5.0 Movement Strategy & Street Typologies

5.5 Informal Private Drives & Shared Surfaces

This street typology has 2 distinct characters depending on its location:

A. Forming the informal sensitive rural edge frontage to the Hillside.

More informal in character, predominantly detached homes set along a gently undulating private drives create a lower density edge to the sensitive rural setting at the North of the site.

No consistent building line and a mix of different house types create a varied and interesting streetscape.

Parking on plot behind the building line.

Ornamental planting and grass with sweet chestnut cleft timber trip rail to front garden boundaries.

B. Part of the semi formal frontage along the Green Park edge.

More formal groupings of smaller homes within the southern development parcel fronting the Green park landscape corridor.

Consistent building line and street alignment supports semi formal frontage character.

Parking on plot behind the building line and in front on street.

Estate fencing with no hedge to small front gardens.

5.0 Movement Strategy & Street Typologies

5.6 Pedestrian Connections & Cycle Strategy

The layout has been designed to be as permeable as possible for pedestrians and cyclists. The key principle footpath connections that run North South along the greenways to the Hillside are provided as shared routes with dedicated connections into and across these key green corridors and into Green Park.

As well as long the secondary street, a separate pedestrian connection into the adjacent parcel is proposed along the Eastern boundary to ensure phase wide connectivity.

The North South connecting route along the Western edge sits within this parcel until the southern edge when it runs within the green corridor due to technical constraints in this area.

A segregated footpath cycleway is provided along the spine road , cycle movements along the secondary street within this phase are on road. This is due to the residential character and nature of the street as set out in the DLS, slow vehicle speeds are proposed, and the number of direct drive accesses would make a segregated cycle route less safe.

5.0 Movement Strategy & Street Typologies

5.7 Car and cycle parking strategy

Across the site parking has been designed in accordance with the typologies set out in the DLS so as to not dominate the street:

- Parking courts to apartment buildings.
- On plot parking behind the building line with a clear number of spaces provided.
- On street with a maximum run of 4 spaces before a landscape strip provided.
- Parallel visitor parking bays on street.

The amount of parking has been proposed in line with the adopted policy set by West Sussex County Council as set out below:

Table 2: Residential Parking Demand (spaces per dwelling)

Number of bedrooms	Number of habitable rooms	Parking Behaviour Zone				
		1	2	3	4	5
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

Using the calculation method set out in the SPG (PBZ 2, garages count as 0.5 space)

Policy parking requirement = 364 resident spaces
39 visitor spaces
TOTAL = 403 spaces

Parking provided = 374 resident spaces
36 visitor spaces
TOTAL = 410 spaces

Cycle parking is in garages (sized to suit) or secure stores for apartments. Homes without garages are provided with sheds. Electric Vehicle charging points will be provided on the site with the following strategy. L&G Strategic have secured a limited number of commercial charging points, due to the limited available electrical capacity site-wide; at present there are no communal chargers designed for this phase, however all units that have either a driveway or garage allocated to a plot will be able to provide a 7.2KW smart car charger.

6.0 Architecture & Materials

6.1 Materials Strategy

The neighbourhood has a consistent limited palette of materials as set out in the Design & Landscape Strategy, drawing references from the local vernacular.

This materials strategy supports the character of the different parts of the site that has been set by the street hierarchy, nature of the frontages and the pattern of built form to ensure it has a varied but harmonious character. The mix of materials is controlled to reflect the level of formality as it reduces progressing from South to North.

Architectural Context

Precedent

Early concept sketch view

6.0 Architecture & Materials

6.1 Materials Strategy

Primary Street and Green Park Frontage:
Semi formal frontage with repeated house types and consistent building line. - Red brick with Gable features of either black or natural colour timber effect cladding, balconies to apartments.

Secondary Street:
Semi formal frontage with repeated house types and consistent building line. Buildings elevated as groups, in either brick and black timber effect cladding or brick and tile hanging.

Neighbourhood Core:
Informal Mews streets with short runs of terraces and semi detached homes. Predominantly brick with limited use of timber effect cladding on corner turning buildings.

Informal open space frontage:
Part of the neighbourhood core, the open space is framed by repeating pairs of house types of brick and tile hanging.

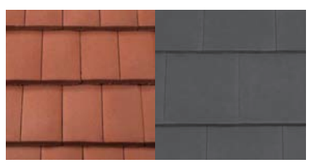
Informal and sensitive frontages:
The rural edge character is reinforced by using a mix of finishes from the limited palette pepper potted across the frontage. A mix of brick, brick with timber effect cladding or brick with tile hanging, with no more than 2 adjacent plots the same finish.


Main Bricks : Red orange multi tones


Detail Brick


Cladding : Black & natural light sand


Tile Hanging


Roof Tiles: Interlocking plain tile format & Slate

6.0 Architecture & Materials

6.2 Street Scenes

Elevation A (along Spine Road)
1-200

Elevation B-B
1-200

Elevation B-B (continued)
1-200

Elevation C (Tertiary Road)
1-200

Site Development Layout
Scale 1:1000

6.0 Architecture & Materials

6.2 Street Scenes

Elevation D (Tertiary Road)
1-200

Elevation E (Tertiary Road)
1-200

Elevation F (Secondary Street)
1-200

Elevation F cont'd (Secondary Street)
1-200

The composition and arrangement of dwellings along the street, and the material choices within each streetscape have been considered in order to create a coherent and interesting street scene and to support the legibility and character of the neighbourhood.

Site Development Layout
Scale 1:1000

6.3 Illustrative Views

View West along Primary Street

6.3 Illustrative Views

View North along Secondary Street

6.0 Architecture & Materials

6.3 Illustrative Views

View North along Hillside Edge

7.0 Landscape & Public Realm

7.1 Landscape Strategy

The landscape proposals have been prepared in accordance with the Phase 1 Design and Landscape Strategy submitted to discharge Condition 8 of the OPP.

Planning Context - The Design and Landscape Strategy

The Design and Landscape Strategy sets out a strategy to guide and inform the provision of landscape throughout Phase 1A-E. With reference to this RM Area the key features of the strategy include the design principles set out for streets, and the pocket park.

Existing Vegetation

This RM Area is bordered by existing vegetation which includes Ancient Woodland, Historic Hedgerows and arable land. A tree survey has been provided by PJC which provides details of the condition of the existing trees and vegetation. Listed below are some of the key design principles in respect of existing vegetation, as set out in the DLS.

• Retain and enhance the Ancient Woodland copse which falls within the site boundaries.
• Retain and enhance the Historic Hedges which traverse the site.
• Retain and enhance the hedge planting either side of the public right of way.

Planting Proposals

In accordance with the guidelines set down by the DLS, a number of planting palettes have been developed for use across the residential area, to reflect the character of the adjacent host landscapes, and the proposed character of the various 'neighbourhoods' within this phase.

The proposed planting palettes are as follows:

Planting Mix 1 - The Primary Road Frontage

Medium growing trees are proposed to the boundary of residential properties in combination with formal hedge planting and estate rail fencing along Moat Road and Northern Strategic Landscape and to provide the development with a distinctive frontage.

Planting Mix 2 - The Secondary Road

Medium size growing trees in planted verges are proposed to the secondary road, to provide a soft foil to the residential development on either side. Verges will be planted and act as informal swales with species selected that are tolerant of a variety of conditions. Hedge planting will provide front garden boundaries where space permits, with ornamental planting and grass verges elsewhere.

Planting Mix 3 - Tertiary Roads Close to 'Wetland Areas'

A more natural 'riparian' character to property frontages close to and facing onto Green Infrastructure areas, to reflect the proximity to the ponds and ditches.

Planting Mix 4 - Tertiary Roads in the Northern Areas of the Phase

A more natural 'woodland' character to the street frontage to reinforce the character of the adjacent hillside and mature hedgerows.

Planting Mix 5 - Residential Courts

Smaller growing tree ornamental species, together with ornamental planting to dwelling frontages, which reflect the more intimate scale of setting.

Planting Mix 6 - Tertiary Road Facing the Hillside

Ornamental planting to property frontages with a higher percentage of grasses to reflect the proximity to the hillside and open aspect.

Ecological Enhancements

The DLS sets down a number of key principles in respect of ecological enhancements which include:

• Protect retained habitats and species.
• Create new opportunities for local wildlife on the site.
• Where possible retain existing trees along the eastern, southern and western boundaries.
• Use predominantly native tree species in proposed tree planting strategy to boundaries and Green Corridors.
• Provide a network of tree avenues and new planting to create ecological corridors and connectivity through the site for the benefit of foraging birds, commuting bats, and other wildlife.
• Plant fruit and flower bearing trees to provide a valuable food resource for bees and other wildlife

Boundary Treatment Proposals

The DLS requires that the strategy for the provision of boundary treatments seeks to ensure treatments reinforce the rural character of the site, and reinforce the design of boundary treatments which give the villages in this area their distinctive character.

Street Furniture

A minimum of two distinctive palettes of street furniture should be used to reinforce the hierarchy of spaces through the development, using complementary materials to reflect the rural and historic context of the development.

Pocket Park Design Principles

The pocket parks are to provide a green focal point and social meeting place in the heart of the larger residential parcel areas. They are to be attractive and simple 'greens' with open edges, with a single large growing legacy tree to provide a green foil to development, or group of smaller growing seasonally attractive trees, and limited seating.

8.0 Sustainability

8.1 Sustainability Strategy

The Land North of Horsham RM Area 2 will follow a fabric first approach to sustainable construction, demonstrating that improvements in insulation specification, a reduction in thermal bridging and unwanted air leakage paths, together with further passive design measures will ensure that energy demand and consequent CO2 emissions are minimised. Calculations demonstrate that the design specification will deliver energy savings of approximately 2.24% over the Part L 2013 standards.

A range of potentially appropriate low carbon energy technologies have been assessed for feasibility in delivering a reduction in energy demand in line with planning policy requirements, concluding that solar PV would constitute the preferred technology for this site. However, it is demonstrated that provision of renewable energy systems is not required as the site already meets its energy requirement through fabric measures alone.

In compliance with planning policy, the site has taken into consideration a number of wider sustainability issues, including mitigation of climate change, biodiversity and sustainable travel. The predicted average water use has been calculated in terms of litres/person/day and is below the 110 litres/person/day required to meet Planning Policy.

Mitigating the Effects of Climate Change

The impacts of construction materials range from the depletion of natural resources to the greenhouse gas emissions and water use associated with their manufacture and installation.

Within the development choices will be made in order to reduce the consumption of primary resources and use materials with fewer negative impacts on the environment, including but not limited to the following:

- Use fewer resources and less energy through designing buildings more efficiently,
- Specify and select materials and products that strike a responsible balance between social, economic and environmental factors.
- Improve environmental, economic and social sustainability of construction products by recognising and encouraging the selection of products with responsible sourcing certification.
- Wherever possible materials will be diverted from landfill through re-use, recycling, return to supplier or recycling.
- In addition to promoting the use of public transport, cycling is being encouraged through the provision of accessible and secure cycle storage.

Sustainable Drainage and Flood Prevention

Surface water arising from a developed area will as far as practicable, be managed in a sustainable manner to reduce the surface water flows arising from the site, reducing the flood risk on the site itself and elsewhere, taking climate change into account.

A surface water drainage strategy has been produced, that adheres to appropriate guidance, to ensure that the system can cope with a 1 in 100 year + 30% climate change storm event.

Specific drainage features will include; permeable pavement to driveways, aco-drains where driveways/access paths fall towards properties and appropriately spaced gullies in the road. All networks will be hydraulically modelled within appropriate software to ensure flood criteria are met.

To ensure appropriate water runoff is achieved it will be determined that the road alignment, gradients and drainage measures are sufficient, thus minimising chances of standing water and localised flooding.

There will also be consideration towards appropriate 'exceedance' flow paths which are the paths that surface water will take in an exceedance event e.g. a storm larger than the designed storm event or in the case of a failure or blockage of the surface water system. These paths allow the exceedance flows to be routed away from properties in this event to enable it to follow the topography of the site.

The site will utilise water butts which will collect rainwater from property roofs, which can be used for garden watering or car washing, before the ultimate discharge into the network.

Biodiversity

In order to protect and enhance the ecology of the site, strategies have been developed to enhance opportunities for biodiversity through the introduction of extensive planting on site. Landscape proposals have been designed as part of the application.

A programme of ecological measures and enhancements have been developed, including bird boxes (for swift, house martin and house sparrow) and bat boxes installed throughout the site, the implementation of hedgehog highways through the site and the inclusion of a wildlife garden as well as the avoidance of road gully pots (to prevent trapping newts) will be encouraged.

Water Conservation

Water will be managed effectively to reduce the water consumption associated with the proposed development. Internal potable water consumption will be limited to 110 litres/person/day in accordance with the standards contained within Approved Document G.

9.0 Conclusion

The proposals for RM area 2 has been designed to support the ambition for Land North of Horsham as set out in the OPP and DLS, to deliver a sustainable community that is welcoming, inclusive and built to last.

A neighbourhood created through spaces and buildings that are rooted in their environment and local context, and take advantage of the unique landscape setting of this site.

9.0 Appendices

Appendix 1 Design Development

The proposal for RM area 2 have been developed over a number of months. The layout has been through a number of iterations with amendments made in relation to the emerging Design & Landscape Strategy Document.

Initial sketch proposals

Developed sketch proposals

Pre-app proposals

9.0 Appendices

Appendix 1 Design Development

A Pre-Application meeting was held on the 20th July 2020 with the local authority. Their comments with our response is set out below, and this has informed the final proposals.

HDC Pre-App Comment	Design Team Response
The path behind Western Block 5 lacks permeability and should be connected to a road.	This path now continues around that block to connect to the Spine road. It is located within the greenway corridor at this point due to technical constraints
Concern that the south eastern tertiary link could become a rat-run.	Localised narrowing and change of surface finish proposed to indicate tertiary street and give feel of private drive whilst retaining access.
4 northern 'T' ends appear large as tarmac stops. Is there opportunity to reduce down their scale?	Shape revised and reduced where possible but we are dictated by tracking requirements of refuse vehicles and fire tenders.
Density change at northern fringe does not come across- it's about sense of greater spaciousness- longer front gardens, less ordered building line	Layout revised as requested
View south towards 7 does not truncate at an interesting stop, contrary to DLS.	Layout revised as requested
Terrace of houses – how are bin and cycle stores to be managed? Rear alleys should be avoided	Layout revised as requested where possible, terrace of 4 omitted but terraces of 3 retained with amendments to rear garden access. See next page.
Need to identify opportunities for marker buildings	Apartment buildings identified as marker buildings in accordance with DLS
Central circle feature gives good sense of place and reference point. Consider boundaries and access, poss. add another pair of same houses for more formal feel	Reflected in landscape proposals. Not enough space to introduce another pair of same houses without creating negative corner behind
Street trees – as discussed, we would like much more trees to be included. Ideally, you should aim for 1 for every 2 dwellings.	Reflected in landscape proposals.
Disagree with DLS limit on one side for secondary street- opportunity for smaller ornamental trees to other side if space is slim.	Verge on one side to maximise trees in relation to vis splays. Additional trees added elsewhere. Reflected in landscape proposals.
Flat blocks - will ground floor flats have their own garden space?	Small terrace for each flat , landscaped garden areas where possible
Recessed parking bays to houses leave half spaces to footway. This risks cars will ad hoc park on these spaces creating worse clutter.	Either pushed back or pulled forward where no other technical constraints. Some remain.
Visitor parking needs to be included.	Included
Architectural language not clear, avoid 'standard' verges etc and mean windows. Roof needs to be grey to match, suggest minimal/no verge to give contemporary styling.	High quality traditional architectural language proposed with more contemporary detailing on the apartments. Roofs to be grey where black/grey boarding proposed
Add Bat and Bird Boxes as required	Will be added where required

Pre-app proposals

Pre-app layout showing vista terminating with parking area when viewed from Hillside.

Amended layout showing vista terminating positively with built form.

Massing view showing vista terminating positively with built form.