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Carr Lodge will have a strong identity and sense of place that reflects its connections to the existing community and to its rural edge location. New development, together with existing homes and facilities at Woodfield Plantation, will form a well serviced neighbourhood that is an exemplar of sustainability for the borough.

A network of high quality green routes designed to encourage walking and cycling will provide convenient connections to local facilities including; a nursery, primary school, youth club, sports pitches, play areas, a linear park, shops and a community hall.

The neighbourhood will be well connected by bus to Doncaster town centre and the wider public transport network to further reduce dependence on the private car. Woodfield Way will form part of a local link road including a new bus route.

The historic hedges, ditches and woodland belts, which will be preserved to protect their ecological value, along with the rural-style linear park and lily pond, will form an attractive, well managed landscape setting for the new homes with provision for active leisure and play in a natural environment.
I. INTRODUCTION

The purpose of Design Codes

“A Design Code is a set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area. The graphic and written components of the Code are detailed and precise, and built upon a design vision such as the Masterplan or other design and development framework for a site or area.”

This Design Code provides a set of design controls that support the Masterplan for Carr Lodge in order to create a distinctive development of high quality. It provides guidance and mandatory instructions on design and planning issues for the site, including the creation of character and the key components of building/ street design. It is intended to give confidence to the community and Local Authority that the design of the scheme can be managed to a high standard.

This document has been prepared to manage the process of ‘development control and delivery’, giving advice on the residential and mixed use areas within the site, specifically focusing on housing, the public realm, and streets. It is part of a suite of other documents including the Design and Assess Statement which should be referred to when preparing any design for residential layout, infrastructure design or public open space.

The onus is therefore on the design teams that use the Design Code to familiarise themselves with the full range of documents that provide the technical and planning context of the scheme.

The Supplementary Planning Document

Outline planning permission was approved on the 19th March 2012 at land south of Woodfield Way, Balby, Doncaster (known as Carr Lodge) for the development of: 1,600 residential dwellings (C3), community uses (A1 (675 sq m)), A3 (100 sq m), D1 (375 sq m), D2 (400 sq m) and sui generis (400 sq m), including associated works for formation of site access roads, landscaping, open space and ecological mitigation. The applicant and landowner is the Homes and Communities Agency (HCA).

Following on from the outline permission a subsequent reserved matters application for the link road between Woodfield Way (adjacent B and Q) and the Tesco’s at Balby, has been approved and the road open. Similarly reserved matters applications for the first phases of housing (which the developers named Dominion) and a new school (Carr Lodge Academy) has been built. A community is beginning to develop in the area.

In March 2015 the outline planning permission for the whole site expired, meaning those areas of land not subject to approved reserved matters applications do now not benefit from the planning approval. Although the development of the site for the uses described above would in principle be acceptable due to the previous permission. Now any future phases of development will need to submit new full planning applications as the HCA have indicated they will not be submitting another outline application for the full remainder of the site.

Preparation of the original outline application took place over 18 months prior to submission and involved a thorough consultation and engagement programme with the local community and other stakeholders. The outline application reflected the outcomes of the consultation process and was considered a high quality proposal which had the potential to create an attractive new neighbourhood for the Borough which met (and in certain areas exceeded) Council planning policy requirements.

The design and layout of the proposals were one particularly positive aspect of the outline application and were set out in a Design Code which provided strong guidance as to how the development should take place and integrate into the existing area in a positive way. The success of the Design Code in coordinating a range of developers to create a high quality environment can be seen in the first phase of development currently being built on site by 3 different builders.

The Council have adopted the original Design Code as a Supplementary Planning Document, in order to give future applicants a clear steer on what is required and give the Council greater influence over the form of future phases. This should help to ensure the original high quality aspirations are delivered.

Supplementary Planning Documents (SPDs) provide further guidance about the implementation of specific planning policies or advice in relation to a site or area. They give guidance to the public, applicants and developers when making planning applications. Whilst they do not have the same status as Development Plan Documents (DPDs), SPDs are a material consideration in the determination of planning applications and therefore a useful tool in the planning process, particularly for large / complex sites such as Carr Lodge.
I. INTRODUCTION

PLANNING CONTEXT

The development plan for Doncaster includes:

**Core Strategy**
The Core Strategy forms part of the Local Development Framework and decides what gets built, where and when. It includes a range of policies on matters such as housing, employment, transport and the environment. The Carr Lodge SPD provides further detail on the interpretation of key Core Strategy policies specifically in relation to this site, which include:

- CS1: Quality of life
- CS4: Flooding and drainage
- CS14: Design and sustainable construction
- CS16: Valuing our natural environment
- CS17: Providing green infrastructure

**Relevant parts of the Unitary Development Plan**
Some of the policies within the Unitary Development Plan (UDP) have been saved and continue to inform decision making. The site forms part of a wider development allocation in the UDP; the “Woodfield Plantation” for a mixed use regeneration scheme. The UDP contains an illustrative masterplan indicating how a range of uses, including hotel, offices, and housing, could be accommodated at “Woodfield Plantation”. The housing is centred on the Carr Lodge site. The housing has already been delivered in part at Woodfield Plantation Phase 1. Carr Lodge forms the second component of this.

This Supplementary Planning Document provides further detail and guidance on how these policies will be implemented. The document will be used when considering planning applications for new development at Carr Lodge. It should be read alongside the Core Strategy and other adopted Supplementary Planning Documents, where relevant. This includes:

- South Yorkshire Residential Design Guide (SYRDG), Supplementary Planning Document.
- Development Guidance and Requirements Supplementary Planning Document, and
- Development, Flood Risk and Drainage, Supplementary Planning Document.
UNITARY DEVELOPMENT PLAN

The Doncaster Unitary Development Plan (UDP) set out the borough's planning policy framework to 2001 and together with the Yorkshire and Humber RSS forms part of the Statutory Development Plan. The site forms part of a wider development allocation in the UDP; the "Woodfield Plantation" for a mixed use regeneration scheme. The UDP contains an illustrative masterplan indicating ... at "Woodfield Plantation". The housing is centred on the Carr Lodge site. The housing has already been delivered in part at Woodfield Plantation Phase 1. Carr Lodge forms the second component of this.

The UDP is being reviewed and will be replaced by a Local Development Framework (LDF) in due course. The LDF is still in the early stages of development but the Core Strategy ... emphasise the importance of locating development in sustainable locations and explain the significant challenges ahead.

The development of the Carr Lodge site is therefore supported by the UDP and emerging policy in the LDF. The planning case is dealt with in full in the supporting Planning Statement which accompanies the outline planning application for the site.
The Department for Communities and Local Government stated in their November 2006 publication ‘Preparing Design Codes – A Practice Manual’ that Design Codes should “decide which elements of the code will be mandatory or discretionary, but seek to balance prescription with flexibility across the design code and for each element within it” (page 65).

This document went on to state that, “Enough detail is required to give the desired level of clarity and certainty and to protect the delivery of a coherent and coordinated design solution. However, precision to legal standards is unlikely to be necessary.

To balance the levels of prescription, a degree of flexibility can be provided within design codes in a number of ways:

- Including a menu of alternative design coding solutions for particular elements.
- Focusing on performance-based design coding, rather than highly specified outcomes.
- Identifying clearly which elements of the design code are mandatory and which are discretionary, with flexibility built in to illustrate how the latter can be interpreted.
- Paring down the design code to its essential requirements on which there is no negotiation, and then simply design coding for those elements (e.g. building line and setbacks). In this solution, other elements are left entirely open for interpretation, or subject to other forms of guidance.

Not only will the relative balance between prescription and flexibility need consideration for the design code as a whole, but also for each individual design coded element” (page 76).

The approach taken to identifying the mandatory elements in this Design Code for Carr Lodge broadly complies with this guidance, in particular the final two points. The adjacent flow chart contains information that will guide and influence any subsequent development scheme and clarifies which information is mandatory. Any information not identified as being mandatory is guidance and is to be discussed and agreed upon during the development control process. Any departure from the mandatory elements of this code will require significant justification at Reserved Matters application stage.

DMBC will undertake evaluation of Design Code implementation on a regular basis subject to build out rates and changes in policy. Revisions will be based on feedback from the developer, development control officers and CABE Enabler or equivalent.

HCA will ensure that sufficient skills are in place for reviews and revisions. Those involved need to understand how the Code works as a delivery tool and how it can ease administration through the planning process.

The Design Code review process will check for:

- Weaknesses in delivering quality outcomes
- Success in the degree of flexibility
- The influence of market conditions on design
- Changes in sustainability and environmental policy

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This section provides a guide to the requirements of Reserved Matters applications in terms of national policy and general best practice.

As the Masterplan will be an exemplar for sustainable development, sustainable development philosophy forms the backbone of this Design Code and should permeate all subsequent stages of design and implementation. The key documents that support this aspiration include:

- Sustainability Statement
- Development Objectives
- Sustainable Energy Strategy

Social & Economic Sustainability

A socially sustainable residential community is one with a wide variety of residents, housing and tenure arrangements. New homes should be located within walking distance of local facilities and the street network should provide an efficient public transport infrastructure.

Sustainable Energy Strategy

All detailed design proposals must demonstrate how they respond to the Energy Statement for the site. This sets out the key objectives for the site and assesses which methods and measures are important elements of the sustainable development objectives for the site. The strategy embodies the following principles:

- Minimising the demand for energy
- Supplying energy efficiently
- Using renewable energy

Environmental Sustainability

All detailed design proposals must demonstrate how they work with the principles embodied in the Environmental Statement and Transport Assessment. Measures to protect and enhance the surrounding environment, reduce energy and water use and increase recycling must be taken into account. The Environmental Statement for the site sets out these measures and the importance of reducing car usage is encouraged by the creation of a walkable network which is well connected to its surroundings.

Building Design

In addition to current Building Regulations all detailed design proposals must achieve the standards and guidance set out below:

- BREEAM/Code for Sustainable Homes
- Building Materials
- Secured by Design
- Building for Life

Building for Life

Building for Life is a scheme organised by the House Builders Federation, CABE and the Civic Trust. The standard represents the national standard for housing and neighbourhoods and is awarded to new housing projects that demonstrate a commitment to high design standards, good place making and sustainable development.

Proposed development at Carr Lodge must achieve a minimum of 'Silver Standard' in the Building for Life Scheme.

Schemes must obtain Secured by Design accreditation, which is a UK Police initiative supporting the principles of 'designing out crime' by combining good standards of physical security and well tested principles of natural surveillance and defensible space. The key principles is an integrated approach so that all the significant components of its design, planning and layout are considered together at an early stage so that potential conflicts between security and other major objectives can be resolved. Other principles include:

- Provision of secure parking provided close to and visible from the buildings where owners live.
- Overlooking of public spaces by surrounding properties.
- Adequate lighting of communal areas.
- Adoption of landscape design supporting safety
- Controlled access points to the rear of buildings.

Building Materials

All detailed design proposals must demonstrate how they contribute to the use of local and sustainable materials and resources. Developers must therefore demonstrate how they have sought to source materials locally but may utilise materials from further afield where this is not possible. Developers must also use the Green Guide to Housing Specification to select the most environmentally friendly materials for construction. The Guide, developed by the BRE, covers typical wall, roof and floor construction as well as other elements such as kitchens and landscaping. It uses a simple A, B, C rating for each specification and environmental impact. Developers must aim to use 100% of materials rated B or above.

Secured by Design
1. INTRODUCTION

DEVELOPMENT PROCESS

The development of Carr Lodge is managed by the Homes and Communities Agency (HCA). The HCA are providing a high level of direction and control to the project to ensure that the vision for the development is secured.

In order to set the stage for the implementation of the Design Code, HCA will:

- Coordinate the range of technical and planning approvals that are required
- Prepare the strategic land freehold of Carr Lodge for adoption by the various statutory and utility authorities
- Phase the development to allow for completions over a 10-15 year period
- Prepare landscape works including SUDS drainage and conservation measures
- Prepare a framework for selected developers and their architectural teams to deliver parcels of land for the duration of the project by phase and by subdivision of phase
- Undertake the delivery of the first phase of residential development to ensure that the DCLG housing targets are met and to set the standard for open market developers to follow.
## 1. INTRODUCTION

### STRUCTURE OF THE DESIGN CODE

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- **Cycle Parking for Residents**
- **Cycle Parking for Visitors**
- **Guide to Reserved Matters Applications**
- **Checklists**
COMMUNITY CLUSTER
- Bungalows
- Shared surfaces
- Intimate scale

MEWS CLUSTER
- Bungalows
- Shared surfaces
- Intimate scale

WESTERN SOLAR VILLAGE
PASSIVE SOLAR 1
- Passive design glazing
- Light weight materials
- Street planting
- On street parking
- Sensitive to Woodfields Plantation
- Homezones (Massing + Scale)

CENTRAL AREA
- Higher density
- Less parking per dwelling
- Small gardens
- Courtyard parking
- Close to facilities
- Range of dwelling types

COMMUNITY CLUSTER
- Access to facilities
- Family living
- Well connected
- Higher density
- Play integrated in street

RURAL EDGE
- Informal access roads
- Where landscape meets buildings
- Natural / informal
- Undulating spaces
- Curtiledge parking
- Lower density
- More detached larger homes

PASSIVE SOLAR 2
- Similar to solar 1
- Use of colour on buildings
- Sensitive to White Post Way and warehouses
- Homezones

EASTERN SOLAR VILLAGE
PASSIVE SOLAR 2
- Similar to solar 1
- Use of colour on buildings
- Sensitive to White Post Way and warehouses
- Homezones
2. CHARACTER AREAS

INTRODUCTION

The ideas of character and local identity are so important to people that a great deal of design and planning policy has been written about them; yet to define them without caricature is not easy. Perhaps when people discuss ‘think globally – act locally’, what matters is defining our place in the world. For Design Codes, what matters is understanding the potential of places in order to define them for emerging communities.

“It’s my deep, instinctive belief that all children are wired for memory and narrative. Children want to be part of buildings that talk about where they have come from. They want to walk and live in those kinds of places”.

Professor Simon Schama. CABE 16 September 2009.

Simon Schama’s point reflects on the importance of memories developed from a strong sense of place. Creating this is a key ambition for Carr Lodge, and the successful realisation of neighbourhoods with memorable characteristics will play an essential part in this. A strong sense of place will:

- Allow the new community at Carr Lodge to grow and develop its own identity.
- Help the new community to understand how its neighbourhoods fit into the wider context of Doncaster.
- Be rewarding for those who live, work and play in the new community.
- Encourage visitors to explore and enjoy its public spaces.

Research has shown that what makes places legible and therefore gives them a distinctive and memorable identity are:

- Routes: The network of footpaths which provide links within and beyond neighbourhoods.
- Crossing points (nodes): The intersections between these paths which provide local foci and the opportunity to celebrate the ‘meeting point’.
- Edges: The boundaries between environmental features, such as housing and open space, which involve a strong contrast.
- Centres: Buildings and spaces which serve as focal points and meeting places.

Within this context the character generators of Carr Lodge have been defined as:

- The Central Area
- The Western Solar Village
- The Eastern Solar Village
- The Mews Cluster
- The Rural Edge
- The Community Cluster.

The character of these areas will be informed by their relation to private amenity space, built form, public spaces, landscape, movement network, parking and waste management following the guidance in this section.
2. CHARACTER AREAS

CENTRAL CHARACTER AREA

LOCATION

IDENTITY

This character area will be at the heart of the new neighbourhood. It will be framed by parallel hedges (within Linear Parks) running approximately north south and it will contain a mix of uses and facilities including the village square, the market building, the farm shop / local shop, the nursery, flexible community space, a games area, bus stops and parking.

The built form will have continuous frontage with strong vertical emphasis, especially where it fronts onto the Main Road. The Linear parks will be framed by units facing onto them to ensure they are safe and vibrant. These units will be served by shared surface streets. The pedestrian crossings to the parks will be framed by maisonettes with flats above them.
2. CHARACTER AREAS

CENTRAL CHARACTER AREA

Building frontage will have vertical emphasis by:-
- Façade junction that will delineate the party wall line.
- Windows will repeat vertically.
- Windows proportions will be more vertical than horizontal.
- The use of protruding and recessed parts to break down the appearance of mass.
- The use of balconies, windows and entrances.

Building frontage will have visual variation to increase the legibility of the Main Street by:-
- A diversity of appearance, where regular plan types will contain differences within their street façades.
- The use of some limited bold patterns and statement colours in the most prominent locations.
- A diversity of dwelling types, where not more than three of the same frontage type will appear in a row.
- Diversity of building height, where variation in ridge, eave and base height will occur within each row of continuous building frontage.

Buildings on street corners will create a distinctive street scene by:-
- Distributing windows and doors around the corner to provide natural surveillance onto all the public spaces and routes.
- Using increased height and punctuated roof lines to mark the prominent corners or those that terminate vistas.

Local High Street character is emphasised by:-
- Various building heights
- Various floor-to-floor heights
- Distinct plot definition
- Mix of plot widths
- Vertical window types

This elevation is an illustrative example of the Central Character Area. Specific design will rely on subsequent designers’ interpretations and applications of the Code and the requirements for this area.
2. CHARACTER AREAS
WESTERN SOLAR VILLAGE

IDENTITY
The Character Area will have an open space and play space at its core. Its street grid will be influenced by the ditch pattern. The built form will be contemporary, with its appearance generated by low carbon features. These will particularly respond to the solar conditions in the area through:

- North facing wide fronted units with sun spaces (glazed south facing rooms).
- South facing wide fronted units with staircases at the back.
- Deeper front gardens to south facing units.
- Shaded parking spaces to south side of homezone streets and amenity spaces to the north side which will be in the sun.
- Trees to north side of street to provide summer shading.
- Narrow North/South lanes with parking, wider East/West green homezones with pinch points and staggers.

LOCATION

BLOCK PLAN

- On street parking – in line on Collector Street.
- A mix of on street parking arrangements in Homezones.
- Some (limited) dwelling will have 2 allocated spaces on plot.
- Medium sized rear gardens for family use.
- Balconies/roof terraces that afford solar aspect.
- Layout to be integrated into the existing housing of the Woodfield neighbourhood.
- Terraced house types with northerly and southerly aspects.
- Detached/semi-detached types along site boundaries.
- Glazing designed to exploit passive solar gain.
- Light weight materials.
- Roof form to reduce overshadowing.

DENSITY:
- 38-40 D/Ha along south and east boundaries.
- 40-42 D/Ha throughout the rest of Solar Village.

STOREY HEIGHTS:
- Collector Street: 2 ½ - 3 storeys.
- Other streets: 2 - 2 ½ storeys.

SPACES:
- Local Equipped Area of Play (LEAP).
- Informal grass open space including Kickabout space to south.
- Two 'Microspaces' next to east-west Collector Street.
- Street planting pattern to link area with the Division Drain.
- Bounded by the Division Drain to the north, creating an ecology corridor.
- Bounded by drainage ditch to east.

BUILDING SET BACKS:
- 0-1m demarcated with brass studs or.
- 2-3m demarcated with railings.

MOVEMENT NETWORK:
- East-west collector road.
- North-south lanes with on street parking.
- Bus gate at western entrance to the area.
- Local Streets, Mews Streets, and Homezones.

WASTE STRATEGY:
- Mostly individual on plot bin storage facilities.
- Some communal facilities within 30m distance from dwellings.
2. CHARACTER AREAS
WESTERN SOLAR VILLAGE

Building frontage will have a horizontal emphasis by:-
- Façade junctions that will delineate more wide front dwellings than narrow front dwellings.
- Windows that will vary in proportion between ground floor and upper floors.
- Use features that are consistent with others of the same solar orientation.
- Mostly two storey terraced arrangements.

Building frontage will have unity within the building frontage to increase the consistency of the Western Solar Village by:-
- A horizontal appearance with little variation in building heights.
- The use of patterns of similar balconies, windows and entrances.
- The use of regular plan types of similar façades.
- Use of a limited palette of materials
- A repetition of dwelling types, where more than two of the same frontage type will appear in a row.

Roof features will create a distinctive street scene by:-
- Use of chimneys features and provide the opportunity for managing a number of roof outlet ducts into one stack.
- Chimney materials that will either be consistent with the walls of buildings or the use of contemporary lightweight materials.
- Thermal panels integrated into the slopes of roofs
- The use of asymmetrical roof slopes to increase the solar aspect of the dwelling.

Local residential Street character is emphasised by:-
- Regular building heights
- Consistent floor-to-floor heights
- Appearance of wide plots with distinct plot definition
- Mostly two storey in height
- Building set-out and roof line to follow the slope of land
- Building features to create a repeating pattern along the street.

This elevation is an illustrative example of the Central Character Area. Specific design will rely on subsequent designers’ interpretations and applications of the Code and the requirements for this area.
2. CHARACTER AREAS

EASTERN SOLAR VILLAGE

IDENTITY

The rural edge setting of this character area will be emphasised by the woodland buffers that will frame it on the east and west. Its street grid will be influenced by the hedgerow and ditch patterns. It will have an open space and play space at its core. All the open spaces, including the woodlands and the play space will require active frontages onto them.

This character area will link through to the woodland on the eastern side of the development. The built form will be contemporary, with its appearance generated by low carbon features, particularly those that exploit the solar conditions of the area. The Homezone streets will create intimate court settings for clusters of bungalows and will provide access to parking courts. In the Homezones, parking will be provided on the south side where it will be in the shade and amenity spaces will be on the north side where they will be in the sun.

CODING ELEVATION

High quality bespoke corners must be active and provide natural surveillance onto all the public spaces and routes they define. Colours should be light, predominantly white, off white or cream. Materials should reflect the environmentally sustainable focus of the area. Minor projections and set backs may be provided within elevations to reinforce rhythm and reduce massing. Roof forms should respond to the requirements of exploiting solar gain for passive heating and energy generation.

Build line should generally be continuous, with some alterations in key areas such as at nodes and at the termination of vistas.

This elevation is an illustrative example of the Eastern Solar Village Character Area. Specific design will rely on subsequent designers’ interpretations/applications of the Code and the requirements for this area.

Monopitch roof with high level windows

Articulation of roof line on longer terraces- eg. Wind cowls.
IDENTITY

This Character Area will be a family focused community built around the Central Park which will provide the amenities of open space and play. There will also be a youth club. The street grid of the area will be influenced by the linear parks that lead into the Central Park. The area will be predominantly residential. The open spaces will be framed by units (including maisonettes with flats above and corner flat blocks) facing onto them in order to create enclosure.

The south facing units will have large front gardens. Those units with the block will tend to be shorter than those fronting onto the open spaces.

CODING ELEVATION

Corners and gateways should be celebrated by providing bespoke architecture providing active frontages to the streets. Muted natural colours punctuated by limited bold colours or patterns are appropriate. The predominant roof style will be a modern interpretation of the pitched roof. However, the corner flat blocks may have modern flat or angular roofs.

2. CHARACTER AREAS
COMMUNITY CLUSTER

Parking
- Predominantly 2 allocated spaces on plot
- To the west, 50% will have 2 allocated (on/off plot) spaces and 50% will have 1 on plot & 1 unallocated

Private amenity space
- South facing units should have large front gardens
- Medium sized rear gardens for family use
- Balconies and roof terraces that afford solar aspect

Built form
- Terraces around the Central Park and fronting onto the linear parks
- Pavilion buildings along the southern edge of the park
- Detached and semi-detached units further south
- Glazing designed to exploit passive solar gain
- Light weight materials
- Roof form to reduce overshadowing

Density:
- 35 D/Ha on the south eastern corner of the Central Park
- 38 - 40 D/Ha on north, east and south edges of the Central Park
- 44-46 D/Ha on the west edge of the Central Park

Storey Heights:
- Central Park: 3 storeys
- Collector Street: 2 ½ - 3 storeys
- Other streets: 2 - 2 ½ storeys

Spaces
- The Central Park containing Neighbourhood Equipped Area of Play
- Microspaces where the Access Roads cross the Local Street
- Linear parks containing ditches that contributes to the SUDS design
- Rural Edge link
- Informal kick about space in north eastern corner
- Play integrated into the streets

Movement network
- Most vehicular movement east/west along the edges of the park
- Local Street forms a loop linking the Main Street into the area
- Collector Street, Local Streets, Minor Streets and Green Edges
- Bridleway passing through the centre of the area
- Two pedestrian routes running north-south in line with the linear parks

Waste Strategy
- Shared surfaces along linear parks to prevent refuse vehicles reversing
- Predominantly individual on plot bin storage facilities
- Some communal facilities within 30m distance from dwellings

Waste Strategy
- Shared surfaces along linear parks to prevent refuse vehicles reversing
- Predominantly individual on plot bin storage facilities
- Some communal facilities within 30m distance from dwellings
2. CHARACTER AREAS
MEWS CLUSTER

LOCATION

IDENTITY
This character area is bordered by the natural edges of two linear parks and an area of woodland. Active frontages will be provided along the edges that front onto the amenities and open spaces provided by the woodland and the linear parks. There is a link through to the woodland on the eastern side of the development.
The streets and public spaces will have an intimate scale, emphasised by the building heights being limited to 2½ storeys (including single storey bungalows). Those units with the block will tend to be shorter than those fronting onto the open spaces.

CODING ELEVATION
Rhythm and repetition should be generated within elevations to reinforce the enclosure of the Woodland Corridor. Architectural features, including glazing and cladding should be used to emphasise the vertical proportions of the housing in order to give sense of enclosure to the Woodland Corridor. Colours used for render and other cladding should be muted in colour and natural in appearance. Use of materials should be innovative and hard wearing. The predominant roof style will be a modern interpretation of the pitched roof.

<table>
<thead>
<tr>
<th>Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Predominantly 1 on plot &amp; 1 unallocated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private amenity space</th>
</tr>
</thead>
<tbody>
<tr>
<td>• South facing units should have large front gardens</td>
</tr>
<tr>
<td>• Medium sized rear gardens for family use</td>
</tr>
<tr>
<td>• Balconies and roof terraces with solar aspect</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Built form</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bungalows</td>
</tr>
<tr>
<td>• Passive design glazing</td>
</tr>
<tr>
<td>• Light weight materials</td>
</tr>
<tr>
<td>• Roof form to reduce overshadowing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Density:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 40-43 dwellings/ha to north of traffic free pedestrian route</td>
</tr>
<tr>
<td>• 38-40 dwellings/ha to south of pedestrian route.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storey heights:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Woodland Corridor: 2 ½ - 3 storeys</td>
</tr>
<tr>
<td>• Mews Streets and Access Roads: 1-2 storeys</td>
</tr>
<tr>
<td>• Other streets: 2 - 2 ½ storey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Permeable woodland with boardwalk and footpaths running through it</td>
</tr>
<tr>
<td>• Linear Park 2 to the west and Linear Park 3 to the east.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building set backs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 0-1m demarcated with brass studs or</td>
</tr>
<tr>
<td>• or 2-3m demarcated with railings or hedges</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Movement network</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Village Street and shared surface Homezones and Green Edge</td>
</tr>
<tr>
<td>• Homezones to create intimate courts fronted by clusters of bungalows</td>
</tr>
<tr>
<td>• Amenity spaces integrated into Homezones</td>
</tr>
<tr>
<td>• Bordered by Main Road at northern-most point where there is also an emergency access point,</td>
</tr>
<tr>
<td>• Traffic free pedestrian route running east west through centre of area</td>
</tr>
<tr>
<td>• Street planting</td>
</tr>
<tr>
<td>• The street grid is reinforced by the pedestrian and cycle network</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waste Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Internal mews street to prevent refuse vehicle reversing.</td>
</tr>
<tr>
<td>• Units facing linear parks to bring bin stores to collection point in mews court on bin day.</td>
</tr>
</tbody>
</table>

Vertical greening to gable elevations
On the edges fronting the Woodland Corridor, the build line should generally be continuous, with some alterations in key areas such as at nodes and at the termination of vistas

This elevation is an illustrative example of the Mews Cluster Character Area. Specific design will rely on subsequent designers’ interpretations/applications of the Code and the requirements for this area.

Vertical greening to gable elevations
On the edges fronting the Woodland Corridor, the build line should generally be continuous, with some alterations in key areas such as at nodes and at the termination of vistas

This elevation is an illustrative example of the Mews Cluster Character Area. Specific design will rely on subsequent designers’ interpretations/applications of the Code and the requirements for this area.
2. CHARACTER AREAS

RURAL EDGE

IDENTITY
This Character Area will be created along the edge where landscape meets the buildings. It will be significantly influenced by the improvements to the disused railway (undertaken by others). The northern edge of the railway line will become a soft edge with pedestrian and cycle access to the main route. The building line will be set back sufficiently from the planting to prevent overshadowing and a minimum of 2m is required to support the principles of Safer Places. Gaps between dwellings should be sufficient to provide soft landscape features.

CODING ELEVATION
Rooflines should be varied and reflect a modern interpretation of the pitch roof form. This area provides the opportunity to develop a lower density, but innovative design style. Layout of buildings in this area is more informal. Where there is alteration in the building line, efforts should be made to avoid any areas of blank and inactive facades. Gaps between dwellings that face onto the street will be linked by a connecting wall. The design of these walls will forms part of the architectural expression. Colours used for render and other cladding should be muted and have a natural appearance. Use of materials should be innovative and hard wearing. Corners and gateways should be celebrated by providing bespoke architecture providing active frontages to the streets.

LOCATION

BLOCK PLAN

Parking
- Predominantly 2 allocated spaces on plot

Private amenity space
- South facing units should have large front gardens
- Medium sized rear gardens for family use
- Balconies and roof terraces that afford solar aspect

Built form
- Undulating spaces
- Detached, larger family homes facing linear parks and Woodland Edges
- Glazing designed to exploit passive solar gain
- Light weight materials
- Roof form to reduce overshadowing

Density:
- 44-46 D/ha along south eastern edge
- 38-40 D/ha in the centre of the character area
- The rest 35 D/ha

Storey Heights:
- Facing out of site, fronting onto landscape edge - 2 ½ - 3 storeys
- Other streets and spaces - 2 - 2 ½ storeys

Spaces
- Rural edge all the way around
- Woodland Edge in south eastern and western corners of development
- Rural Edge LEAP

Building Set backs:
- 0 - 1m demarcated with brass studs or
- or 2 - 3m demarcated with railings

Movement network
- Main Street, Local Street, Village Street, Homezones and Green Edge
- The Southern Gateway
- The Bridgeway
- The street grid is reinforced by the pedestrian and cycle network

Waste Strategy
- Shared surfaces along edges prevent refuse vehicles reversing
- Predominantly individual on plot bin storage facilities

This elevation is an illustrative example of the Rural Edge Character Area. Specific design will rely on subsequent designers’ interpretations/applications of the Code and the requirements for this area.
3. URBAN DESIGN PRINCIPLES

INTRODUCTION

Urban Design Principles provide generic rules that are intended to influence the Masterplan as a whole. Through a mix of written and drawn illustrations their impact on Carr Lodge will be through their translation into development schemes.

All development proposals will influence the behaviour of people occupying the finished place and will effect their quality of life. The importance of following these design principles is that they will improve quality of life by showing how the main interactions with the environment will occur. This includes creating a better feeling of safety and a reduction in environmental impact. The principles illustrated are not comprehensive but they do influence the most important attributes of the Masterplan.
FRONTS AND BACKS

Dwellings with an aspect to the street will provide a clear definition between the private space of the interior and the public space of the street. All dwellings will follow this pattern.

In the majority of cases, layouts will form continuous fronts and backs in order to generate a consistent level of privacy.

ACTIVE FRONTAGE

The treatment of the ground level frontages in the development will be central to the creation of vibrant streets particularly in the mixed use areas. In order to ensure that these frontages are 'active', they require frequent doors and windows and few blank walls. Typically, active frontages will also include lively internal uses that are either visible from the outside or that 'spill out' onto the street. No blank walls will be set out around the village square.

Rear parking to dwellings will not automatically dictate rear front doors as this weakens the connection between dwelling and street. Therefore, where ground floor flats are located each must include a front door which faces the street.
3. URBAN DESIGN PRINCIPLES

PRIVACY AND OUTLOOK

Not less the 20m is appropriate for privacy distances between habitable room windows (at first floor) across rear gardens. Less can be considered only when local context allows. In these locations single aspect or screening can be considered.

Outlook over neighbouring gardens is acceptable providing the scope of overlooking is mutually shared and consistent between neighbours.

CORNER BUILDINGS

Corner sites are visually prominent, have two frontages and occur at the confluence of two routes. Therefore additional care is needed in design and layout. Standard types that have not been amended to suit this setting will not be acceptable.

Where these occur in a mixed-use setting, frontage access will be required for upper floor uses. These are to be integrated into the ground floor active frontage with minimal blanks walls.

All facades facing public space will require additional windows to enhance the setting of the whole. These are to form part of the architectural character.
3. URBAN DESIGN PRINCIPLES

BUILDING HEIGHTS

Ridge heights will vary depending on design, particularly in relation to solar aspect. Roof pitch not to be more than 45 degrees for a typical building depth of not more than 10m.

- 2 STOREY
  Max 6m to eave

- 2 1/2 STOREY
  Max 6m to eave

- 3 STOREY
  Max 9m to eave

- 4 STOREY INC COMMERCIAL
  Ground Floor
  Max 11m to top of parapet on roof terrace

Terrace set back not less than 2m

4th storey to have flat roof

BUILDING HEIGHTS

The approach is to respond to the local setting. Storey heights will be low close to existing residential neighbours to the west, and along the rural edge to the south. These will be up to two storeys. Building height will increase up to three storeys in the Central Character Area particularly along the Main Road. There will be a fourth storey on buildings surrounding the Village Square. These levels will not be flush to the main façade but set back to form roof decks and balconies.

- Residential floor dimensions are 2.7-3m floor to floor.
- Commercial floor dimensions are 4.3-4.7m floor to floor

SKYLINE AND ROOFSCAPE

The skyline at Carr Lodge will reflect the local character as identified in the Design and Access Statement. Local examples of quality streetscape illustrate some areas having a regular skyline while others are varied. The more varied roofline provides a high degree of legibility for visitors and enriches townscape character. The Carr Lodge interpretation of these examples is to provide a skyline that is regular on some streets and varied on others. The degree of variation will be limited to one storey per plot and in most cases this transition will include plots with half storeys, such as in the use of attic storeys or window features projecting from the roof wall plate. The roofline may also be punctuated with features such as:

- Light wells
- Wind cowls
- Chimneys

In addition to reinforcing local character, the Carr Lodge roofscape will vary in response to the solar aspect of buildings. 35 degrees is the optimum angle for the UK latitude, however early decisions as to the types of solar collectors may vary the decisions about roofscape. It is expected that asymmetrical roofs may result from a solar driven roofscape.
3. URBAN DESIGN PRINCIPLES

**STYLE**

‘Preparing Design Codes – A Practice Manual’ (CLG) 2006 recognises that particular architectural styles or a particular taste should not be imposed on design codes without good reason.

“Doing otherwise runs the risk of stifling innovation, originality and initiative. Therefore, where particular development styles are pursued they should be fully substantiated by robust analysis and understanding of local character and context and be informed by appropriate design skills”.

The manual reflects the view that good design and good taste are two different things; good taste is a matter of opinion whereas good design is about how well things work balancing function, utility and appearance. If a style is suggested, it is likely to be the result of standing the test of time. Developers like to sell this ‘standing the test of time nostalgia’ even when they incorporate inaccurate interpretations of past styles. Our references are now broader and our expectations have developed over time, particularly with our new concerns about sustainability.

**PROPORTION**

Proportion is one of the myths about style. Whilst relating to function, utility and appearance it also opens the issue of good and bad taste, and the cultural needs at the time of building.

Proportion enables us to see order in an intelligible and coherent way. As stated in Design Review by CABE, “order can manifest itself through symmetry (or asymmetry) and balance: through repetition or organisational or structural elements such as the grid, the frame or the bay, and through resonance between element of different scales”.

As a consequence, this Code will not provide mandatory conditions for style and proportion, but developers, designers and offices should be aware that the misuse of period details will be discouraged. Guidance for elements that allude to Style do appear in Section 7 on Building Materials and Details. This illustrates the materials and details that can integrate those typical of local character and those that are drawn from current sustainability practice.
3. URBAN DESIGN PRINCIPLES

URBAN DESIGN PRINCIPLES FOR DITCH AND HEDGEROW DESIGN

1. Re-graded edge of ditch feature including additional soft planting.
2. Retained profile edge of ditch and hedgerow feature.
3. Guard rail located at top of steep side of ditch.
4. Service access not less than 3m wide.
5. Soft landscape feature to property frontage.
6. Typical footway only access with parking to rear of property.
7. Typical street including carriageway and footway.
8. Dwellings to provide overlooking of landscape feature.

DITCHES AND HEDGEROWS WITHIN THE URBAN SETTING

The retention of ditches and hedgerows forms an important part of the Masterplan. The development blocks are arranged so that the ditch and hedgerow features forms part of the network of public spaces. The landscape features also form part of the dwelling frontages. Whether the frontage build line is continuous or broken, all dwellings will overlook these features.

Movement feature
Each side of every ditch feature will contain at least one street type, access drive, bridleway or footpath. Typically, multiple arrangements of these will occur in each location.

Profile of feature
The ditch features throughout the Masterplan have a variety of depths. Steep ditches will be re-graded on one side in order to:

- Halve the number of deep cut profiles and therefore the requirements for railings or guard features within the public space.
- Increase the landscape amenity and ecological value of the ditches through corridors of biodiversity along the shallow cut edge profiles.

Servicing
The movement features will form the basis of the spatial requirements for servicing the ditch, including cleaning, thinning and de-silting. A minimum of 3m level access will be required on one side of the ditch. Access will be arranged so that vehicles can remain in forward gear without turning-heads.

Streetscape
The streets that contain ditch features will have a natural character with boundaries and hard landscape elements contributing to the rural setting. These will include timber knee rails, flush kerbs and hedgerows along property boundaries.
3. URBAN DESIGN PRINCIPLES

URBAN DESIGN PRINCIPLES FOR PASSIVE DESIGN

Not all residential layouts can equally prioritise the wide range of urban design objectives, particularly when reconciling passive solar orientation with other objectives. However, careful orientation of streets, dwellings, habitable rooms, windows and gardens is required to define an optimum balance. The following principles show some of the balances between competing design objectives:

1. Wider streets to accommodate south facing landscape strip.
2. Solar zone to south facing properties and adequate space for refuse and cycle storage.
3. Maximise north/south facing units in order to reduce hard to control east/west facades.
4. Parking to south side of street in shade.
5. Shorter rows of terraces/breaks in rows to south side to let light into the street.
6. Asymmetrical roof pitches to give sufficient area for renewables whilst letting daylight into the street.
7. ‘Hard working’ landscape strip including play (LAP’s), SUDs, community spaces (bbq, seating etc.), planting and low trees for solar shading to south facing units.
4. STREET TYPES

INTRODUCTION

The Masterplan aims to create a hierarchy of different street types of varying characters. This hierarchy is based on the anticipated frequency of access by different vehicle types, with the higher order streets accommodating larger vehicles and the lower order streets smaller vehicles. All streets aim to provide a pleasant walking and cycling environment.

This chapter sets out the detailed specifications to be used when designing different street types, and considers key urban design principles, highways parameters, speed limits, parking arrangements, surface materials, tree planting, building set backs and frontage boundary types.

The Street Hierarchy is first discussed, then the detailed requirements for each street type are set out in turn, and this is followed by a more general discussion on traffic calming measures and streetscape materials.
The proposed movement hierarchy comprises three categories of route: primary, secondary and tertiary, to create a strategic movement network designed to allow for the appropriate traffic movements to take place whilst creating streets that are places in their own right.

Sub-categories of street type are proposed within these three route categories. Design parameters in terms of indicative carriageway widths, building to building widths and parking layout are set out for each street type over the following pages.

The primary route is the key movement spine for all modes of traffic through the development and will provide a connection between Tickhill (A60) and White Rose Way (A6182). Along this route there is one street type, the Main Street. Near continuous frontage and avenue planting provide a strong sense of enclosure and identity.

The secondary routes, consisting of Collector Streets and Local Streets, provide streets for circulation around the site, while the tertiary routes, consisting of Homezones, Mews Streets and Green Edges, are based on shared space principles and will provide access to individual properties.

The development has been designed to be highly permeable and pedestrian and cycle friendly by making streets safe and creating high quality routes. All streets within the development will be cycle friendly, and a series of off street routes are also provided along the abandoned railway line, past the pond to the west of the site towards Tesco and to the north west of the site past the proposed school. These routes connect to the wider strategic cycle network, towards the town centre and Lakeside.
Streets to be designed as bus routes are indicated on the accompanying plan, along with indicative bus stop locations. Separate bus lanes will not be provided along these routes; however, bus lay-bys will be located in-carrigeway to encourage bus priority.

Bus stops along the route will be designed to accommodate the following features:

- Shelters with lighting and seating to make waiting for the bus safer and more comfortable
- Textured paving to help people with visual impairments
- Litter bins to keep the surrounding area tidy
- Raised kerbs to make it easier for people with mobility problems, or pushchairs, to get on and off the bus
- In-depth timetable information to keep users better informed
- ‘Real time’ bus information at some stops and the YourNextBus service at all stops
- Bus stop ‘clearways’ at all bus stops which prevent parking so that buses can pull right up to the kerb
4. STREET TYPES
THE PRIMARY ROUTE

The primary route is the key movement spine for all modes of traffic through the development and will provide a connection between Tickhill (A60) and White Rose Way (A6182) by linking into existing stretches of Woodfield Way to the north and south of the development. The primary route carries through-traffic from surrounding areas of Doncaster and as such plays a more strategic role than other streets within the development. It also functions as a public transport corridor. The design of this route must accommodate these strategic functions but not to the detriment of the pedestrian and cycling environment. Near continuous frontage and avenue planting provide a strong sense of enclosure and identity, while traffic calming features at key locations should keep speeds down.

The Main Street

The Main Street through Carr Lodge links Woodfield Way North and South together to form a continuous link between Tickhill and White Rose Way. The Main Street carriageway will be a minimum width of 7m; the footway will have a minimum width of 2m which will be widened to at least 3m in key pedestrian areas, such as bus stops and outside local amenities. Green verges along the route will be approximately 3.5m wide. On street parking is provided in parallel bays.

The design speed of the route will be 30mph, with traffic calming reducing the speed to 20mph at key points. Cyclists will be directed onto the quieter parallel streets and traffic free routes.

The Village Square, which is integral to the Main Street is detailed separately on a subsequent page.

<table>
<thead>
<tr>
<th>Street Design Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>2.2m in line on street parking bays interspersed with street trees on both sides of street.</td>
</tr>
<tr>
<td>Surface Materials</td>
<td>Carriageway main surface to be blacktop. Key junctions to become flush and be surfaced with PCC setts. Footways to be surfaced with large unit PCC paving. Parking bays to be outlined in PCC setts. There is to be a PCC channel to edge of carriageway. Awareness strips across junctions with lower order streets to be composed of PCC setts.</td>
</tr>
<tr>
<td>Street Tree Species</td>
<td>Fraxinus excelsior ‘Westholf’s Glorie’</td>
</tr>
<tr>
<td>Building Set backs</td>
<td>Set backs of 1-2m for commercial ground floors and 2-4m for residential. Flush setts or grass.</td>
</tr>
<tr>
<td>Frontage Boundaries</td>
<td>Commercial set backs demarcated with blockwork string course, residential set backs demarcated with railings and/or hedges on low walls</td>
</tr>
</tbody>
</table>
The secondary routes form the main access and circulation through the residential neighbourhoods and carry the general traffic that needs to access the different quarters of the development. They have a smaller scale to reflect the lower volumes of traffic they need to accommodate. They have more priority given to pedestrians and cyclists than the primary route. The basic components are a tight carriageway space, parallel parking on both sides and a front garden.

There are two types of secondary route; the Collector Street and the Local Street. The Collector Street carries more traffic than the Local Street and indeed, distributes traffic to the Local Street, which will loop around the residential neighbourhoods.

The Collector Streets
The Collector Streets will have a carriageway width of 6m with gentle horizontal deflections to calm traffic. As with the Main Street, the footway width will be a minimum of 2m and will be widened in key pedestrian areas, such as at bus stops. On street parking is provided as a mixture of parallel and perpendicular bays. The design speed of this street is 25 mph.

Street Design Element | Comment
--- | ---
Parking | 2.2m in line on street parking bays and 6m perpendicular parking bays interspersed with street trees on both sides of street
Surface Materials | Carriageway main surface to be blacktop. Key junctions to become flush and be surfaced with PCC setts. Footways to be surfaced with large unit PCC paving. Parking bays are delineated only by their insets, with no other demarcation. Channels are optional. Where provided, they should be composed of PCC. Awareness strips across junctions with lower order streets to be composed of PCC setts.
Street Tree Species | Acer Campestre 'Elsrijk'
Building Set backs | Private set backs of 2.5 - 3.5m Flush setts or grass and/ or shrubs
Frontage Boundaries | Railings and/ or hedges

The Collector Streets
- Carriageway width: 6m
- Footway width: 2m
- Parking: Mix of parallel and perpendicular bays
- Design speed: 25 mph
4. STREET TYPES
THE SECONDARY ROUTES

The Local Streets
The Local Streets are a narrower and of a lower order street than the Collector Streets, and have a carriageway width of 5.5m. The layout of Local Street is more circuitous, so as not to create an attractive through route for rat running. The minimum footway of the local street is 1.5m with green verges of 3m. The design speed of the route is 20-25 mph. This is assisted by the use of raised tables at junctions to calm traffic. On street parking is provided in perpendicular bays.

<table>
<thead>
<tr>
<th>Street Design Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>2.2m in line on street parking interspersed with street trees on both sides of street</td>
</tr>
<tr>
<td>Surface Materials</td>
<td>Carriageway main surface to be blacktop. Key junctions to become flush and be surfaced with PCC setts. Footways to be surfaced with large unit PCC paving Parking bays are delineated only by their insets, with no other demarcation Channels are optional. Where provided, they should be composed of PCC. Awareness strips across junctions with lower order streets to be composed of PCC setts.</td>
</tr>
<tr>
<td>Street Tree Species</td>
<td>Acer Campestre ‘Elsrijk’ Maulus tchonoskii in special areas</td>
</tr>
<tr>
<td>Building Set backs</td>
<td>Private set backs of 1-2m Flush setts or grass and/ or shrubs</td>
</tr>
<tr>
<td>Frontage Boundaries</td>
<td>Railings and/ or hedges</td>
</tr>
</tbody>
</table>
Tertiary routes are based on shared space principles and have the most pedestrian/cyclist priority. In contrast to the primary and secondary routes, which cater for through-traffic and general circulation traffic, the tertiary routes are of a more intimate scale and provide access to individual properties.

There are three types of tertiary route; Homezones, Mews Streets and Green Edges.

### Homezones

Pedestrians, cyclists and vehicles will have the same priority within the Homezones. This priority is indicated by shared surfaces between buildings throughout the streets and attractive landscaping. The carriageway has a width of 4.8-6.5m with horizontal deflections and a mixture of parking types to calm traffic.

Different areas within the shared surface, such as parking, will be demarcated by differential paving. A consistent street frontage will be established, with the occasional house set back. Distinct areas within the Homezones will be identified for car parking, and these will be identified on the ground in a low-key manner using differential paving. Parking areas must have no more than 6 spaces in any one group.

<table>
<thead>
<tr>
<th>Street Design Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>A variety of parking arrangements are to be used, with their layout designed to deflect vehicles around bays and create narrowings and will include 2.2m in line on street parking.</td>
</tr>
<tr>
<td>Surface Materials</td>
<td>Different paving colours/courses are to be used to differentiate different types of movement. For the vehicle trackway, silver grey interlocking PCC paving is to be used while charcoal interlocking PCC paving is to be used for junctions, parking bays and driveway access points. Awareness strips across junctions with higher order streets to be composed of PCC setts.</td>
</tr>
<tr>
<td>Street Tree Species</td>
<td>Sorbus aucuparia ‘Sheerwater Seedling’</td>
</tr>
</tbody>
</table>
| Building Set backs    | Private set backs of 0.5 - 1m (Bungalows 1 - 1.5m)  
Flush charcoal coloured setts and/ or shrubs |
| Frontage Boundaries   | Set backs are to be open except for bungalows which are to have railings or hedges to ensure privacy for ground floor bedrooms. |
4. STREET TYPES
THE TERTIARY ROUTES

The Mews Streets
Mews Streets have a tighter, more “urban” residential character than Homezones. They are designed as a shared level surface, where pedestrians and cyclists have equal priority with vehicles. Mews Streets must have building frontages on both sides of the street.

Mews Streets are set out in a linear form and will provide for on street parking, integral parking to the house or in a side garage. With minimum width carriageways, Mews Streets should allow for two-way traffic movement and at appropriate intervals a passing space should be provided.

<table>
<thead>
<tr>
<th>Street Design Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>There is to be some parking in a variety of arrangements. However, this is not to detract from the intimate scale of the streets.</td>
</tr>
<tr>
<td>Surface Materials</td>
<td>Mews streets are to be shared surfaces made up of PCC setts throughout. There are to be rumble strips on entry to mews streets composed of PCC setts. Where the minimum footway width is compromised, these are to be integrated with strips into which pedestrians can over run composed of raised PCC setts. Parking bays are to be outlined in PCC setts.</td>
</tr>
<tr>
<td>Street Tree Species</td>
<td>Sorbus x thuringiaca ‘Fastigiata’ or other similar approved Sorbus species of narrow, upright stature</td>
</tr>
<tr>
<td>Building Set backs</td>
<td>Private set backs of 0.5-1m (Bungalows 1-1.5m) Often, front door will open straight onto street. Flush setts and/ or shrubs</td>
</tr>
<tr>
<td>Frontage Boundaries</td>
<td>Set backs to be open except bungalows which are to have railings or hedges to ensure privacy for ground !</td>
</tr>
</tbody>
</table>

---

**Street Types**

**The Mews Streets**

Mews Streets have a tighter, more “urban” residential character than Homezones. They are designed as a shared level surface, where pedestrians and cyclists have equal priority with vehicles. Mews Streets must have building frontages on both sides of the street.

Mews Streets are set out in a linear form and will provide for on street parking, integral parking to the house or in a side garage. With minimum width carriageways, Mews Streets should allow for two-way traffic movement and at appropriate intervals a passing space should be provided.
The Green Edges
The Green Edges are small streets that link higher order streets to homes and driveways and typically have building frontage along one side only. The carriageway has a minimum width of 5.5m; a shared surface runs the length of the street with some visitor parking, though more provision will be available on surrounding higher order streets. The design speed of the access street is 20mph, which is encouraged through horizontal deflections in the carriageway.

<table>
<thead>
<tr>
<th>Street Design Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>Some visitor parking where practical.</td>
</tr>
<tr>
<td>Surface Materials</td>
<td>Different paving colours/courses are to be used to differentiate different types of movement. For the vehicle trackway, silver grey interlocking PCC paving is to be used while charcoal interlocking PCC paving is to be used for junctions, parking bays and driveway access points. Residential setbacks are to be composed of charcoal coloured setts. Awareness strips across junctions with higher order streets to be composed of PCC setts.</td>
</tr>
<tr>
<td>Street Tree Species</td>
<td>Sorbus aucuparia ‘Sheerwater Seedling’</td>
</tr>
<tr>
<td>Building Set backs</td>
<td>2- 4m private set backs</td>
</tr>
<tr>
<td></td>
<td>Flush setts or grass and/ or shrubs</td>
</tr>
<tr>
<td>Frontage Boundaries</td>
<td>Hedges</td>
</tr>
</tbody>
</table>

4. STREET TYPES
THE TERTIARY ROUTES
4. STREET TYPES

Junction Design
Junctions will be designed to be pedestrian friendly with crossing points conveniently located along the desire lines. Key junctions and crossings will have raised tables; side roads on main walking routes should have side-road entry treatment. In accordance with ‘Better Places to Live in South Yorkshire’ (South Yorkshire Integrated Transport Group, 2008), junction radii within the site will be 6m. In some circumstances, the radius can be reduced to 4m. Forward visibility at junctions will be in accordance with Manual for Streets.

The principal junction within the Carr Lodge development will be located within a large hard landscaped square with two Collector Streets meeting the Main Street through the development (see opposite). The square forms the focus for activity in the public realm, which will be reinforced by the integration of public art, street furniture and public transport interchange facilities. Pedestrian crossings, curvature in the street, on-street parking, in-carrigeway bus stops and pedestrian activity will all work together to calm traffic in this area.

The Village Square
The Village Square will accommodate the carriageway of the Main Street through it. The surface of the carriageway will change at the entrance to match the high quality paving material of the footways. A low kerb will be retained through the square but the use of a single material will convey the pedestrian priority. This will be complemented by other integral traffic calming measures such as tight carriageway geometry and alternating priorities at junctions. Vehicle routes will be defined by a change in materials, planting and street furniture. Hard landscaping will be used to enforce low vehicle speeds and to convey that vehicles are ‘guests’ within the space. Tree planting will be used to enclosure the carriageway and reinforce the form of the square.

<table>
<thead>
<tr>
<th>Street Design Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>Parking/loading/drop off spaces are to be permitted around edge of square. Cycle parking is to be provided in groups of no more than 5 stands to front of pavement.</td>
</tr>
<tr>
<td>Surface Materials</td>
<td>The main space (including carriageway) is to be surfaced in quality stone paving. There are to be stone awareness strips on entry to the square, integrated with dropped kerb pedestrian crossing bands. Give-way lines are to be built into crossing bands using contrasting coloured setts. Stone sett paving details are to be used across the square. These can also act as give-way lines in the absence of paving bands. Stone setts are to be used for treatment of channels and for the entire of inset parking bays.</td>
</tr>
<tr>
<td>Street Tree Species</td>
<td>Acer platanoides ‘Emerald Queen’</td>
</tr>
<tr>
<td>Building Set backs</td>
<td>Set backs of 1-2m for commercial ground floors. Open, paved in same material as the square.</td>
</tr>
<tr>
<td>Frontage Boundaries</td>
<td>Set back demarcated with brass studs.</td>
</tr>
</tbody>
</table>
4. STREET TYPES
TRAFFIC CALMING FEATURES

TRAFFIC CALMING METHODS
The principle means of calming traffic on streets should be through the use of integral townscape features, rather than bolt on engineering measures such as speed humps.

Key Principles include the use of:
- Shifts in the alignment of the street and on-street parking bays to force vehicles to deflect and slow.
- Narrowings created by inset on-street parking bays protruding into the carriageway that require vehicles either to slow or to wait to pass.
- Raised tables at junctions
- Raised crossing points
- Shared surface streets, with the carriageway identified by differential paving
- The avoidance of long, continuous, straight roads. To these ends, some on-street parking creating either deflection or a narrowing should be provided on all streets.

PROVIDING FOR CYCLISTS
Safe on-carriageway conditions for cyclists are to be provided on all streets. This is to be achieved by careful traffic calming rather than the provision of specific facilities for cyclists. Cyclists in particular benefit from the use of deflection devices rather than the creation of narrowings. If the latter are not designed appropriately, cyclists can be squeezed or intimidated.

In addition, while the grid of streets has been broken a key points to prevent rat-running by vehicular traffic, pedestrian and cycle connectivity will be provided at these locations and alongside green corridors to create a more permeable network of routes for those on foot or travelling by bicycle.
The images on this page are intended to show generic examples of the surface materials, street tree species and frontage boundary treatments specified in each of the preceding street type tables.

Over and above the street tree species listed below, ornamental Trees can complement the range such as Amelanchier arborea, Betula utilis and Prunus avium.

**Surface Materials**
1. Blocktop
2. Awareness Strip
3. Large unit PCC paving
4. Large unit PCC paving
5. Small unit PCC interlocking pavours
6. PCC setts (mews streets)
7. PCC gully
8. Stone paving (civic areas only)
9. Stone setts (civic areas only)
10. Small stone setts (traffic calming in civic areas only)

**Street Trees**
11. Fraxinus Excelsior
12. Acer campestre
13. Sorbus accepa
14. Acer Platanoides

**Frontage Boundaries**
15. Modern railings
16. Timber railings
17. Soft plated setback
18. Blockwork string course
5. LANDSCAPE INTRODUCTION

The landscape character has a significant influence on the Masterplan as the grid of landscape features, including water courses, dictates the development grid.

The following section explains the objectives, layers of design consideration and approach to landscape hierarchy. It identifies each landscape space within the Masterplan and describes what makes each distinct in character, purpose and appearance. The spaces include: the Village Square, the Central Park, Local Parks and the Linear Parks. Spaces of wider community benefit, such as the Community Woodland, the Community Fields and the Mitigation Area are also included. The sequence of linear parks has number references missing. This is because they have been numbered to relate to the survey method and should not be considered references for any delivery purpose.

Each space is described through a set of design principles and typical plans. In the case of the Linear Parks this also includes cross sections. Developers should note that these cross sections constitute a mandatory element of the Design Code; although the dimensions are for specific locations, they set a minimum standard to be applied based on the interpretation of local conditions and detailed design. They therefore enable the authority to request significant justification if and when schemes vary from the cross sections.

The Landscape Delivery Process
Developers of land parcels will be required to deliver the section of strategic landscape that neighbours their net developable area. The detail of this will be set out in the phasing of the site and in the Green Infrastructure Strategy prepared by the landscape architects.

The onus is therefore placed on all subsequent developers and their design teams who use the Design Code to familiarise themselves with the other supporting documents that provide the technical context of the scheme.
5. LANDSCAPE
OBJECTIVES + APPROACH

OBJECTIVES

An idyllic place to live
To create a place that integrates new urban developments with the surrounding countryside. This development will offer an attractive village environment and a network of quality open spaces to benefit both new and existing residents.

A landscape driven masterplan
To use the existing landscape to guide the masterplan layout. A grid of field boundaries, mature woodlands, trees, hedgerows and ditches set within flat, open countryside.

A network of multifunctional green space
To criss-cross the development with linear parks with a wildlife focus that also offer the opportunity for passive recreation. A network of formal green space is also provided through both large and small play areas, open kickabout areas and formal sports pitches.

An environmental focus
To enhance the already rich wildlife habitat throughout the site and forge relationships with nearby assets such as Potteric Carr Nature Reserve. Sustainable Urban Drainage will be fully integrated within the scheme.
Linear Reedbed Canals
The existing ditches retained but regraded in some places for safety. These act as conduits for clean, attenuated water to be supplied to Potteric Carr Nature Reserve and are also important for water voles.

Shallow Swales
New shallow linear ditches which only hold water some of the time.

Existing Ponds

Proposed Ponds and Wet Areas
Flood alleviation and a replacement habitat for newts and water voles.

Existing Newt Ponds
Retained ponds.

A LAYERED APPROACH

Community Woods
Existing woodland retained within new buffer areas. New paths and boardwalks in some areas, other areas left undisturbed for wildlife.

Central Park & Local Parks Network
Open spaces with formal play facilities. Featuring a central ‘neighbourhood equipped area for play’ (NEAP) and network of ‘local equipped area for play’ (LEAP).

Linear Parks
Managed for wildlife and informal recreation.

Community Orchard Opportunities
Free fruit for residents if demand exists.

Allotments
Possible allotments/orchards if demand exists.

Old Railway Park
Strategic footpath and cycle way within existing scrub landscape.

Active Recreational Space / Sports Facilities
Development to provide sport pitches on site.

Woodland & Scrub
Managed for long term wildlife value.

Mitigation Areas
a. White Rose Way
b. Carr Lodge
(New areas of scrub, hibernacula and ponds created for newts and water vole)

Newt Habitat
Retained ponds.

Hedgerows
Retained, managed and gapped up.

New Hedgerows
Planted to create a complete network.

Water Vole Canal
Retain ditches with improvements.
The site’s existing nature and landscape framework creates a ‘grid’ which is to be largely retained to provide new opportunities for wildlife and give ready access to open space.

The resulting network of spaces and green corridors are described on the following pages to set out instructions for designers and developers.

A separate Green Infrastructure Strategy provides the rationale and context for the landscape proposals and sets out the Management and Maintenance principles to ensure a sustainable resource.

A full tree survey has been undertaken and the outline masterplan commits to retain the majority of healthy existing trees/hedgerows within the proposed open spaces. Individual trees shown on masterplan are indicative (refer to tree survey for details).
5. LANDSCAPE

LANDSCAPE HIERARCHY

Key
- Site Boundary
- Village Square (0.2 hectares)
- Central Park (2 hectares)
- Local Park (1 hectares)
- Play Area
- Linear Parks (7 hectares)
- Woodland (4.6 hectares)
- Community Fields (7.2 hectares)
- White Rose Way Mitigation by others (balancing ponds)
- Carr Lodge Mitigation (5.8 hectares) (newts/water voles ponds)
- Ditches
- Newt Ponds
- Disused Railway Improvements (strategic cycle/footpath by others)
5. LANDSCAPE

VILLAGE SQUARE

VISION

Village Square (0.2 hectares) is a landmark public space adjacent to new local centre (shops/community use). The square is predominantly hard surfaced providing a flexible space for daytime and evening activity and events. Its location is prominent along the main road and it is orientated to avoid shading. A shared surface approach is proposed adjacent to the village square to create a pedestrian dominant environment and enlarge its scale.

PRINCIPLES

Play/Facilities
- The space should be clutter free, contemporary and flexible.
- No formal play facilities are provided.
- The space shall incorporate a focal point feature (for example a water feature or community led art).
- Formal benches and sculptural seating should be provided.
- The space should be able to accommodate events/markets.

Movement
- The space should be accessible to all and avoid unnecessary level changes/steps.

Soft Landscape
- A grid of trees shall be accommodated to create structure and enclosure to the space. Specimen species, with attractive form, foliage and autumn colour are required to create a feature.

Hard Landscape
- Paving shall be upgraded from the typical streetscape treatment. For example high quality exposed aggregate concrete paving slabs with natural stone accents. (see section 4)

Habitat
- Tree species should be selected to provide additional habitat value.
VISION

Central Park is conveniently located formal park adjacent to Village Square to serve the whole community. Central Park is approximately 2 hectares and provides a Neighborhood Equipped Area of Play (NEAP) for formal play, open grassed areas and retains existing woodland.

The park edges are defined by housing and a community building creating a ‘contemporary village green character’ and providing passive surveillance & activity.

PRINCIPLES

Play/Facilities
- NEAP to be at least 1,000 sqm with a set off of 30m from adjacent housing
- NEAP must meet current guidance and in Central Park should provide formal play equipment for a range of ages (more naturalistic play is focused in Linear Parks)
- Formal benches should be provided and informal seating opportunities given through sculptural earth mounding
- Incorporate a community orchard (layout a grid of trees).

Movement
- A loop path shall be provided as an opportunity for leisure use (tie in with the wider footpath network). Formal access shall be provided to the NEAP. The existing bridleway should be incorporated into Central Park.

Soft Landscape
- Amenity grassed areas should be maintained for informal recreation. Edges adjacent to woodland should incorporate swathes of wildflower grass, however this approach should be setback from any footpaths to maintain a neat appearance.
- Entrances into the park should be highlighted by pockets of ornamental tree, shrub and perennial planting.

Hard Landscape
- Loop path shall be formal (for example resin bound gravel). Bridleway to be a less formal (bound gravel).
- Distinctive entrance features should be incorporated into the park to create interest and detail (for example a bespoke railing, sculptural feature or paving band)

Habitat
- Existing woodland belts should be safeguarded and managed for habitat value. No formal pathways are proposed within the woodland itself.
- Wildflower planting should be incorporated to the habitat value of the park.
5. LANDSCAPE
LOCAL PARKS

VISION
Three local parks are provided to serve local areas. In addition they provide stopping points along the linear park trails. Each local park is approximately 0.3 hectares and provides a LEAP for formal play, open grassed areas and groupings of existing and proposed trees.

The character is formal/ornamental and will be well overlooked by adjacent housing for passive surveillance.

PRINCIPLES

Play/Facilities
• Local Equipped Area of Play (LEAP) to be at least 400 sqm with a set off of 20m from adjacent housing
• LEAP must meet current guidance and should be designed to provide formal play features for a range of ages. (more naturalistic play is focused in linear parks)
• Formal benches will be provided and informal seating opportunities given through sculptural earth mounding

Movement
• Paths shall be incorporated to tie into the wider footpath network. Formal access shall be provided to the LEAP.

Soft Landscape
• Amenity grassed areas shall be maintained for informal recreation. Edges adjacent to tree groupings should incorporate swathes of wildflower grass; however this approach should be setback from any footpaths to maintain a neat appearance.
• Tree planting shall be ornamental in style and avoid obscuring views from adjacent properties.

Hard Landscape
• Paths to be formal (for example resin bound gravel)

Habitat
• Existing tree groupings should be safeguarded for habitat value.
• Wildflower planting should be incorporated to enhance the habitat value of the park.
5. LANDSCAPE
LINEAR PARKS

VISION
The masterplan grid is formed by the existing network of ditches and hedgerows. The resulting linear parks provide a biodiversity focus, however public access is incorporated for informal recreation and access to housing. A bespoke approach has been taken to each linear park to safely maintain existing landscape features and incorporate public access. Tree planting is proposed either to complement the existing informal character or instead to create a more formal tree lined avenue. Housing typically fronts onto the linear parks to ensure passive surveillance.

PRINCIPLES
Facilities
- No formal play facilities, however a series of naturalistic play features shall be incorporated.
- A limited quantity of benches will be provided at key pedestrian junctions.

Movement
- Cycle/footpaths and the existing bridleway shall be incorporated into the corridors. A series of pedestrian bridges are also required to pick up lateral desire lines across the site.
- Shared surface vehicular routes will be incorporated sensitively within the linear parks where required to access housing and provide maintenance to the ditches.

Soft Landscape
- Existing hedgerows and groupings of trees are retained where possible. Hedges shall be pruned to an appropriate scale to allow views above them.
- Ditches shall be retained and re-profiled as required for both habitat value and to create safe environment for public access. Additional marginal planting is proposed.
- New planting shall complement existing to help formalise pedestrian routes. Tree planting, hedgerows and wildflower/swale mixes shall be predominantly native.
- Tree planting shall either be formal boulevards or naturalistic groupings (see plan).

Hard Landscape
- Cycle/footpaths shall be formally surfaced (resin bound gravel) The existing bridleway shall be incorporated and surfaced informally (bound gravel).
- Robust boardwalk bridges shall be an appropriate slip resistant finish and be designed for a 50yr life.
- Where landscape features cannot provide sufficient barriers to ditches timber fences are proposed for safety to restrict access to the steep sides of ditches.

Habitat
- Existing ditches/swales run through each of the linear parks and have been individually surveyed and shall improve habitat value, provide safety for public access and encourage additional water flow through weirs for SUDS/aesthetics.
5. LANDSCAPE
LINEAR PARK 1

The following cross sections demonstrate the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)

- Tree planting to create a formal character linear park
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).
- Incorporates additional space to provide open grassed ‘kickabout’ area.
5. LANDSCAPE
LINEAR PARK 2

PRINCIPLES

- Tree planting to create a informal character linear park
- Incorporates cycle/footpaths, existing bridleway & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).

The following cross section demonstrates the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)
5. LANDSCAPE
LINEAR PARK 3

The following cross sections demonstrate the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements.)

PRINCIPLES

- Tree planting to enhance existing informal character linear park
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).
5. LANDSCAPE
LINEAR PARK 4 NORTH

PRINCIPLES

- Tree planting to create an informal character linear park adjacent to existing woodland belt
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).

The following cross section demonstrates the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)
5. LANDSCAPE
LINEAR PARK 4 SOUTH

The following cross sections demonstrate the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)

PRINCIPLES
- Tree planting to create a formal character linear park
- Incorporates cycle/footpaths, existing bridleway & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety)
5. LANDSCAPE
LINEAR PARK 6

The following cross section demonstrates the proposed typical treatment:
(Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)

PRINCIPLES
- Tree planting to create a formal character linear park
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch will require formal barrier
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).
5. LANDSCAPE
LINEAR PARK 7

PRINCIPLES

- Tree planting to create a formal character linear park
- Incorporates cycle/footpaths & shared surface access
- Incorporates additional space to provide open grassed ‘kickabout’ area.

The following cross sections demonstrate the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)
5. LANDSCAPE
LINEAR PARK 8

PRINCIPLES

- Tree planting to create an informal character linear park adjacent to existing woodland belt
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).

The following cross section demonstrates the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)
5. LANDSCAPE
LINEAR PARK 9

PRINCIPLES

- Tree planting to create a formal character linear park
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).
- Creates a strong lateral link between the community fields and housing.

The following cross sections demonstrate the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)
5. LANDSCAPE
LINEAR PARK II

PRINCIPLES

- Tree planting to create an informal character linear park adjacent to woodland belt and community fields
- Incorporates cycle/footpaths & shared surface access
- Steep edge to ditch is proposed to incorporate opportunity for water vole habitat (requires formal barrier for public safety).

The following cross section demonstrates the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)
5. LANDSCAPE
LINEAR PARK 13

The following cross sections demonstrate the proposed typical treatment: (Dotted red line shows existing ground level that shall be regraded to create desired profile. Dimensions show desired relationship of elements)

**PRINCIPLES**
- Tree planting to enhance existing informal character linear park
- Incorporates cycle/footpaths & shared surface access
- Both steep edges to ditch are retained to retain existing water vole habitat. Extend existing habitat westwards if possible. The steep sides requires formal barrier for public safety)
VISION

The community woodland (4.2 hectares) retains the mature woodland belts which cut through the site. The primary focus is to protect and enhance this important habitat. Paths are predominantly limited to the edges of woodland. However elevated boardwalks shall be incorporated in appropriate locations to focus likely use and avoid informally trodden trails, which are more damaging to root systems and habitat.

PRINCIPLES

Play/Facilities
• No formal play facilities or seating should be provided.

Movement
• Formal access is limited. Cycle/footpaths shall be incorporated on the edge of woodlands. Boardwalks shall be incorporated into woodlands to pick up key desire lines and in consideration of tree/habitat surveys.

Soft Landscape
• Enhance woodland habitat as required by a long term management plan. Approach should ensure progression and longevity of the woodland and incorporate a variety of ages of trees. New tree and understory planting shall be predominantly native.

Hard Landscape
• Cycle/footpaths shall be formally surfaced (for example resin bound gravel).
• Boardwalks shall be an appropriate slip resistant finish. Footings shall be located sensitively following detailed arboricultural advise.

Habitat
• Existing woodland shall be managed for habitat value.
5. LANDSCAPE
COMMUNITY FIELDS

VISION
To complement the wider areas recreation offer, community fields (7.2 hectares) proposes space for two formal junior sports pitches, a looped pathway and community driven allotments & orchard. The north west corner may be required for flood storage in the event of a 100yr event (strategy to be confirmed). The enlargement plan (above demonstrates how the northern sports pitch and earth mounding could achieve the required volumes and avoids a separate dedicated ‘flood area’.

PRINCIPLES

Play/Facilities
- Play areas are provided elsewhere on the site, however a series of naturalistic play features shall be incorporated in combination with sculptural earth mounds.
- Sculptural earth mounds provide a place to relax and watch games and create a landscape feature.
- A limited quantity of benches will be provided at key pedestrian junctions. Earth mounds shall provide informal seating opportunities.
- Allotments shall have a formal boundary for security, but the area should be designed and managed to provide an inclusive, welcoming facility. This could involve provision of a range of sized plots including mini allotments (for example 2mx2m raised beds to encourage a wider audience). Relationships with local community groups or schools would be encouraged and a year long programme of events.
- Incorporate a community led orchard (layout to be grid of trees).

Movement
- A loop leisure cycle/footpath shall be incorporated to link with housing areas and external routes including the disused railway strategic cycle/footpath.

Soft Landscape
- Amenity grassed areas to be maintained for informal recreation. Edges adjacent to tree groupings should incorporate swathes of wildflower grass, however this approach should be setback from any footpaths to maintain a neat appearance.
- Tree planting, hedgerows and wildflower/swale mixes shall be predominantly native.

Hard Landscape
- Paths shall be formal (for example resin bound gravel)

Habitat
- Naturalistic tree groupings are proposed and managed for habitat value.
- The addition of wildflower planting will add to the habitat value of the park.
- Existing ditches and hedgerows are retained where possible for habitat value.
5. LANDSCAPE
CARR LODGE MITIGATION

VISION
The mitigation area provides a 5.8 hectares of new habitat and is located adjacent to the White Rose Way mitigation area (by others). New areas of woodland, scrub, hibernacula and ponds are created for newts and water vole. Public access is not encouraged, however a perimeter cycle/footpath provides glimpsed views. The mitigation provides a wildlife asset and the opportunity for education/research in close proximity to Potteric Carr SSSI.

PRINCIPLES
Play/Facilities
• No play facilities or seating are provided.

Movement
• No formal access is provided, however a perimeter cycle/footpath links in with the wider network allowing glimpsed views.

Soft Landscape
• Create new habitats as required by a long term management plan. Tree planting, hedgerows and wildflower/swale mixes shall be predominantly native.

Hard Landscape
• None required

Habitat
• Proposed ponds and planting to be managed for habitat value. Focus on creating alternative habitat for water vole and newts which will need to be translocated under EN licence from the main development area.
6. BUILDING TYPES

INTRODUCTION

When laying out the mix of dwellings required for a particular parcel, designers should understand the implications that types have on their setting and conversely, that setting has on dwelling types.

The selection of dwelling types is driven by many stakeholders over and above the dwelling occupiers, whose primary concern is how the house functions as a home. There is a wide range of other stakeholders who are charged with the public interest; highway performance and parking, security, recycling collection, utilities provision, nature conservation, fire services and building regulations, all of which have an impact on housing design.

The following guidance is generic but examines some of the impacts of selection in terms of:

- Distribution within Masterplan
- Density
- Storey Heights
- Street Types
- Parking
- Building for Life
- Code for Sustainable Homes

The guidance will be useful to planners and developers as it is intended to:

- help local authority officers think their way through design and make balanced and valued judgements; and,
- guide developers towards ensuring that sufficient design resources are put in place for quality proposals to be made.
6. BUILDING TYPES
RESIDENTIAL NARROW TYPES

The indicative 'Narrow Type' houses above are based on a nominal 5-5.5m plot width which necessitates a deep front-to-back plan. In general, this will limit the internal planning to the width of one habitable room.

INDICATIVE ARRANGEMENT

- Boundary to rear parking courts to allow views of parked cars. Therefore, the solid part is not to be more than 1.5m high.
- Streetscape to include street trees and on street parking
- Enclosed, secure back gardens
- Potential for one car only on frontage forecourt
- This type (with integral garage) is only suitable for Homezones and Mews Streets.
- There are to be no more than three dwellings of this type (with integral garage) in a row.

Typology Principles | Comment
--- | ---
**Distribution within Masterplan** | Arranged as terraces or semi-detached. Distributed in the grid-like areas as continuous frontage and where a compact family housing mix is required.

Density | 40-50 D/HA, see Design and Access Statement for Density Plan and location opportunities

Storey Heights | 2-3 storeys. Between 2.7 and 3m between floors.

Street Types | Formal streets, particularly the Main Road and the Collector Streets. House type and parking arrangement to respond to on-street parking and street tree layouts. May also be appropriate for higher density Local Streets and Mews Streets. The type of street will influence further design decisions such as set back distances and boundary treatments.

Parking | On-street frontage parking subject to street type. Frontage forecourt parking to be in over-shadowed northern aspect only. Integral garages to be not more than three in a row and not grouped directly across a street. Space in front of integral garages is to be limited to 2m to prevent misuse. Terraced arrangements without integral garages to be parked at rear. Semi-detached arrangements to be parked along the flank wall of the units. It is unlikely that this type would achieve more than one on-plot space.

Building for Life | Narrow plan reduces opportunities for adaptation, conversion or extension.

Code for Sustainable Homes | Minimal thermal envelope. Light penetration to full depth of plan is reliant on increased glazing or light wells, therefore a higher than typical percentage of glazing and u-value are critical. Integral garage will necessitate higher spec. of envelope to achieve Code levels 5 and 6.
The indicative ‘Wide Type’ houses above are based on a nominal 9-11m plot width, which results in a shallow front-to-back plan. In general, this will allow internal planning to be based on the width of two habitable rooms.

1. Enclosed, secure back gardens
2. Potential for 2 cars on frontage forecourt
3. Boundary to rear parking courts to allow views of parked cars. Therefore, the solid part is not to be more than 1.5m high.
4. Streetscape to include street trees and on street parking
5. Capacity for a second car in drive through car port
6. This types (with drive through parking) is only suitable for Homezones and Mews Streets.
7. There are to be no more than six dwellings of these types (with integral parking) in a row. They are to include soft landscape as part of the frontage design.

### 6. BUILDING TYPES

#### RESIDENTIAL WIDE TYPES

<table>
<thead>
<tr>
<th>Typology Principles</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution within Masterplan</td>
<td>Back of block spaces are generous. These spaces will be occupied by over-sized gardens and parking courts. Type to be distributed in the grid-like areas as continuous frontage and where a low density family housing mix is required. Use house types with dual aspect habitable rooms in places with poor solar orientation.</td>
</tr>
<tr>
<td>Density</td>
<td>35-42 D/HA, See Design and Access Statement for Density Plan and location opportunities.</td>
</tr>
<tr>
<td>Storey Heights</td>
<td>2-3 storeys. Between 2.7 and 3m between floors. Shallow front to back dimensions will result in a lower roof line.</td>
</tr>
<tr>
<td>Street Types</td>
<td>To be located along the Local Streets and Mews Streets. The type of street will influence further design decisions such as set back distances and boundary treatments.</td>
</tr>
<tr>
<td>Parking</td>
<td>On plot frontage parking will be led by street trees and on-street parking layout. Frontage forecourt parking to be used in over-shadowed areas with northern aspects only. No more than six units with integral garages in a row. Terraced arrangements without integral garages to be parked at rear. Corner dwellings to include parking access in minor street. Car ports can allow through access to rear parking.</td>
</tr>
<tr>
<td>Building for Life</td>
<td>Shallow plan type will allow for easier adaptation, conversion or extension.</td>
</tr>
<tr>
<td>Code for Sustainable Homes</td>
<td>Shallow front to back dimensions will allow good solar penetration. Therefore less of the thermal envelope will be needed as glazing. Good passive ventilation potential. Integral garage will necessitate higher spec. of envelope to achieve Code levels 5 and 6.</td>
</tr>
</tbody>
</table>
6. BUILDING TYPES
RESIDENTIAL SQUARE TYPES

The indicative ‘Square Type’ houses above are based on a nominal 7-8m plot width which lends itself to the creation of square or L-shaped plans. In general, this will allow internal planning based on the width of two habitable rooms.

INDICATIVE ARRANGEMENT

<table>
<thead>
<tr>
<th>Typology Principles</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution within Masterplan</td>
<td>Where there are bigger plot widths, typically on corners and detached housing areas (eg. the rural Edge). Compact plan form allows for grid and irregular block layouts. Can be arranged as terraced, semi-detached and detached dwellings. Able to meet a wide range of market aspirations.</td>
</tr>
<tr>
<td>Density</td>
<td>38-48 D/HA, see Design and Access Statement for Density Plan.</td>
</tr>
<tr>
<td>Storey Heights</td>
<td>2-3 storeys. Between 2.7 and 3m between floors. Can be used to present a varied roof line to the street.</td>
</tr>
<tr>
<td>Street Types</td>
<td>To be located along the Local Streets and Mews Streets. The type of street will influence further design decisions such as set back distances and boundary treatments.</td>
</tr>
<tr>
<td>Parking</td>
<td>On plot frontage parking will be led by street trees and on-street parking layout. Frontage forecourt parking to be used in over-shadowed areas with northern aspects only. No more than four units with integral garages in a row. Terraced arrangements without integral garages to be parked at rear. Car ports can allow through access to rear parking.</td>
</tr>
<tr>
<td>Building for Life</td>
<td>Square plan type will allow for easier adaptation, conversion or extension.</td>
</tr>
<tr>
<td>Code for Sustainable Homes</td>
<td>The dimensions of the square type will allow good solar penetration. Therefore less of the thermal envelope will be needed for glazing. Good passive ventilation potential. Integral garage will necessitate higher spec. of envelope to achieve Code levels 5 and 6.</td>
</tr>
</tbody>
</table>

Boundary to rear parking courts to allow views of parked cars. Therefore, the solid part is not to be more than 1.5m high.

Streetscape to include street trees and on street parking.

Enclosed, secure back gardens. There are to be no more than four dwellings of this type (with integral garage) in a row. They are to include soft landscape as part of the frontage design.

Potential for two cars on frontage forecourt.
The indicative ‘Bungalow Type’ houses above are based on a nominal 10-12.5m plot width which will allow a wheelie bin to pass a parked car.

1. Compact block depth
2. Shallow rear gardens of not less than 5m due to single storey buildings and 1.8m high privacy fence between them
3. Plot width of 10-12.5m to allow for a wheelie bin to pass a car
4. Side flanking parking which includes a pergola/ car port for one car ensures that the front door is screened from rain
5. The streetscape is to combine parking, access, on street parking and street trees
6. Privacy set back from front bedroom window
7. Use roof form to increase sense of enclosure of street, i.e. monopitch, gable, parapet
8. Continuous build line with neighbouring houses

INDICATIVE ARRANGEMENT

<table>
<thead>
<tr>
<th>Typology Principles</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution within Masterplan</td>
<td>Located in the quietest streets. Less than 1% of all dwellings - see parcel briefings (refer to Introduction in Section 1 of this Code) for details. Plot width of 10-12.5m to allow for flanking parking. Compact and private rear gardens possible, subject to local arrangement of 2-3 storey dwellings. Arranged to continue the built line of the street. All bungalows to comply with Lifetime Homes.</td>
</tr>
<tr>
<td>Storey Heights</td>
<td>1-11/2 storeys. Between 2.7 and 3m between floors. Can be used to present a varied roof line to the street.</td>
</tr>
<tr>
<td>Street Types</td>
<td>To be located along the Homezones and Mews Streets. Boundaries to street frontage must provide a physical barrier to protect privacy of frontage bedrooms. Front gardens must be no less than 2m deep.</td>
</tr>
<tr>
<td>Parking</td>
<td>Frontage parking will be led by Homezone and Mews Street layouts, including drainage, street trees and on-street parking. Car ports to allow enough width for car and wheelie bin access. Car ports can allow through access to rear parking.</td>
</tr>
<tr>
<td>Building for Life</td>
<td>Bungalow plan type will allow for easy conversion to full mobility access or extension.</td>
</tr>
<tr>
<td>Code for Sustainable Homes</td>
<td>Extensive roof area will allow good solar heating and power devices. Good passive ventilation potential from single storey. A high surface area: volume ratio will lead to higher heat loss.</td>
</tr>
</tbody>
</table>
6. BUILDING TYPES

FLATTED TYPES

- Additional front doors for all ground floor flats facing the street.
- Rear parking courts screened from street.
- Visitor parking integrated into street tree layout.

**INDICATIVE ARRANGEMENT**

**ACCESS**

**PROPORTION**

**PRIVACY**

<table>
<thead>
<tr>
<th>Typology Principles</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution within Masterplan</td>
<td>Flats to be in blocks detached from other dwelling types. To be located on Main Road, along the Rural Edge close to the local centre and along the southern edge of the Central Park. Should be used within the urban block to reinforce townscape design as vista stoppers and to highlight gateways and corners.</td>
</tr>
<tr>
<td>Density</td>
<td>50-70 D/HA, see Design and Access Statement for Density Plan and location opportunities.</td>
</tr>
<tr>
<td>Storey Heights</td>
<td>3-4 storeys. Between 2.7 and 3m between floors.</td>
</tr>
<tr>
<td>Street Types</td>
<td>To be located on formal streets, particularly the Main Road. Street arrangement will be a result of parking strategy. On-street visitor parking and street trees will only be possible when rear parking courts are used for residents. Flats located along swales will require an additional access drive for frontage parking.</td>
</tr>
<tr>
<td>Parking</td>
<td>See Design and Access Statement for parking standard for flats. See above note on Street Type above for frontage parking. On street allocated parking will be provided with a mix of in line bays and bays at 90 degrees to carriageway to ensure minimal set-back of flats from street. Rear parking courts will occupy valuable space that could be used for recreation. Therefore ensure that rear parking is only used where other recreation space is local and accessible.</td>
</tr>
<tr>
<td>Building for Life</td>
<td>Ensure the mix of flats contributes to the mix of surrounding dwelling types to allow for local lifestyle changes.</td>
</tr>
<tr>
<td>Code for Sustainable Homes</td>
<td>Minimal thermal envelope. There should be no north facing single aspect flats. Ensure amenity space for air drying laundry. Private or shared outdoor spaces for every flat are to meet the Code.</td>
</tr>
</tbody>
</table>
6. BUILDING TYPES
MIXED-USE TYPES

<table>
<thead>
<tr>
<th>Typology Principles</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution within Masterplan</td>
<td>To provide the built form for two sides of the Village Square in the Central Area only. To provide a legible landmark for the whole of Carr Lodge and to provide local civic identity.</td>
</tr>
<tr>
<td>Density</td>
<td>40-50 D/HA over and above commercial uses, see Design and Access Statement for Density Plan and location opportunities</td>
</tr>
<tr>
<td>Storey Heights</td>
<td>3-4 storeys. Between 2.7 and 3m between floors for residential. Commercial ground floor to be 4.3-4.7m for servicing and viability purposes.</td>
</tr>
<tr>
<td>Street Types</td>
<td>To be a formal set piece building on the junction of Main Road and the east-west Collector Street. Layout and parking arrangement to respond to on-street parking and street tree layouts. Special street design and layout to integrate pedestrian desire lines, crossing points, on street visitor parking, bus stops, tree planting and lighting. Street materials specified in line with landscape details in Sections 4 and 5. Building set-backs to be flush surface demarcated by brass studs to show adoption.</td>
</tr>
<tr>
<td>Parking</td>
<td>On-street frontage parking for visitors only. On-street parking to be in-line with carriageway and integrated into the street tree and lighting grid. Parking courts for residents and ground floor operators will occupy space to the rear of the building. Rear parking courts to integrate servicing access for the commercial uses.</td>
</tr>
<tr>
<td>Building for Life</td>
<td>Ensure commercial ground floor uses are compatible with upper floor dwellings.</td>
</tr>
<tr>
<td>Code for Sustainable Homes</td>
<td>Minimal thermal envelope. There should be no north facing single aspect flats. Ensure amenity space for air drying laundry.</td>
</tr>
</tbody>
</table>

Indicative Arrangement:

1. Residential parking for mixed use block.
2. Service vehicle circulation for mixed use block.
3. Create street enclosure at rear access. Minimum width to allow for carriageway and footway.
4. All buildings to create sense of enclosure.
5. Ensure overlooking of all publicly accessible spaces.
7. BUILDING MATERIALS AND DETAILS

INTRODUCTION

Architectural details and building materials play a vital role in place-making and contribute towards the sustainability credentials of development. Thoughtful attention to the built form and the construction details is therefore needed. CABE’s ‘The Design Review’ and ‘Buildings for Life – Delivering Great Places to Live’, both include sections on how architectural quality can be demonstrated and are excellent starting points.

This section contains guidance on the energy and sustainability considerations that are required. It then illustrates some of the contemporary features that can result from sustainability considerations. There is then an examination of the local character of buildings as illustrated in the Design and Access Statement, and the preferred palette for Carr Lodge.

The images above show existing house-types used at the first phase of Carr Lodge. Whilst there are a variety of developers, houses and building forms, there is a collective character brought about by the use of similar architectural details and building materials. This helps to give the development a distinctive identity and sense of place. Whilst there is scope for imaginative new design in future applications for development at Carr Lodge, the proposals should seek to respond to this emerging vernacular in a positive way.
7. BUILDING MATERIALS AND ELEMENTS

ENERGY CONSIDERATIONS

Developers and their designers will be expected to demonstrate considerations of energy efficient practice. Although this section is prepared as guidance as opposed to mandatory codes, observance of the elements listed below will ease compliance to the Code for Sustainable Homes level 4 and above. None of these should be considered in isolation but as part of a comprehensive and integrated solution.

Orientation to the south
At Carr Lodge, to meet the ambitions of the sustainability targets the layout of new buildings will be informed by their orientation which includes a preference for:
- Orientation of living and bedrooms to the south.
- Orientation of service rooms and entrances to the north.
- Maximising passive solar gains and requirement for active solar roofs.

Quality of Building Envelope
At Carr Lodge designers will need to consider the impact of efficient wall design and the thermal performance of their approach including:
- High levels of insulation for walls and roofs leading to a thicker external envelope.
- Requirement for very good ‘air tightness’.
- Reducing heat losses and improving thermal comfort.

Ventilation Concept
At Carr Lodge designers will need to consider ventilation in conjunction with building envelope design including:
- Reduce heat losses through ventilation, this is important in reducing the overall losses in energy and creating energy efficient buildings.
- Consider the use of mechanical ventilation with heat recovery.

Energy-Efficient Windows
At Carr Lodge designers will need to consider window design in conjunction with the building envelope and ventilation including:
- The use of triple-glazing to provide a high level of insulation and to capture the sunlight.
- Reducing frames as these are thermally the weakest part of windows.
- Maximising solar gains, reducing heat losses and providing high thermal comfort.

Integration of Renewable Energy Sources
At Carr Lodge a reduction in the energy demand of dwellings will benefit from:
- Using south-oriented roofs for the generation of energy.
- Photovoltaic panels to generate electricity.
- The concept of houses as a “power station” for renewable energies.

Summer Sun Protection
At Carr Lodge, a consequence of responding to energy efficient orientation is the need for summer sun protection including:
- Shading provided through over-hanging eaves and balconies to avoid (highly insulated buildings) over-heating in summer.
- Additional shading provided by shutters and blinds to protect large windows.
- The use of building additional components for summer sun protection.

Sustainable Building Materials
All materials used at Carr Lodge will have a degree of embodied energy, therefore materials selection should consider:
- Render or timber finishing instead of heavier materials like stone.
- Application of timber selection for load-bearing structure.
- Reducing embodied energy of building materials.

Broadband Infrastructure
Any new development must have the provision for broadband connectivity, to ensure best value for money, and choice for new residents, this need to be considered and built in at the design and planning stage. Broadband is highly expected in new developments and is viewed as an essential commodity by many people now. All new developments should be supported by a variety of broadband infrastructure suppliers.
7. BUILDING MATERIALS AND ELEMENTS

CHARACTER AND PALETTE

The images on the following pages examine the materials and building elements that will be appropriate for Carr Lodge. The first selection illustrates materials that can be used to meet the sustainability targets set for the development, the second selection shows the materials and details that are typical of the South Yorkshire area, the third selection draws out the areas of overlap and provides a palette for Carr Lodge. The vision for the development is one which reflects the unique character of South Yorkshire whilst creating new building typologies that are compact, simple and flexible. Therefore, the key design considerations are:

- To develop character from an understanding of the surrounding built context and natural form
- To use positive features from the local area as design cues which can then be interpreted in a contemporary manner
- To use local materials and colour palettes to reinforce distinctiveness
- To develop the external appearance of dwellings from the function and internal use of the building rather than as ‘bolt-ons’ to standard house types. The maximisation of light and space, flexibility of layout, and reduction of carbon emissions should inform the layout and appearance of buildings.
- To select materials for their energy consideration and impact on the environment when disposed of
- To minimise waste through the prefabrication of building elements off site. This will also help to achieve the required airtightness and reductions in carbon emissions.
7. BUILDING MATERIALS AND ELEMENTS
CONTEMPORARY AND LOCAL REFERENCES

SOUTH YORKSHIRE

One of the predominant materials in South Yorkshire is the traditional limestone.

Some of the stone buildings were rendered in light colours such as cream and white or simply painted.

The other predominant material is red brick. Windows tend to be well proportioned with vertical emphasis.

There are a few very successful timber frame buildings.

There are many examples of slate or orange pan tiles for the roofs, particularly in post war buildings.

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7. BUILDING MATERIALS AND ELEMENTS

THE CARR LODGE PALETTE

The key principles selected for Carr Lodge include:

1. Red brick, particularly on rear and north facing elevations, with the opportunity to integrate reclaimed bricks
2. Light coloured, cream or white render
3. Reconstituted stone for key buildings
4. A variety of roof forms and materials

<table>
<thead>
<tr>
<th>Design Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Walls</strong></td>
</tr>
<tr>
<td>Expansion joints should be carefully considered and placed to avoid visual intrusion. Selected brick and mortar pointing must be prepared as sample panels to be approved by DMBC. Render finishes are to be coloured through for quality and consistency. Utilities are to be located to the rear.</td>
</tr>
</tbody>
</table>

| **Roofs** |
| Galvanised rainwater goods must be fully integrated into elevation designs and not added on as afterthoughts. Capping materials on flat roofs with parapets must be robust and ensure a clean edge on the cornice line. On mono-pitch roofs with over-sailing eaves, the under-eave and soffits must be well detailed and form part of the architectural expression. When detailing Dormers, the ridges and eaves must be proportionally smaller than those on the main roof. Aerials and satellite dishes will not be permitted on roofs or facades where they cause visual intrusion. |

| **Windows & Doors** |
| All windows and their subdivisions should have a proportional relationship with the entire building. Avoid glazing bars within glazing cavity. Consider the depth of window reveals as part of the architectural expression of the walls. No UPVC. Whether steel, aluminium or timber all windows will include fully factory prepared finishes. No hinging sashes that present the appearance of sliding sashes are to be used. |
8. PARKING STRATEGIES

Predominantly 2 allocated both on plot
Predominantly 1 on plot & 1 unallocated (street or lane or court)
50% 2 allocated (on/off plot)
50% 1 on plot & 1 unallocated
Predominantly 2 unallocated (street, lane)

NOTES:
Rear parking courts to be unadopted and unallocated. Where units have no parking on plot, rear parking courts to be allocated.

Reference has been made to the 'Residential Car Parking Research' document prepared by the DCLG in May 2007 as well as the EP document 'Car Parking - what works where' prepared in March 2006.

Research suggests that no special provision need be made for visitors where at least half of the parking provision associated with a development is unallocated.
8. PARKING STRATEGIES

INTRODUCTION

As with all newly constructed areas, the level of parking provided greatly influences patterns of sustainable movement and in each case, there is a balance to be achieved between delivering sustainable transport objectives and achieving commercial viability for new houses. As a result, the link between the level of parking available and the generation of private vehicle trips has been examined to justify the use of car parking constraints as a method of promoting travel by sustainable modes.

The good provision of public transport and facilities for walking and cycling proposed at Carr Lodge will offer people an alternative to using the private car and although this will ... preferred mode of choice for some journeys and levels of car ownership may not reduce significantly in the near future.

Therefore, sufficient space will be planned for car parking so that inappropriate parking, which could be detrimental to the safety and amenity of others, can be generally avoided. The appraisal of car parking requirements should also take account of the impact of parking on the overall character area of a place and the contribution towards increased street activity.

Parking will be carefully structured to give a mixture of different parking types spread across the site - a combination of on-street, on plot and parking court solutions - so that less impact is made in the public realm in any one place. On-plot parking will include a mixture of garages, hard standing and car ports, rear courts and mews streets with garages. Off plot parking includes the use of front courts, mews courts and mews streets with garages and pergolas. There will also be on-street parking provision for visitors and residents.

Parking standards for houses and apartments

For dwelling houses and apartments the council will aim to achieve the following minimum parking standards:

- apartments: 1.5 spaces, where 1 space is allocated and another defined shared visitor space is provided for every 2 dwellings in communal parking areas;
- 2 bed units: 1.5 spaces, where 1 space is allocated and 1 space is provided for every 2 dwellings in defined bays within the public highway;
- 3+ bed units: 2 allocated spaces per dwelling,
- plus 1 visitor space per 4 dwellings unallocated and provided in defined bays within the public highway or private drive,
- Integral or standalone garages will not be counted as a parking space unless they are an adequate size (currently 3x6 metres minimum clear internal dimensions).

Parking ratios from DCLG Residential Car Parking Research

<table>
<thead>
<tr>
<th>CAR PARKING SPACES PER DWELLING</th>
<th>WHERE UNALLOCATED</th>
<th>WHERE IS ALLOCATED</th>
<th>WHERE ARE ALLOCATED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. PARKING STRATEGIES
ON STREET PARKING

UNALLOCATED ON STREET
As a rule, all on-street parking spaces must be clearly defined. In the more residential character areas the parking spaces should be more subtly evident, in order to suit the informal character of the setting. Unless identified as a parking location, all carriageway space should be assumed as being required for traffic movement, not for parking. In some of the streets, suitable parking controls may need to be implemented as part of any adoption process. On street parking will be mixed as parallel and perpendicular parking.

Right Angled
- In front of properties, short walking distance
- Efficient provision of visitor parking
- To be integrated with other parking solutions to provide landscaping
- Particularly suitable for north facing dwellings

Right Angled
- Efficient provision of visitor parking
- To be integrated with other parking solutions to avoid street scene to be dominated by cars
- Particularly suitable for north facing dwellings
8. PARKING STRATEGIES

ON-PLOT PARKING

ALLOCATED ON PLOT

Space for car parking can be provided within the ownership of the plot. Care should be taken that this does not result in streets being dominated by parking spaces in front of narrow fronted dwellings or building facades with large expanses of garage doors. It is preferable to locate parking spaces to the side or rear of buildings where practicable. In the same streets it may be possible to have parking within the private strip in front of the property, the benefit of this arrangement being that whilst it appears like normal on-street parking, the space is within the ownership of the property and therefore can be allocated to it.

Integral garages

Garages can help reduce the visual impact of parked cars. However, it is recognised that garages are often used for other purposes, such as general storage and therefore, if they are of a minimal size, they will not be an effective parking space. A realistic view should be taken based on the amount of storage space provided elsewhere within a dwelling and the likely need to accommodate items such as bicycles, freezers etc. The advantage of the garage is that it can be used as an amenity and again, because the dwelling is accessed from the front, an active street frontage is maintained.

Hardstanding and Garage or Pergola

- Potential to use garage roofs as amenity
- Gated shed to avoid garage being used as storage
- Access to dwelling from street

Attached Garage

- Potential to use garage roofs as amenity (particularly suitable for south facing dwellings)
- Access to dwelling from front to ensure active street

Hardstanding (partially covered)

- Particularly suitable for north facing dwellings
- Access to dwelling from street to ensure active frontage

Mews Street with Garages or Pergola

- Potential to access court through archway
- Access to dwelling from front to ensure active street
- Alternative using pergolas

Guidance for all garaging that will count towards an allocated parking space.

- These will be gated for security rather than containing a garage door. They will be an open grill type of gate that will allow visual permeability and therefore discourage the use of the space as general storage.
- They will have sufficient width so as to allow the opening of a car door or to be able to walk passed a car with a wheelie bin, a minimum of 6m X 3m plus opening mechanisms.
- They will be operated with the use of an electric fob for ease of use and to reduce the number of actions required for manoeuvring the car.
8. PARKING STRATEGIES
MEWS STREET PARKING

ALLOCATED OFF PLOT

Mews parking arrangement will be designed for a range of residential uses not just car movement.

It provides hard standing parking adjacent to the property for easy access to the home and locating front doors on the street will encourage the dwelling to be accessed from the front, contributing to an active street frontage. All hard landscape materials will be designed as one composition and be in blockwork.

Landscape design will be carefully considered including the use of car ports or pergolas. These will create the opportunity for soft landscaping and again, because the dwelling is accessed from the front, an active street frontage is maintained. There is the opportunity to turn the roof of the car port into a sun terrace, or other amenity.

On plot spaces to be located at 4m max from pavement to avoid additional parking in front of it blocking footpath.

Mews Street
- Allocated if units do not have a space on plot
- Access to dwelling from front to ensure active street

Mews Street with Garages
- Allocated if units do not have a space on plot
- Small scale of street encourages sense of ownership
- Layouts could include a flat over garage (FOG) on one or both sides of Mews Street subject to detailed design

Mews Street with Pergolas
- Allocated if units do not have a space on plot
- Potential for soft landscaping on pergolas
- Access to dwelling from front to ensure active street
8. PARKING STRATEGIES
FRONT AND REAR COURT PARKING

FRONT PARKING COURTS
Front parking courts that occupy deep frontage spaces are an efficient use of space whilst retaining the public-private divide of the street. In these settings, planting will be carefully designed to reduce the visual impact of parked cars. Typically this will include low level screening from the street so that an unhindered view of pedestrians is possible. The layout should also allow for cars to turn within the space so that they can enter the street in forward gear.

REAR PARKING COURTS
Small parking courts serving a small number of dwellings from the rear can be an acceptable way of relocating car parking away from the fronts of dwellings and can help reduce the visual impact of parked cars on the street scene. Large unsupervised parking courts should be avoided. Parking courts should be well related to the dwellings that they serve and should preferably be overlooked or clearly within the private domain. The entrances to parking courts should be designed to emphasise their private use e.g. narrowing access points / gateways / archways or change of surface.

All quotations from “Car Parking: What works where” (English Partnerships)
8. PARKING STRATEGIES

COMBINATION PARKING

A COMPREHENSIVE APPROACH

No one parking solution will be adequate for an individual layout and a variety in parking solutions will enrich the setting of the whole. Whichever parking solution is selected, an integrated approach to landscaping will be required as this is fundamental to the design of: allocated and non-allocated spaces, the type and amount of set-back from dwellings, the location of access-ways to rear parking courts and tree and lighting positions.

In order to ensure parking is secure and well surveyed, it is important for it to be closely related to the dwelling it serves. This often results in a preference for on plot solutions but does not preclude others. For more detail refer to Safer Places: The Planning System and Crime Prevention (2004).

On plot spaces to be located at 4m max from pavement to avoid additional parking in front of it blocking footpath.

COMBINED ALLOCATED AND UNALLOCATED

Attached Garage
- “Potential to use of garage roofs as amenity” (particularly suitable for south facing dwellings)
- “Gated shed to avoid garage being used as storage”

Car Port (Pergola)
- Potential for soft landscaping on pergolas
- Access to dwelling from front to ensure active street

Integral Garage
- Particularly suitable for north facing dwellings
- “Visual interest of wide frontage units ensure that garage door does not dominate”

Integral Garage
- Particularly suitable for north facing dwellings
- “Visual interest of wide frontage units ensure that garage door does not dominate”

Hardstanding (covered)
- Particularly suitable for north facing dwellings
- “Potential to use garage roofs as amenity”

Hardstanding (Cut out)
- “Visual interest of wide frontage units ensure that garage door does not dominate”
- Access to dwelling from front to ensure active street
The amount of cycle parking provided in shared facilities should be determined by the average levels of cycle ownership for the area. It must also be considered that cycle ownership is lower in flats than houses.

**CYCLE PARKING FOR VISITORS**

Visitor cycle parking will be on-street in key locations; cycle parking will be in the form of Sheffield stands. Visitor cycle parking in the public realm is best placed in areas that are overlooked. Cycle parking stands must be located clear of pedestrian desire lines and generally on the carriageway side of the footway.

The need for convenient and safe cycle parking in all new developments is noted in PPPG 13, which recommends providing cycle parking as a way of increasing cycling, in an effort to obtain local authority cycle targets.

**CYCLE PARKING FOR HOUSES**

Residential cycle parking should be provided in a location where the use of the bicycle is encouraged for short trips. The bicycle, should therefore be as parked as close as possible to the front door. If cycle parking is provided for in private garages, then the garage must be designed so that the bicycle can be easily removed without needing to remove any parked cars in the garage. Cycle parking should be designed so that there is no need to lift or drag the bicycle, making the parking provision suitable for all strengths and ages of person.

Greater consideration needs to be given to bespoke cycle parking, tailored for that type of property. The properties with pergolas, court parking and car ports will not be suitable for cycle storage; therefore other provision must be made.

1.3 Cycle parking for flats/maisonettes

In flats, cycle parking provision has been historically poor, causing people to store their bicycles in the hallway or on balconies. To avoid the problems associated with inadequate cycle parking, communal cycle parking will be provided for residents of flats.

Covered and secure cycle parking will be provided in a location that is conveniently accessible, for all residents. Communal parking is best stored at ground level, off the communal hallway, alternatively, cycle parking can be provided in underground parking areas or in purpose designed out houses. Another option to communal cycle parking is to incorporate cycle parking into the flat, though this requires adequately sized lifts and this option must be considered at an early stage in the design, it is also more space intensive than communal cycle parking.
9. WASTE + RECYCLING STRATEGY

TYPICAL VEHICLE MOVEMENT IN FORWARD GEAR
9. WASTE + RECYCLING STRATEGY

WASTE COLLECTION VEHICLE ACCESS

Roads in residential areas must be wide enough to accommodate refuse/ recycling collection vehicles. Non- standard and variable width carriageways are possible but the applicant will have to demonstrate their acceptability with vehicle tracking shown on proposal plans. Residents will be required to bring their refuse and recycling containers to their front property boundary. In accordance with Part H6 of the Building Regulations, the design of houses will require the provision of enough space for refuse on collection days. The temporary use of this space should not encumber the normal use of the street.
9. WASTE + RECYCLING STRATEGY

HOUSES

Designers should consult with DMBC and review the Doncaster Waste Strategy at the time of application for up to date guidance.
9. WASTE + RECYCLING STRATEGY

APARTMENTS

Apartments will include communal refuse areas. It is important that these areas:

- Have adequate refuse space for the number of properties; 1 eurobin (1320 mm high x 1360 mm width x 1080 mm depth) for every 8 properties.
- Include space for recycling activity. As a guide, 5 240 litre wheeled bins will be required for every 30 properties.
- Are secure and unobtrusive; i.e. accessible to residents and collectors, but not to others.
- Are readily accessible from a road. Collectors should not be expected to go up or down stairs, in lifts, across grass or inside parts of the building other than the refuse/recycling room.
- Include smooth surfaces sufficient to aid the easy mobility of wheeled bins between store and vehicle.
- Are located not more than 36.5m from vehicle position.

The appearance of these areas is important. If visible from the street or other public space, the structure should be well designed and be consistent with the architectural treatment of the residential parts of the proposal. Design proposals for the refuse/recycling stores must be submitted at the time of the application for the main dwellings so that the composition of the two can be reviewed.
10. COMPLIANCE CRITERIA

PROCESS

Designers of Reserved Matters applications should fully acquaint themselves with the provisions of the Code prior to starting design work.

Any arboricultural or habitat surveys should be reviewed prior to starting design work.

Designers should prepare a composite plan for their proposal that brings together all the spatial components of the Code and that takes account of any updated servicing or infrastructure information. This should not be restricted to two dimensional layout but be designed holistically including landscape, built form and materials.

Designers should undertake pre-application negotiations with the Planning Authority, submitting sketch proposals at least two weeks prior to any meeting so that the Authority can liaise with colleagues from other organisations if required. Although the purpose of the Code is to avoid this, there may be exceptional circumstances which designers should flag up as non-compliant proposals.

Key sources of information and advice

For general planning advice:
Local Authority tel. 01302 736000
http://www.doncaster.gov.uk

For open space advice:
Doncaster Council Parks and Open Spaces Dept.
tel. 01302 736000

For regional advice on wildlife & habitats:
Yorkshire Wildlife Trust
tel. 01904 659570
http://www.ywt.org.uk/index.php

For environmental, roads and transport advice:
Doncaster Council Highways, Streets and Transport Dept.
tel. 01302 736000

For advice on drainage & flood risk:
The Environment Agency
tel. 08708 506506
This is a summary of the scope of information required to make a Reserved Matters application. Over and above this, there will be a number of additional components required by the Local... therefore familiarise themselves with this list prior to finalising the scope of their Reserved Matters application.

## 10. COMPLIANCE CRITERIA CHECKLIST

1. A Design and Access Statement which ensures compliance with this Code. An approach to Design and Access Statements based on a Code for Sustainable Homes pre-assessment. Therefore, at least 70% of the criteria must be met.

2. A composite plan that brings together all the spatial components of the Code.


4. A 1:200 scale plan showing the following:
   - areas for adoption by the highways authority
   - areas for sale
   - areas for transfer to a RSL
   - details of maintenance outside these areas.

5. A 1:1250 scale OS based location plan with the site area edged red.

6. A 1:500 block plan with the site area edged red.

7. 1:100 / 50 site plans to include external works / boundary treatments / existing and proposed levels. All plans must be clearly and accurately drawn with roads dimensioned, visibility splays shown and parking within communal areas clearly assigned to plots. Where a number of drawings are submitted they must correspond with each other and cross reference Manual for Streets where necessary.

8. 1:100 / 50 elevations [in colour] including details of all materials to be used. Elevations must ensure all details are clearly drawn / annotated (e.g. windows - materials to be used and nature of opening) and show the massing of adjacent buildings. Positions of external flues must be shown.

9. 1:100 / 50 street scenes in colour including details of all materials to be used and adjacent context.

10. 1:100 / 50 cross-sections (consistent with the floor plans) where applicable.

11. 3D impression for key groupings with materials and colours shown.

12. A schedule of proposed materials for buildings, roads and hard landscaped areas.

13. A full landscaping scheme must form an integral part of the submission (unless otherwise agreed landscaping will not be dealt with by condition).

14. Details of tree protection measures must be included.

15. Existing trees must be accurately plotted and the location of the proposed underground services shown where known.

16. An arboricultural survey should be submitted relating to the condition and potential of trees to remain within the site.

17. Full details of services (if known), e.g. substations, bus shelters, lighting, telephone boxes should be included.

18. Details of intended maintenance proposal for any communal areas should be provided.