



APPLICATION FOR RESERVE MATTERS

**126 DWELLINGS
NORTH LITTLEHAMPTON, WEST SUSSEX**

DESIGN STATEMENT

March 2017

CONTENTS

Introduction

Site Analysis

Design Principles

Materials and Finishes

Architectural Details

Access and Parking

Landscape

Sustainable Drainage Design

Sustainability

Conclusions

Appendix 1 – architectural details

INTRODUCTION

The purpose of this document is to provide the design rationale behind the next phase of residential development at the North Littlehampton Strategic Development Area (NLSDA).

This next phase of development, which comprises the second phase of development by Persimmon Homes, is being brought forward under outline planning consent LU/44/11. It seeks to provide 126 dwellings on land east of the proposed Lyminster Bypass and adjacent to the local centre that will be delivered under separate reserve matters applications. It is known as Parcel C1 and part of Parcels B2, B4 and C2.

This document has been prepared having full regard to the design and access statement that was approved with the outline consent. In addition regard has been had to the more detailed design principles provided in the Development Framework Document (DFD) that has been submitted under s73 application LU/182/15/PL. This ensures that the proposed development has full regard to the broad principles established at outline stage while ensuring continuity in design with the future reserve matters applications that will be brought forward under the s73 consent when it is achieved.

Turning to the conditions that this document relates to:

- Condition 5 requires details of the materials and external finishes of proposed buildings and surfaces and means of enclosure
- Condition 7 requires landscaping details to be provided
- Condition 8 requires the submission of a design statement that demonstrates how the objectives of the approved Design and Access Statement will be met and provides various details that need to be provided
- Condition 31 requires details of sustainable energy design to be provided.

In addition details relating to architectural finishes will be provided in **appendix 1**.

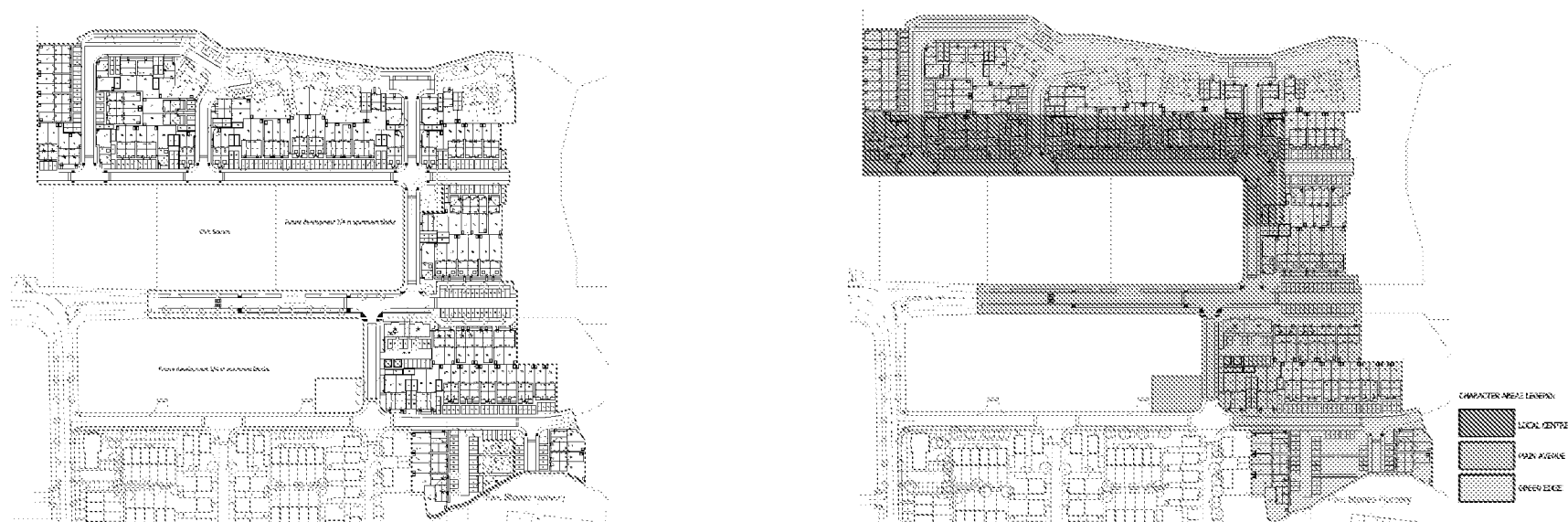
This document needs to be read in conjunction with the submitted drawings, which are detailed on the submitted drawing schedule and all other supporting documentation.

Overall, this document will provide a clear and unambiguous structure of the design approach taken to this phase of residential development.

SITE ANALYSIS

The application site subject to this reserve matters application is located within the western half of the overall development at the NLSDA. It comprises land east of the proposed Lyminster Bypass and adjacent to the local centre. It is located next to and wrapping around the Local Centre, which will be delivered at a later stage, with the Main Avenue running through it. These areas are detailed in the s73 DFD as being of higher density urban development. The main avenue and the adjacent future retail development have been key features determining the form of development in this application.

The outer edges of the application site fall within the Green Edges character area, where a softer more rural design approach is required to both reflect the adjoining green areas (the existing Black Ditch to the north and the Central Wetland Area to the east) and provide a clear transition between these open areas and the built form of the development site.



DESIGN PRINCIPLES

Relevant Planning Policy Considerations

The Development Plan for the application site comprises the saved policies of the adopted Arun District Local Plan 2003. Currently, ADC is preparing its emerging Local Plan with proposed modifications likely to be published Spring / Summer 2017. Given that the emerging Local Plan is relatively well-progressed through the preparation process, it represents a material consideration of limited weight in the determination of the planning application.

Relevant design policies are as follows:

Saved Local Plan Policy

Policy GEN7 states that planning permission will only be granted for schemes displaying high quality design and layout and that development proposals must be accompanied by an illustrated written analysis of the site and its immediate setting, together with its relationship with the relevant townscape, landscape, wildlife and movement characteristics of the wider area. This Design Statement provides the information necessary to demonstrate compliance with the various requirements of this policy. In general the proposed layout and design of the dwellings accords with the broad principles detailed in the Outline Planning Permission (as detailed within the Design and Access Statement and the approved parameter plans). As such it fully takes into the consideration both existing site characteristics (which predominately comprise the surrounding landscape) and the design principles approved with the illustrative master plan and parameter plans. In addition, as previously detailed full regard has been had to the more detailed design principles outlined in the s73 DFD. While this document has yet to be formally approved, the principles stated within it have been reviewed and discussed by the District Council, Town Council and Littlehampton Steering Group as part to the s73 process and therefore comprise principles that are understood and supported.

Emerging Local Plan Policy

Policy D SP1 states that all development proposals should be of good quality and demonstrate a high standard of design. Development proposals should have been derived from: a thorough site analysis and context appraisal; adherence to objectives informing sustainable design (inclusivity, adaptability, security, attractiveness and usability, health and wellbeing and climate change mitigation); and the influence these objectives have on the form of the development. All development proposals must consider the efficient use of land, layout, landscape and its setting, density, mix, scale, massing, materials, finish, architectural details and nearby habitats.

Policy D DM1 confirms that when considering any application for development the Council will have regard, where relevant, to character; appearance / attractiveness; impact; innovation; adaptability; crime prevention; trees and woodland; solar gain; public realm; layout – movement; layout – legibility; public art; density; and scale.

This Design Statement demonstrates compliance with these policies.

Policy D DM2 sets out internal space standards for new dwellings which are to be of an appropriate size to meet the requirements of all occupants and their changing needs. As this proposed development is submitted under an already approved outline planning permission it is only necessary to deliver proposed dwellings in accordance with standards prescribed by the outline consent. In this regard full consideration of and compliance with the standards cited in the s106 agreement attached to the outline consent have been had.

Policy D DM3 sets out external space standards for the provision of useable private amenity space (excluding parking and turning areas) in new residential development, including back gardens, roof terraces, balconies and communal gardens in apartment developments. Compliance with this policy is achieved with the proposed development.

Compliance with the Outline Planning Permission and s73 Development Framework Document

Condition 6 of outline planning permission LU/47/11 requires that the development at the North Littlehampton strategic development site is to be carried out in substantial accordance with the Illustrative Masterplan (Drawing No. GR.L-002 Rev A) and the Design and Access Statement incorporating Design Guidance dated February 2011, approved as part of the outline permission. In addition the s73 DFD provides more specific design principles. Full consideration of all these documents has been had in the development of the application proposals as will be detailed where relevant in this statement.

Site Layout

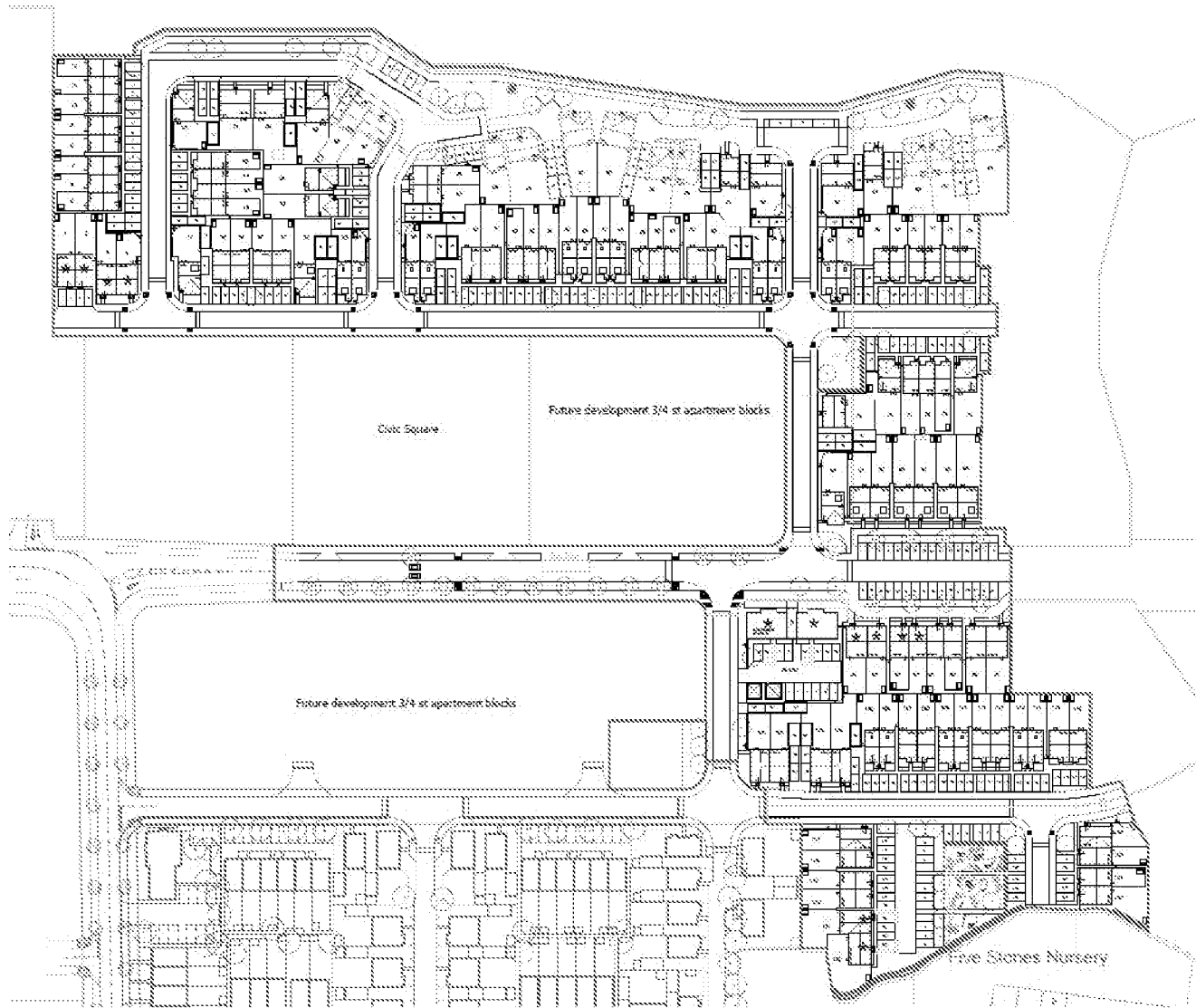
The proposed development for 126 dwellings. A key aspect of the proposed layout is that this phase of development will bring forward the first part of the Main Avenue which leads from the Lyminster Bypass. When the development is completed the Main Avenue will form the main Spine Road of the development, travelling from the Lyminster Bypass, through the Local Centre, over the Central Wetland Area and the main residential element of the site providing access to the new School Site and community / youth facilities. As a consequence it is key that built form is appropriately orientated along the Main Avenue in a strong regular form. It is an urban feature of the development and as such development has been designed to front on to it and be urban in character and appearance. Development behind the Main Avenue is primarily residential in character and is softer in form with green spaces. This form will become more irregular and rural in character as the residential areas move to the green edges of the Site.

The dwellings provided will be a mix of 2 / 2 ½ storey houses providing 2 - 5 bedrooms, and a 3 storey apartment blocks comprising 1 and 2 bed units. Proposed houses will be 2 and 2 ½ storey houses. In accordance with the s73 DFD 2 ½ - 3 storey dwellings have been provided where suitable in the streetscenes, predominately along the Main Avenue and in key locations with the main development parcel (e.g. at key focal points). Key to building height will be ensuring that the scale of development appropriately steps down along key frontages and a suitable transition is provided from the Main Avenue / Local Centre to the Green Edges character areas.

The apartment block is located along the southern boundary of the Main Avenue. In the long term it will form part of a block of apartments around the Local Centre area. In accordance with both the outline planning consent, the s73 DFD and the amended parameter plans the highest density of development is proposed along the Main Avenue and around the Local Centre, hence the position of the apartment block and the urban design of the proposed built form in this area. As well as the apartment block smaller houses are proposed, arranged in small clusters of dwellings or linear terraces. As development moves out from the Main Avenue towards the Black Ditch to the north and the Central Wetland Area to the east the character changes to that of the Green Edges. As such a lower density is proposed with larger detached and semi-detached houses. Design and boundary treatments will soften and a more open, village character created.

Two LAPS and one LEAP are also provided as part of the proposed development, and these will provide key areas of informal and formal play space for the new residents. One of the LAPs is located within the Local Centre character area, with another located along the northern boundary. The LEAP is located towards the southern boundary.

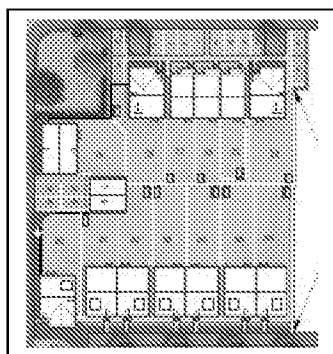
The relationship with the Black Ditch to the north has also been considered as part of the proposed layout. The landscape plan provided with the planning application illustrates that a footpath will be provided between the proposed residential development and the Black Ditch, which is in accordance with approved parameters plans and the principles detailed in the s73 DFD. The intention of the footpath is to facilitate access between the various elements of the overall development and provide a green / rural aspect to movement patterns. However, it is important that the Black Ditch remains a natural area and pedestrian movement contained to the development. As such a strong medium level landscape buffer along the footpath is provided which will ensure the visual amenity provided by the Black Ditch is retained, but that people are encouraged to stay on the footpath which runs around the perimeter of the site.



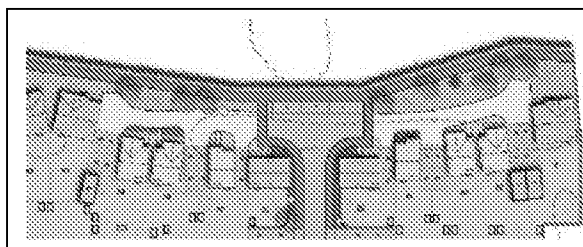
Block Form

The outline masterplan scheme proposed a very clear structure of continuous public frontage overlooking public routes and spaces with private rear areas predominantly backed onto new or existing private rear areas. This overall concept has been carried through into the detailed scheme. Strategic planting reinforces the building line with regular trees used to reinforce and enliven the street scene where possible and relevant to the character that has been established. Regard has been taken to the nature of the spaces that need to be created with specific consideration given to the character areas that have been specified in the s73 DFD. As a result the use of a regular rectilinear and square forms has been used for parts of the development that fall within the higher density Local Centre and Main Avenue character areas, with a looser more fluid form created for the areas that fall within the Green Edges character area. The individual development parcels provide the opportunity for localised residential block variations, including:

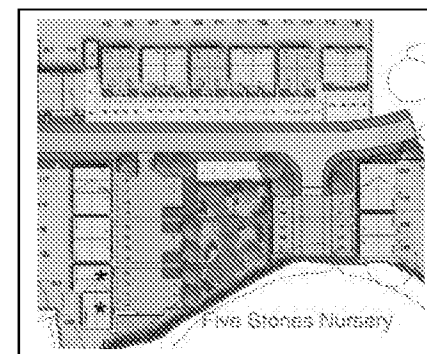
Back-to-back (this is a traditional arrangement where dwellings back onto one another separated by private rear gardens, parking is provided on plot or frontages)



Private Drives (where dwellings are grouped together often in a more irregular format parking is usually on plot)



Courtyard (where dwellings are arranged around courtyard parking and / or open space)

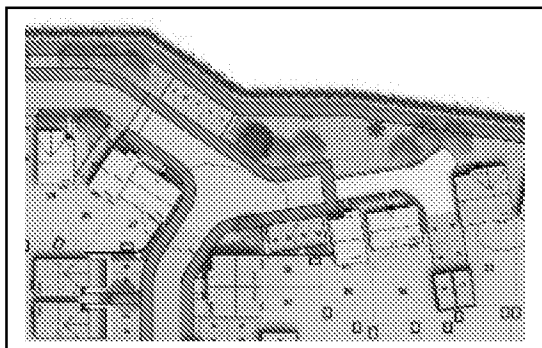


Frontages will provide activity to the street and will assist in defining the streets and spaces that are to be created. They are defined by either key focal buildings or spaces and the built form has been designed to accord with these concepts. Pedestrian legibility is a key design concept that all proposed frontages have embraced. Streets have been design to be overlooked with development providing activity to the streets and spaces. Corner buildings provide fenestration to their two outward looking edges to provide natural surveillance and avoid blank facades with the street scene. They are defined by their scale, change in material, boundary treatment, setback, colour, or detailed design.

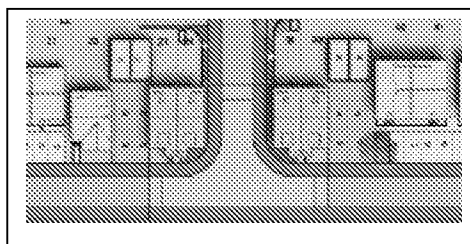
Structure

The structure that has developed as a result of the block form created provides for a clear placement of dwellings. A traditional approach has been taken where dwellings front onto roads with a back-to-back structure. This optimises use of the land parcel whilst allowing a clear and identifiable dwelling / parking relationship to be created. It also ensures activity and overlooking of the public realm while allowing for private rear gardens to be provided. To the north and east the structure has softened, particularly where dwellings overlook the key green spaces of the Black Ditch which allows for a different character which adds interest to the overall structure of the application site. To vary the formality of the grid structure shared surfaces and private drives, parking court yards and raised tables are provided which varies the width of roads and enables different surface and boundary treatments to be established which provides further variety in the street scene areas provided.

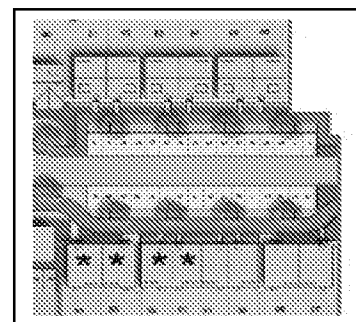
Private Drives



Raised tables



Parking Courtyards

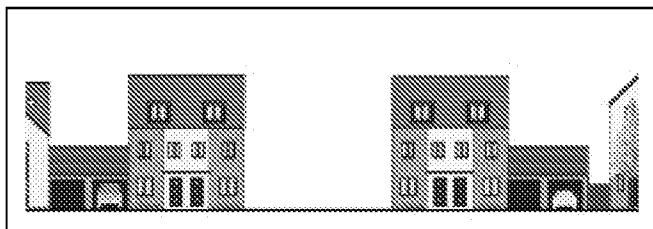


The Main Avenue and Local Centre character areas provide the opportunity for taller buildings. This is due to their relationship and proximity to the retail element of the Local Centre which will be 3 / 4 storey's in height. It is also important to provide a strong sense of place along the Main Avenue and having appropriately scaled built form is key to this. The aim of the taller elements is to reinforce and support the strategic status of the area. In particular the Local Centre will be the centre of economic and retail activity and therefore building height will reflect this.

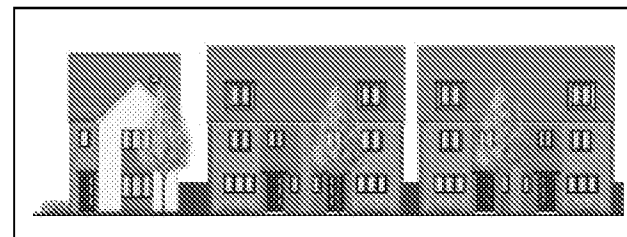
In addition focal buildings will act as markers within the development. These have been located in and around the Local Centre character area and on locations along the Main Avenue. They operate as gateway features used to define changes in character / design approach. They have been designed to be appropriate to the area in which they are located and be taller more structural buildings that provide an element of consistency and integration for the development. They are between 2.5 -3 storeys in height.

Local focal buildings have also been provided within the main development parcel on key corners and vistas to provide local legibility. They will act as local points of interests and can be used to define local spaces. They are 2.5 storeys in height.

Focal Buildings – acting as gateway features



Local Focal Buildings – creating key vistas



Spaces

The Illustrative Master Plan demonstrates that a clear demarcation between public and private spaces must be achieved. For the development site this has been interpreted as follows:

- Public areas - are open spaces with designated areas of movement defined by footpaths. All of these areas are overlooked by surrounding development and will be managed by a management company.
- Semi-private spaces - are the areas which are shared, but which are principally for the new residents of the development, such as parking areas and shared surfaces. These areas are accessible to residents and demarcated with a change of material and often a strong sense of enclosure, defined by the building forms that also provide natural surveillance to the space.
- Private spaces - are defined by the use of landscaping and built form. Private residences will have privacy strips or front gardens which are defined by walls, fencing, hedging and / or planting. Private rear gardens will be provided and defined by close board fencing or brick walls. The back-to-back block structure that has pre-dominantly been used in the proposed layout has the benefit of increasing the sense of security by ensuring that the backs of dwellings are not exposed.

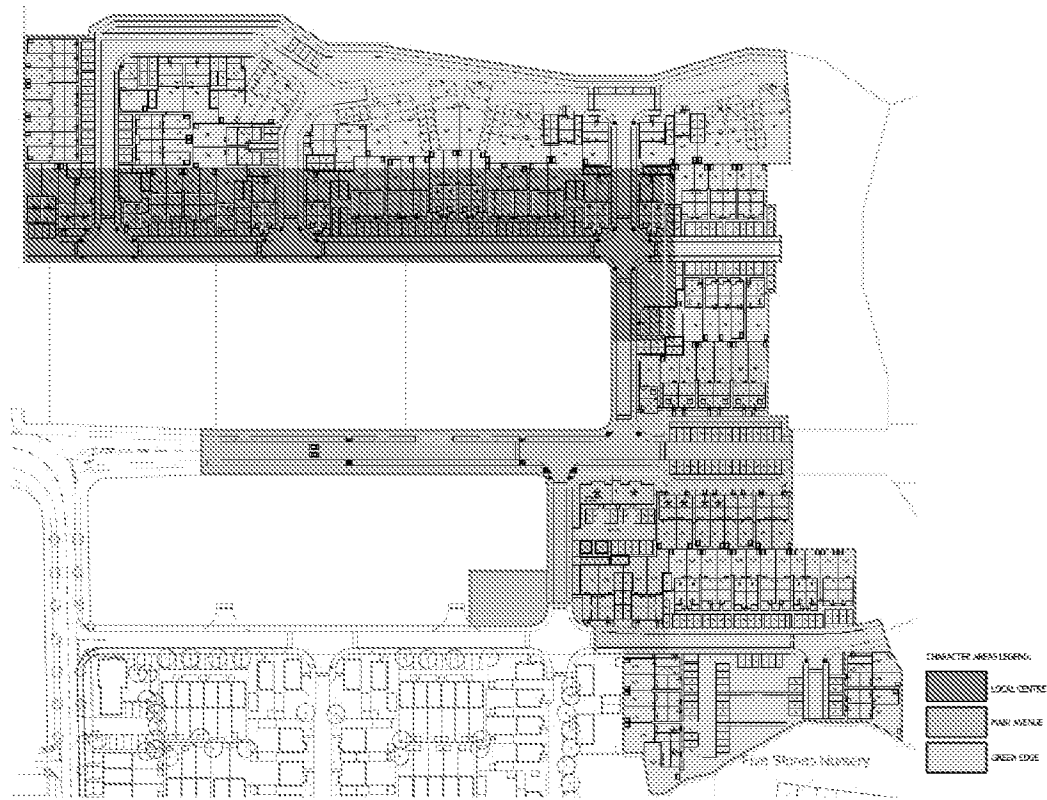
Overlooking

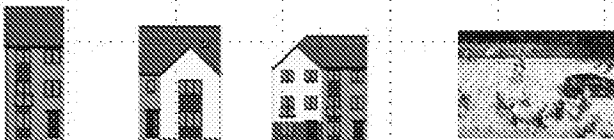
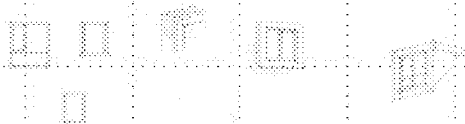
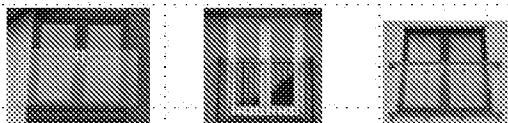
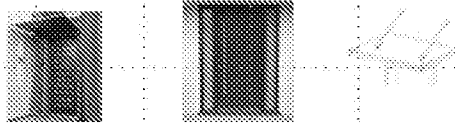
All proposed dwellings have been appropriately set back with adequate separation distances provided. Distances that will generally be adhered to are as follows:

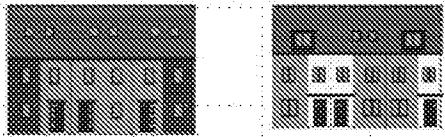
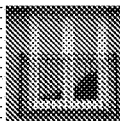
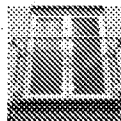
- 20m back-to-back
- 11m side-on

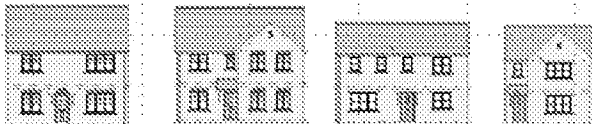
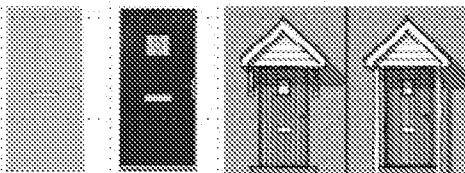
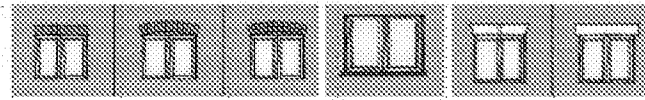
Appearance

The development site comprises 3 character areas (1) Local Centre; (2) Main Avenue; and (3) Green Edges. The following pages detail the overarching design principles that have been incorporated into the layout and built form proposed.



Local Centre		
Density	High density	
Unit configuration	Office blocks, flats with incorporated retail, other commercial uses – significant massing	
Residential unit types	Predominantly flats and terraces	
Storey Heights	Predominantly 4 / 3.5 storey	
Parking arrangement	Predominantly on plot parking (commercial element), frontage parking with limited on plot parking	
Offset	Up to 4m along road corridor	
Front Boundary treatment	None; change in materials where appropriate	
Material palette	Contemporary material palette (red / buff brick, render, cladding, predominantly grey roof tiles), simple detailing, predominantly brick with render	
Surface Materials	Carrageway: black tarmac/adam Pavement: black tarmac/adam Kerbs: precast concrete Shared space and speed control features: block paving	
Accents / Corners	Important corners to be defined by increased building height, parcel entrance to be identified by special treatment units	
Window Forms	Contemporary simple form, white or grey GPC, Dormer windows if appropriate	
Balconies	Railings – glass or railings	
Roof Detail	Edgebeads, Mono and Standard pitches	
Doors and Canopies	White, Grey or Black GPC Canopies simple contemporary external structures or recesses	

Main Avenue		
Density	Medium density (up to high density where flats are proposed)	
Unit configuration	Predominantly semi-detached units and small terraces with some detached units and block of flats on corners	
Residential unit types	Flats and medium size family accommodation	
Storey Heights	Predominantly 2.5 / 3 storey	
Parking arrangement	Predominantly on plot parking with limited elements of frontage parking	 
Offset	Up to 2m along road corridor	
Front Boundary treatment	Low level walls, hedges or railings, change in materials	 
Material palette	Contemporary material pallet (red brick, contrasting urban multi brick, light render and contrasting cladding may be appropriate, plain roof tile colours); simple detailing; predominantly brick and render	   
Surface Material	Carriageway: black tarmac/adam Pavement: black tarmac/adam Kerbs: precast concrete Shared areas and speed control features: block paving	 
Accents / Corners	Important corners to be defined by flats, parcel entrance to be identified by paired gate units	 
Window Forms	Contemporary simple casement form, in white (GRC), Dormer and Velux windows.	 
Balconies	Minimal glass or railings	 
Roof Detail	Standard pitch, some accommodation in the roof. Bargeboards and gable features where appropriate.	
Doors and Canopies	White or black GRR in a simple or contemporary design Canopies simple contemporary external structures fixed with brackets	   
Chimneys and Headers	Contrasting brick if appropriate to design and materials palette	

Green Edges		
Density	Lower density	
Unit configuration	Predominantly detached and semi detached units	
Residential unit types	Medium to large size family accommodation	
Storey Heights	Predominantly 2 storey with limited amount of 2.5 storey	
Parking arrangement	Predominantly on plot / integral garages	
Offset	Up to 2m along road corridor	
Front Boundary treatment	Timber knee rails, grass verges and stone walls to key buildings	
Material palette	Standard material palette (rural red and multi bricks, limited use of render, tile hanging, red and brown roof tiles), typical detailing, predominantly brick with elements of hanging tile and render.	
Surface Materials	Carriageway: black tarmac/adam Pavements: black tarmac/adam Kerbs: precast concrete Shared edges and spied control features: block paving	
Accents / Corners	Important corners to be defined by dual aspect units and use of chimneys	
Window Forms	Standard domestic form and scale casement windows in a cottage style/ white uPVC	
Roof Detail	Standard domestic pitch suitable for 2 / 2.5 storey dwellings. Bargeboards.	
Doors and Canopies	White or black GRP in a simple traditional / cottage design Canopies simple external structures of traditional proportions fixed with brackets or posts as appropriate to design	
Eills and Headers	Headers: Flat, gauged or full brick arches in contrasting brick or reconstituted stone Eills: 2 course plain tiles or reconstituted stone	

Mix

The application is for 126 dwellings. A mix of house types is provided catering for a wide range of household types and requirements. The table below details the mix provided, along with the split between affordable housing and market housing.

Littlehampton Phase 2			
	SQF	NO ON SITE	TOTAL SQF
Market			
Almwick	838	13	8254
Hanbury	761	16	12176
Soslar	951	13	17118
Hatfield	969	5	7752
Clayton	908	5	4695
Greyflars	1068	6	5426
Leicester	1162	8	6672
Lumley	1230	5	8100
Chedworth	1222	2	2444
Wolvesey	1338	8	10712
Corfe	1414	3	4242
Total Market		93	87213
HA Shared Ownership			
WP2420A	803	14	11242
WP3520C	908	2	1818
WP3625A	1200	4	4800
		20	17860
HA Social Rented			
WP2420A	803	6	4818
WP3625A	1200	2	2400
WPLTH3520A	1014	1	1014
WPLTH3520C-01	1014	1	1014
HA-F, 2bed, 4 person	756	4	3024
HA-F-WH, 2 bed, 3 person	756	2	1512
		16	13782
Total HA (28.5%)		36	31642
TOTAL ON SITE		126	118855

All affordable housing units will meet HCA standards, with 10% satisfying lifetime home standards.

Of the 126 dwellings proposed 2 are wheelchair accessible. These comprise the ground floor apartments.

Means of Enclosure

Garden fences will comprise of either a 1.8m high close-boarded timber fence or a 1.8m brick wall, which complies with the recommendations of the Noise Assessment by WYG.

Timber knee rails are used in amenity / green spaces where appropriate to separate use and add character.

Hedging is used where appropriate along the site boundaries (specifically the northern and southern boundaries).

Security

‘Secure by Design’ principles have generally been incorporated into the layout. Public routes and parking areas are well overlooked and all means of access are located so as to avoid enclaves that could be used for anti social purposes.

Waste, Recycling and Cycle Storage

Drawing 543_PL_SiteLayout_108 details the refuse collection strategy for the site. For the individual dwellings bins and bicycles will be stored in rear gardens and rear access has been provided to enable easy and direct access. For the apartments communal refuse and cycle stores are provided within easy reach of the apartments and adopted road, again ensuring that the 35m carrying distance is complied with.

Lighting Strategy

Details of the proposed lighting strategy are shown on Mayer Brown drawings A/PHLITTLE-INT.1/13-1.

MATERIALS AND FINISHES

The following schedules detail the proposed material finishes for the dwellings in the three character areas that comprise this development site. Samples of these materials can be provided on request.

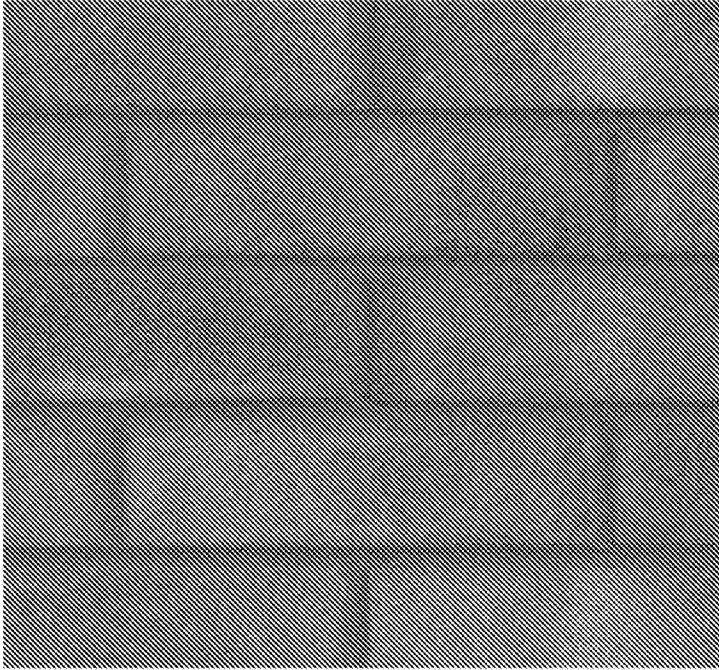
The information provided in this section is considered sufficient to discharge outline conditions 5 and 7(ii).

Surface material information is provided on the surface treatment drawing by Mayer Brown (ref: A/PHLITTLE-INT.1/11-1 and 11-2 (rev P4) and the landscape layout drawing by WYG (Ref: LA100). A summary of the hard landscape proposal are below:

Hard landscape proposals

-  **Parking bays:** tarmac or block paving (Blacken colour)
-  **Private paths:** Marshalls slab paving (Buff colour)
-  **Shared / private driveways:** Marshalls block paving (Blacken colour)
-  **Raised junctions:** Marshalls block paving (Brinelle colour)
-  **Tree grilles:** with granite setts
-  **LEAPs:** Refer to drawing LA106 for equipment and surface finish
-  **Benches:** Refer to drawing LA106

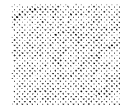
Main Avenue Character Area



Rufford_Red_Multi_Brick



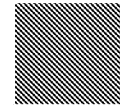
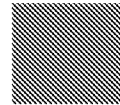
20/20 Flanders



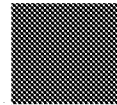
Brookway Blue



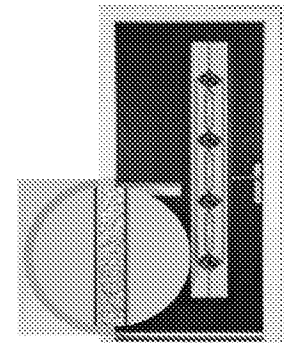
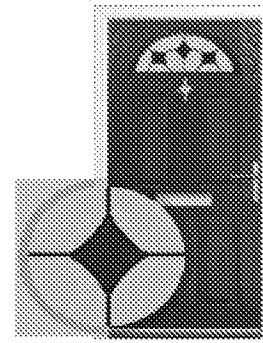
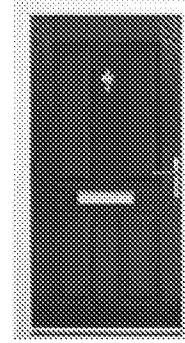
Eccleston Blue



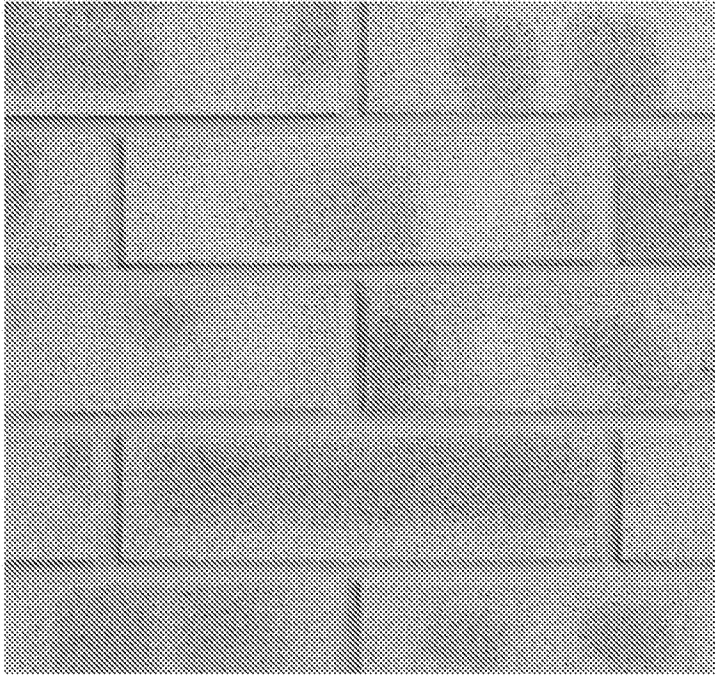
Ocean Blue



Iron Grey



Local Centre Character Area



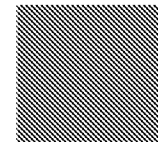
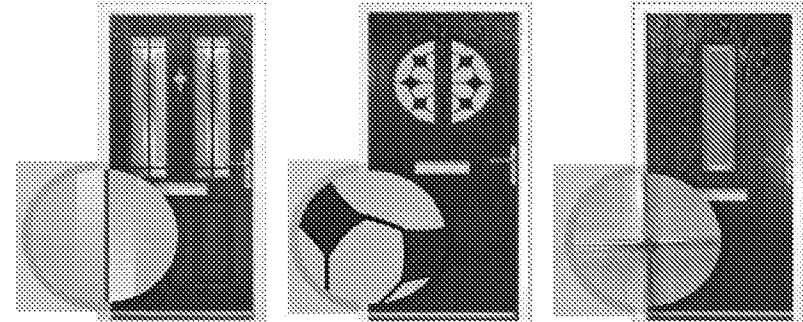
Rufford_Buff_Multi_Brick



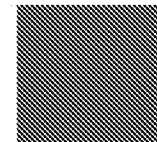
20/20 Antique Slate



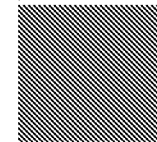
20/20 Flanders



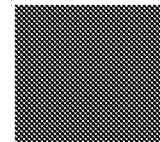
Boatbay Blue



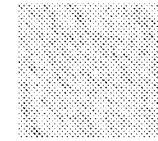
Evening Blue



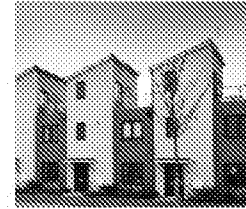
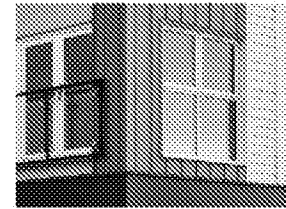
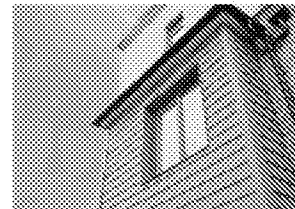
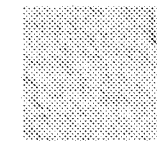
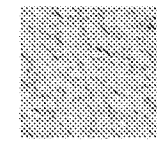
Ocean Blue



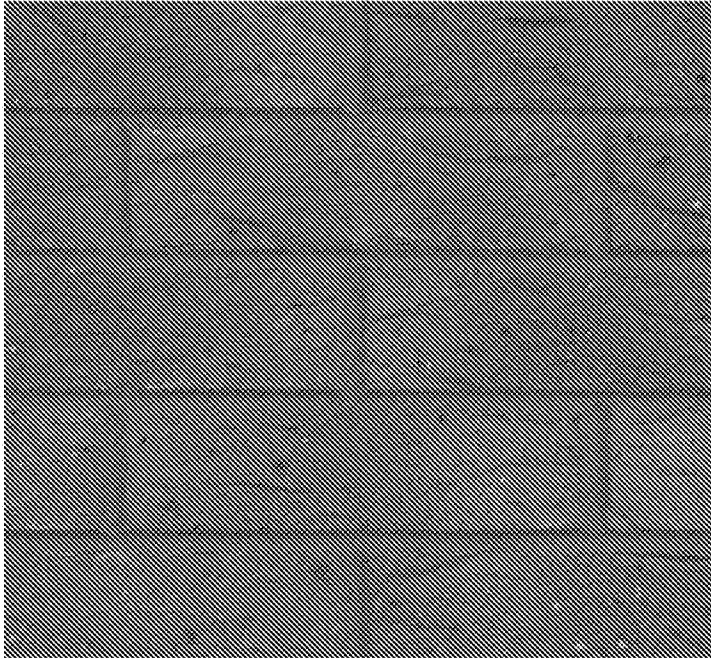
Iron Grey



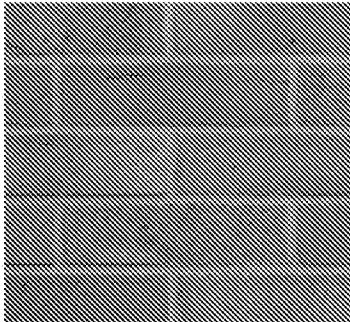
Weber Renders Ivory



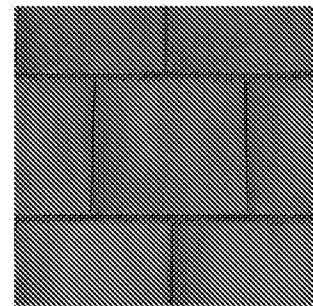
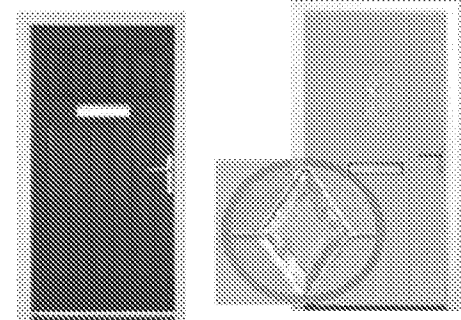
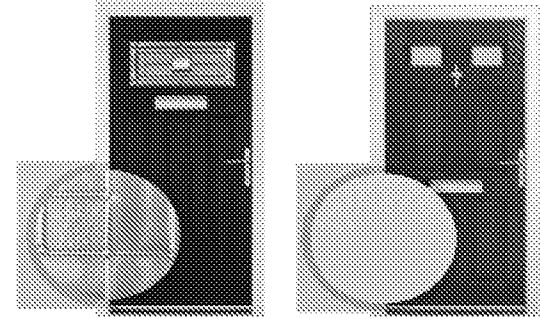
Green Edge Character Area



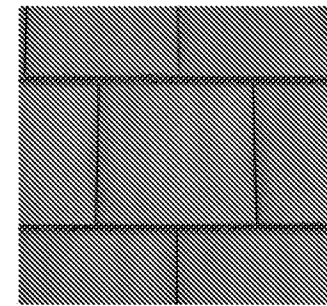
Clumber Red



Arden_Special_Reserve_Brick



Mini Stonewold Brown 52



Mini Stonewold Terracotta 34

ARCHITECTURAL DETAILS

The following plans, provided in **appendix 1**, provide details of the following architectural details that are shown on the proposed house types:

- 140mm Reconstituted Stone Cill (in Brick or Stone)
- 215mm Brick Soldier Course Below Cill in Brick or Stone
- 215mm Brick Soldier Course in Render
- Unventilated Boxed Eaves Detail (extended soffit)
- Brick Soldier Lintel Detail
- Splayed End Reconstituted Stone Lintel
- Flat Topped GRP Canopy with Brackets
- Gable Fronted GRP Canopy with King Posts and Brackets
- Lean to corner GRP Canopy with Brackets
- Gable Parapet and Coping Details – facing brickwork
- 215mm High Brick Soldier Course
- Feature Brick Dentil Band
- Juliette Balcony Detail

Please refer to the house type pack for reference purposes.

ACCESS AND PARKING

Access to this phase of development will be via Toddington Lane and the IDR that runs adjacent to Parcels B3 and B5. Once the Lyminster Bypass is delivered a significant volume traffic will naturally flow from the A259 roundabout, with Toddington Lane and the IDR very much becoming a secondary route for access.

Pedestrian links will be facilitated by the main vehicular links, as well as a wider network of existing public rights of way and proposed and existing footways and cycle ways. These will facilitate access to the wider countryside where possible and on-site open and play space.

Road Hierarchy

The road hierarchy proposed has sought to expand on the broad principles of main, local, and residential roads has been retained. The following types of road are proposed with the application site:

- Main Avenue
- Estate Roads
- Shared Surface Roads
- Private Drives

The overarching rationale for the road hierarchy is that larger roads are used to carry more intense levels of movements, often with clear and structured segregation of pedestrians, cyclists and vehicles. Roads in the lower order will be less engineered and extend to the edge of the development.

The following images provide the design principles associated with the road types that have been incorporated into the proposed development.

Internal Street Structure

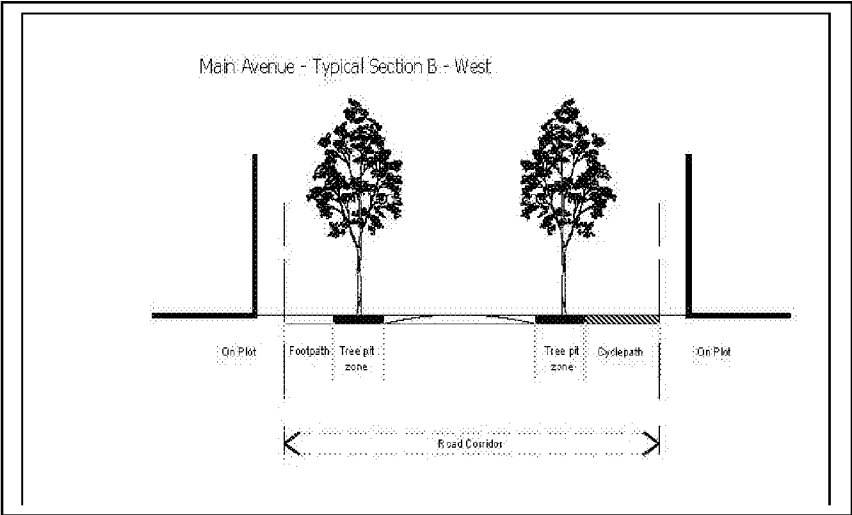
The overall internal road layout of the development is dictated by the proposed block structure set out in the Outline Planning Permission which states that in the western part of the Site, around the local centre, in which this application site is located, the road pattern has a strong grid-alignment that is regularised, creating a strong urban form to the area.

In addition, the outline design and access statement suggest that the design of individual development parcels should provide permeable and legible road patterns. This has been achieved by offering users multiple ways to travel through the Site via routes that are safe and overlooked. The road hierarchy, along with pedestrian and cycle routes looks to achieve this. In addition all open spaces, parking areas and footways within the street structure are overlooked by development with activity promoted onto the streets and open spaces. Natural surveillance is key to ensuring that streets are safe.

The use of appropriate boundary treatments, as detailed previous, is also key to the development of safe legible streets. Please refer to the Landscape Layout (LA100) for further details.

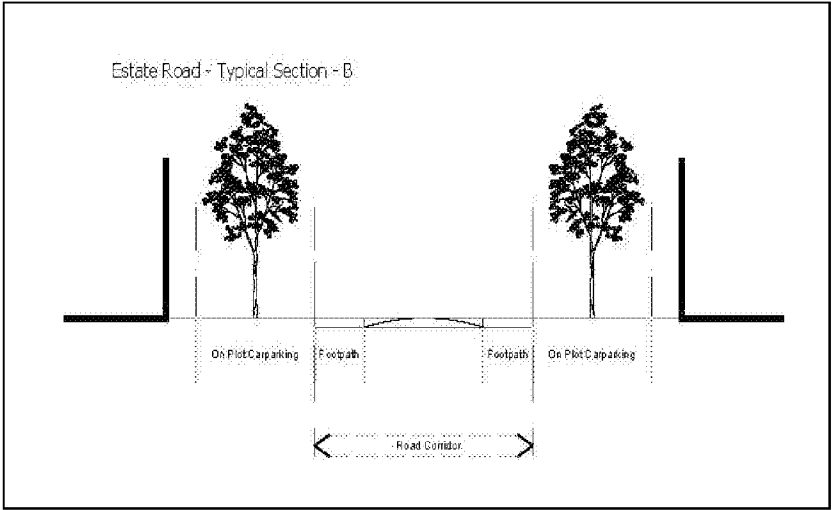
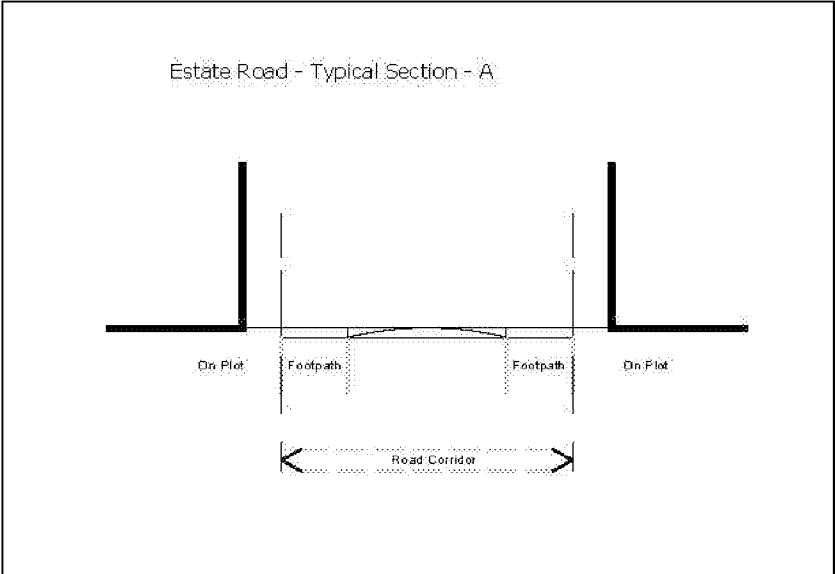
Main Avenue

Main Avenue - West	
Max Speed	20mph
Minimum carriageway width	6m
Footways	3m to one side
Cycleway	3m to one side
Verge	2m planting strip along the carriageway to both sides
Direct access to dwellings	allowed
Public Transport	yes
Bus stop	on the road
Bus route	Yes
Traffic calming	yes
On-street parking	limited



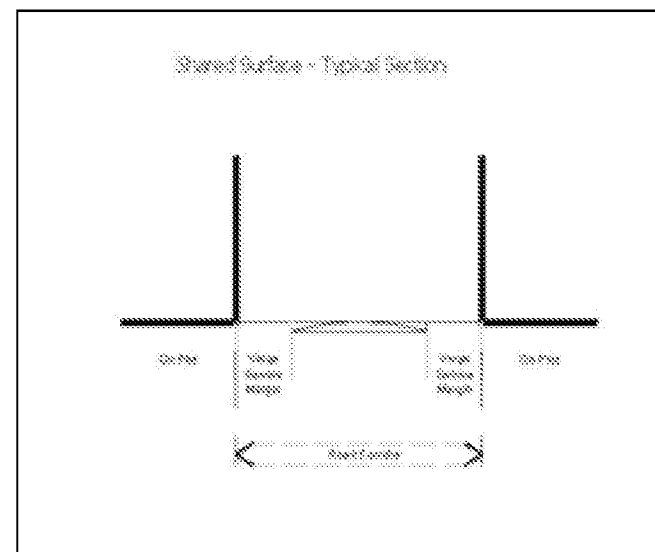
Estate Roads

Estate Roads		
Max Speed	20mph	
Minimum carriageway width	4.8m	
Footways	2m to both sides	
Cycleway	On road	
Verge	N/A	
Direct access to dwellings	allowed	
Public Transport	N/A	
Traffic calming	yes	
On-street parking	Allowed	



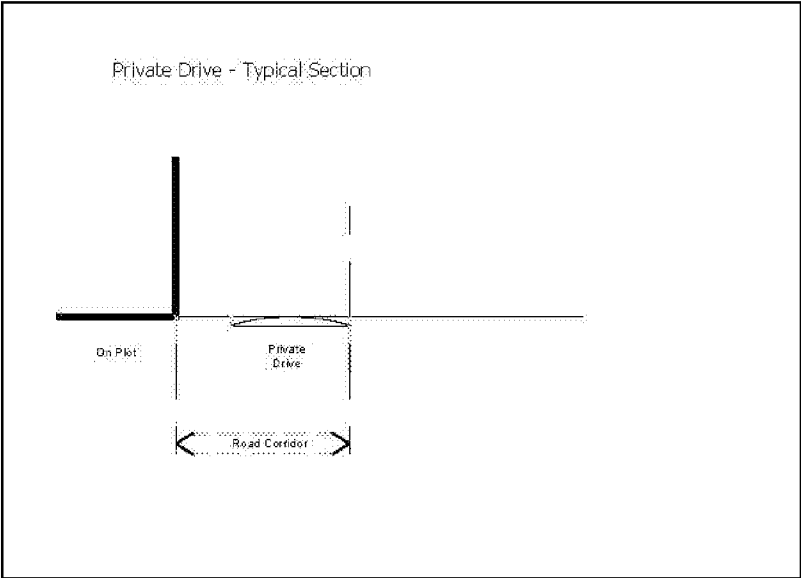
Shared Surfaces

Shared Surface Road	
Max Speed	20mph
Minimum carriageway width	4.8m
Footways	-
Cycleway	On the road
Verge	1.2m & 2m
Direct access to dwellings	allowed
Public Transport	N/A
Traffic calming	yes
On-street parking	Allowed



Private Drives

Private Drive			
Max Speed	20mph		
Minimum carriageway width	4.1m		
Footways	-		
Cycleway	On the road		
Verge	0.5m & 2m		
Direct access to dwellings	allowed		
Public Transport	N/A		
Traffic calming	yes		
On-street parking	Allowed		



LANDSCAPE

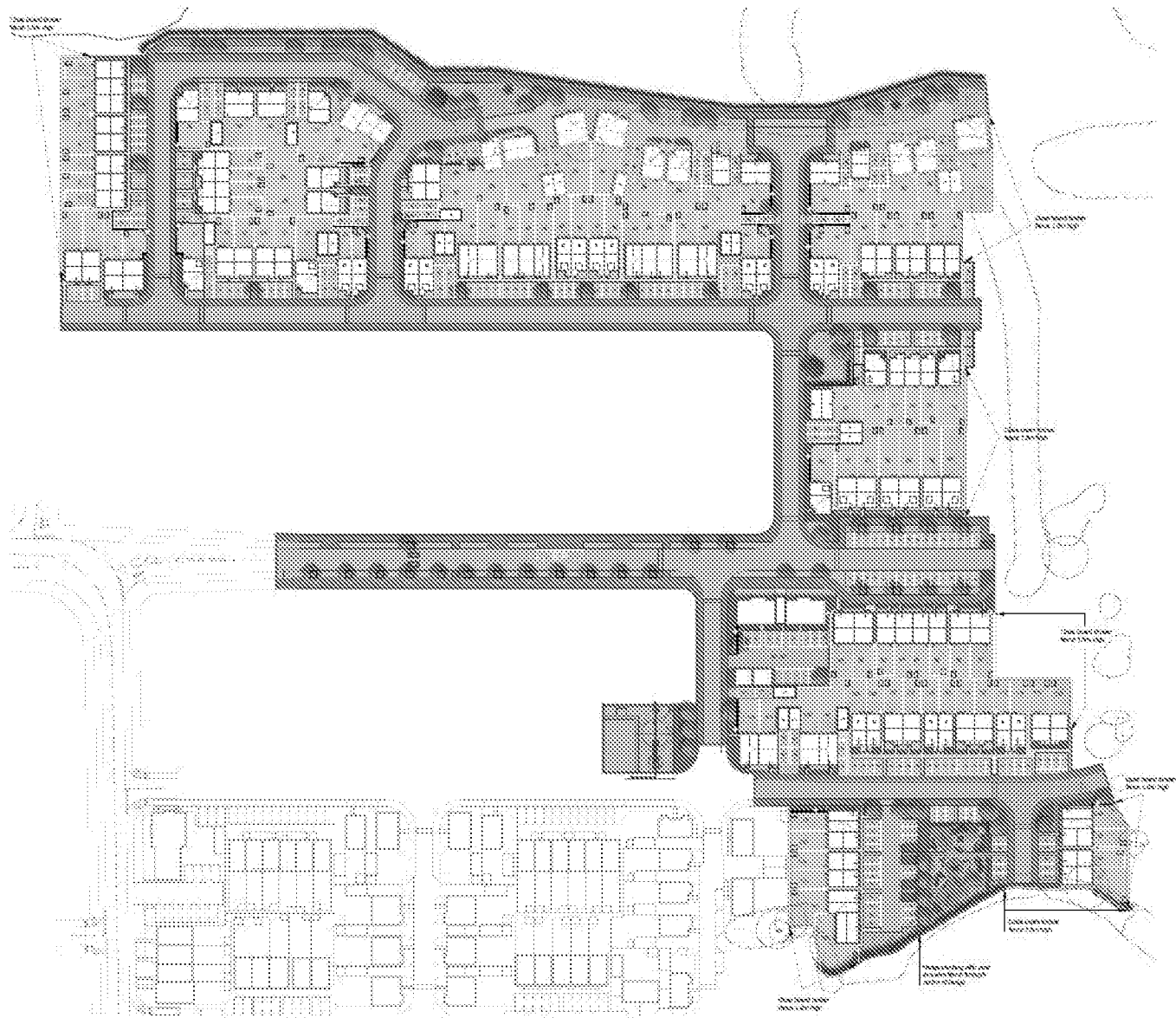
A key element of the design of the proposed development has been the development of a robust landscape strategy which provides an appropriate setting for the development and a pleasant living environment for future residents. Detailed landscaping plans are provided with the application submission. The landscape concepts that have been developed are shown on landscape drawings LA100-LA107.

Some tree and some hedgerow removal will be required to accommodate the development. As detailed on the Landscape Layout and Tree Plan this has been kept to a minimum and where possible good quality species are retained. Where removal is necessary landscaping has been proposed to ensure that key landscape features across the site will be enhanced, this includes tree and shrub planting, herbaceous plants, species rich grass and climbing plants. Large specimen nursery trees throughout will provide a sense of maturity within the development. The trees are both native and ornamental species, positioned in appropriate locations. Shrub and herbaceous plants is themed by location and will provide colour, texture and interest all year. The planting includes grasses and herbaceous species at the north and robust ornamental shrubs (both evergreen and deciduous) elsewhere. Planting schedules are provided on drawings LA101 - LA105.

In addition a strong landscape buffer, incorporating a footpath is proposed along the northern boundary of the development site to ensure that an appropriate green barrier is provided between the development site and retained open land. This will be in accordance with principles detailed in the outline consent and the design framework document submitted with the s73 application. A compensatory mixed native hedge is proposed along the southern boundary.

A Local Equipped Area of Play (LEAP) is provided within the development. It includes timber structures, boulders and logs for both formal and informal play opportunities. Tree planting and hazel coppice within the space will provide shade during the summer months whilst encouraging more imaginative play opportunities all year. A hedge and knee rail defines the LEAP boundary. Local Areas of Play are also provided in the site and include species rich grass, seating, and tree planting.

Proposed surface materials include block paving at junctions, shared drives, and key parking areas. The paving will help reduce the amount of tarmac proposed on the roads and footpaths and will also provide additional colour within the site. Surface finishes within the LEAP include bark mulch and compacted gravel on the paths. Along the main avenue, trees will be planted into tree grilles with granite setts. In addition to surface finish materials, boundary treatments within rear gardens are close board timber fencing. Boundaries to side of main footpaths within the public realm are brick walls. Seating areas are limited to the play areas.

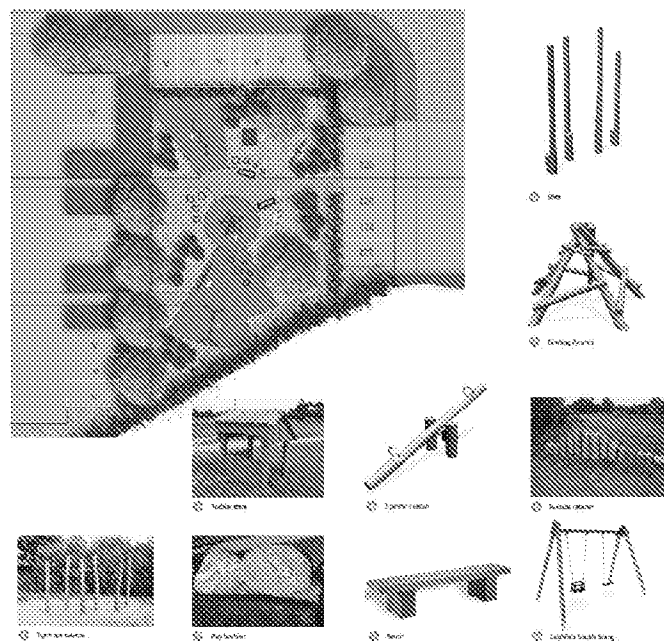


PLAY STRATEGY

Formal and informal play areas form a key part of the overall landscape strategy for the Site. As part of the development site, two LAPS and one LEAP will be provided. The proposed design and layout of these areas provided on the Landscape Plan.

The first LAP is located along the northern boundary and falls within the Green Edges Character area. As such this LAP will be more rural in character, with softer landscaping and boundary treatment. The second LAP is located alongside the Main Avenue and falls within a more urban character area, it therefore provides a more urban play environment with structured landscaping / boundary treatment.

The LEAP is also located in the Green Edges Character Area and therefore will be more rural in character. It will comprise of timber play equipment and a soft landscaping setting as detailed on WYG LA108.



SUSTAINABLE DRAINAGE DESIGN

A Technical Drainage Note has been provided by WYG and accompanies the application submission. This provides details of both the surface water and foul drainage strategies and how they accord to the principles agreed within the outline consent.

Surface water will be discharged from the development into existing watercourses that connect into the Black Ditch. The Black Ditch is an ordinary watercourse and tributary of the River Arun. Discharge consent has been obtained from the Environment Agency to utilise an outfall, known as outfall B. Therefore, all proposed surface water from the application site has been designed to connect into the piped system that will discharge at outfall B. A hydrobrake will restrict discharge to that approved with the outline planning consent.

Surface water storage will be provided in the form of a cellular crate tank system constructed under the civic parking area which lies adjacent to the development site. This storage tank has been designed to accommodate storage for a 1:100 year return period + 30% climate change.

SUSTAINABILITY

Condition 31 of the outline planning permission requires demonstration of how renewable energy and sustainable design have formed an integral part of the design development process of the proposed development. As per the s106 the whole development will be built to Code Level 3. In addition a 10% carbon reduction through the use of renewable or low energy is provided for. The carbon reduction will be a fabric first approach thereby obtaining the saving in perpetuity and minimising future maintenance.

A sustainability statement has been submitted with the application which details how this will be achieved.

CONCLUSION

The proposed design uses good urban design principles to provide a safe and pleasant environment in which to live.

A good palette of house types, materials and architectural detailing will provide an attractive, well designed place to live.

Careful consideration has gone into providing for a proposed layout and housetype package that complements the overall design ethos for the NLSDA, while ensuring that the application site has a sense of identity and place.