legend***

1. Piazza space
2. Potential for Commercial use at Ground Floor
3. Taller buildings with more mass at the heart of the area
4. Higher order streets
5. Increased height and massing at the heart of the area to establish 'place making'
6. Buildings addressing the streets
7. Back to back form where appropriate
8. Small terraces but some detached and semi-detached plots
9. Regular building lines and set-backs.
10. Pedestrian Link running North-South through the centre of the scheme
11. Long range views to Open Spaces promotes legibility and permeability



Illustrative plan of the Community Hub Key Space.

## Central Open Space Key Space

This Key Space sits at the heart of the land parcel to the South of Mercer Road. It consists of a large Public Open Space that runs East – West across the site, together with the built form that surrounds it. The shape of the Open Space is informed by a number of factors, including the retention of a number of existing trees towards the Eastern end of it and the desire to create a generous, use-able space between buildings towards the Western end. As such a dimension of not less than 50 metres from building face to building face is suggested towards the Western side in order to achieve these aspirations.

This space will act as a 'Village Green' for the development and provides excellent opportunities for recreation, social interaction and healthy lifestyle choices. An equipped play area (LEAP) will be provided that observes all the required buffer distances. The space will also be planted to ensure that its ecological and biodiversity credentials enhance the scheme.

Single sided streets will define the edge of the space with buildings orientated to overlook it. A pedestrian / cycle link should take a more direct and convenient route through the space (towards the South East) but should respect all existing tree constraints.

Built form should be lower in density with a range of 20–30 dwellings per hectare being appropriate. These will predominantly consist of detached houses with occasional semi-detached dwellings also been suitable. All built form surrounding the space should be a maximum of 2 storeys in height and less continuous in form to emphasise the low density credentials of the area.

Building designs should feature a commonality of language. Roof piles should be less varied and fully hipped designs will emphasise the lower density feel. Façades should feature consistent detailing such as bay windows, chimneys and brick detailing etc. whilst finishes should be from a more limited and cohesive palette of materials using brick as a primary finish and vertical tile hanging as a secondary material.

### Precedent Images:

Dwellings frame the large Public Open Space

Open Space designed to accommodate existing trees

Open Space affords opportunity for play, exercise and social interaction

Hipped roofs

Occasional bay windows



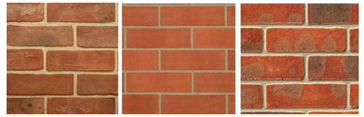


Occasional balconies

Occasional tile hanging

Occasional chimneys

### Appropriate Materials:



Predominantly Soft red brickwork

Occasional Buff brickwork

Vertical Tile hanging as a secondary material

Predominantly Red roof tiles

Occasional Grey roof tiles



Location plan identifying the location and extent of the Central Open Space Key Space.

***Legend***

1. Existing trees retained
2. Pedestrian / cycle link takes a more direct route through the open space
3. Shape of space informed by retaining trees
4. Good separation between buildings
5. Perimeter roads define the space
6. Buildings orientated to face the Open Space
7. Predominantly detached dwellings
8. Larger gaps between built form
9. More consistent approach to roof piles (hipped)
10. Equipped Play Area
11. Public Open Space acts as a 'Village Green'
12. Long range views to open space afforded from streets

Illustrative plan of the Central Open Space Key Space.

## Southern Woodlands Key Space

This Key Space is located to the South of the site where levels are at their lowest. It includes several areas of Public Open Space and built form development parcels. It is informed by the retention of a number of existing trees, ponds and vegetation, together with open space that will contribute to amenity, ecology and biodiversity. A more natural habitat will be created with the planting of native species reinforcing the existing landscape.

Built form parcels will mostly consist of 2 storey housing but additional height (2.5 / 3 storeys) may be acceptable in key locations. Dwellings shall be arranged to address the Open Spaces and streets in 'Back to Back' parcels wherever possible. Care should be taken to respect the neighbouring property (Pondtail House) with a landscape buffer between its Southern boundary and new built form. A landscape buffer should also be created along the Western edge of this Key Space to provide separation between the railway lines and built form.

Densities (measured excluding the Open Space) will be Medium, with 30 – 40 dwellings per hectare considered appropriate. This will predominantly consist of small terraces and semi-detached dwellings with some detached homes too. Set backs and building lines will be semi-regular with some variation encouraged.

A range of street hierarchy types will feature in this area, with the lower order ones located towards the peripheries. An emergency vehicular link on to Langhurstwood Road shall be provided in a location suitable for visibility requirements whilst causing the least disturbance to the existing trees and hedging. A pedestrian / cycle link will also run through this Character Area and connect to Langhurstwood Road in a similar location.

Buildings will be traditional in style with a range of roof pile designs employed to create interest. Façades will predominantly be brickwork but cream coloured horizontal boarding will feature as a secondary material to reflect local character. A mixture of red / brown and grey roof tiles will feature and a cohesive palette of details will reinforce character.

### Precedent Images:


Dwellings overlooking a natural habitat containing water features.


Existing ditches and water features retained.


Street trees line the routes through this Key Space

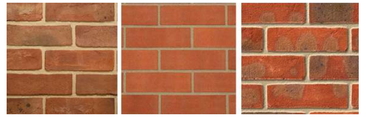



Varied Roof piles


Cream boarding


Occasional tile hanging

### Appropriate Materials:


Soft red brickwork


Buff brickwork


Cream Horizontal boarding as a secondary material


Occasional use of hang tiles


Grey tile roofs


Red roof tiles




Location plan identifying the location and extent of the Southern Woodlands Key Space.

***Legend***

1. Retain existing trees
2. Retain existing water features
3. Landscape buffer between railway and built form
4. Landscape buffer to respect neighbouring property
5. Public Open Space
6. Built form orientated to address Open Spaces
7. Built form orientated to address streets
8. Emergency Vehicle Access
9. 'Mews' areas
10. Back to back form where possible
11. Small terraces, semi-detached and detached dwellings


Illustrative plan of the Southern Woodlands Key Space.

## Movement Network and Connectivity

Permeability and connectivity are important to how a development functions. Places need to be easy to get to and move through.

The footpath / cycle network within the site should be well connected to the wider area. This includes Warnham Station, the new station car park, the major development to the East and Horsham to the South East.

Vehicular connections to the site should also be well considered to create safe points of access that afford suitable permeability whilst being sympathetic to the existing landscape features and ecology.

This diagram shows the key connectivity node points and the accompanying legend explains how they ensure good movement, permeability and connectivity are achieved.

Cycling

Promoting outdoor activity

Pedestrian priority

Walking


Connectivity Diagram



**Legend**

**C1**

Connectivity Point C1 – Pedestrian and vehicular access to the eastern end of the Northern parcel will be taken from Langhurstwood Road. This should be sited in a location to afford suitable visibility and ensure the minimum disturbance to existing trees, hedging and ecology. It will afford the opportunity for users to connect with the wider pedestrian / vehicular network, in particular, the Major development area to the East.

**C2**

Connectivity Point C2 – Pedestrian and vehicular access to the remainder of the Northern parcel from Mercer Road. This should be sited in a location to afford suitable visibility and ensure the minimum disturbance to existing trees, hedging and ecology.

**C3 / C4**

Connectivity Points C3 and C4 – Pedestrian and vehicular accesses to the Southern parcel from Mercer Road. These should be sited in locations to afford suitable visibility and ensure the minimum disturbance to existing trees, hedging and ecology. They form part of the 'looped' highway network that runs through the Southern parcel and will afford easy access to the new 'Community Hub' area that will contain retail premises. Good access to these facilities from passing trade using Mercer Road to access Warnham Station will be important to ensure the viability of such facilities.

**C5 / C6**

Connectivity Points C5 and C6 – Currently a Public right of Way (1574) runs from Langhurstwood Road in an East-West direction along Mercer Road towards the Station crossing. As part of this development, the Public Right of Way will be diverted to run through the Open Space to the South of Mercer Road. This will significantly improve the attractiveness and safety of the PROW, taking pedestrians off the carriageway and on to a dedicated footpath. The PROW will enter the development at Connectivity Point C5, close to the junction between Mercer Road and Langhurstwood Road and will re-join its original route at Connectivity Point C6.The improvement to this PROW will afford the opportunity for safe passage through the scheme in both Easterly and Westerly directions between occupants of the Major Development to the East and Warnham Station.

**C7**

Connectivity Point C7 – Vehicular and pedestrian access to the new parking area proposed to serve Warnham Station. This will be accessed via the new site streets within the Northern parcel and will provide the opportunity for more users to patronise the station.

**C8**

Connectivity Point C8 –Emergency vehicular and pedestrian / cycle access to Langhurstwood Road in the South East of the scheme. A bollarded (emergency only) vehicular access will be created in this location to afford access / egress in the event of road closures elsewhere. It should be sited in a location to afford suitable visibility and ensure the minimum disturbance to existing trees, hedging and ecology. A new pedestrian / cycle link will also be sited in this location, offering the opportunity for residents and others to move through the scheme (in a North – South direction) between Horsham and Warnham Station.

MN

### Pedestrian / Cycle Network

Safe pedestrian and cycle routes that afford good permeability through the scheme are important features of the Movement Network. they should follow natural desire routes and be well overlooked to promote safety.

The adjacent plan shows the location of the proposed cycleways and footways throughout the development together with the diverted public right of way.

Priority must be given to pedestrians and cyclists to promote a safe environment for people to choose alternative modes of transport from car use.

As mentioned, the existing public right of way (1574) which currently runs along Mercer Road will be relocated so as to be within the development boundary. This will enable a safer, well-surveyed pedestrian route to be provided.

Footways are those parts of a road intended for pedestrian use. They generally run parallel to the adjacent carriageway and may be separated from it by kerbs and or verges.

Footpaths are pedestrian routes generally located away from the carriageway and not associated with routes for motor vehicles. Footpaths should be continuous and follow pedestrian desire lines where possible.

Where lower hierarchy roads are used, cyclists will share the carriageway with vehicles but roads will be designed to bring mean speeds to below 20mph. Where footways follow carriageways with a speed limit of below 30mph, the acceptable total width recommended is 2.0m.

A range of solutions, from dedicated footpaths, footways adjacent to carriageways and shared surface streets should be provided to suit the proposed street hierarchy, quantum of use and character of the area.

**Legend**

- Primary North-South on-road cycle network.
- On-road cycle access & shared surface pedestrian access unless dedicated footway indicated.
- Dedicated footways (adjacent to carriageways)
- Existing Public Right of Way along Mercer Road relocated to be within site boundary providing a safer route
- Off road dedicated footpath / cycleway (usually through landscaped areas).

Pedestrian / Cycle Network Diagram



SH

Street Hierarchy Diagram

### Street Hierarchy

The development should be divided into simple and legible street hierarchies to create identity, assist in way-finding and provide identity. The street hierarchy should incorporate the principles of 'Manuals for Streets' together with those contained within the West Sussex County Council Local Design Guide.

The scheme design should seek to provide continuous loop roads around the development, where possible, to maximise connectivity and offer safe routes for service vehicles.

The movement network should comprise of an interconnected network of streets, buildings and spaces. Each type of street within the hierarchy will have a different specification and character which will assist with orientation and legibility for both road users and pedestrians.

The street hierarchy comprises:

- Green Boulevard - Type 1
- Green Boulevard - Type 2
- Primary Streets - Type 1
- Primary Streets - Type 2
- Lanes (Shared Surface)
- Private Drives

Details of these are provided on the following pages.

The exact alignment of the various street types shown in the diagram should not be considered prescriptive. They are shown to demonstrate the principles of the street hierarchy and the designer should consider all of the opportunities, constraints and requirements when design the highway network.

## Green Boulevard - Type 1

The Green Boulevard is the main feeder route and runs from the principal entrance off Mercer Road and acts as a spine road running through the southern parcel.

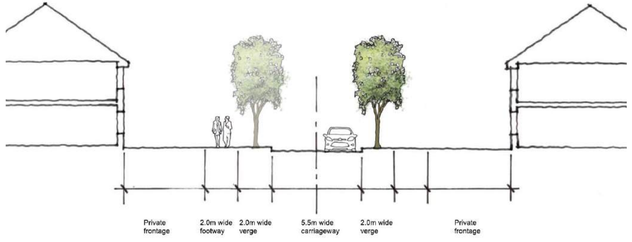
The Green Boulevard - Type 1 is employed where built development occurs on both sides and will comprise a 5.5m wide carriageway with 2.0m wide verge zones and 2.0m footways to both sides. The verge zones will incorporate street tree planting and visitor bay parking.

| Green Boulevard - Type 1 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m |
| Cycleway | Within carriageway |
| Verge | 2.0m |
| Parking | Generally on-plot or frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within verges |
| Setbacks | 1.5 - 5.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths / soft margins |

Green Boulevard - Type 1 Key Plan


1. 5.5 metre wide carriageway.
2. 2.0 metre wide footway on either side.
3. 2.0 metre wide verges on both sides.
4. Dwellings addressing the street.
5. Street tree planting in verges.

Illustrative Green Boulevard - Type 1 Plan




Illustrative cross section through Green Boulevard - Type 1



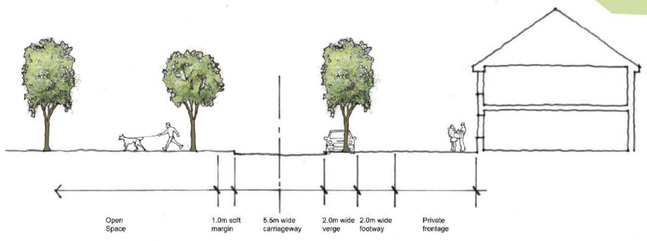
Green Boulevard - Type 2 Key Plan

| Green Boulevard - Type 2 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m on development side |
| Cycleway | Within carriageway |
| Verge | 2.0m wide on development side, 1.0m wide soft margin on non-development side. |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within verges |
| Setbacks | 1.5 - 5.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths / soft margins |

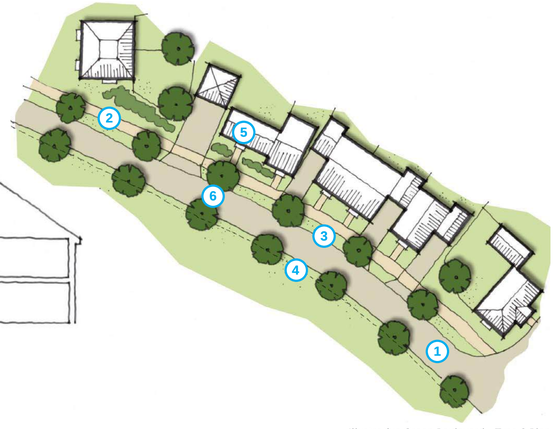
## Green Boulevard - Type 2

The second variation of the Green Boulevard is to be used where development only occurs on one side. It consists of a 5.5m wide carriageway with a 2.0m wide verge and 2.0m wide footpath/ cycleway on one side with a 1.0m wide soft margin on the non-development side.

1. 5.5 metre wide carriageway.
2. 2.0 metre wide footway on development side.
3. 2.0 metre wide verge on development side.
4. 1.0 metre wide soft margin.
5. Dwellings addressing the street.
6. Street tree planting in verge and public open space.




Illustrative cross section through Green Boulevard - Type 2




Illustrative Green Boulevard - Type 2 Plan

## Primary Streets - Type 1

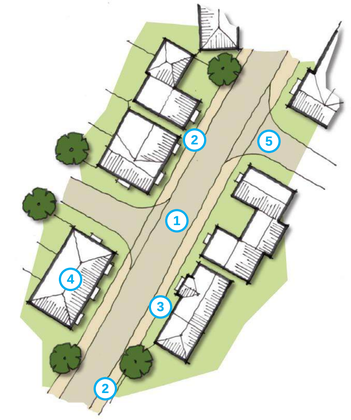
The Primary Streets are the main feeder routes running from either the principal vehicular accesses or from Green Boulevards.

The Primary Street - Type 1 are wide streets with good levels of enclosure. They comprise a 5.5m wide carriageway with 2.0m wide footpaths to either side.

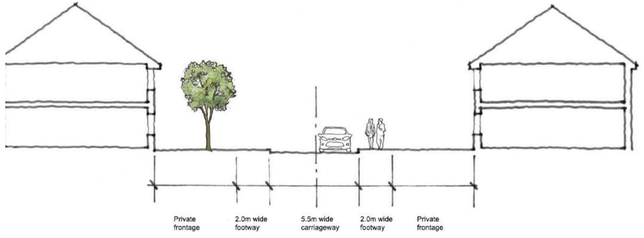
1. 5.5 metre wide carriageway.
2. 2.0 metre wide footway on both sides.
3. 1.2 - 8.0 metre setbacks with defensive planting / frontage delineation.
4. Dwellings addressing the street.
5. Street trees in private curtilage.

| Primary Street - Type 1 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m on both sides |
| Cycleway | Within carriageway |
| Verge | No |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 1.2 - 8.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths |

Primary Street - Type 1 Key Plan




Illustrative Primary Street - Type 1 Plan




Illustrative cross section through Primary Street - Type 1

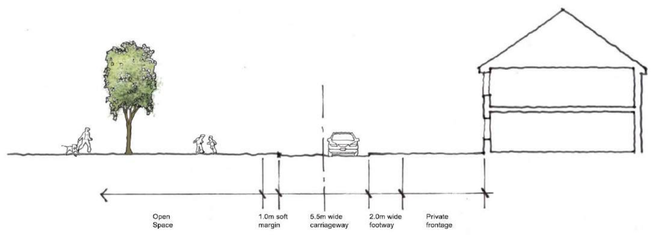


Primary Street - Type 2 Key Plan

| Primary Street - Type 2 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m on development side |
| Cycleway | Within carriageway |
| Verge | 1.0m wide soft margin on non-development side. |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 1.2 - 8.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths |

## Primary Streets - Type 2

The Primary Street - Type 2 is a variation whereby built development only occurs on one side. In this situation the 5.5m wide carriageway has a 2.0m wide footpath on the development side and a 1.0m wide soft margin on the other.




Illustrative cross section through Primary Street - Type 2


1. 5.5 metre wide carriageway.
2. 2.0 metre wide footpath on development side.
3. 1.0 metre wide soft margin.
4. Vistor parking bays interspersed with tree planting.
5. Dwellings addressing the street.
6. Street trees in public open space.

Illustrative Primary Street - Type 2 Plan

## Lanes (Shared Surfaces)

The Lanes are informal shared surface routes which lead from the Boulevards and Primary Streets. They serve smaller areas and often feed the, lower order, private drives.

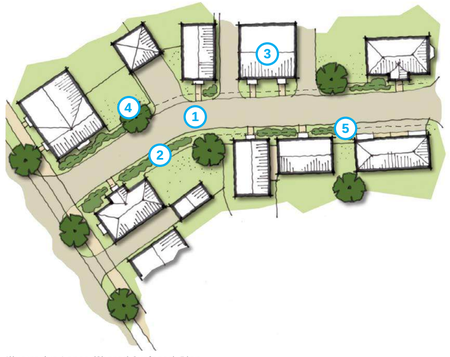
They consist of a 4.8m wide carriageway with 2.0m wide soft verges either side.

Development will be either on both sides of the lanes or on one side only where the Lanes are adjacent to open space.

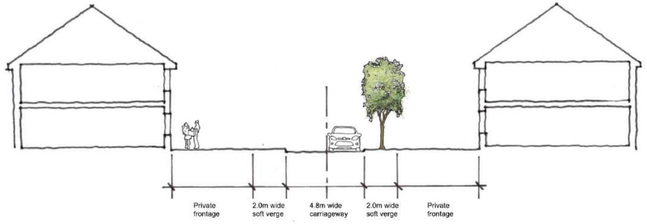
1. 4.8 metre wide carriageway.
2. 2.0 metre wide wide soft margin.
3. Dwellings addressing the street.
4. Street trees in private frontages.
5. 2.0 - 7.0 metre setbacks with defensive planting / frontage delineation.

| Lanes (Shared Surfaces) | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 4.8m |
| Footway | No |
| Cycleway | Within carriageway |
| Verge | 2.0m wide soft margin on both sides. |
| Parking | Generally on-plot or Frontage behind margin |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 2.0 - 7.0m |
| Boundary Treatments | Informal Planting, Hedges |
| Services | Under soft margins |

Lanes (Shared Surfaces) Key Plan




Illustrative Lanes (Shared Surfaces) Plan



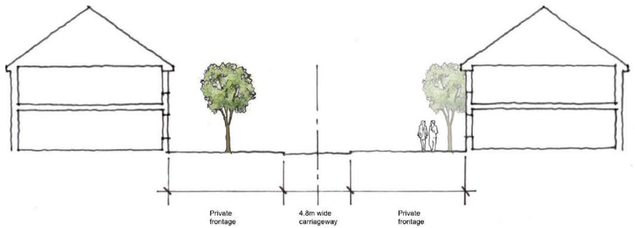

Illustrative cross section through Lanes (Shared Surfaces)



Private Drives Key Plan

| Private Drives | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 4.8m |
| Footway | No |
| Cycleway | No |
| Verge | No |
| Parking | Generally on-plot or Frontage |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 1.2 - 7.0m |
| Boundary Treatments | Informal Planting, Hedges |
| Services | Services should ideally be within the carriageway and preferably within a defined zone. |

1. 4.8 metre wide carriageway.
2. Street trees in private frontages.
3. 1.2 - 7.0 metre setbacks with defensive planting / frontage delineation.
4. Dwellings addressing the Private Drive.
5. Parallel visitor parking bays provided.



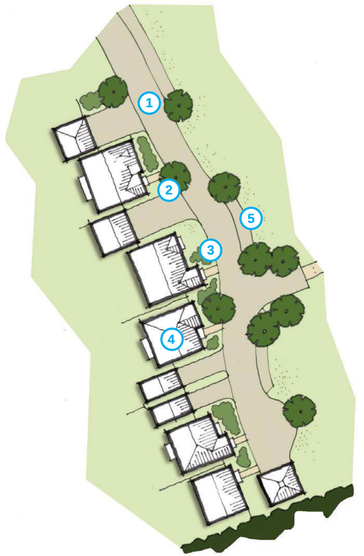

Illustrative cross section through Private Drives

## Private Drives

Private Drives represent the lowest status routes within the street hierarchy. They are served from Primary Streets and Lanes and should serve a limited number of dwellings.

Consideration should be given to ensure adequate provision for refuse collection and fire appliance access is afforded.

Development will be either on both sides of the Private Drive or on one side where it is located adjacent to an open space or the edge of the development.




Illustrative Private Drives Plan

Frontage Boundary Types

Frontage boundary delineation assists in defining both public and private space, whilst establishing character.

Front boundaries must be given a hierarchy appropriate to the importance of the street and it's location within the site.

Boundary heights and set backs will also vary depending upon location and function. Wherever frontage boundaries adjoin the highway, they must be no more than 600mm in height, to avoid the need to follow the line of visibility splays generated by driveways crossing footpaths.

The examples of railings, low brick walls, landscaping and surface boundary treatments shown are indicative only.

Legend

- Application Boundary
- Estate Railings, Formal Hedges or Formal Frontage Planting.
- Low Brick Walls, Formal Hedges or Formal Frontage Planting.
- Formal Hedges or Frontage planting
- Hedges or Frontage Planting.

| Street Type | Set Backs | Suitable Frontage Treatment |
|---|---|---|
| Green Boulevards | 1.5 - 5.0m | Estate Railings<br>Low Brick Walls<br>Formal Hedging<br>Formal Frontage Planting |
| Primary Streets | 1.2 - 8.0m | Low Brick Walls<br>Formal Hedges<br>Formal Frontage Planting |
| Tertiary Streets / Lanes | 2.0 - 7.0m | Formal Hedges<br>Frontage Planting |
| Private Drives | 1.2 - 7.0m | Hedges<br>Frontage Planting |

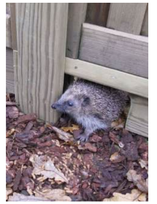
Table showing where different frontage treatments are suitable

Boundary Treatments Diagram



Example of Larchlap Fencing with Trellis - used as garden divisions.

Example of Close Boarded Timber Fencing - used as divisions between gardens and semi-public spaces.



Example of Hedgehog Hole.

**Boundary Treatments**

Plot boundaries help to define the public realm, and have an influence on the character of the streets. Boundary treatments utilised should be appropriate for the area within which they are located and the type of street they are visible from.

Wherever possible boundaries should aim to be somewhat permeable to wildlife, allowing the free movement of animals such as hedgehogs.

Boundaries facing on to roads could be delineated by low brick walls and/or simple railings, hedges or landscaping.

Example of Timber Bollards - used to prevent vehicles entering areas of public open space.

Example of Timber Knee Rail - used to prevent vehicles entering areas of public open space.

Example of Frontage Planting.

Example of Frontage Planting.

Example of Estate Railings. Could be used in appropriate locations.

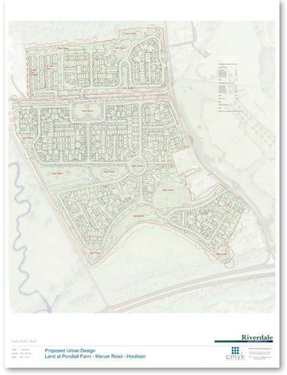
Example of Formal Hedge.

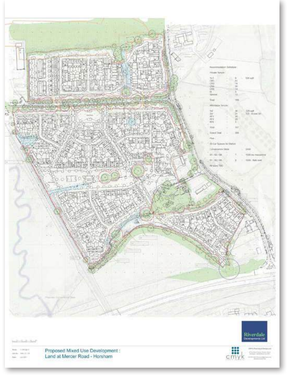
Example of High Brick Wall. Used where enclosures face public space.

Example of Low Brick Wall as frontage treatment. (brick colour should match the dwelling).

# 3.0 Design Process






Examples of Early Concept Schemes



**Design Process**

This section details some of the significant factors that have influenced the final scheme design. These include matters such as the most appropriate locations for accesses, important trees to be retained and other ecological factors.

By considering these at an early stage in the process, they can be integrated into the scheme with the other opportunities and constraints already identified in the earlier section of this document.

A careful analysis of the location, topography and local character of the area can then also be factored in and a design solution begins to emerge.

Early concept sketches were produced that sought to address these findings whilst showing simple land use, form and movement routes for the scheme. These were then worked up in more detail so that numbers, densities and block structures can be factored in.

As part of the on-going design process the applicant engaged with the Local Authority Planning Department on a regular basis (with specialist feedback from departments such as Highways and Ecology etc.). This has ensured that the scheme design has evolved in a thoughtful and considered way, resulting in good intrinsic design principles.

From these sketches and using the feedback provided from the Local Authority, a detailed scheme was worked up which now forms the basis of this Application.

The following pages will demonstrate how matters such as access, trees and ecology were considered and how these were integrated into the early concept sketches. They also provide a brief recap of the Pre-Application liaison with the Local Authority and how the scheme evolved accordingly.

### Access to the Site

The location and number of access points into the development parcels are the result of extensive collaboration between the highway, ecology and arboricultural consultants to ensure appropriate positions.

In terms of ecology and trees the access points will be located for minimal impact on existing trees and biodiversity. This will be balanced against highway requirements for junction geometry, visibility splays etc.

***Northern Parcel:***

Two vehicular access points will be provided to the northern parcel. The first is located on Mercer Road towards the western end. This will afford access to both the residential element as well as the new car parking being provided to serve Warnham Station.

The second access point is taken from Langhurst Wood Road and is situated midway along the northern parcels eastern boundary.

***Southern Parcel:***

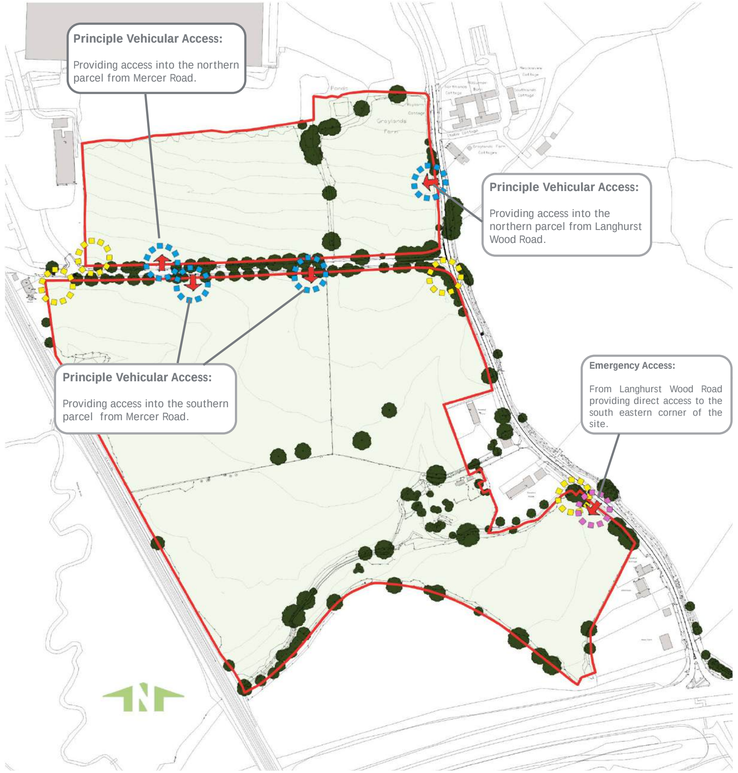
Two principle vehicular points will be provided to the southern parcel, both being taken from Mercer Road at strategic locations.

A further emergency vehicular access point is afforded from Langhurst Wood Road providing direct access to the south eastern corner of the site.

The adjacent diagram shows these proposed access points into the development.

### Legend

- Principle Vehicular Access Points
- Emergency Vehicular Access Points
- Pedestrian/Cycle Access Points




Access Diagram


Ecology Diagram



### Trees and Ecology

The Environment Act, legislation designed to protect and enhance the environment, includes a duty to provide biodiversity net gain to ensure developments deliver at least a 10% increase in biodiversity.

Accordingly, existing ecological systems and natural habitats found on the site are to be safeguarded and enhanced, as practicable, with new opportunities for increasing biodiversity being implemented.

The site will be able to provide a range of diverse habitats from the woodlands areas found in the low lying southern end of the site to the generous landscaped buffers adjacent to the ancient woodland to the north.

Green public open spaces will also be utilised as one of the main opportunities to incorporate biodiversity, with many of these focussed around existing trees and vegetation.

A veteran tree has been identified in the southern parcel and this should be retained within an area of public open space to ensure that it can be appropriately managed. A veteran tree is a tree which has markedly ancient characteristics, irrespective of chronological age. These features contribute to its biodiversity, cultural and heritage value.

Generally, existing trees have been identified as follows:

- For retention,
- For removal, or
- For retention but suitable for removal to facilitate development.

For further information pertaining to the designation and management of existing on-site trees reference should be made to the Arboricultural Report, which accompanies this application.

### Legend

- Existing Ancient Woodland
- Existing Southern Woodland
- Areas of Open Space providing varied habitat
- Existing Trees
- Development Areas
- Veteran Tree

## Design Evolution

Once the opportunities and constraints for the site have been analysed an embryonic design for the scheme can begin to develop.

The design response seeks to build on the pertinent development principles established within the Design Coding section, as follows;

- Enhance existing features: Retain and enhance natural features including hedgerows trees and water bodies for benefit of wildlife, flora and fauna.
- Retain historic field pattern: Retain historic field pattern by maintaining and enhancing existing hedgerows to provide wildlife corridors and visual amenity.
- Landscape buffers: Creation of landscape buffers to maintain ecological value, provide separation between settlements, and provide both visual and amenity benefits.
- Establish a natural buffer between development and the Ancient Woodland to the North.
- Green corridors: Create a network of green corridors to provide wildlife corridors and a pleasant outlook for new homes.
- Generous Open Space: Creation of open spaces that will provide varied uses from more natural areas to formal play spaces. These will continue to establish a nett biodiversity gain.
- Sustainable Urban Drainage: The existing topography provides an opportunity for sustainable urban drainage system (SUDS) including swales, ponds to mitigate flooding.
- Locate access points where suitable visibility etc. can be established whilst causing the least disturbance to trees, hedges and ecology.
- Establish a Hierarchy of Streets: The alignment of streets responding to natural and man-made features.
- Provide a sustainable pedestrian / cycle route through the scheme that links North Horsham to Warnham Station and the wider context.
- Divert the existing Public Right of Way from Mercer Road through open space to improve safety.
- Respect neighbouring properties.
- Create outward facing development parcels that will promote security.

Early Sketch Indicating Design Principles

**Legend**

- Application Boundary.
- Mercer Road
- Langhurst Wood Road
- Vehicular / Pedestrian Access Location.
- Principle Spine Road: A tree-lined boulevard with footways and verges to both sides.
- Primary Streets, Shared Surfaces and Private Drives serving the development.
- New car park providing 50 no. car parking spaces for Warnham Station.
- Existing public right of way (1574), which runs alongside Mercer Road, relocated within the development.
- Pedestrian / cycle links.
- Good levels of separation to be afforded with existing properties on Langhurst Wood Road.
- Central public open space incorporating Equipped Play Area (LEAP)
- Existing trees to be retained, where practicable.
- Existing field division within northern parcel retained within area of open space for ecological benefit.
- Development Form - outward facing perimeter blocks.
- Swales, ponds contributing to the Sustainable Drainage Strategy of the development.
- Low points of site to provide woodlands habitat / open space.
- A264 - Dual Carriageway
- Existing surrounding residential properties.
- Proposed Mixed-use Strategic Development at Land North of Horsham.
- Pedestrian retail piazza
- Dwellings set back from Sutton and Mole Valley railway line.

**Evolved Design**

From the early concept sketch, a more detailed scheme is prepared that begins to establish dwelling numbers, street patterns, open space uses and development parcels.

At this stage the Design Coding requirements relating to Density, Height, Development Structure, Key Spaces, Movement, Connectivity & Street Hierarchy can be demonstrated on the scheme. These are annotated using 'Design Coding symbols' in the key opposite.

By taking into account the topography, existing landscape features and surrounding context, and analysing the opportunities and constraints of the land, then applying the requirements of the Design Coding and working with the Local Authority throughout, a quality scheme has developed.

Evolved Design

**Legend**

- Application boundary
- 1 Mercer Road
- 2 Langhurst Wood Road
- 3 Vehicular and pedestrian access via appropriate locations on Mercer Road and Langhurst Wood Road. MN
- 4 Emergency vehicular access from Langhurst Wood Road. MN
- 5 Suggested street pattern forming a clear hierarchy of streets and recognisable routes. SH
- 6 Tree-lined boulevard acting as a spine road within the southern parcel. MN SH
- 7 Existing public right of way (1574), which currently runs along Mercer Road, relocated so as to be within the development boundary. MN
- 8 Pedestrian links between streets within the development. MN
- 9 Cycle/pedestrian route through the scheme linking North Horsham to the station and wider area. MN
- 10 New car parking area serving Warnham Railway Station on the western side of the north parcel.
- 11 Proposed built form (shown indicatively only). Outward facing development that will enhance the legibility of the streetscape and public spaces. DS D
- 12 Well located and overlooked Central Open Space incorporating an equipped play area. KS
- 13 Pedestrian piazza at the heart of the scheme, containing retail premises. DS KS
- 14 Ancient Woodland
- 15 Required 15m development off-set to ancient woodland accommodated within area of landscaped open space. KS
- 16 Existing trees retained, including veteran example in southern parcel.
- 17 New tree planting – shown indicatively only.
- 18 Creation of SUDs features for surface water attenuation and the creation of a more diverse habitat – exact shape and size subject to detailed design. KS
- 19 Woodlands ecological zone / public open space. KS
- 20 Existing field division within northern parcel comprises extensive native tree and hedgerow planting retained within an area of open space for ecological benefit. KS
- 21 Proposed Mixed-use Strategic Development at Land North of Horsham. MN
- 22 Existing surrounding residential properties – proposed development designed to respect the existing dwellings on Langhurst Wood Road and Mercer Road.
- 23 Dwellings set back from Sutton and Mole Valley railway line.
- 24 Dual carriageway, A264.
- 25 Potential traffic noise from the A264 reduced by existing fencing and foliage.

## Pre-Application Process

Throughout the design process the applicant has engaged with the local Authority using the 'Pre-Application' process. This has included site visits, meetings, phone calls and other correspondence.

In June 2020 a formal 'Planning Performance Agreement' (PPA) was entered into by the Applicant and the Local Authority. The purpose of this was to agree a series of submissions to the Council with feedback provided accordingly. It also ensured that other Council departments (such as Highways, Arboriculture and Ecology etc.) were part of the early discussions.

A suite of documents and plans were first submitted to the Council, as part of this process in July 2020. These included details of transport, highways, ecology, topography, drainage, trees and ecology together with an illustrative site plan. High level discussions were held about the principle of development, site constraints and what would be expected of the site.

In January 2021 the applicant sent information to Local Residents informing them of the proposal to develop this land and invited comment. Following this, a further suite of documents and plans were submitted to the Council and these included a Landscape Masterplan, a Landscape and Visual Impact Assessment (LVIA), a noise report, flood risk assessments and various ecology studies.

Further meetings took place where feedback from Officers was generally favourable and the development of this land in principle was considered acceptable due to its allocation within the Draft Reg-19 plan.

Discussions were held regarding the timing of the Application and the Applicant confirmed that it would not be likely until at least 2022.

Other discussions were held on the principles of connectivity and the highway network with the Council seeking sustainable links between North Horsham and the new community to the East, Warnham Station and the wider surrounds.

The Council stated that they expected the application to include an element of retail within the scheme that would serve residents of the scheme and the wider community. The applicant also confirmed that it was their intention to provide a new parking facility within the application site for the railway station.

Discussions were held regarding the housing mix and that the submitted scheme would need to comply with the Strategic Housing Market Assessment (SHMA).

The Council's Landscape Officer provided feedback on the illustrative layout confirming that improvements would need to be made to create 'natural' corridors of trees and vegetation through the site, particularly where existing features could be retained. They also identified a 'Veteran Tree' that would need to be retained. They confirmed that a Locally Equipped Area of Play (LEAP) would be required and felt that the number of dwellings proposed (325 at the time) should be lowered.

Other feedback included correspondence from the Noise officer who set out what would need to be considered as part of a formal noise assessment.

The Council's Ecology consultant provided feedback that all of the surveys submitted were suitable and welcomed discussions that the existing woodland and hedgerows to the North are to be retained. They also provided advice on how the Biodiversity Nett gains (BNG) should be provided.

The Council's Drainage Engineer confirmed that there were 'no major issues' with the submitted drainage strategy and flood risk assessment and provided advice on what other information would be required at Application.

Additional advice was also provided from Refuse and Energy / climate with expected standards confirmed.

Having taken this feedback, the applicant re-assessed the scheme in order to address the comments raised.

A new illustrative Layout was prepared and submitted to the Council for feedback and this included:

The provision of a retail premise;
A pedestrian / cycle link from the South of the site to Mercer Road;
The existing Public Right of Way from Mercer Road to the Station diverted to be 'off road';
The retention of important trees, vegetation and ecological areas;
A nett Biodiversity Gain across the site;
A 'Strategic Housing Market Assessment' (SHMA) compliant mix of dwellings.

Officers welcomed the latest scheme and further discussions were held on detailed matters such as the exact location of the access points, existing trees and other such items. Discussions were held about the inclusion of 'key spaces' or different character areas and these have been taken on board as part of the Design Coding section of this document.

The scheme has now been worked up in detail and the submitted proposals represent a scheme that observes the various opportunities and constraints of the land, meets the requirements of the Design Coding and addresses the comments raised during the Pre-Application process.







Extracts from various documents submitted during the Pre-Application process

# 4.0 Proposed Scheme

**Proposed Scheme**

Following on from the Design Evolution stage, a full scheme has now been produced and forms the basis of this Planning Application.

This section of the document demonstrates various attributes of the proposed scheme, including: The proposed layout, the quantum of development and mix, densities, scale, development structure, parcel design, tenure allocation and community safety.

In some instances, the following pages respond to the requirements of the 'Design Coding' section and seek to demonstrate how the proposed scheme complies. Where appropriate, the 'Design Coding Symbols' have been included to draw the reader's attention to the applicable section with the Design Coding element.


Proposed Site Layout



D
DS
KS
MN
SH

## Quantum of Development

A total of 304 dwellings are proposed, together with a retail unit, infrastructure, parking, gardens and open space.

The number of dwellings proposed is as a function of several factors including: Responding to the existing landscape features; ensuring a nett biodiversity gain; densities as per the Design Coding element; efficient land use and compliance with the Strategic Housing Market Assessment (SHMA).

Affordable housing has been provided at 10% of the dwelling numbers and this is based on Viability. The Affordable mix provides a range of dwelling sizes from 1 bedroom flats to 4 bedroom houses.

The SHMA sets out the number of different sized dwellings required (based on the number of bedrooms) as a percentage of the overall total. The proposed mix is very close to this and it is normal for a small deviation in numbers to suit good design principles. The table below shows the SHMA mix requirements, together with the proposed mix. It can be seen that the scheme is generally compliant with only a small weighting towards smaller, 1 and 2 bedroom dwellings.

PRIVATE DWELLINGS:

| | | | |
|---|---|---|---|
| 25 | x | 1 bedroom flat |
| 27 | x | 2 bedroom flat |
| 60 | x | 2 bedroom houses |
| 107 | x | 3 bedroom houses |
| 55 | x | 4 bedroom houses |

Total Private Dwellings: 274

AFFORDABLE DWELLINGS:

| | | | |
|---|---|---|---|
| 10 | x | 1 bedroom flat |
| 3 | x | 2 bedroom flat |
| 7 | x | 2 bedroom houses |
| 7 | x | 3 bedroom houses |
| 3 | x | 4 bedroom houses |

Total Affordable dwellings: 30

Grand Total: 304

Retail Unit - 2,048 sq.ft. internal space

| Market Housing | SHMA % Required | SHMA No. Required | No. Proposed |
|---|---|---|---|
| 1-Bed | 5% | 14 | 25 |
| 2-Bed | 30% | 82 | 87 |
| 3-Bed | 40% | 110 | 107 |
| 4+-Bed | 25% | 68 | 55 |
| Totals | 100% | 274 | 274 |

Quantum of Development Diagram



### Woodland Edge

Design Parameters as prescribed within the Design Coding = min. 35 dph – max. 45 dph

Area = 1.03 Ha

The proposed layout shows 45no. dwellings in this area. This equates to a density of 43.4 dph, which is in accordance with required design parameters.

### Mercer Road

Design Parameters as prescribed within the Design Coding = min. 40 dph – max. 50 dph

Area = 1.70 Ha

The proposed layout shows 75no. dwellings in this area. This equates to a density of 44.07 dph, which is in accordance with required design parameters.

### Central Open Space

Design Parameters as prescribed within the Design Coding = min. 20 dph – max. 30 dph

Area = 1.41 Ha

The proposed layout shows 36no. dwellings in this area. This equates to a density of 25.5 dph, which is in accordance with required design parameters.

### Community Hub

Design Parameters as prescribed within the Design Coding = min. 35 dph – max. 45 dph

Area = 1.65 Ha

The proposed layout shows 71no. dwellings in this area. This equates to a density of 43.0 dph, which is in accordance with required design parameters.

### Southern Woodlands

Design Parameters as prescribed within the Design Coding = min. 30 dph – max. 40 dph

Area = 2.08 Ha

The proposed layout shows 77no. dwellings in this area. This equates to a density of 37.0 dph, which is in accordance with required design parameters.

Density Strategy Diagram

## Density Strategy

Appropriate densities are detailed in the Design Coding section of this document. These are based on the location of the development parcels and the desire to establish character in different Key Spaces.

This page demonstrates how the proposed scheme complies with the Density requirements of the Design Coding section.

Suggested Densities:

- Woodland Edge - Medium - 35 to 45 dwellings/ha
- Mercer Road - Medium to High - 40 to 50 dwellings/ha
- Community Hub - Medium - 35 to 45 dwellings/ha
- Central Open Space - Low - 20 to 30 dwellings/ha
- Southern Woodlands - Medium - 30 to 40 dwellings/ha

Density Plan from Design Coding section illustrating suggested density ranges.

## Scale & Massing

The Design Coding section of this document describes the various building heights that would be appropriate in different locations. This page demonstrates how the proposed scheme complies with the building height requirements of the Design Coding section.

It identifies the majority of buildings as being 2 storeys in height that will respect the edge of settlement setting of the scheme and neighbouring properties.

Some increased height (3 and 4 storeys) is located at the heart of the scheme, 3 storey along the 'Mercer Road' and 4 storey to the 'Community Hub' Key Spaces. These buildings frame an important Community Space that contains the retail premises and a Piazza and help provide way-finding and character whilst being less visual from the longer range views towards the scheme.

Buildings are designed to be human in scale and to relate well to the Landscape lead setting. Roof piles have been designed to be varied and reinforce character and this is detailed further in later pages.

Building Heights Plan from Design Coding section illustrating suggested Building Heights.


Scale & Massing Strategy Diagram



Development Structure Diagram

## Development Structure

The Design Coding section of this document provides a diagram that sets out the various lad uses for the site. These include development parcels, informal open space, formal open space, ecology areas, the location of a new station car park and a community hub containing retail premises.

This page demonstrates how the proposed scheme complies with the Development Structure requirements of the Design Coding section and affords a nett biodiversity gain of at least 10%.

**Legend**

- Residential development areas - including buildings, roads, gardens and parking.
- Public open space - including natural areas, SUDs etc.
- Public open space - along Mercer Road including SUDS etc. and PROW diversion.
- Public open space - Ancient woodland edge.
- Central public open space - including a LEAP.
- Community hub - including retail premises and piazza.
- New station car parking providing 50 spaces.

Development Structure from Design Coding section illustrating distribution of land uses.

## Residential Parcel Design

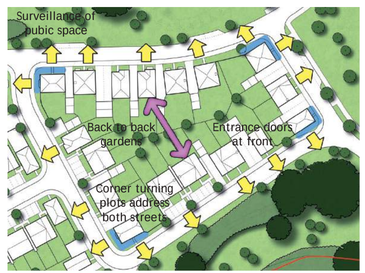
Where possible, outward facing perimeter block arrangements have been utilised for the residential parcels. These promote good levels of security for the enclosed rear gardens and provide surveillance over the public domain to the front. They also enhance the legibility of the streetscape and promote a sense of vibrancy.

The residential parcels are set out to respond to the landscape features of the site, ensuring that existing trees and field boundaries are retained where possible and suitable open spaces are provided throughout the scheme.

Development parcels are set out in sensible sizes, affording good levels of permeability through the scheme via a clear hierarchy of streets and spaces. Feature spaces and vista stops have been incorporated into these parcels to add interest and aid in place-making and way-finding.

Outward facing development is used in most circumstances, including where development fronts onto Open Space. This ensures good surveillance of the open space and assists in establishing a landscape lead scheme. To the North of the development, dwellings have not been orientated to face the open space (to the South of the Ancient Woodland) to discourage use of this area as it will be kept in a more natural state, promoting excellent ecology and biodiversity.

By adopting this design rationale, the principles of ''Secure by Design'' have been included and the resultant scheme is both attractive and safe.




Extract of residential parcel


Typical block structure section

Plan illustrating the proposed block structure within the application parcel.


Tenure Allocation Diagram



## Tenure Allocation

The development will consist of both open market (Private) dwellings and Affordable dwellings in a range of sizes and styles.

Affordable housing is provided at 10% of the total dwelling numbers (304). This equates to 30 Affordable dwellings. This is based on a Viability assessment for developing the site and details of this are submitted with the application.

Affordable dwellings will be provided as both 'Rent' and 'Shared Ownership' tenures at the ratio of 70/30 respectively.

All dwellings will comply with Building Regulations Part M4(2) (Wheelchair Accessible) and 3 No Affordable dwellings will be provided in compliance with Building Regulations Part M4(3) (Full Wheelchair design). In addition, all dwellings will meet the requirements of the Nationally Described Space Standards (NDSS).

All Affordable homes have been designed to be 'Tenure Blind' meaning that they will be of similar appearance to the Private dwellings allowing the visual harmony of the development.

**Legend**

Private Dwellings

Affordable Dwellings

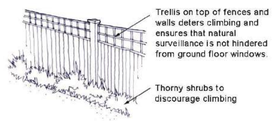
Refer to previous pages for a breakdown of the mixes provided for Private and Affordable tenures.

## Community Safety

The design and layout of this development will reflect the principles of "Secured by Design" in relation to natural surveillance, perimeters, physical security, landscaping and lighting. The design will endeavour to create a safe environment that is also attractive.

### *Landscaping and External Environment*

Care has been taken in the design of the external environment to avoid the inadvertent creation of opportunities for crime i.e. trees located poorly affording access to upper storey windows, tall shrubs creating hiding places etc. Parking areas have been designed such that access and egress is generally via the same route. This prevents the sense of 'escape routes' and ensures that surveillance is easier to achieve.




### *Lighting*

Well lit spaces are crucial in reducing fear of crime and making places more liveable. A detailed lighting scheme will be considered for the development to provide consistent levels of illumination. The avoidance of deep shadows is important and lighting should illuminate potentially dark corners in public areas as well as main circulation areas. The use of low energy units will be investigated. The implementation of well-designed lighting will also increase the opportunity for surveillance at night.

Different lighting sources will be provided so as to be sensitive to the local environment. Generally fittings should be out of reach and tamper proof. Any low level lighting used should be vandal resistant.

### *Defensible Space*

Changes in surface colours and materials have been proposed in the road design and parking courtyards to create a sense of community ownership and to deter potential offenders from areas that may be perceived to be private or semi-private. Walls, fences and hedges have an important security function, they denote where public space stops and semi-public or private space begins. They can help the residents to control who can use particular areas of space and can dissuade casual trespass, thereby limiting opportunities for crime.


Dwellings are set back with soft landscaped 'defensible' areas to the front generally laid to lawn with shrub planting and often including a frontage boundary. Rear gardens, also laid to lawn, have been designed to be private, secure spaces.

### *Circulation Routes and Accesses*

Access routes leading to individual dwellings rear garden gates are closed off with 1.8m high gates fitted with anti-lift hinges. The gates should be self closing and fitted with key operated locks that are operable from both sides. These measures are intended to eliminate areas where offenders may gain access to rear gardens unnoticed.


### *Surveillance*

All buildings are orientated to provide active frontages, with their principal entrances facing the route from which they are served; this provides vibrancy and promotes a sense of security. Principal living rooms will generally be located at the front of the dwellings so that they overlook public areas and provide an interaction with the wider realm.


An example of natural surveillance from habitable rooms over the public open space

# 5.0 Landscaping

## Landscape Framework

This page demonstrates the differing types of open spaces within the proposed development. In accordance with the Design Coding section, these spaces vary in formality, function and appearance, though there is a commonality of environmental and community enhancement. The landscaping framework has been designed to provide key green spaces and pedestrian friendly routes.

Existing land form, water, trees and vegetation has been allowed to inform and shape the development, adding unique character while contributing to effective way-finding.

These spaces impart the overarching character for the scheme and the built form has been designed to be subservient to them. The quantum and diversity of the landscaping not only provides wide ranging benefits for the community, it enhances the ecological credentials and also ensures that the overall site sits comfortably in this settlement edge setting.

The development delivers key areas of public open space including a Central Open Space incorporating a LEAP, a Pedestrian Piazza, drainage basins and a generous amounts of use-able open space.

The distinction between public realm and private space is clearly articulated. Public spaces have been designed to serve a clear function in the urban structure.

The provision of generous areas of landscaping, dispersed throughout the scheme, ensures that the land remains open in character.

For further details pertaining to the design and specification of hard and soft landscaping, hedges, shrub planting etc, reference should be made to the detailed landscaping information, which accompanies this application.


Landscape Framework Diagram



## Landscape Framework /cont.

### Legend

1. Ancient Woodland buffer- An area of open space at the north end of the site that serves to protect the existing ancient woodland. This will be a more natural area and provides excellent biodiversity and habitat credentials.
2. Existing Trees Retained - The retention of these trees not only promotes good ecology but reinforces the landscape lead approach to the scheme design.
3. Existing Veteran Tree - Retained within an area of open space to preserve it's setting.
4. Existing Hedgerows and Field Divisions - Retained and reinforced with native species planting. These reinforce the landscape setting and ensure good ecological benefits.
5. Open Space Corridor along Mercer Road - The tree lined rural character of Mercer Road has been respected by setting development back and creating Public Open Space to both the North and South of the Road.
6. Landscaped Buffer along Western Edge - Development has been set back from the western boundary to create an open space buffer. This, together with reinforcement planting along the boundary will screen the railway line from the development whilst establishing a good wildlife corridor.
7. Existing / New Water Features - Where existing, these will be retained and integrated into the developments drainage strategy. New semi-dry drainage basins will also be created that will promote a sustainable drainage solution, whilst providing excellent habitat and ecology credentials. These will also provide aesthetic interest to the public domain.
8. Piazza - A public open space at the heart of the scheme that will be landscaped with both hard and soft features to create a vibrant, attractive space that will promote vitality and activity.
9. Central Open Space - This space serves to break the development halfway through the southern parcel and affords the retention of several large, existing trees. This will be a more formal space, mainly laid to grass with native tree and shrub planting throughout. It will contain a dedicated play area (LEAP) together with open spaces that offer the opportunity for play, recreation and community gatherings akin to a 'village green'. The entire space is well surveyed by dwellings arranged to face it.
10. Other Ancillary Open Space - The scheme contains a number of other open space areas that can be used for a number of purposes. These will be planted with native trees and planting, and assist in reinforcing the landscape lead design whilst providing good ecological credentials.
11. Woodlands Zone - The southern part of the site exhibits characteristics that make it suitable as a woodlands habitat. This will provide excellent biodiversity credentials and will be left in a more natural state.
12. Long Range Views - Views from within the development towards the central open space assist in linking spaces together and way-finding.
13. Avenue Tree planting - The main Avenue and pedestrian / cycle link from the South East corner to Mercer Road will be lined with street trees to establish its credentials in the street hierarchy. These trees also provide god habitat and shade for pedestrians during hot, sunny days.

Example of green amenity space which could be achieved within the Central Open Space.

View along Mercer Road illustrating the tree-line, rural character.

Example of Equipped Play Area featuring equipment employing natural materials, considered appropriate for this development.

Example of woodlands habitat

## Proposed Landscaping Strategy

This page demonstrates the broad strategy for the landscaping design and shows how the different elements, such as the private frontages, public spaces and private amenity spaces are integral to the overall layout. It shows where soft and hard landscaping is intended and acts as a 'Masterplan' from which the detailed Landscape strategies and proposals can be prepared.

New trees have been used within the layout to give a sense of place, aid legibility, and to soften the built form. Trees and landscape planting have also been used near the edges of the residential area to enable a transition into the open space and act as a buffer.

All existing retained trees will be protected to current guidelines, from commencement to completion of all site works.

The existing ecology within the site will be retained and enhanced, with the existing field divisions informing the layout of the development, including the positioning of the central open space. Further ecological credentials have been delivered by providing other open space landscape features such as the drainage basin, Ancient Woodland Buffer, Woodlands Zone and surrounding hedges.

Where dwellings have been set back from pavements they are generally laid to lawn with shrub planting. Soft landscaping will be used to provide 'defensible' areas to the front and flanks of dwellings, where appropriate.

### Legend

- Application boundary.
- Existing trees retained
- Existing hedgerows retained
- Proposed trees - shown indicatively only.
- Quality hardscaped areas to form streets, footways and parking etc.
- Private and secure amenity space (rear gardens).
- Softscaped semi-private frontages featuring defensible planting.
- Public Open Space

Refer to drawings, reports and schedules by landscape consultant for detailed infomation on landscaping.


Landscape Strategy Diagram

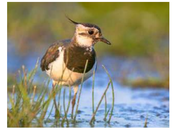










## Ecology and Biodiversity

The overarching ecological objectives proposed in the short, medium and long term are:

- To maintain and enhance the existing nature conservation value of retained features and their associated fauna including watercourses, trees, hedgerows, broad leaved woodland and species rich grassland;
- To create new habitats to compensate for the loss of, and effects on, existing habitats;
- Other opportunities to create priority habitats;
- To enhance connectivity with biodiversity and green spaces within the wider area;
- To maximise ecological value through appropriate management, ensuring significant areas of open space and green corridors are maintained and created that are of value to wildlife;
- To balance the multifunctional use of the Green Infrastructure with its biodiversity interests within and adjacent to the site; To raise awareness of biodiversity within the existing and new communities.

To achieve these aspirations a raft of measures have been designed in to the scheme including:

- All existing trees that are suitable will be retained and are located within open space areas to allow them to flourish.
- Existing hedgerows and field boundaries within and around the site are to be retained and reinforced with native species that will provide valuable wildlife corridors.
- Where exiting landscape features are to be retained, they will be located within the public realm to ensure their long term survival and eliminate the risk of removal by residents.
- Existing waterbodies will be retained, and new ones introduced, that will expand the opportunities for biodiversity and ecology.
- Significant areas of open space have been designed that will provide a range of different habitats and are linked by vital wildlife corridors.
- The Ancient Woodland to the North of the site is protected by a generous landscape buffer that will be of a more natural nature, affording the opportunity for excellent biodiversity and ecology.
- The large, central, open space affords the retention of several mature trees whilst providing a significant area of amenity grassland. Additional native species planting will be introduced to further contribute towards the ecological credentials of the space.
- A large area of open space is provided towards the South of the site where existing conditions provide a 'woodlands' habitat that will be maintained in a more natural state to promote good biodiversity.
- Other areas of open space or landscape buffers are located throughout the development that will be planted with native trees and species (such as wild flower meadows etc.) that will contribute to the overall biodiversity whilst establishing wildlife corridors and links through the scheme.
- A significant number of new trees will be planted throughout the scheme that will enhance the ecological opportunities of the area.

In addition to these, measures such as bird and bat boxes will be installed in appropriate locations and plot division fences will feature hedgehog holes to afford free movement throughout the scheme.

Signage, informing the public about the different areas and their ecological merits, will be installed throughout the development and a detailed management plan will be created that will afford suitable management of the various spaces and areas.

The ecological strategy for the scheme has been considered from an early stage and the resultant proposals will ensure a net biodiversity gain for the site of at least 10%.

Further details on biodiversity and ecology can be found in the submitted documents and reports that accompany this application.

**Boundary Treatments**

Frontage boundary treatments play an important role in establishing character whilst defining the difference between the public and private realm.

By employing different treatments to different areas, they also help inform the hierarchy of streets.

The Design Coding section of this document sets out what frontage boundary treatments are appropriate in different locations and this page demonstrates how the proposed scheme is compliant.

A plan showing the various boundary treatments in more detail is submitted with this application.

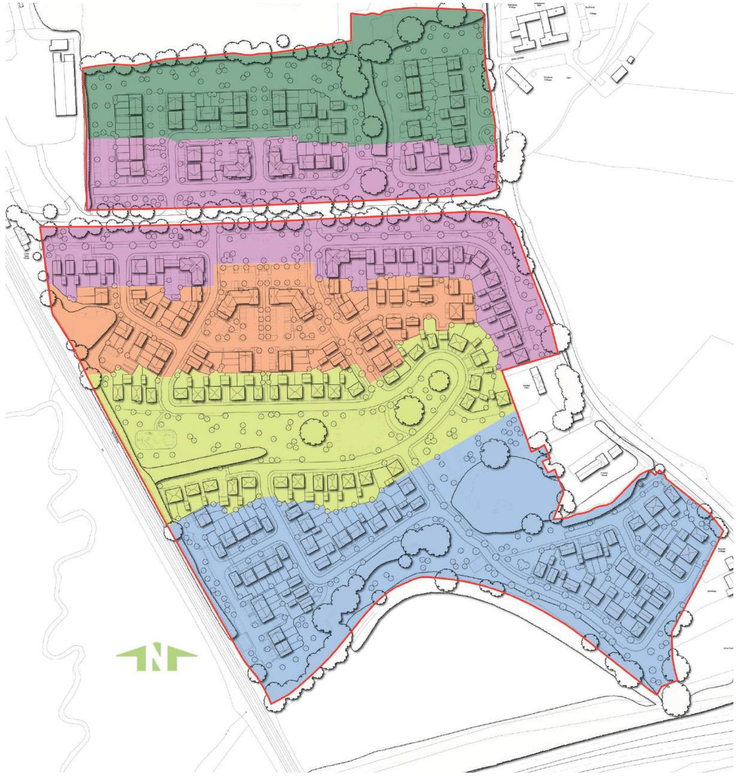
Legend

- Application Boundary
- Estate Railings
- Formal Hedges / Planting
- Informal Frontage Planting

Boundary Treatments Plan from Design Coding section illustrating suggested boundary specifications and locations.

Boundary Treatments Diagram

# 6.0 Key Spaces



Key Spaces Diagram

## Introduction

The purpose of establishing 'Key Spaces' within the scheme is to afford a sense of place, establish character and assist in way finding.

The 'Design Coding' section of this document identifies a number of Key Spaces that are based around the major landscape features of the site and details what characteristics are expected for each area.

The proposed layout has been designed from the start with these important spaces in mind and the large image on this page shows where each Key Space is located and demonstrates compliance with the Design Coding Section in this respect.

Further details of each Key Space is provided in the following pages. The five Key Spaces are:

- Woodland Edge
- Mercer Road
- Community Hub
- Central Open Space
- Southern Woodlands

Key Spaces Plan from Design Coding section illustrating Key Space locations.

**Woodland Edge**

This Key Space is located along the northern boundary of the application site and consists of the open space (to the south of the Ancient Woodland) and the built form to the South of it.

The open space will be natural in style with only limited access to protect the ecological credentials of the area. Only a limited number of dwellings have been orientated to face north (onto the open space) to provide some surveillance whilst discouraging its general use.

Existing trees and hedgerows are retained to reinforce the landscape lead character of the area and have informed the more rural characteristics of this Key Space.

Access to the dwellings is provided from the South (off Mercer Road) and the East (off Langhurstwood Road) and street types are of the lower hierarchies, such as Shared Surfaces and Private Drives.

Care has been taken to work with the sloping topography of this part of the site with dwellings stepping naturally to follow the contours. This avoids significant amounts of 'cut and fill' or exposed under-build.

Building designs are traditional in style to reflect the existing dwellings in the area. They will be more 'rural' in character, consisting of small terraces, semi-detached and occasional detached dwellings. Heights have been restricted to two storeys to respect the edge setting of the area and the nett density provided is just above 43 dwellings per hectare.

Pitched roofs, with varied roof pile designs reinforce the rural vernacular and a cohesive palette of finishes and details further inform the character of the space.

Brickwork is the predominant finish in hues of soft red with dark coloured boarding also featuring to reflect the rural character of the other buildings in the vicinity. One or two plots are finished with vertical tile hanging to reflect the traditional 'farm house' design also found in close proximity.
Simple detailing such as fenestration styles, bay windows, chimneys and arched brick heads combine to create a unified character with a number of porch roof designs introduced to provide variety and interest.

Further examples of the building designs are detailed on the following pages.

Location plan identifying the location and extent of the Woodland Edge Key Space.

Precedent Images from the Design Coding Section of this document:

Illustrative layout showing the Woodland Edge Key Space from the Design Coding Section.




Extract of proposed site layout identifying the Woodland Edge Key Space.

***Legend***

1. Existing Ancient Woodland
2. Existing trees retained
3. Existing hedge /landscape feature retained
4. Good separation afforded between trees and built form
5. Limited access to the Open Space
6. Existing landscape reinforced with native species and meadow like planting
7. Terraces will feature steps in levels to reflect the topography
8. Building vernacular informed by the rural design of the barn conversions to the East
9. Semi-detached or small terraces with occasional detached dwellings
10. Regular building lines
11. Predominantly duo-pitch roofs but with ends expressed by gables
12. Some roof pile variations

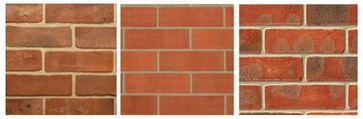
This page demonstrates how the aspirations of the Design Coding section are met from an urban design and layout perspective.

The following pages show how the building designs, materials and details will further contribute to the overall character of the Woodland Edge Key Space.

Bonnet hip tiles reflect local character

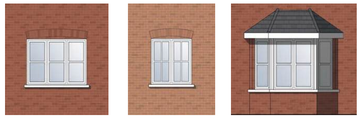
Simple fenestration and detailing further reinforce the area's character

Use of dark Boarding reflects a more rural vernacular



Red brickwork.

Red plain tile roofs.



Simple window styles in white finish. Arched brick heads reflect the local character.

Occasional bay windows add interest

Dark horizontal boarding.

Grey plain tile roofs.

Occasional vertical tile hanging reflects the 'Farmhouse' vernacular.

Simple cill details



Changes in level are dealt with honestly and without the need to cut and fill extensively

A range of porch designs provide variety and individualism

Boarding details reflect rural characteristics

**Mercer Road**

This Key Space is located along Mercer Road and is formed by the newly created Open Spaces to the North and South of it, together with the built form that address these spaces.

The mature trees and hedgerows along Mercer Road will be retained with the exception of the access points which have been sited to avoid significant disturbance to the existing features. By retaining the existing trees and hedgerows, the rural characteristics of the lane will be maintained.

This is further reinforced by the locations of the built form which are set well back from the hedgerows to maintain the open character whilst creating Open Space that will provide good ecological credentials.

The existing Public Right of Way that currently runs along Mercer Road is diverted through the new Open Space to improve safety and security whilst promoting its use.

Building designs in this area are of a traditional appearance but display more formality than those in the 'Woodland Edge'. They consist of detached, semi-detached and small terraces of houses, with apartment blocks located central within the space and all are designed to address the Open Spaces.

Building heights are two storeys for all houses to respect the open nature of the space but apartment blocks at 3 storeys have been sited towards the centre that will frame the Public Space in front of the retail element.

Density is achieved at 44 dwellings per Hectare which is within the permitted range specified in the Design Coding section.

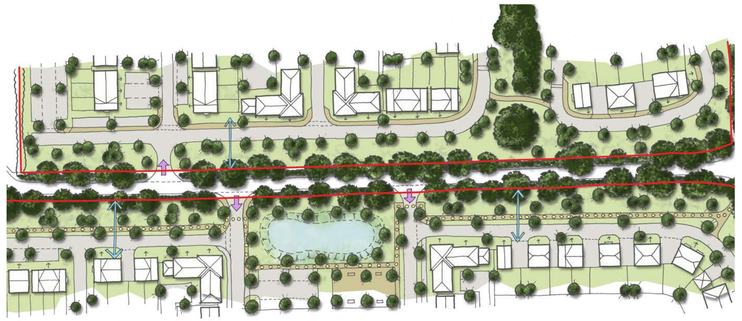
All roofs are pitched but designs vary to include gables and hips, with some roofs orientated to 'book-end' others to enhance the street scene.

Facades are primarily finished in brickwork, varying between shades of soft red and buff. Some use of light coloured boarding, vertical tile hanging and occasional render is also employed to provide variety with interest.

A palette of detailing is employed throughout this area such as: window styles, gauged brick heads, stone cills, porch designs, occasional bay windows and chimneys. These combine to produce a coherent and legible character for the Key Space.

Location plan identifying the location and extent of the Mercer Road Key Space.

Precedent Images from the Design Coding Section of this document:



Illustrative layout showing the Mercer Road Key Space from the Design Coding Section.



Extract of proposed site layout identifying the Mercer Road Key Space.

***Legend***

1. Mercer Road
2. Existing Trees and hedges retained
3. Access points created where least disturbance to existing trees and hedges
4. Good separation between hedge / trees and built form
5. Public Open Space
6. Buildings address Open Space
7. Two storeys in height
8. Increased height and massing at the heart of the area to establish 'place making'
9. Lower densities at the Eastern end – predominantly detached dwellings
10. Medium densities at the Western end – predominantly small terraces and semis
11. Higher density in the centre featuring taller apartment blocks
12. Predominantly duo-pitch roofs but with ends expressed by gables
13. Some roof pile variations
14. Regular Building Lines

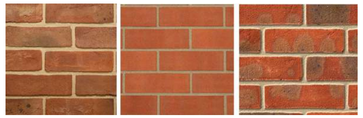
This page demonstrates how the aspirations of the Design Coding section are met from an urban design and layout perspective.

The following pages show how the building designs, materials and details will further contribute to the overall character of the Mercer Road Key Space.

Hipped roof adds variation

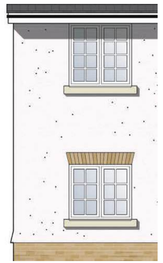
Varied roof piles, vertical tile hanging and bays create interest

Gauged heads and stone cills establish character



Red brickwork

Buff brickwork



Render provides variation

Tile hanging reflects the local vernacular

Grey plain tile roofs

Red plain tile roofs



Use of render provides variety along the street scene

Three storey apartment blocks establish place-making

A range of porch designs provide variety and individualism

A range of fenestration styles in white finish. Stone cills reinforce character. Gauged brick heads feature within this Key Space.

Occasional bay windows add interest

Elements of Tile Hanging reflect rural characteristics

**Community Hub**

This Key Space is located at the heart of the overall scheme and acts as a conduit to the other Key Spaces.

It is more urban in design than other Key Spaces, mainly consisting of built form but a tree lined avenue runs through it to establish good connectivity and a clear street hierarchy.

At the centre of the Space, the built form opens up to create a Public Piazza that is overlooked by taller buildings (3 storeys). These frame the space and provide a sense of enclosure.

Retail facilities are proposed within the ground floor of these buildings that will serve both the residents of the scheme and the wider community.

The increased height and massing, together with the retail premises and Public Piazza combine to make this a vibrant space within the heart of the scheme.

Elsewhere, built form in this Key Space has been designed so that dwellings address the streets and building lines are fairly regular. All dwellings are two-storeys in height (with the exception of the apartment blocks at the heart) and a Nett Density of 43 dwellings per Hectare is established, which is within the permitted range.

Buildings have been designed to exhibit traditional form and finishes (such as pitched roofs, brickwork and boarding etc.) but they have been designed to reflect a more contemporary aesthetic, in keeping with the vibrant nature of this Key Space.

Fenestration exhibits a more vertical emphasis and will have grey coloured frames. Facades will predominantly be brickwork in shades of soft red or buff but elements of light coloured boarding have been included to relate to the local vernacular too.

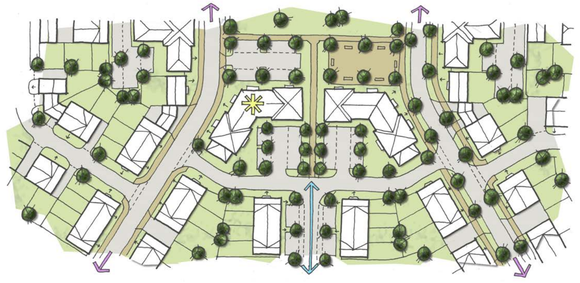
Detailing within this Key Space will be clean and simple with flat roofed canopies, unembellished window styles, modern door styles and vertical panels of boarding.

Roof piles are mainly duo-pitched (front to back) but some gable fronted properties have been included to add interest and establish rhythm. Roofs will mainly be finished in grey roof tiles.

This approach ensures that the Key Space establishes its own character whilst respecting the other Key Spaces and wider context around it.

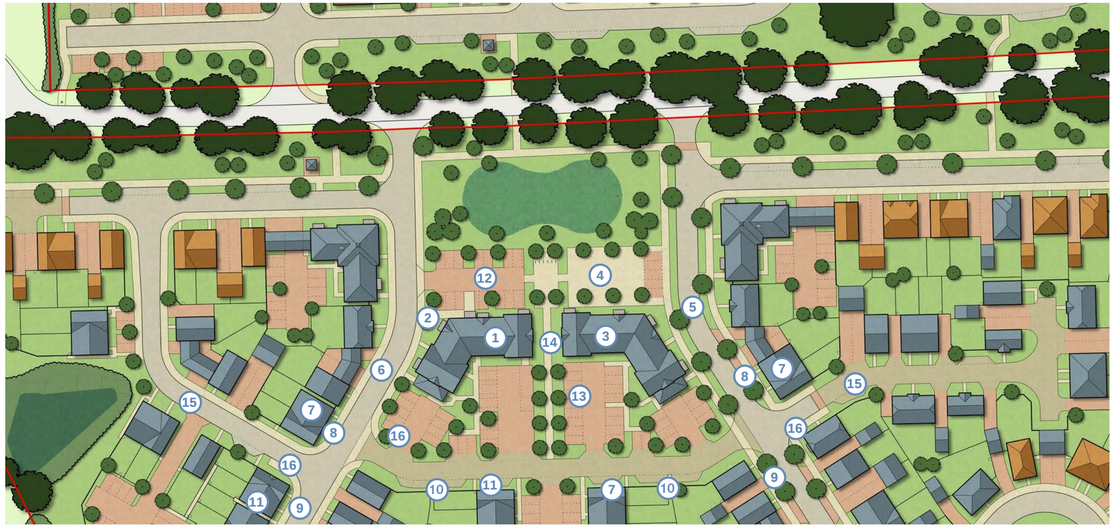
Location plan identifying the location and extent of the Community Hub Key Space.

Precedent Images from the Design Coding Section of this document:



Illustrative layout showing the Community Hub Key Space from the Design Coding Section.






Extract of proposed site layout identifying the Community Hub Key Space.

***Legend***

1. Increased Building height is appropriate at the heart of this area
2. Buildings of greater Mass provide good Place-making
3. Non Residential use (Commercial) to Ground Floor
4. Public Space (Piazza)
5. Tree lined Avenue
6. Higher order street types
7. Housing is predominantly two storeys in height
8. Regular building lines and set-backs.
9. Buildings addressing the streets
10. Back to back form
11. Predominantly duo-pitch roofs but with ends expressed by gables
12. Parking for retail facility
13. Servicing area for retail facility in less visual location
14. Pedestrian link through the centre of the scheme, linking the 'Central Open Space' to Mercer Road.
15. Lower order streets (Shared Surface)
16. Buildings designed to turn corners

This page demonstrates how the aspirations of the Design Coding section are met from an urban design and layout perspective.

The following pages show how the building designs, materials and details will further contribute to the overall character of the Community Hub Key Space.

Gabled elevation used on ends provides variety and establishes character

Flat roof canopies and simple detailing

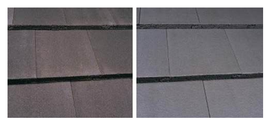
Light coloured boarding used regularly to introduce character

A more vertical emphasis to fenestration

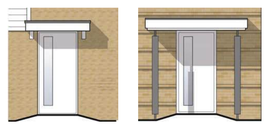
Red brickwork

Buff brickwork

Light coloured boarding used in various ways



Predominantly Grey Tile Roofs



Simple, contemporary canopy roofs




Three storey apartment block with retail facilities at ground floor

Simple fenestration with a vertical emphasis in grey frames. Simple cills to match window frames. Simple detailing reinforces a more contemporary aesthetic'

'Metal balconies in grey finish

Metal balconies and light boarding establish identity.

## Central Open Space

This Key Space sits at the heart of the Southern land parcel and consists of the large public open space and the built form that surrounds it.

The open space affords the retention of several mature trees and the streets have been designed to wrap around it. A new footpath / cycle link crosses the space towards the Eastern end following the desire line for the link between Horsham and Mercer Road.

The Open Space offers excellent facilities for recreational uses such as play, exercise and community gatherings. It will act as a new 'Village Green' and contains an equipped play area (LEAP).

Streets surrounding the open space have been designed as single sided carriageways with dwellings orientated to face the open space on all sides (except the Western end).

Dwellings to the North and South of the Open Space are separated (face to face) by over 55 metres, allowing them to frame the space but not dominate it.

Built form is less continuous with larger gaps between buildings and mainly consists of detached dwellings with occasional semi-detached pairs. This results in a lower density of just under 26 dwellings per hectare being achieved (which is within the permitted range).

All dwellings are two storeys in height to reflect the low density nature of this area and roofscapes are predominantly hipped all round. This not only visually reduces the mass of the buildings but also establishes a sense of character for the space.

A cohesive palette of finishes is employed consisting of mainly soft red brickwork with occasional buff brickwork for variation. Roof finishes will be predominantly red tiles with occasional grey ones. Vertical tile hanging is used more in this Key Space and establishes a common language.

Whilst care has been taken to ensure that detailing is consistent, further elaboration is employed within this Key Space. This includes occasional chimneys, bay windows, stone cills, dentil courses, decorative club tiles and varied porch designs.

A range of window styles are used to compliment and further embellish the facades and these will all be finished in white. White painted timber balconies are also shown on some plots so that residents can enjoy the view across the large Open Space.

Location plan identifying the location and extent of the Central Open Space Key Space.

Precedent Images from the Design Coding Section of this document:

Illustrative layout showing the Central Open Space Key Space from the Design Coding Section.




Extract of proposed site layout identifying the Central Open Space Key Space.

***Legend***

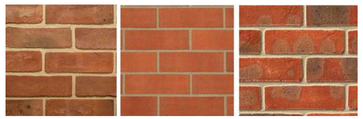
1. Existing trees retained
2. Tree lined Avenue
3. Pedestrian / cycle link takes a direct route through space
4. Shape of space informed by retaining trees
5. Good separation between buildings
6. Single sided perimeter roads define the space
7. Buildings orientated to face the Open Space
8. Predominantly detached dwellings
9. Larger gaps between built form
10. Hipped roofs provide identity and further reduce density along the street scape
11. Buildings designed to turn corners
12. Equipped Play Area
13. Opportunities for recreation, play and social interaction
14. New attenuation basin

This page demonstrates how the aspirations of the Design Coding section are met from an urban design and layout perspective.

The following pages show how the building designs, materials and details will further contribute to the overall character of the Central Open Space Key Space.

Hipped roof, balcony over bay windows and chimney

Projecting gable on hipped roof with decorative detailing



Predominantly Red brickwork

Predominantly Red Tile Roofs

Decorative tile hanging creates identity

Occasional Finial details

Occasional Buff brickwork

Occasional Grey Tile Roofs

Brick detailing adds embellishment



Hipped roof, decorative tile hanging and varied porch design

Hipped roof, decorative tile hanging and variation in fenestration

A range of porch designs provide variety and character

Occasional bay windows add character

Fenestration in a range of embellished styles. Stone cills & gauged brick heads provide uniformity.

## Southern Woodlands

This Key Space is located at the Southern end of the site and includes Public Open Space and built form development parcels.

The Open Space areas afford the retention of many existing trees, together with ponds, water courses and vegetation These areas will be maintained in a more natural state to promote excellent ecology and biodiversity. A landscape buffer of between 13 and 15 metres width is provided along the Western side of the area to separate development from the adjacent railway line and the majority of building façades are set back further.

A tree lined Avenue runs through the area providing a pedestrian / cycle route through from Horsham towards Mercer Road, the nearby station and the wider environs. Other streets are of middle to lower order hierarchies in keeping with their locations. An emergency link is located on Langhurstwood Road to the East of this area, ensuring that access / egress would be possible should there be difficulties using the Mercer Road access points. The location of the emergency access has been carefully designed to afford suitable visibility whilst causing the least disturbance to the existing trees and hedge.

Single sided streets are employed along Open Space edges, allowing dwellings to front out and look over the Open Spaces. This promotes a sense of vitality and provides surveillance over the Public Realm. Dwellings have been arranged in 'back to back' parcels wherever possible which promotes security and 'corner turning' plots have been designed to overlook both streets where they are sited.

Care has been taken to respect the existing properties along Langhurstwood Road (Pondtail House) with proposed dwellings sited between 18 and 20 metres from the boundary. This will ensure that their presence is not overbearing and avoids overlooking issues.

Built form will consist of small terraces of houses, semi-detached houses and occasional detached houses. This results in a medium density of 37 dwellings per Hectare which is within the permitted range. All dwellings are restricted to two storeys in height in order to be sympathetic to the low-lying nature of this area.

Buildings are designed to reflect traditional vernaculars with the majority of roof piles running from front to back. However, a number of alternative roof designs are also employed (such as gable fronted buildings and hipped roofs) to provide variety and interest.

Roof finishes will be a mixture of red / brown tiles, together with grey tiles, whilst facades will predominantly be brickwork in tones of soft red or buff. Occasional use of light coloured boarding and vertical tile hanging is also introduced to reflect local character and provide interest.

A range of detailing has also been introduced such as varied fenestration styles, varied porch designs, chimneys, bay windows, and brick detailing that will add interest and establish character.

Location plan identifying the location and extent of the Southern Woodlands Key Space.

Precedent Images from the Design Coding Section of this document:

Illustrative layout showing the Southern Woodlands Key Space from the Design Coding Section.




Extract of proposed site layout identifying the Southern Woodlands Key Space.

***Legend***

1. Railway Line
2. Landscape buffer to Western edge
3. Dwellings set well back from Western edge
4. Mews style development
5. Single sided streets and dwellings overlooking Open Space
6. Existing trees retained
7. Public Open Space
8. Lower hierarchy of street types
9. 'Back to Back' parcel design
10. Tree lined Avenue
11. Emergency Access on to Langhurstwood Road
12. Good separation from existing properties
13. Varied roof pile designs create interest
14. Existing property (Pondtail House)
15. Buildings designed to turn corners

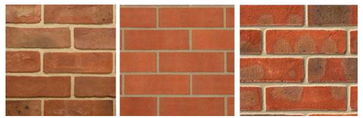
This page demonstrates how the aspirations of the Design Coding section are met from an urban design and layout perspective.

The following pages show how the building designs, materials and details will further contribute to the overall character of the Southern Woodlands Key Space.

Front to back roof, occasional chimneys and commonality of detailing

Large porch roof, half hips and some light boarding

Light coloured boarding unifies character in this area

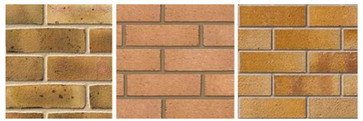


Red brickwork

Red / Brown Tile Roofs

Light coloured boarding

Occasional decorative tile hanging



Buff brickwork

Grey Tile Roofs

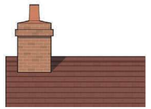


Gable fronted dwelling with light coloured boarding in gable

Hipped roofs with expressed gable. Decorative tile hanging and brick detailing

A more limited range of fenestration styles. Simple cills. Gauged brick heads throughout provide uniformity.

Occasional Finial details

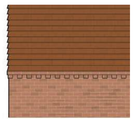


Occasional chimneys reflect local character

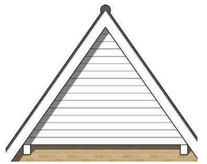
A range of porch designs provide variety and character



Occasional bay windows add character



Brick detailing adds embellishment



Light coloured boarding within gables

# 7.0 Movement and Access

## Movement Network and Connectivity

The 'Opportunities and Constraints' pages of this document set out the aspirations of how this development should interact and connect to the wider environs. This is further developed in the 'Coding' Section where specific Connectivity points are identified. Early Designs for the site took these into account and their importance has been maintained throughout the Design Evolution stage.

The Application now submitted retains these important Connectivity points and the key below / image opposite demonstrates their location and purpose.

Key:

C1 Connectivity Point C1 – Pedestrian, cycle and vehicular access to / from the eastern end of the Northern parcel on to Langhurstwood Road. Sited to afford required visibility and cause the least disturbance to existing trees and hedges. This will allow users to connect to the wider environs, including the the Major development to the East.

C2 Connectivity Point C2 - Pedestrian, cycle and vehicular access to / from the remainder of the Northern parcel on to Mercer Road. Sited to afford required visibility and cause the least disturbance to existing trees and hedges. This allows users to access the existing movement network including the diverted Public Right of Way to the South of Mercer Road.

C3 Connectivity Point C3 - Pedestrian, cycle and vehicular access to / from the southern parcel on to Mercer Road. Sited to afford required visibility and cause the least disturbance to existing trees and hedges. This access, combined with Connectivity Point C4 forms a 'loop' in the highway, affording good permeability through the scheme.

C4 Connectivity Point C4 - Pedestrian, cycle and vehicular access to / from the southern parcel on to Mercer Road. Sited to afford required visibility and cause the least disturbance to existing trees and hedges. This access, combined with Connectivity Point C3 forms a 'loop' and also affords convenient access to the retail facilities in the 'Community Hub' area.

C5 Connectivity Point C5 - Pedestrian and cycle access from the junction of Langhurstwood Road and Mercer Road to the (diverted) Public right of Way (PROW). The existing PROW (Ref 1574) runs along Mercer Road so by diverting it through the Open Space within the proposed scheme, it will afford a much safer route for users and encourage movement between both this scheme, the major development to the East and Warnham station.

C6 Connectivity Point C6 - Pedestrian and cycle access from the western end of Mercer Road to the (diverted) Public right of Way (PROW) that runs within the open space to the south of Mercer Road – See notes regarding Connectivity Point C5 above.

C7 Connectivity Point C7 – Pedestrian and Vehicular access to the new Station car park. This is taken from the new highway within the development to avoid unnecessary removal of the hedge / trees along Mercer Road. Provision of this car park will provide more opportunity for users to patronise the Station

C8 Connectivity Point C8 – Pedestrian / cycle access from the South East of the site on to Langhurstwood Road. Sited to afford required visibility and cause the least disturbance to existing trees and hedges. This will form part of the pedestrian / cycle movement network that links Horsham (to the South) with Warnham Station, the major development to the East and the wider area. This point also serves as an emergency vehicular access which could be used in the event of road closures elsewhere. This will be controlled by lockable bollards.

Connectivity Plan from Design Coding section illustrating suggested key vehicular and pedestrian/cycle routes in, out and through the site.


Movement Network and Connectivity Diagram

## Pedestrian / Cycle Network

The Coding section of this documents sets out the pedestrian and cycle movement routes required through the scheme and where they should link up with the 'Connectivity' Nodes identified on the previous pages. This page shows where these routes are located in the proposed scheme and demonstrates compliance with the Coding section.

Care has been taken to ensure that priority is given to pedestrians and cyclists to create a safe environment and to promote alternative modes of transport.

The existing Public Right of Way (PROW) – (Reference 1574) is diverted from its current route along Mercer Road such that it runs through the Public Open Space to the South of Mercer Road. This will improve its safety and promote its use as a vital link between the major development to the East and Warnham Station.

Legend

- Primary North – South, Green Boulevard, Avenue. For vehicular and cycle use.
- Primary streets. For vehicular and cycle use.
- Shared Surface streets. For vehicular, pedestrian and cycle use.
- Dedicated Footways (generally adjacent to carriageways). For pedestrian use only.
- Diverted Public right of Way. For pedestrian use only.
- Off-Road footpath / cycleways. For pedestrians and cycle use only.

Pedestrian/Cycle Network Plan from Design Coding section illustrating suggested pedestrian and cycle routes through the scheme.

Proposed Pedestrian/Cycle Network



## Street Hierarchy

The Coding section of this document describes the importance of providing legible street hierarchies that provide identity and assist in way-finding.

It sets out a number of suitable street types, their approximate locations and the physical parameters that they should display. It also calls for roads to be looped where possible to assist service vehicles and promote connectivity.

The diagram opposite shows the street hierarchy for the proposed scheme and it can be seen that the aspirations of the Coding section have been achieved.

Legend

- Green Boulevard - Type 1,
- Green Boulevard - Type 2,
- Primary Streets - Type 1,
- Primary Streets - Type 2,
- Lanes (Shared Surfaces), and
- Private Drives

Further details on the physical attributes of each street hierarchy are described on the following pages.

Proposed Street Hierarchy Diagram

Street Hierarchy Plan from Design Coding section illustrating suggested hierarchy of streets.

## Green Boulevard - Type 1

***Road Type Overview***

The Green Boulevards are the main feeder routes to the southern land parcel and run from the eastern entrance off Mercer Road leading to the south eastern corner of the application site. They act as a spine road running through the southern parcel, filtering the traffic to the subservient streets within the southern part of the development.

The Green Boulevard - Type 1 is employed where built development occurs on both sides and will comprise of a 5.5m wide carriageway with 2.0m wide verge zones and 2.0m wide footpaths to either side. The verge zones will incorporate planting and visitor bay parking.

Location Plan highlighting the extent of the Green Boulevard - Type 1 within the proposed scheme.

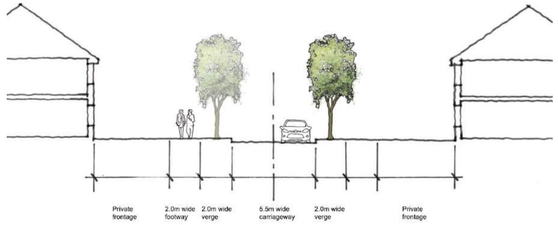
| Green Boulevard - Type 1 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m |
| Cycleway | Within carriageway |
| Verge | 2.0m |
| Parking | Generally on-plot or frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within verges |
| Setbacks | 1.5 - 5.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths / soft margins |

Street specification detailing the principal elements for Green Boulevard - Type 1.

Extract from Proposed Site Layout showing typical characteristics of the Green Boulevard - Type 1.

KEY

1. 5.5m wide carriageway.
2. 2.0m (min.) footway to either side of carriageway.
3. Vehicle crossovers.
4. Frontage generally 1-5m- 5m deep.
5. 2.0m wide soft verges with tree planting.
6. Dwellings addressing the street.




Typical Cross Section through Green Boulevard - Type 1.



| Green Boulevard - Type 2 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m on development side |
| Cycleway | Within carriageway |
| Verge | 2.0m wide on development side, 1.0m wide soft margin on non-development side. |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within verges |
| Setbacks | 1.5 - 5.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths / soft margins |

Street specification detailing the principal elements for Green Boulevard - Type 2.

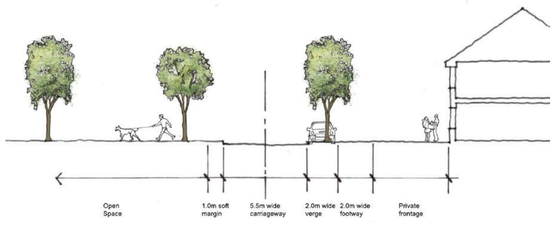
Location Plan highlighting the extent of the Green Boulevard - Type 2 within the proposed scheme.

## Green Boulevard - Type 2

***Road Type Overview***

The second variation of the Green Boulevard is used where development only occurs on one side. It consists of a 5.5m wide carriageway with a 2.0m wide verge and 2.0m wide footpath on the development side, and a 1.0m wide soft margin on the non-development side.

Extract from Proposed Site Layout showing typical characteristics of the Green Boulevard - Type 2.




Typical Cross Section through Green Boulevard - Type 2.

KEY

1. 5.5m wide carriageway.
2. 2.0m (min.) footway to development side only.
3. Vehicle crossovers.
4. Frontage generally 1-5m- 5m deep.
5. 2.0m wide soft verge with tree planting to development side.
6. Dwellings addressing the street.
7. 1.0m wide soft verge with tree planting to opposite side.

## Primary Streets - Type 1

***Road Type Overview***

Primary Streets are the main feeder routes running from either the principal vehicular accesses or from Green Boulevards.

Primary Street - Type 1 are streets with good levels of enclosure. They comprise a 5.5m wide carriageway with 2.0m wide footpaths to either side.

Location Plan highlighting the extent of the Primary Streets - Type 1 within the proposed scheme.

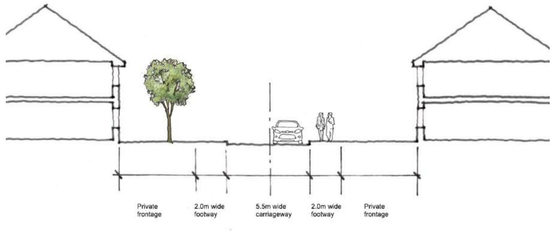
| Primary Street - Type 1 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m on both sides |
| Cycleway | Within carriageway |
| Verge | No |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 1.2 - 8.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths |

Street specification detailing the principal elements for Primary Streets - Type 1.


Extract from Proposed Site Layout showing typical characteristics of the Primary Streets - Type 1.

KEY

1. 5.5m wide carriageway.
2. 2.0m (min.) footway to either side of carriageway.
3. Vehicle crossovers.
4. Frontage generally 1.2 - 8m deep.
5. Some gable ends fronting on to the street.
6. Dwellings addressing the street.




Typical Cross Section through Primary Streets - Type 1.



## Primary Steets - Type 2

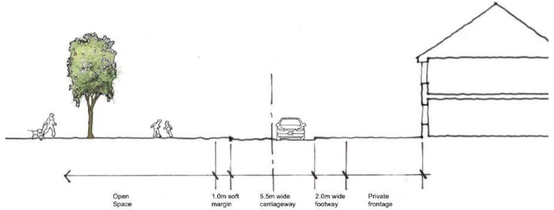
***Road Type Overview***

The Primary Street - Type 2 is a variation whereby built development only occurs on one side. In this situation the 5.5m wide carriageway has a 2.0m wide footpath on the development side and a 1.0m wide soft margin on the other.

| Primary Street - Type 2 | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 5.5m |
| Footway | 2.0m on development side |
| Cycleway | Within carriageway |
| Verge | 1.0m wide soft margin on non-development side. |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 1.2 - 8.0m |
| Boundary Treatments | Formal Planting, Hedges, Dwarf Walls, Estate Railings |
| Services | Under footpaths |

Street specification detailing the principal elements for Primary Streets - Type 2.

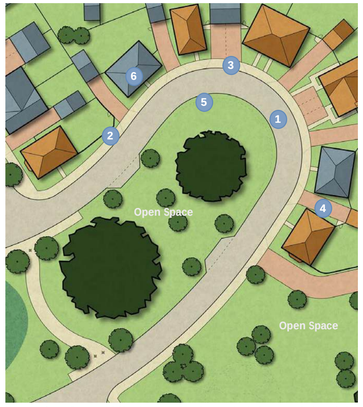
Location Plan highlighting the extent of the Primary Streets - Type 2 within the proposed scheme.




Typical Cross Section through Primary Streets - Type 2 .

KEY

1. 5.5 metre wide carriageway
2. 2.0m (min.) footway to development side of carriageway
3. Vehicle crossovers
4. Frontage generally 1.2 - 8m deep.
5. 1.0m wide verge on open space side.
6. Dwellings addressing the street.




Extract from Proposed Site Layout showing typical characteristics of the Primary Streets - Type 1.

## Lanes (Shared Surface)

***Road Type Overview***

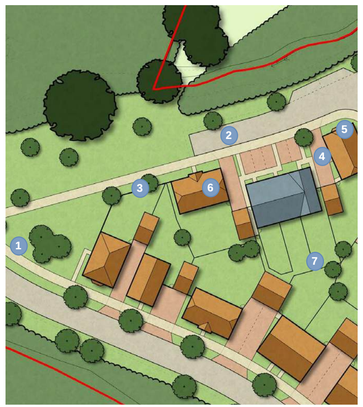
Lanes are at the lower end of the street hierarchy. They are defined by 4.8m carriageway widths, shared by pedestrians, cyclists and motorists alike. Lanes are typically located at the periphery of the Development and alongside green space provision.

Development addressing the Lanes has been designed to be informal, lower density and more rural in character with limited boundary treatments. This provides a sympathetic interface between the development as a whole and the greater landscaped and peripheral areas.

Location Plan highlighting the extent of the Lanes (Shared Surfaces) within the proposed scheme.

| Lanes (Shared Surfaces) | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 4.8m |
| Footway | No |
| Cycleway | Within carriageway |
| Verge | 2.0m wide soft margin on both sides. |
| Parking | Generally on-plot or Frontage behind margin |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 2.0 - 7.0m |
| Boundary Treatments | Informal Planting, Hedges |
| Services | Under footpaths |

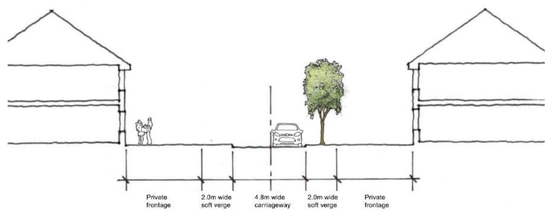
Street specification detailing the principal elements for Lanes (Shared Surfaces).




Extract from Proposed Site Layout showing typical characteristics of the Lanes (Shared Surfaces).

KEY

1. Lanes are served from Green Boulevards or Primary Streets.
2. Lanes 4.8m wide shared surface.
3. Landscaped frontages to dwellings 2.0-7.0 metres.
4. On-plot parking.
5. Some Lanes have development on both sides but they often serve single-sided development only.
6. Dwellings addressing the Lanes
7. New trees in private gardens.




Typical Cross Section through Lanes (Shared Surfaces).



## Private Drives

***Road Type Overview***

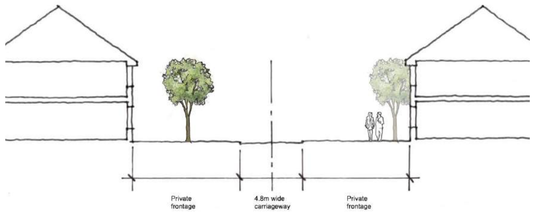
Private Drives represent the lowest status routes within the street hierarchy. They are served from Primary Streets and Lanes and serve a limited number of dwellings.

Development is either on both sides of the Private Drive or on one side where it is located adjacent to an open space or the edge of the development

| Private Drives | |
|---|---|
| **Street Specification** | |
| Speed | 20 mph |
| Carriageway | 4.8m |
| Footway | No |
| Cycleway | No |
| Verge | No |
| Parking | Generally on-plot or Frontage behind footway |
| Traffic Calming | To be achieved using road alignment, pinch points or changes in road material. |
| Junction Radii | 10m (max. subject to tracking) |
| **Materials and Landscape** | |
| Surface Materials | Asphalt / Tarmacadam |
| Street Trees | Within private frontages |
| Setbacks | 1.2 - 7.0m |
| Boundary Treatments | Informal Planting, Hedges |
| Services | Services should ideally be within the carriageway and preferably within a defined zone. |

Street specification detailing the principal elements for Private Drives.

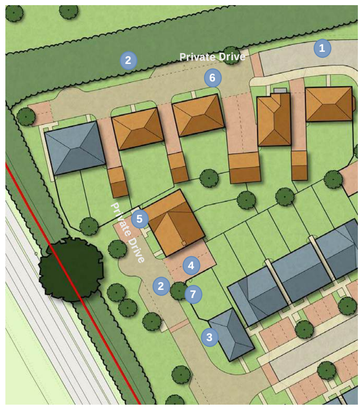
Location Plan highlighting the extent of the Private Drives within the proposed scheme.




Typical Cross Section through Private Drives.

KEY

1. Private Drives are generally served from Lanes.
2. Private Drives at minimum 4.8m wide.
3. Landscaped frontages to dwellings 1.2-7.0 metres.
4. On-plot parking.
5. Private Drives serving single - sided development.
6. Dwellings addressing the Lanes
7. New trees in private gardens.




Extract from Proposed Site Layout showing typical characteristics of the Private Drives.

## Car Parking Strategy

The scheme recognises that the availability of car parking can influence the choice and means of transport. A careful balance has therefore been sought between the expectations of car owners and the need to maintain the character of the overall setting.

A range of different parking solutions have been employed, from garages, car ports, driveways frontage parking and parking courts. These combine to create variety within the street-scape and reinforce character.

West Sussex County Council's Supplementary Planning Document 'Guidance on Parking at New Developments – September 2005' sets out the average quantum of parking spaces required per dwelling size, depending on the location of the site.

This site is located within the 'Holbrook West' ward and therefore falls under the PBZ (Parking Behaviour Zone) 2.

| Number of Bedrooms | Number of Habitable Rooms | PBZ1 | PBZ2 | PBZ3 | PBZ4 | PBZ5 |
|---|---|---|---|---|---|---|
| 1 | 1 to 3 | 1.5 | 1.4 | 0.9 | 0.9 | 0.6 |
| 2 | 4 | 1.7 | 1.7 | 1.3 | 1.1 | 1.1 |
| 3 | 5 to 6 | 2.2 | 2.1 | 1.8 | 1.7 | 1.6 |
| 4+ | 7 or more | 2.7 | 2.7 | 2.5 | 2.2 | 2.2 |

As such, the average parking required is:

1 bed units 1.4 spaces per dwelling

2 bed units 1.7 spaces per dwelling

3 bed units 2.1 spaces per dwelling

4+ bed units 2.7 spaces per dwelling

Based on the above, the proposed mix generates the following parking requirement:

| Dwelling Size | Average Parking Spaces Required | No. of Dwellings | Parking Spaces Required |
|---|---|---|---|
| 1 Bed Dwellings | 1.4 | 35 | 49 |
| 2 Bed Dwellings | 1.7 | 97 | 164.9 |
| 3 Bed Dwellings | 2.1 | 108 | 226.8 |
| 4+ Bed Dwellings | 2.7 | 64 | 172.8 |
| | **Totals** | **304** | **613.5** |

The West Sussex County Council guidance for parking states that the minimum internal dimensions for garages should be 3m wide x 6m long. These sizes allow for a quantum of storage which is important when promoting garages for car parking use. All garages proposed comply with these standards.

Where garages are proposed, West Sussex County Council states that only half of them can count towards the overall parking provision. A total of 112 garages are proposed, meaning that only 56 of them can count towards the overall parking provision.

Parking has been provided in the Proposed scheme as follows:

ALLOCATED SPACES (Driveways, frontage parking, car ports and parking courts serving houses)

438 spaces

UNALLOCATED SPACES (Frontage parking, car ports and parking courts serving houses and apartments)

128 spaces

GARAGES (116 total – of which only 50% can be counted towards parking provision)

58 spaces

GRAND TOTAL

624 spaces

As such, the scheme is in compliance with the applicable standards.

In addition to the above, 89 spaces are provided for Visitor use (including the retail facility) and 50 spaces are provided in the new station car park.


Car Parking Diagram

## Cycle Storage / Parking Strategy

The proposed scheme recognises that good levels of secure cycle storage are an important factor in promoting their use and has integrated a strategy from the early concept designs.

The West Sussex County Council's Guidance on Parking at New Developments (September 2020) sets out the minimum cycle storage provision based on the dwellings size and type (see table below).

This provision is met within the proposed scheme by a number of different methods:

Where houses have an on plot garage, the garage has been sized suitable to afford cycle storage.

Where houses do not have a garage, they will be provided with a weather-proof, lockable store within their gardens (such as a timber shed or propriety metal locker). Direct access from the gardens to the public realm is afforded to all such properties, removing the need to bring cycles through the home.

Apartments are provided with dedicated communal cycle stores in convenient locations. These are weather-proof structures of masonry construction and will have locked doors that only residents can access. Internally, they will be fitted with metal cycle racks allowing individuals to further secure their cycles.

| Type | Dwelling Size | Cycle Provision (per unit) |
|---|---|---|
| Houses | Up to 4 rooms (1 & 2 bed) | 1 space |
| Houses | 5+ rooms (3+ bed) | 2 spaces |
| Houses | Multiple Occupation | 1 space |
| Flats | Up to 3 rooms (1 & 2 bed) | 0.5 space (if communal storage otherwise same as 1 & 2 bed house) |
| Flats | 4+ rooms (3+ bed) | 1 space |

**Legend**

- Cycle storage provided in garages for these dwellings.
- Cycle storage provided in lockable stores within gardens for these dwellings.
- Communal secure cycle store serving apartments.

A plan detailing the cycle storage strategy is submitted as part of the application package and should be read in conjunction with this page. Plans and elevations of the communal cycle stores serving the apartments are also submitted as part of this application.

Cycle Parking Diagram



## Refuse & Recycling Collection Strategy

The storage and collection of refuse and materials associated with recycling has been carefully considered in the design of the scheme. All properties have been designed to accommodate the necessary storage provision as required by Horsham District Council, whereby;

Each household will be provided with a green lidded wheelie bin for general waste and a blue lidded wheelie bin for recyclables, each collected on an alternating fortnightly schedule. An additional, paid for, fortnightly garden waste collection service is also available.

Waste storage principles have been applied in accordance with relevant LPA policy and guidelines. These principles are demonstrated in the adjacent diagram, a larger scale plan of which, is submitted as part of this Reserved Matters application.

Flat refuse collection strategy:

Occupants of the flats are to carry their refuse to an enclosed refuse store (red circle on plan) located adjacent to the building. All occupants will have access to the refuse store throughout the week. The refuse collection operatives will then collect the larger wheeled containers from here.

Refuse collection strategy 1:

Houses that are to have their bins collected from the side of the street will store their bins in their rear gardens and wheel them to the front on collection day.

Refuse collection strategy 2:

Houses that are to share a refuse collection point. This will be a designated area (purple circle on plan) from which the refuse service providers will collect refuse from. Residents will store their bins in their rear gardens and take them to their designated colection area on collection day.

**Legend**

- Route traversed by the residents with their refuse.
- Private refuse storage location.
- Individual kerbside refuse collection point.
- Shared designated refuse collection point.
- Communal secure refuse storage location.

Waste Storage and Collection Diagram
(A larger scale plan has been submitted as part of this Reserved Matters application).

# 8.0 Building Design

## Local Character Study

Properties within the Horsham area display a wide range of traditional building materials, which are important in establishing character.

The variety of building styles and ages contribute to the character of the area. An analysis of the housing stock in the area identifies features, materials and details of note include the following:

- Predominantly red facing brick with some buff.
- Frequent use of brick detailing, i.e window heads, cills, string courses etc.
- A mix of window styles, typically with white-finished frames.
- Red plain roof tiles, pantiles and concrete interlocking tiles. Occasional use of slates or grey tiles.
- Render: Full height and half height render in light colours i.e. white, cream, etc.
- Varying roof pitches and styles including gables, hips and dormers. Occasional chimneys.
- Vertical tile hanging including decorative tiles.
- Horizontal boarding in both dark and light colours.
- Occasional bay windows.
- A mix of porch roofs including flat, gable & lean to. Occasional recessed porch.

Langhurst Wood Road

Langhurst Wood Road

Langhurst Wood Road

Skylark View

Station Road

Station Road

Skylark View



Building design in 'Central Open Space' Key Space


Typical building design in 'Community Hub' Key Space


Typical streetscene from 'Southern Woodlands' Key Space


Building dsign in 'Southern Woodlands' Key Space

### Building Design - General

In designing the scheme, inspiration has been drawn from the existing character of the area, in an effort to reinforce a sense of local distinctiveness.

The housing stock within the locale is varied in terms of age, size and architecture, therefore, it is considered important to establish an identity for the development site whilst also relating sympathetically to the existing vernacular architectural language of the area. As such, a traditional approach is proposed.

The scale and massing of the proposed dwellings not only respond to an analysis of the area but are also designed such that their elevational massing reflects a human scale of architecture which, whilst impressive, does not alienate residents or passers-by.

The elevation treatment proposed for this development creates visual interest through detailing in the window design, porches, bay windows, chimneys, gables and the roof pitches. The change in height to the buildings throughout the site also adds variety to the street scene, ensuring that the environment created by the development is not uniform.

The dwelling house and garage designs feature gable and fully hipped roofs, both of which are appropriate to the area and promote an appearance that is in-keeping with much of the older developments within the locale. Building heights do not exceed three-storeys. The most commonly used construction techniques within the area consist of red and buff bricks, with the occasional use of render, tile-hanging and boarding.

The street scenes submitted show how this traditional design approach and architectural detailing of the buildings complements the character of the area.

The modern interpretation of the traditional vernacular architecture of Horsham and the surrounding area has been achieved without the buildings appearing to be a pastiche.

Careful attention has been paid to the ratio between 'solid and void' and to the varying proportions to reflect that of existing buildings in the locality. The buildings are articulated both vertically and horizontally and the treatment of the roofscape has been carefully considered. Due consideration has been given to create a cohesive feel to the development with differing window depths being introduced to create a 'hierarchy' of fenestration.

Elevational themes have been established through the repetition of underlying elements to create harmony, order and rhythm. The opportunity to add interest has been encouraged further by ensuring a degree of variation exists in the elevational treatment of each dwelling.

Subtle design cues are used to distinguish the various 'Key Spaces' such as finishes, fenestration and detailing. These are explored earlier in this document.

A high-quality range of materials and finishes will be specified for the buildings with a cohesive palette of finishes and details established. External finishes (such as the roads, driveways and footpaths) will also be specified from a good quality selection which will include block pavers and setts. This consistency of detail and materials ensures an overall integrity to the scheme, promotes high quality design and responds to the best of the local vernacular.

## Details & Finishes - General

Materials and detailing play an important role in establishing the character and identity of a scheme.

Buildings have been designed to reflect the traditional characteristics found in the local area. This includes roof piles, façade finishes, fenestration and other embellishments. The intention is that the proposed scheme is a modern interpretation of the traditional vernacular.

Care has been taken to ensure that buildings are designed to work as individual dwellings whilst also ensuring an overall cohesive approach. Subtle variations in finishes and detailing are introduced within the different Key Space character areas to further aide legibility.

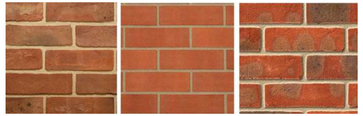
The form, finishes and detailing of the proposed buildings will give the development an attractive appearance, appropriate to its location but with a distinct identity

The examples below demonstrate various building components that are used within the proposed scheme. Reference should also be made to the 'Key Space' pages earlier in this document for more information.

***FAÇADES:***

***Brickwork***

Walls will predominantly consist of brickwork in soft red tones. Some buff brickwork will also be used for variety and punctuation.



Brickwork in tones of Soft Red

Buff Brickwork

***Weatherboarding:***

Horizontal boarding is used to clad a number of dwellings. It will be in dark colours (such as black) in the 'Woodlands Edge' Key Space to reflect a more rural character. Where used further South, it will be in light tones, such as cream, white or pale green. Boarding is used in a variety of ways ranging from the full façade to expressed gables to establish interest. Within the 'Community Hub' Key Space, boarding is used in more contemporary ways to reinforce asymmetry.

Dark Boarding

Light Boarding

Pale Green Boarding

***Render:***

Light coloured render is occasionally used to contrast with brick façades and reinforce character and legibility. It has been used for both whole façades and expressed elements to provide interest along the street scene.

Light coloured render

***Tile Hanging:***

Tile hanging is used in a number of areas to reflect the local vernacular. It is usually employed for the first floor elements of dwellings and often features courses of decorative club-tiles to add further embellishment.

Vertical tile hanging including decorative club tile courses



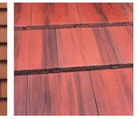
***ROOFS:***

***Finishes:***

A variety of roof finishes and colours are used to provide interest and reinforce character. These will include plain and interlocking tiles in tones of red / brown and grey. In some locations, 'Bonnet-Hip' tiles will be used where roof forms allow.

Red Plan Tiles

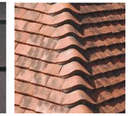
Red / Brown plain Tiles



Red Interlocking Tiles

Grey Plain Tiles

Grey Interlocking Tiles



Bonnet Hip Tiles

***Roof Piles:***

Roofs will be pitched to reflect the local vernacular with the majority of roof piles orientated such that they run across the narrowest direction of the plan area (typically parallel to the street)

Designs featuring gables that address the street are also employed to create identity and introduce a sense of rhythm. These are particularly evident on the end of terraces where they act as visual 'bookends'.

Fully Hipped roofs are also used, together with occasional 'half-hip' roof forms to further add character. These tend to be used on the larger, detached dwellings, particularly within the 'Central Open Space' Key Space.

Roof pitches vary to suit the buildings and overall street scape whilst avoiding a monotonous approach.

Pitch running parallel to the street

Gable end addressing the street

Hipped Roof

***Roof Embellishments:***

Details and embellishments are introduced occasionally to create identity. These include tile hanging or boarding within the gable element or decorative finial details.

Eaves and verges will be white finished, except those in the 'Community Hub' Key Space which will be light grey.

Tile hanging within the gable

Boarding within the gable

Decorative finial detail

***Chimneys:***

Chimneys are used occasionally throughout the scheme to reflect the traditional vernacular. They will be finished to match the dwellings they serve and mostly sit astride the ridge line. Chimney styles will be simple and embellished only by a few string courses so that they integrate with the architecture of the houses.

Chimneys featuring simple string course details sit astride the ridge line

***Fenestration:***

Windows are key components of the façade that assist in providing character whist establishing order, rhythm and proportion.

Openings generally exhibit a vertical emphasis with vertical alignment achieved where appropriate.

A range of different window styles have been used throughout the scheme to assist in establishing character within the different Key Space areas. Windows will predominantly be white finish, except in the 'Community Hub' Key Space, where they will be grey.

Side Hung Casements

Side Hung Casements with inserts

Side Hung Casements with glazing bars

Simple Side Hung Casements

Embellished fan light Casements

'Sash' style Casements

Full Height Contemporary windows

Contemporary openings in grey frames

***Bay Windows:***

Bay windows are occasionally used to enhance the street scene. These are single storey in height and either 'splayed' or 'square' in plan form.

Roofs over bay windows are either pitched or flat, with the latter mainly found in the more contemporary 'Community Hub' Key Space. Occasionally bay windows are used to support balconies over (see later).

Splayed window with pitched roof

Square window with pitched roof

Splayed window with flat roof

***Window Cills:***

Most window cills will generally be simple in style and match the windows they serve. They will predominantly be white, except where window frames are grey ('Community Hub' Key Space), where they will also be grey.

Elsewhere, window cills will consist of R.C stone (150mm deep) to create identity and character.

Simple cills in white finish

Stone cills

***Brick Detailing:***

Brick detailing is introduced throughout the scheme to establish character and identity. This includes brick heads over openings and string or dentil courses. Different styles of brick heads are employed in the different Key Spaces to reinforce the subtle differences in character.

Arched Brick Heads

Gauged Brick Heads

Soldier Brick Heads

Brick Dentil Courses

Brick String Course



***Canopy Roofs:***

Porch or canopy roofs form a significant part of a buildings façade and can be considered a focal point within the elevation. They generally address the street from which the dwelling is served and, as such, help to establish character and identity.

A number of different canopy roof styles have been used throughout that reflect those found within the local area. These mostly feature pitched roofs but occasional, simple, flat roofed ones are also employed.

They consist of varying degrees of embellishment, from simple 'lean-to' roofs supported on gallows brackets, to more elaborate designs supported on timber posts.

Care has been taken when designing the canopy roofs to make sure that they not only suit the dwellings they serve but also contribute to a varied street scene that promotes identity.

Lean to canopy on gallows bracket

Gabled canopy on gallows brackets

Canopy on posts and brick pillars

More elaborate designs

Simple flat roof canopy in grey finish

Gabled canopy on timber posts

***Front Doors:***

A range of front door styles are shown, in keeping with the dwellings they serve. All front doors will feature elements of glazing and styles range from cottage style doors to simple 4 panel doors. More elaborate doors are used on the larger dwellings and houses within the 'Community Hub' Key Space will feature more contemporary doors.

4 Panel Door

6 Panel Door

Cottage Style Door

Contemporary Door Style

***Balconies:***

Most apartments have their own balcony and some houses feature one at first floor too.

Balconies serving the apartments are of a modern design, made of metal with a grey finish. This approach ensures that the guarding is safe whilst allowing the play of shadow to add depth to the building façade.

Some dwellings within the 'Central Open Space' Key Space also feature useful balconies, allowing occupants to enjoy elevated views across the Open Space whilst establishing character. These will be constructed of white finished timber.

Balconies on dwellings around the 'Central open Space'

Metal balconies on apartment blocks

**Retail facilities:**

The proposed application includes the provision of a Retail unit at the heart of the scheme. This will be built as a serviced shell with the eventual occupier being responsible for the internal fit out and signage etc. It is envisaged that the unit will accommodate a convenience store and has been designed to suit the needs of such a facility.

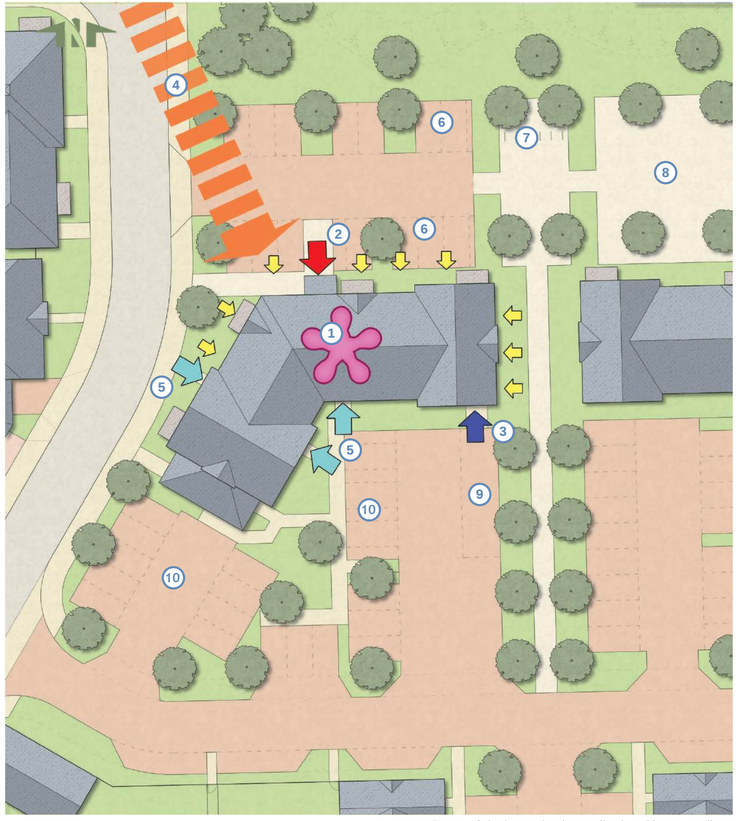
The Retail unit is located on the Ground Floor of the Eastern most block of apartments at the centre of the 'Community Hub' Key Space. Above it will be apartments, served by their own access.

It's location at the heart of the scheme will ensure that it not only serves residents of the proposed scheme but also the wider community. It will be convenient to users of the diverted Public Right of Way with pedestrians passing the facility on their way between the new major development to the East and Warnham Station. It has also been sited to be visual from Mercer Road itself, affording the ability for vehicle users to patronise the facility.

This approach means that the business should be sustainable with a good customer base in close proximity. It also promotes healthier lifestyle choices by being convenient and walkable from resident's homes.

A parking area for users of the shop is located directly in front of the facility and provides 16 spaces, together with a number of 'Sheffield' type cycle stands. A pedestrianised Piazza is also in the same area that will be hard and soft landscaped to provide a vibrant space where people can stop, meet and chat. This, combined with the retail facility, will create vitality and a sense of community.

Servicing for the retail facility will be undertaken from the rear where a dedicated delivery bay is located. Parking for the apartments is also located to the rear so as to segregate it from the visitor parking associated with the shop.




Extract of site layout showing retail unit and its surroundings.



**Legend**

1. Proposed retail facility (shop) on ground floor.
2. Public entrance to shop.
3. Servicing access to shop.
4. Retail facility is visible from Mercer Road.
5. Access to apartments seperate to retail facility.
6. Visitor parking area serving retail facility.
7. Cycle stands.
8. Pedestrianised piazza space.
9. Dedicated delivery bay.
10. Apartment parking seperate from retail facilities.

Shop window visual to public realm.

Although only provided as a 'shell' at this stage, the internal space has been designed to be suitable to accommodate a shop floor, store room and welfare facilities with a total area of 2,048 square feet. The public entrance is located to the North (front) of the building and servicing is to the South (rear). A good degree of glazing is provided along the frontage, along the Eastern façade (facing the Avenue) and elsewhere which acts as 'shop windows' to promote the business use. Signage will be provided above the windows and this will be subject to Approval at a later stage when a occupier is confirmed.


Front Elevation


Ground Floor Plan

## Accessibility & Equality

Riverdale Developments Ltd and CMYK (Planning and Design) Limited are both committed to a policy of equality, inclusion and accessibility in the delivery of their services to members of the public and in the employment opportunities afforded to existing and future employees.

They fully recognise the diversity of their customers, employees and end users, and are active in ensuring that potential sources of discrimination are addressed in both the physical attributes of the buildings they design, build or use, together with the management practices and procedures they adopt.

The philosophy of the design is that it will be fully inclusive in use, including, but not limited to, the needs of people in wheelchairs, people with disabilities, elderly people, those with sight difficulties and people with pushchairs. As such, the pedestrian routes will afford access to all areas within the site.

All dwellings have been designed to achieve Building Regulations, Part M4(2) standards, meaning that they are both assessible and adaptable for users. 5% of the affordable dwellings have been designed to achieve Building Regulations, Part M4(3) standards, meaning that they are fully wheelchair compatible. Further details on both standards are explained on the following pages.

In addition to the lifts provided, the staircases within the apartment blocks will be as shallow as possible to facilitate usage by ambulant disabled pedestrians as prescribed under Part M of the Building Regulations.

All dwellings will have level thresholds affording access to wheelchair users and all external building entrances will be level and clearly defined. Inclusive access around the site is proposed wherever possible and takes into consideration issues such as the location of the building on the plot, the gradient of the plot and the movement framework into and through the site. The latter has been designed to be visually surveyed and convenient.

APPROVED DOCUMENT M

The Equality Act 2010





**Table 1 - Minimum gross internal floor areas and storage ($m^2$)**

| Number of bedrooms(b) | Number of bed spaces (persons) | 1 storey dwellings | 2 storey dwellings | 3 storey dwellings | Built-in storage |
|---|---|---|---|---|---|
| 1b | 1p | 39 (37)* | | | 1.0 |
| | 2p | 50 | 58 | | 1.5 |
| 2b | 3p | 61 | 70 | | 2.0 |
| | 4p | 70 | 79 | | |
| 3b | 4p | 74 | 84 | 90 | 2.5 |
| | 5p | 86 | 93 | 99 | |
| | 6p | 95 | 102 | 108 | |
| 4b | 5p | 90 | 97 | 103 | 3.0 |
| | 6p | 99 | 106 | 112 | |
| | 7p | 108 | 115 | 121 | |
| | 8p | 117 | 124 | 130 | |
| 5b | 6p | 103 | 110 | 116 | 3.5 |
| | 7p | 112 | 119 | 125 | |
| | 8p | 121 | 128 | 134 | |
| 6b | 7p | 116 | 123 | 129 | 4.0 |
| | 8p | 125 | 132 | 138 | |

Table contained within the Nationally Described Space Standard prescribing the minimum gross internal floor areas required.

Legend

- Main double bedroom providing minimum area of 11.5m² and a minimum width of 2.75m.
- Double / Twin bedroom providing minimum area of 11.5m² and a minimum width of 2.55m.
- Single bedroom providing minimum area of 7.5m² and a minimum width of 2.15m.
- Built-in storage affording minimum of 3.0m² as required for a 4b/7p dwelling.


Typical floor plans for a 4-bed, 7-person dwelling identifying how compliance with the NDSS may be achieved.

## Nationally Described Space Standards

Providing adequate space within a dwelling is important to the well-being of the occupants and assists the home to be suitable for its occupiers. To ensure this, ALL dwellings (including Houses and Apartments) have been designed to meet or exceed the Nationally Described Space Standards, as adopted in 2015.

Generally, the standard requires that;

- The dwelling provides at least the gross internal floor area and built-in storage area set out in the adjacent table;

- A dwelling with two or more bed spaces has at least one double (or twin) bedroom;

- In order to provide one bed space, a single bedroom has a floor area of at least 7.5m² and is at least 2.15m wide;

- In order to provide two bed spaces, a double (or twin bedroom) has a floor area of at least 11.5m²;

- One double (or twin bedroom) is at least 2.75m wide and every other double (or twin) bedroom is at least 2.55m wide;

- Any area with a headroom of less than 1.5m is not counted within the Gross Internal Area unless used solely for storage (if the area under the stairs is to be used for storage, assume a general floor area of 1m2 within the Gross Internal Area);

- Any other area that is used solely for storage and has a headroom of 900-1500mm (such as under eaves) is counted at 50% of its floor area, and any area lower than 900mm is not counted at all;

- A built-in wardrobe counts towards the Gross Internal Area and bedroom floor area requirements, but should not reduce the effective width of the room below the minimum widths set out above. The built-in area in excess of 0.72m² in a double bedroom and 0.36m² in a single bedroom counts towards the built-in storage requirement;

- The minimum floor to ceiling height is 2.3m for at least 75% of the Gross Internal Area.

The following floor plans, indicate how these requirements have been achieved on a typical dwelling.

## M4(2) Dwellings

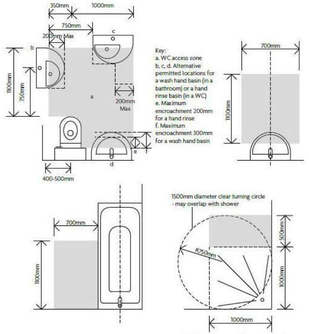
Planning Policy requires all new residential dwellings to meet the Building Regulations Requirement M4(2): Category 2 – Accessible and Adaptable Dwellings with a proportion anticipated to meet the Building Regulations Requirement M4(3): Category 3 – Wheelchair User Dwellings, where appropriate.

Accordingly ALL proposed dwellings (including houses and apartments) have been designed to meet the requirements of the Building Regulations Requirement M4(2): Category 2 – Accessible and Adaptable Dwellings.

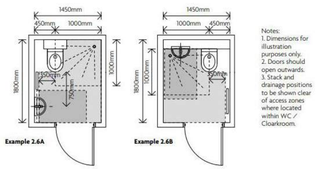
M4(2) Compliance

The requirement for M4(2) is considered to have been satisfied where a new dwelling makes reasonable provision for most people to access the dwelling and incorporates features that make it potentially suitable for a wide range of occupants, including older people, those with reduced mobility and some wheelchair users. Reasonable provision is made if the dwellings comply with all of the following.

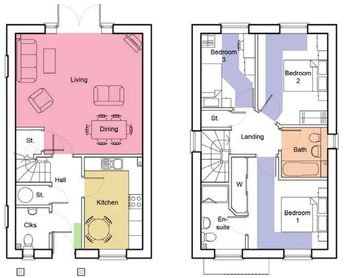
- Within the curtilage of the dwelling, or the building containing the dwelling it is possible to approach and gain step-free access to the dwelling and to any associated parking space and communal facilities intended for the occupants to use.
- There is step-free access to the WC and other accommodation within the entrance storey, and to any associated private outdoor space directly connected to the entrance storey.
- A wide range of people, including older and disabled people and some wheelchair users, are able to use the accommodation and its sanitary facilities.
- Features are provided to enable common adaptations to be carried out in future to increase the accessibility and functionality of the dwelling.
- Wall mounted switches, socket outlets and other controls are reasonably accessible to people who have reduced reach.
- A parking space serving the dwelling must be of minimum dimensions or be capable of being altered to suit.




M4(2) requirements for sanitary fittings, associated clear access zones and permitted encroachment of basins.


M4(2) requirements for WC/cloakroom layouts.




Example floor plans of proposed M4(2) compliant dwelling.

Legend

Every bedroom can provide a clear access route a minimum 750mm wide from the doorway to the window.

Minimum 300mmnib is provided to the leading edge of the entrance door maintained for a minimum distance of 1200mm beyond it.

A minimum1200mm clear space is provided in front of and between all kitchen units and appliances.

A bathroom containing a WC, basin and a bath is located on the same floor as the principal bedroom with all associated access zones.

Within the entrance storey there is a living area (which may be a living room, dining room or a combined kitchen and dining room).


Example floor plan of proposed M4(3) compliant apartment.

Legend

Every bedroom can provide a clear access route a minimum 750mm wide from the doorway to the window.

A minimum 300mm nib is provided to the leading edge of the entrance door maintained for a minimum distance of 1800mm beyond it. A minimum 150mm nib is provided to the hinge side of the door.

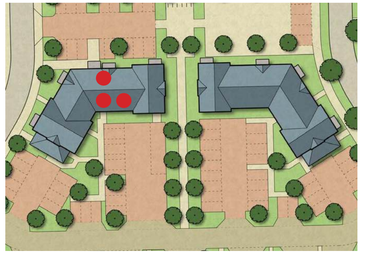
A minimum1500mm clear space is provided in front of and between all kitchen units and appliances.

Bathroom containing a WC, a basin and a bath located on same floor as the principal bedroom with all associated access zones.

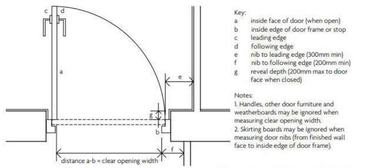
Within the entrance storey there is a living area. The minimum combined floor area of living, dining and kitchen space comply with Table 3.2 (see below).

**Table 3.2 Minimum combined floor area for living, dining, and kitchen space**

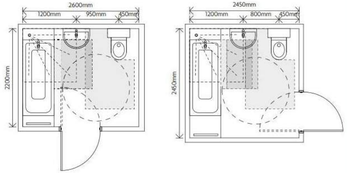
| Number of bedspaces | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| Minimum floor area m² | 25 | 27 | 29 | 31 | 33 | 35 | 37 |



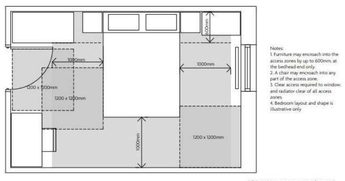
Location of M4(3) apartments




M4(3) requirements for external and internal doors




M4(3) requirements for wheelchair adaptable bathroom layouts with potential to be wheelchair accessible




M4(3) requirements for clear access zones and manoeuvring spaces in principle bedroom



## M4(3) Dwellings

Planning Policy requires 5% of all AFFORDABLE dwellings to be designed to comply with Building regulations, Part M4(3). This ensures their suitibility for wheelchair users. As such, 3 No. Apartments have been designed to meet these standards and are served by lifts.

The requirement for M4(3) will be met where a new dwelling makes a reasonable provision, either at completion or at a point following completion, for a wheelchair user to live in the dwelling and use any associated private outdoor space, parking and communal facilities that may be provided for the use of the occupants. Reasonable provision is made if the dwelling complies with all of the following:

- Within the curtilage of the dwelling or the building containing the dwelling, a wheelchair user can approach and gain step-free access to every private entrance to the dwelling and to every associated private outdoor space, parking space and communal facility for occupants' use.
- Access to the WC and other accommodation within the entrance storey is step-free and the dwelling is designed to have the potential for step-free access to all other parts.
- There is sufficient internal space to make accommodation within the dwelling suitable for a wheelchair user.
- The dwelling is wheelchair adaptable such that key parts of the accommodation, including sanitary facilities and kitchens, could be easily altered to meet the needs of a wheelchair user.
- Wall mounted switches, socket outlets and other controls are reasonably accessible to people who have reduced reach.

## Sustainability Strategy

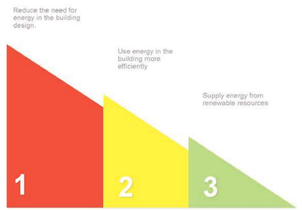
Sustainability is an essential component to the creation of future communities. All levels of policy now place sustainability at the forefront of planning.

As such, the scheme has been designed to provide a number of opportunities to enhance its sustainability credentials and these include:

## High Performance Construction Methods

It is widely acknowledged that priority should be given to the 'Fabric First' approach of design, where the lifetime energy consumption of the building is reduced by the use of thermally efficient construction techniques. This approach will be employed for the scheme and will include measures such as:

- Walls, floors and ceilings that consist of energy efficient design that includes high levels of insulation
- Detailing and construction that minimises heat loss through 'thermal bridging'
- High Efficiency double-glazed windows throughout.




The energy hierarchy describes how adopting a fabric first approach can acheive the most effective way to reduce a dwellings CO2 emissions.

## Purging Excess Heat Build Up

With increased energy efficiency being designed into dwellings, there is a risk of overheating during the summer months. This can impact on residents with effects ranging from mild discomfort to serious health risks. As such it is important to mitigate the risk of overheating and this can be done in several ways:

Thermal Mass – Where the building is constructed of materials with a high thermal mass, it has the ability to absorb heat during the day which helps to maintain a more comfortable temperature. The heat is then released back into the building at night when it is more appropriate.

- Ventilation - By opening windows, heat can be purged quite rapidly from buildings, so, where appropriate to the design, all rooms will feature openable windows.
- Mechanical ventilation – Where natural ventilation is not possible, due to design, security or noise, mechanical ventilation will be installed.
- Heat exchange units – Where appropriate, heat exchange units could be installed that take the air from rooms where temperatures tend to be higher (such as kitchens and bathrooms) and recirculate it to cooler rooms.

## Water Consumption

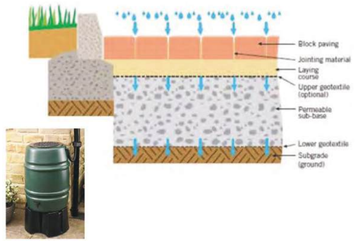
The water consumption of a dwelling has a significant impact on both the operational running costs and energy use (for heating it). As such, a number of measures will be introduced that seek to reduce water consumption to 110 litres per person per day and these will include:

- Installing sanitary fittings with lower flow rates. Recommended standards to achieve an overall reduction are:
  - Kitchen taps - 4 litres per minute
  - Basin taps - 3 litres per minute
  - WC flushes - 3/6 litres
  - Showers - 9 litres per minute
  - Bath volume - 160 litres
- Installing appliances with low consumption. Recommended standards to achieve an overall reduction are:
  - Dishwasher consumption - 1.25 litres per place setting
  - Washing machine consumption - 8.17 litres per Kg
  - NOTE: All appliances should also aim to achieve a high overall energy efficiency.
- Installing water butts to rainwater pipes that will harvest rainwater for garden use in lieu of using tap water.

## Conservation Of Rainwater

Where conditions are appropriate, Sustainable Urban Drainage Solutions (SUDS) will be employed that avoid rainwater being drained through the sewer system. These include measures such as:

- Permeable surface finishes to roads, paving and parking areas.
- Soft areas of landscaped designed to take rainwater 'run-off', such as shallow depressions, ditches and swales.




## Electric Vehicle Charging

All dwellings will be provided with an active Electrical Vehicle (EV) charging point. These will be either wall mounted on the buildings next to driveways or will be free standing (pedestal mounted) in front of parking spaces.

## Internal Daylight

The amount of natural daylight in a room can greatly influence the quality of life enjoyed by the occupants. The amount of daylight in a room can be assessed using the Average Daylight Factor (ADF) method. The BRE guidance on this states that rooms should aim to achieve the following ADF standards:

- Kitchens - 2%
- Living Rooms - 1.5%
- Dining Rooms - 1.5%
- Bedrooms - 1%

Whilst these standards are not mandatory and care needs to be taking with glazing to ensure that thermal heat build up is not introduced through excessive glazing, the dwellings that form part of this application provide good levels of daylight to all habitable rooms.

## Lighting

When artificial lighting is required, it is important that fittings are not high energy consumers from both an affordability perspective and from a sustainability perspective. As such all light fittings will be installed with low-energy, long life bulbs.

## Resources And Materials

Where possible, materials used should be resourced from sustainable suppliers and priority will be given to materials that can, or have been, recycled or reclaimed.

Efforts will also be made to manage and reduce construction waste and this will be controlled by the production of a Site Waste Management Plan.

# 9.0 Conclusion

9.1 Conclusion

## Conclusion

This document explains fully the methodology involved in the preparation of the Full Planning Application for the residential development at Mercers Road, Horsham.

The proposal delivers a landscape led scheme that is suitable for the settlement edge setting of the site. A generous amount of public open space and green infrastructure establishes the character of the scheme whilst enhancing the bio-diversity of the site.

The built form is subservient to the landscaping and is set back from the site boundaries to protect the 'edge of settlement' setting. The scheme delivers 304 dwellings of varying size and tenure, 10% of which are affordable.

The scheme design provides a legible and permeable environment that is easy for residents to understand and navigate, ensuring good levels of connectivity are available within, through and beyond the development.

Therefore it can be concluded that:

The proposal takes account of the need to make the most efficient use of the land, whilst balancing this with its impact upon the local environment.

The scheme will make a significant landscaped contribution to the local area.

A permeable layout has been provided ensuring that good levels of connectivity are available within, through and beyond this phase of development to the surrounding open spaces which afford excellent recreational opportunities.

It has been designed sympathetically to its environs which will ensure that the development integrates with the neighbouring residential areas.

The development provides for a good quality scheme which assists in meeting private and affordable housing needs.

In summary the development will provide:

- Quality housing
- Sustainable urban drainage system
- Secure car parking
- Personal security
- A legible environment
- Sustainable development
- Permeability and connectivity
- Pedestrian priority
- Attractive Places
- Creation of neighbourhood community
- Positive response to periphery
- Privacy
- Integration
- Attractive buildings