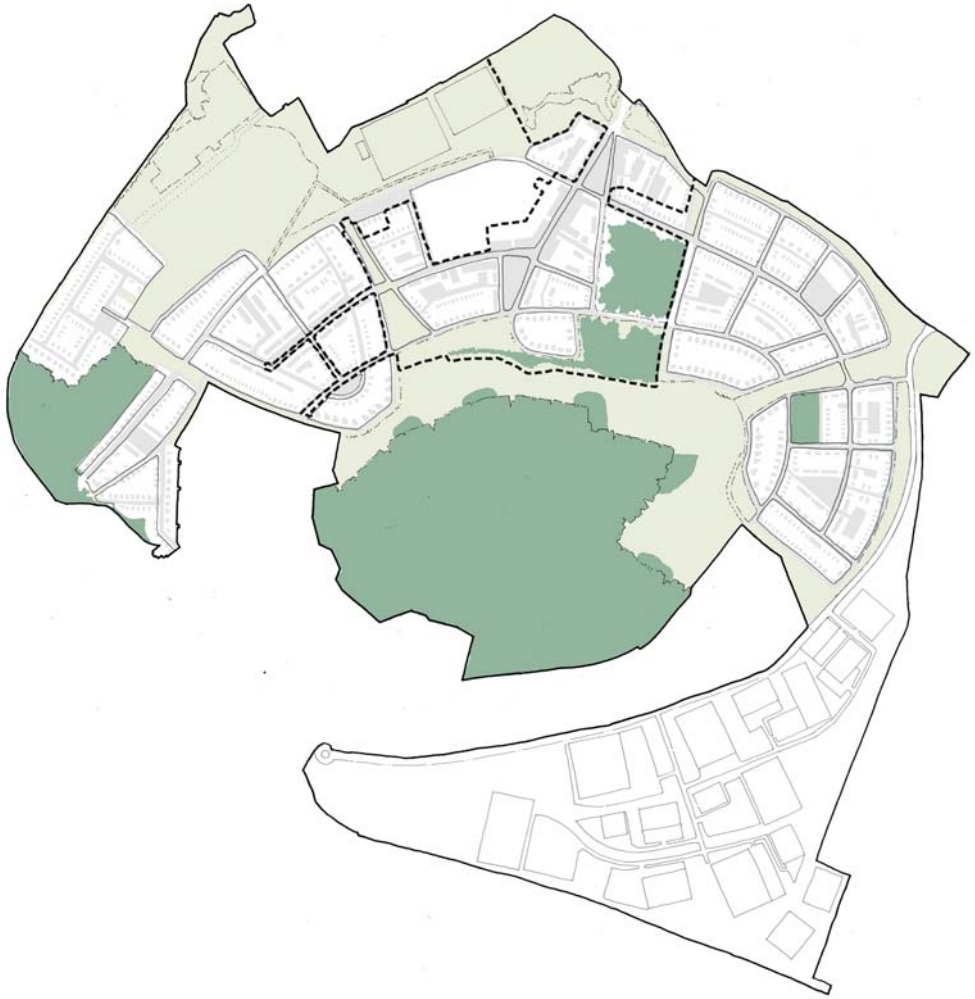
Design Code

Graven Hill Village 2017



The entire extent of the Graven Hill Village development is shown opposite. The plan depicts both the residential land allocation to the north and the commercial land allocation to the south.

This Design Code sets out the design requirements for the northern residential area of the development only.

With project delivery expected to last 15 years, it is likely that there will be changes in market perception, Government policy and implementation procedures during this period. The Code will, therefore, be reviewed and refined prior to each phase of development with future versions incorporating a section on 'lessons learnt.'

The current phase of development (Phase 1) is indicated by a dashed line on the plan. Purchasers of plots within this area will need to demonstrate that their design proposals comply with this Code. Their feedback and experiences will be recorded and used to inform future iterations of this document.

LEFT
Masterplan showing area of code application & extent of Phase 1 of the developments.

Contents

Introduction

Purpose of the design code & how it relates to the project vision

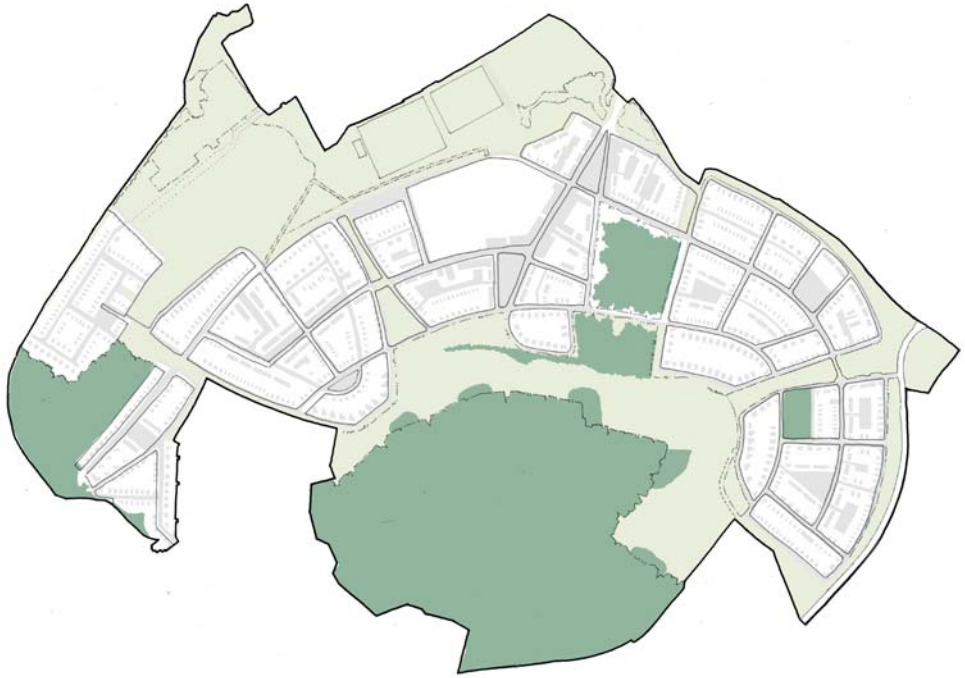
The Graven Hill Village project consists of the redevelopment of 190 hectares of brown-field land to deliver up to 1900 new homes along with a primary school, employment space, recreational areas, a local pub/restaurant, a community centre, allotments, nursery and a small number of local shops.

The overarching vision for the project is as follows:

- To offer the largest opportunity in the UK for people who want to build their own home. This will be for households of all sizes & will include opportunities for people to build as a group and as individuals.
- To have extensive open space. This is to include woodland, allotments, cycle paths & sports pitches.
- To deliver a scheme that looks different to typical UK housing developments where individuality and creativity will be supported and a strong sense of identity achieved through the retention of existing features.
- To provide a strategic location for new employment space, creating jobs & training for local people & attracting new investment into Bicester.

The Design Code has been produced in response to this vision. It focuses on the characteristics desired for each area and stipulates design rules for all features considered critical to achieving them. All remaining features are purposefully left unhampered by design constraints so as to allow community members to fulfil their creative visions.

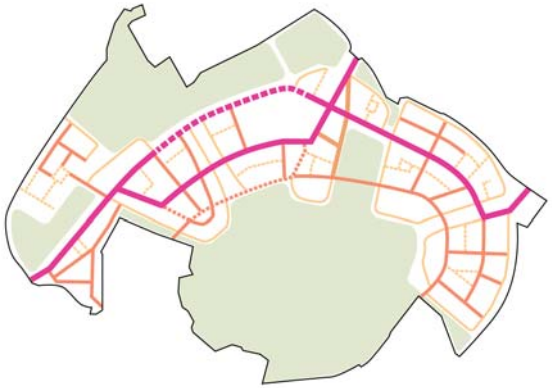
This document serves as a reference point for ongoing design processes. It will also facilitate the quick resolution of any further planning applications that may be required. It is to be read in conjunction with the approved Local Development Order and Outline Planning consent 15-02159 OUT dated 03.06.16.



ABOVE
The Graven Hill Village site

Process

Steps followed to establish the Code

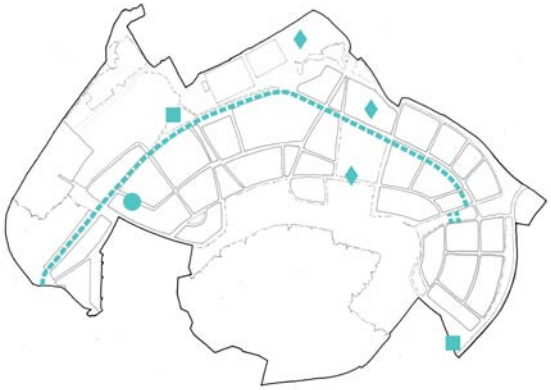


STEP 1
Street Hierarchy

A street hierarchy is essentially a way of categorising routes according to their contribution to a site's social structure and/or traffic flows.

The hierarchy of the site was mapped (see above) and streets that were found to be significant in both aspects designated as 'primary routes' with those that were found to be less significant designated as 'secondary' and 'tertiary' routes.

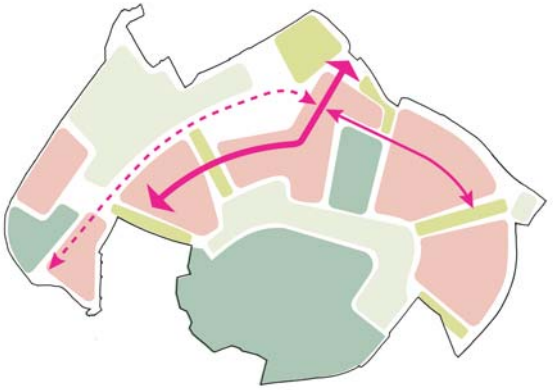
- *Primary Routes*
- *Secondary Routes*
- *Tertiary Routes*



STEP 2
Retention Plan

A key aspiration for the project was to preserve as much of the site's rich military heritage as possible. Towards this aim, a selection of existing features were identified for retention (see above). These dispersed features will form an integral part of the landscaping. They will be treated in a coherent manner in order to provide a continual design element that links the site together as a whole.

- *Rail Tracks*
- *Water Towers*
- *Military Water Reserves*
- *Military Buildings*

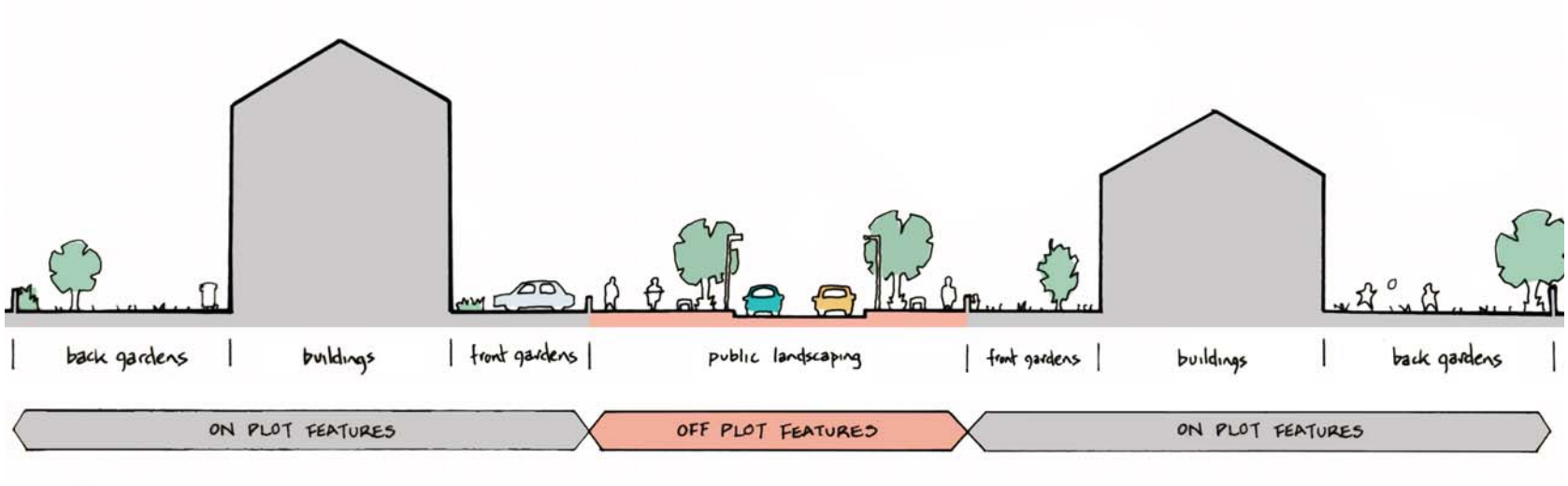


STEP 3
Development Pattern

The existing site consists of pockets of 'urban' development within an expansive 'rural' landscape around the base of a wooded hill. The proposed design seeks to emulate this pattern and provide for a range of experiences from innermost urban cores to fully submersive rural environments. As such, the 'rural' and 'urban' zones were mapped (see above) and an appropriate gradation of treatment established.

- *Rural Treatment*
- *Urban Treatment*

BELOW
Section through a typical street showing the extent of 'On-Plot' and 'Off-Plot' features



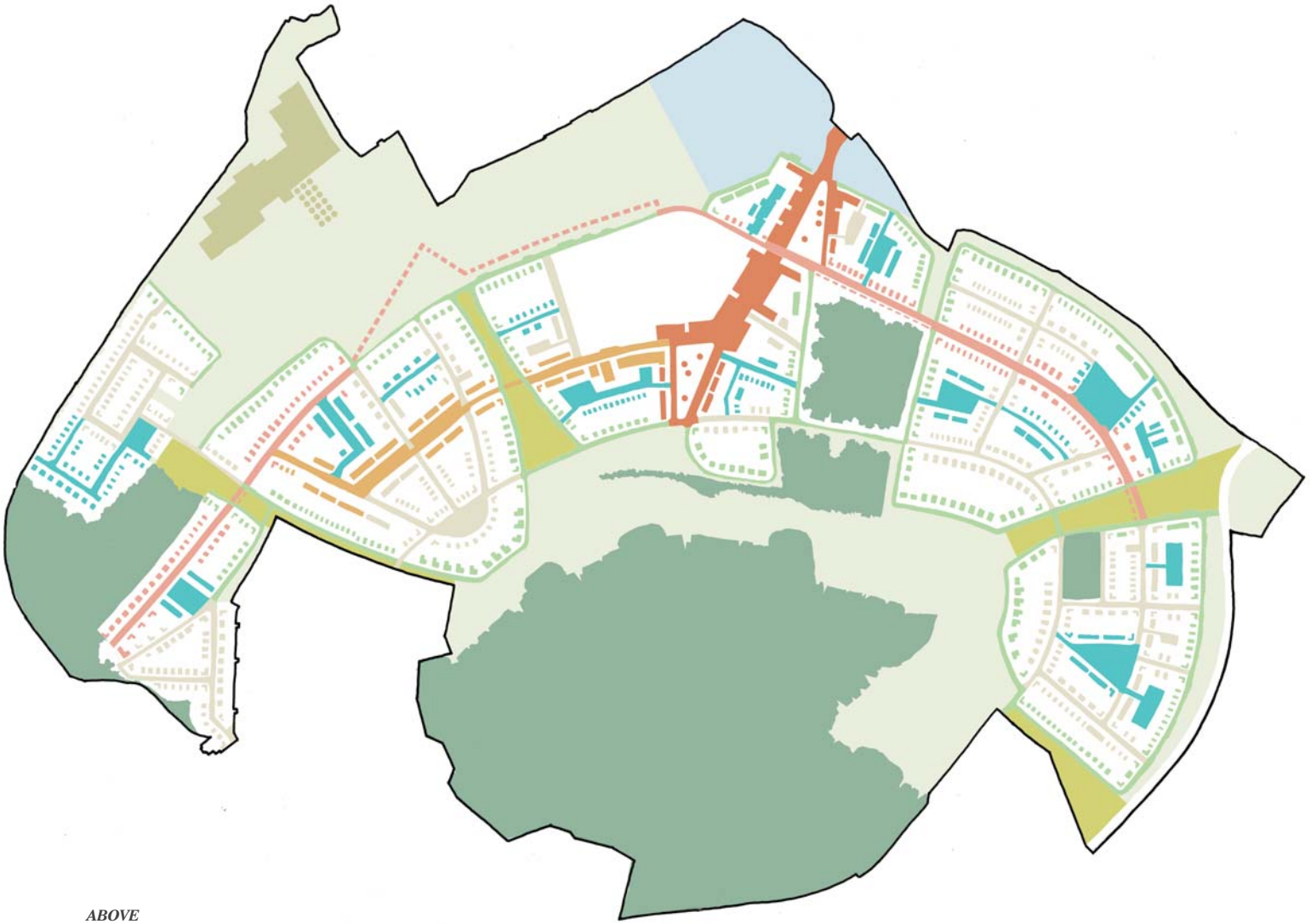
STEP 4
Character Areas

The outcomes of steps 1-3 offered a clear picture of the prevailing characteristics found within each area of the site. Each portion of the site demonstrating its own distinct set of attributes was defined as a 'Character Area.' A total of eleven different Character Areas were identified (see plan on page 4 overleaf), each with subtle differences in terms of their status in the street hierarchy (step 1), number of retained heritage features (step 2) or contribution to an urban/rural structure (step 3).

STEP 5
Design Rules

Once all eleven Character Areas had been identified (step 4), appropriate design rules could be set to ensure their successful delivery. These rules also needed to respond to the overarching aspiration for Graven Hill Village to be the UK's largest self-build scheme where community creativity is encouraged and maximum design flexibility afforded. This key visionary driver informed the need to employ a 'hands off' approach throughout, with only those specific features deemed critical to establishing the desired characteristics regulated - but nothing else. The involvement of customers in the design and delivery of their own homes has also informed the way in which rules are categorised. Whilst the residents will be responsible for the delivery of all 'On Plot' features, thedevloper will retain responsibility for the delivery of all 'Off Plot' features (see above). For clarity, design rules have, therefore, here been defined under these headings..

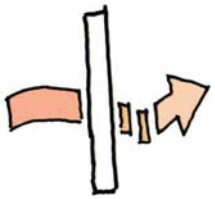
'Character Area'
a portion of a site with its own distinct set of attributes.



ABOVE
Location of the various
Character Areas across the site

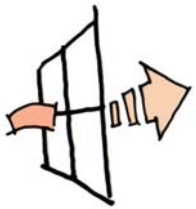
Residential Building Performance Criteria

Standards required for all residential buildings across the site



Thermal Element U-values
walls 0.15 W/m^{2}K or less
ground floors 0.15 W/m^{2}K or less
roofs 0.15 W/m^{2}K or less

Thermal Bridges
use Accredited Construction Details or
achieve y-value of 0.8W/m^{2}K or less



Window U-values and g-values
1.4W/m^{2}K or less and achieve a solar
gain factor (g-value) of between 0.50-0.70

Air Leakage Rate
3m3/hr/m2 @ 50 Pa
(to be tested on site)

MVHR Efficiencies
electrical of 1.5 W/l.s or less
heat recovery of 70% or more

Overheating Risk
As a minimum comply with Building Regulations
Part L (SAP) Appendix P or equivalent to achieve a
'low' or 'medium' risk

Electrical Lighting
Minimum 75% of fixed lighting to be
low energy (e.g. LEDs)

Solar Photovoltaic
Recommended if orientation and feed-in
tariffs suitable (customer choice)

Self-build Process

The Graven Hill Village Golden Brick Customer Journey

A unique delivery method has been created for all self-build plots at Graven Hill Village to help guide customers (and their respective design teams) through the planning and construction process. This process has been termed the 'Graven Hill Golden Brick Customer Journey' and is summarised on the right. For full details of the Golden Brick customer journey please visit the Graven Hill website. A simple program of delivery is proposed, consisting of three core stages; a 'Design Stage' lasting a maximum period of 5 months; an 'Approval Stage' lasting a maximum period of 1 month; and a 'Construction Stage' lasting a maximum period of 24 months. Plot purchasers will be expected to submit information to the Graven Hill Village Development Company Ltd (GHVDC) throughout the process and to complete the activities required within the necessary time scales. To assist customers along their Golden Brick journeys, GHVDC have produced handy 'go-to guides' called 'Plot Passports.

Design Stage
5 months

Following plot reservation, customers must design their homes in accordance with the relevant 'Plot Passport' and submit detailed proposals to the Graven Hill Village Development Company Ltd within 5 months.

Approval Stage
1 month

Designs are checked against the relevant 'Plot Passport' and a formal response provided within 1 month.

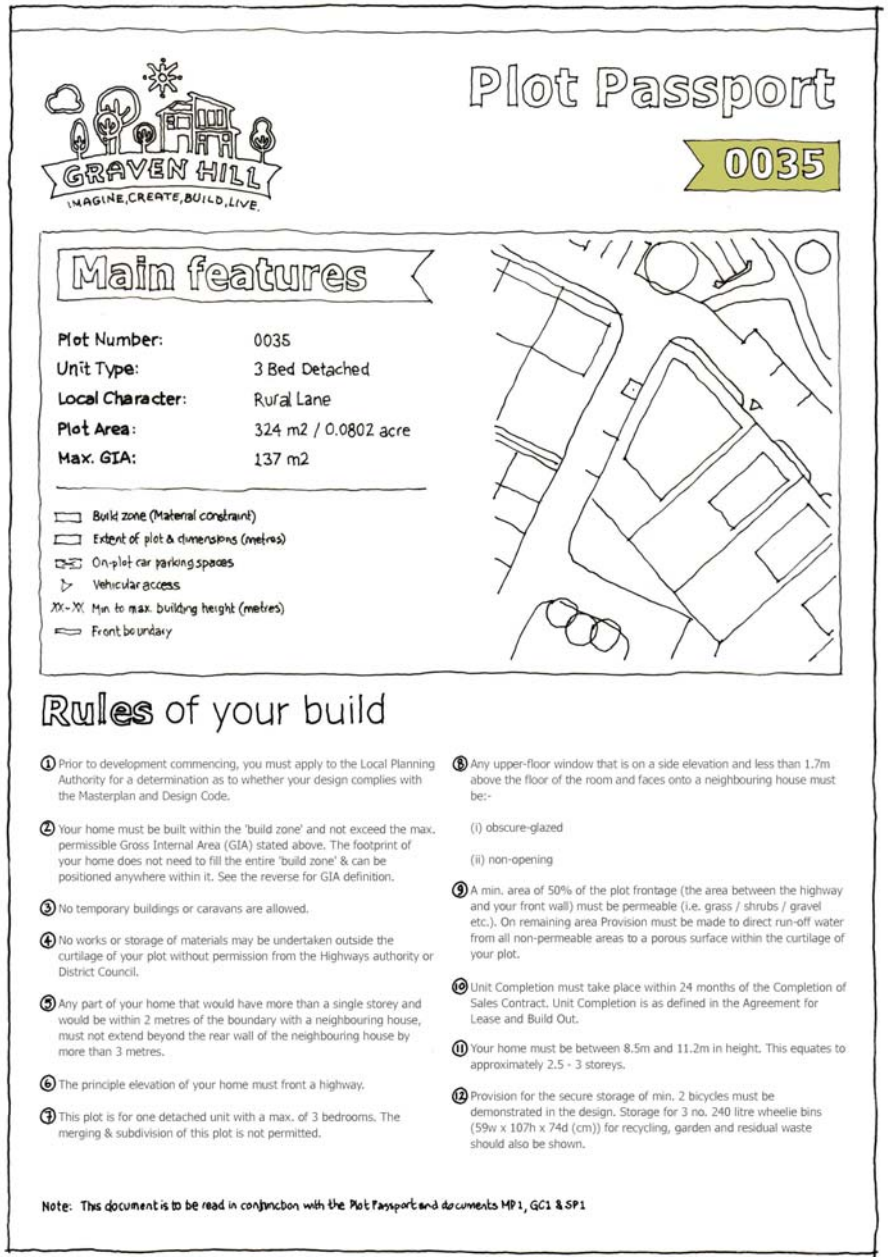
Construction Stage
24 months

Following the Completion of Sales Contract, construction activities may commence. Unit completion must be achieved within 24 months following below ground works.

The 'Plot Passports' are, in essence, succinct inventories of the various design parameters associated with a particular plot. They will act as a key reference point for a plot purchaser, capturing all relevant information from this Design Code, the approved Masterplan, Local Development Order and Outline Planning consent 15-02159 OUT (dated 03.06.16) in an easily understandable and readily accessible format.

The current proposed layout for the architectural element of these documents is given right and overleaf.

As showm, the layout consists of 3 sections; the first section summarises the main features of the plot, complimented by a plan and key to assist designers with the production of initial sketch proposals; the second section provides a list of all the design rules associated with a particular plot; finally, the third section details the range of facade finished and roofing options available if located in an area subject to a material palette (please note, not all areas are subject to material palettes).



13. 2 car parking spaces must be provided on the plot and be a min. of 2.4m x 4.8m in size. The position of parking bays is to your discretion. However, the position of vehicular access is fixed and must be located as shown on the Plot Plan provided. The min. internal dimensions for a single car garage is 3m x 6m.

14. The facade and roof materials of your home must comply with the material palette (refer to document MP1).

15. Front boundaries to be max. 1.1m high Dogwood hedgerows (any variety). Side/rear boundaries to public areas to be max. 1.5m high with 0.3m trellis over. Side/rear boundaries to private areas to be max. 1.8m high. Any material/colour permitted.

16. This is a corner plot. Elevations and boundary treatments facing a street must be designed to respond to the public realm (E.g. incorporate windows). It is advised that windows facing on to the public realm are active (i.e. provide views from habitable rooms such as living room/kitchen).

Performance and Sustainability Requirement:

Thermal element U-values; at least:	Walls: U = 0.15 W/m2K, Ground Floor: U = 0.15 W/m2K, Roofs: U = 0.15 W/m2k
Thermal bridges; meet one of the following standards:	(i) Use Accredited Construction Details, provided by the Government's planning portal website. An overview can be downloaded from www.planningportal.gov.uk. In particular at: http://www.planningportal.gov.uk/buildingregulations/approveddocuments/partl/bcassociateddocuments9/acd (ii) Achieve the Association of Environmentally Conscious Builders (AECB) Gold or Silver Standard details as a minimum to achieve y = 0.08 W/m2K. (iii) Improve on the Accredited Construction Details to achieve a maximum y = 0.08 W/m2K.
Window U-values and g-values (Glazing & Frames combined); at least:	U = 1.4 W/m2K Range for solar gain factor (g-value): g = 0.55 - 0.65
Air Leakage rate	3m3/hr/m2 @ 50 Pa
Mechanical ventilation with heat recovery where specified:	Electrical efficiency ≤ 1.5 W/l.s Heat recovery efficiency ≥ 70%
Overheating risk	Consider design strategies that minimise the risk of summertime overheating risk. As a minimum comply with Building Regulations Part L Standards Assessment Procedure (SAP) Appendix P, or equivalent assessment method to achieve 'low' or 'medium' risk of overheating.
Electrical lighting	Minimum 75% of fixed lighting to be low energy (such as compact fluorescents or LEDs)

Gross Internal Area (GIA)

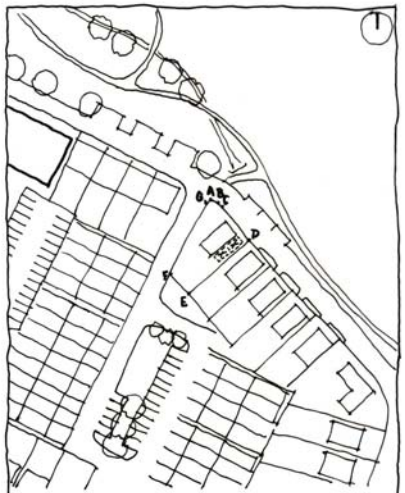
The Gross Internal Area is the area of a building measured to the internal face of the perimeter walls at each floor level.

Includes:

- Areas occupied by internal walls and partitions
- Columns, piers, chimney breasts, stairwells, lift-wells, other internal projections, vertical ducts, and the like
- Atria with clear height above, measured at base level only
- Internal open-sided balconies and the like
- Structural, raked or stepped floors are to be treated as a level floor measured horizontally
- Horizontal floors, with permanent access, below structural, raked or stepped floors.
- Mezzanine areas intended for use with permanent access
- Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above main roof level
- Service accommodation such as toilets, toilet lobbies, bathrooms, showers, and the like
- Voids over stairwells and lift shafts on upper floors
- Areas with headroom of less than 1.5m
- Basements are allowed as a percentage of above ground size but in addition to that area (40% is suggested).
- Garages
- Conservatories

Excludes:

- Perimeter wall thicknesses and external projections
- External open-sided balconies
- Canopies
- Voids over or under structural, raked or stepped floors
- Greenhouses, garden stores, fuel stores, and the like in residential property



Coordinates - Eastings, Northings (metres)

A: 459160.445, 221065.127 B: 459163.070, 221063.826
C: 459164.083, 221063.048 D: 459172.873, 221053.108
E: 459154.214, 221036.745 F: 459148.849, 221042.847
G 4591 9.174, 221063.809

This plot passport relates to the design of your home. There are additional conditions that are statutory (i.e. legislation) & mandatory within your agreement for sale & deed of transfer which you must adhere to. Therefore please ensure that you refer to these before proceeding with design work on or offsite fabrication or construction. This includes conditions relating to health & safety, site working hours, deadlines for completing your home & consideration of neighbouring properties.

Material Palette

VILLAGE CENTRE + RURAL LANES

Facades

Limestone

White/blueish grey to match local pale oolitic limestone

Render Options

Choice of 8 NCS colours as shown below to match tones found within local limestone

Brick Option 1

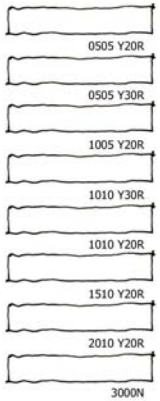
Deep red/orange to match local traditional brick type

Brick Option 2

Deep pink/orange with kiln marks to match bricks of military buildings

Brick Option 3

White painted brick of any type



Roofs

Slate

Natural or dark grey fibre-cement slates

Tiles

Any variety of red plain clay tile

Standing Seam

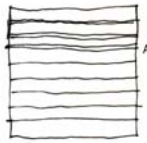
Medium/dark grey standing seam metal roofing

Flat Roof Options

Felt, EPDM or FIbreglass.

Green Roofs

Additional Options for RURAL LANES ONLY



Timber

Any type permissible

Corrugated Metal

Natural/ galvanised

Note: This document is to be read in conjunction with the Plot Passport and documents MP1, GC1 & SP1

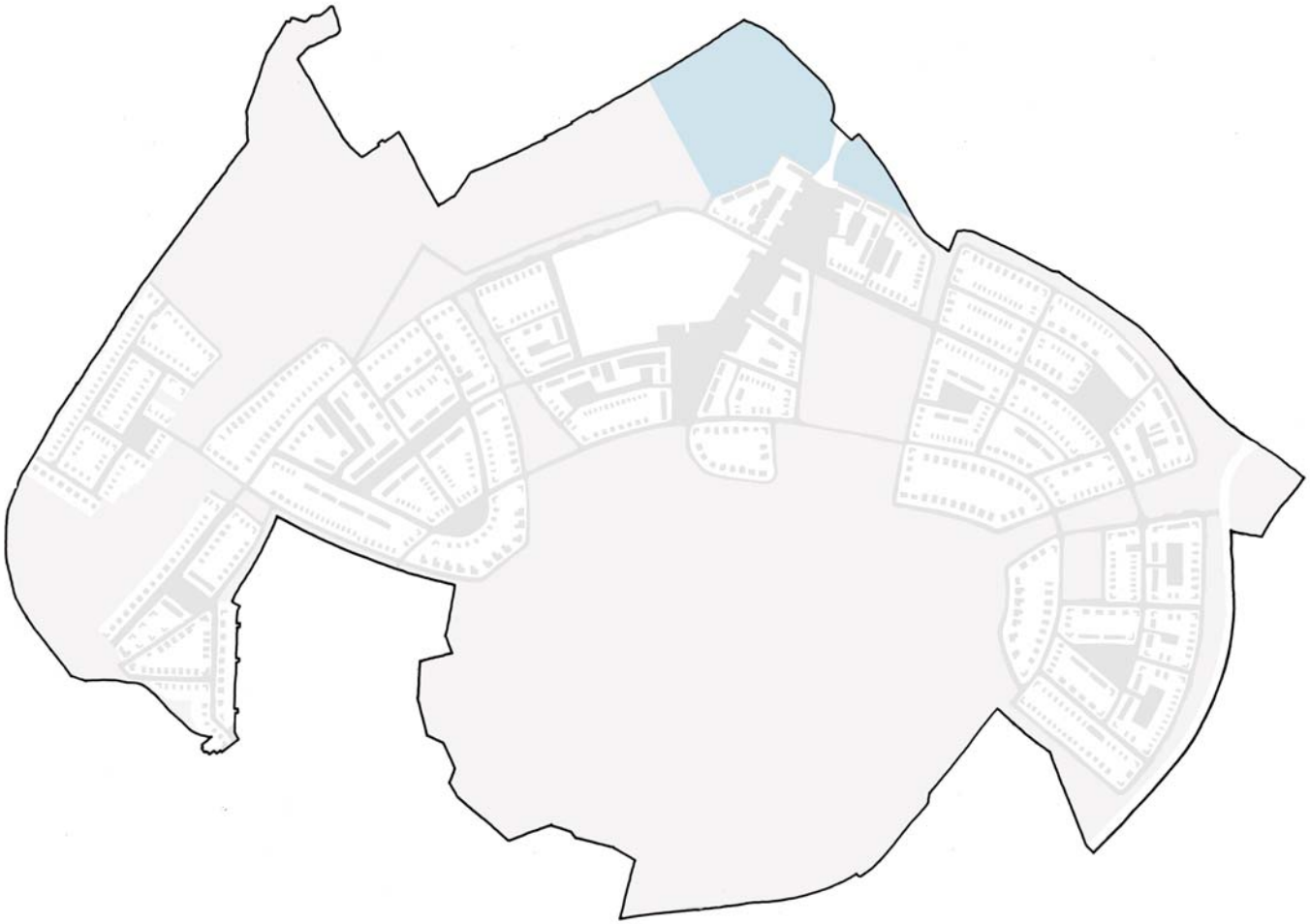
Character Area 1

Gateway Park

Large wetland habitat beside main site entrance

RURAL - LOW DESIGN FREEDOM

Overview



ABOVE
Plan showing location of the Gateway Park.

Location

The 'Gateway Park' is located immediately adjacent to the main site entrance off the A41. It aims to provide a welcoming arrival point and create a more gentle transition into the Village setting.

Character

The intention is to create a peaceful and tranquil wetland park where wildlife can flourish.

Landscape features will include swales, ponds, wet meadows, reedbeds and other marginal planting. Longer, meadow-like grasses will be located on higher banks that link to the surrounding fields.

Walking & cycling routes are to be as visually unobtrusive as possible, adopting meandering layouts, minimum allowable widths & natural finishes (e.g. crushed ironstone aggregate).

Timber boardwalks will add interest along routes, protect the habitats below & create ideal spots for wildlife watching.

Management

The park will be owned and managed by Cherwell District Council.

Design Freedom

As a strategic amenity area located at the entrance to the site, great care must be taken in its delivery and so the Gateway Park does not at this stage offer opportunities for community design.

The potential for later involvement with the on-going management, use and evolution of this space is to be explored

Case Studies

BELOW
Discrete timber boardwalks, such as that pictured below, provide visually unobtrusive recreational routes, their elevated profiles protecting the habitats below.

Estuary, New Zealand
TAKEN FROM http://goo.gl/t7bC4E

ABOVE
The nature reserve at Otmoor, Oxfordshire demonstrates the naturalistic treatment proposed for the attenuation ponds within the Gateway Park. The unencumbered backdrop, informal marginal planting & meandering water bodies offer a serene environment for spotting wildlife.

RSPB Otmoor, Oxfordhire, TAKEN FROM http://goo.gl/27H84o

Design Rules

Requirements considered critical to achieving the desired Gateway Park character

Off Plot Features

Hard Landscaping	Footpaths & Boardwalks	Design to be as visually unobtrusive as possible. Boardwalks to exhibit a simple design of a natural finish and elevated to protect wildlife below. Handrails are only to be used if necessary.
	Shared Cycle/Pedestrian Paths	Design to be as visually unobtrusive as possible
Soft Landscaping	Marginal	Informal design of predominantly native species
	Amenity Grass	Mown for multifunctional uses
	Longer Grass	To contain wildflower species
	Shrubs	Informal arrangement of native species
	Trees (Existing)	To be retained
	Trees (New)	Fluid arrangement of native species to support wildlife flight paths, pollard management
	Water Bodies	Retention ponds as part of SUDS
Lighting	✕ Any	Not applicable. Wetland Park is to remain unlit
Furniture	✓ Benches, Bins	Design to be as unobtrusive as possible (e.g. weathered timber finish)
Management	✓ Amenity, Attenuation Pond & Ecology Pond Strategy	To be managed by Cherwell District Council Presumption in favour of dead wood retention (subject to safety inspections). Report & undertake repair and replacement of trees, planted areas & grass once cause of loss/damage has been established Removal of undesirable woody and herbaceous species from planted areas and grass sward. Removal of leaves and fallen woody material to suitable recycling facility Remove litter, foreign materials from ponds generally to ensure flow/capacity is not impeded Annual removal of marginal & aquatic vegetation to ensure acceptable area of open water remains visible. Biannual cutting of selected grass areas with regular cutting of remaining areas Watering, weed control & general management of trees, woody & herbaceous planting during establishment period & beyond

Character Area 2

Village Centre

Socio-economic hub at the heart of the site

URBAN - LOW DESIGN FREEDOM

Overview

ABOVE
Plan showing location of the Village Centre

Location

The Village Centre forms the socio-economic hub of the development. It extends from the main site entrance to base of the hillside.

Character

The Village Centre will exhibit the highest densities found across the site. It will adopt an 'urban' treatment with a clear and well-defined streetscape created by the use of material palettes, robust detailing, strong 'street-lines,' clear demarcation, hard boundary treatments and a repetitive linear arrangement.

The area will also contain two large, triangular village greens; one to the north beside the main entrance and one to the south beside the hillside. These greens are to reflect the polarities of the existing site by adopting a informal & wild planting scheme that is contrasted by the use of precisely laid linear routes and an industrial treatment on furniture.

Management

Freeholders and leaseholders will be responsible for the management of buildings, Oxfordshire County Council for all features within the highway and Cherwell District Council for the landscaping within the two greens.

Design Freedom

As the socio-economic heart of the site, the Village Centre will be subject to a higher level of design control. To bring localised elements of architectural vibrancy, however, a number of 'leeway' plots are proposed that will remain uninhibited by increased design constraints.

Case Studies

ABOVE

The village greens are to provide flexible spaces for community occasions, specifically the southern green that is located beside the village pub and borders a traffic-calmed street intended for markets and other events.
Jubilee celebration,West Sussex
TAKEN FROM http://goo.gl/EHQ90E

ABOVE RIGHT

A simple paved area provides a multi-use space for a variety of community activities. A similar flexible space is proposed along the edge of the southern green (as described above).
Fiesta at Wodd St, London
TAKEN FROM http://goo.gl/UDknN7

RIGHT

Mont-Evrin Park in France demonstrates the landscaping treatment intended for the village greens where a wild and informal planting scheme of long, tufty, meadow-like grasses is dissected by precisely laid linear routes. Also to note is the use of industrial galvanised steel on the benches placed within mown clearings found throughout the space.
Mont-Evrin Park, France
TAKEN FROM http://goo.gl/OHBZ6V

ABOVE

Neutral, restrained & accessible hardscape on Gough Street in San Francisco. All street clutter (e.g. cycle stands, lighting columns, benches, bins etc.) is confined to a 'functional strip' that separates vehicular from pedestrian zones in order to maintain clear & legible routes for passing traffic. Intermittent street trees also sit within this strip, adding a welcomes dose of greenery to the otherwise hard, urban treatment of this space.

Gough Street, San Francisco:, TAKEN FROM http://goo.gl/HwFBC8

Design Rules

Requirements considered critical to achieving the desired Village Centre character

Off Plot Features

Hard Landscaping	Carriageways	Bitumous construction with pre-coated chippings. Granite setts to demarcate parking bays.
	Pedestrian zones	Silver-grey concrete ground flags. Flush conservation kerbs to plot boundaries & cycleways
	Cycleways	Bitumous with flush conservation kerbs to carriageways.
Soft Landscaping	Incidental planting	Natural design with contrasting formal elements
	Street trees	To be planted in tree pits & be min. 15m high after 25yrs
	Village Greens	To incorporate a formal structures (urban materials, linear layouts etc) within an otherwise wild & natural planting design to reflect existing site character. Designs to deliver a visually strong & distinctive statement.
	✓ Play Areas	Design to fit with surrounding landscape.
	✓ Columns	Standard columns with LED lantern units.
Street Furniture	✓ Benches, Bins & Cycle Stands	Robust & functional design. Min. of 39 commercial & 235 residential cycle stands to be provided.
Maintenance	✓ Streetscape Strategy	Public amenity to be managed by CDC. Highways to be managed by OCC

On Plot Features

Generic	Feature Plots	None of the 'Bespoke' rules (see below) apply.
	Build Zone	Area of the plot that may be developed. All facades that face onto the public realm must have windows
	✓ Building Performance	Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.
	X Max. Building Height (m)	Total building height (including roof) must not exceed this value.
	✓ Plot Boundaries	Front boundaries to be no higher than 0.9m. Side & rear boundaries to be no higher than 1.8m
	Vehicular Access	Driveway access must be located as shown.
	Vehicular & Cycle Parking	No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.
	✓ Waste Management	Storage for 3 x 240l wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.
Bespoke to Village Centre	✓ Boundary Materials	Boundaries facing onto the public realm must either be one of the brick varieties specified in the Village Centre material palette (overleaf) or railings.
	✓ Material Palette	See material options overleaf.
	X Min. Building Height (m)	Total building height (including roof) must not fall below this value..
	Fixed Elevation Position	The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/ porches/balconies must not protrude more than 1.5 metres beyond this line.

Village Centre Material Palette

Facade Options

The 9 NCS render colours as shown below have been chosen to match tones found within the local oolitic limestone.

Where desired, readily available products of a similar tone may be used. Under these circumstances samples will need to be submitted for approval as part of the compliance process.

Limestone
To match local oolitic limestone

Brick Option 1
Deep red/orange to match traditional local brickwork

Brick Option 2
White painted bricks of any type

Brick Option 3
Deep pink/orange with kiln marks to match existing site buildings

Lime Render
Natural colour

Render Option 1
Colour 1005-Y10R

Render Option 2
Colour 0505-Y20R

Render Option 3
Colour 0505-Y30R

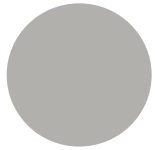
Render Option 4
Colour 1005-Y20R

Render Option 5
Colour 1010-Y30R

Render Option 6
Colour 1010-Y20R

Render Option 7
Colour 1510-Y20R

Render Option 8
Colour 2010-Y20R



Render Option 9
Colour 3000N

Minor Options

The following accent materials can be used on up to 30% of your home's total surface area .

Please note, the use of a green wall must be applied over one of the permitted facade materials as stipulated above..

White Render

Corten Steel

Structural Members

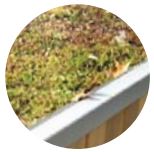
Green Walls

Mirror Finishes

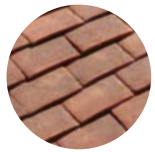
Metal Cladding

Roof Options

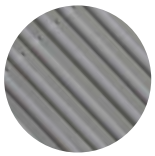
Please note: the metal, tile, timber & slate options shown opposite can be used wherever feasible. The 'flat roofs only' options are not permitted for use on pitched roofs.



Additional Options for Flat Roofs Only
Any variety of green roof, felt, EPDM or fibreglass

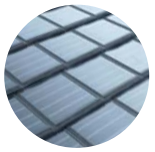


Tiles
Any variety of plain clay or smooth red/grey plain concrete tiles of a slim profile.



Metal Roofing
Any variety of of an exposed finish or of a grey colour

Slates
Any variety of natural slate or med/dark grey fibre cement slate



Solar Tiles
Any variety of roof-integrated solar tiles, shingles or slates.

Character Area 3

Tree-lined Boulevard

Central, leafy thoroughfare

URBAN - SOME DESIGN FREEDOM

Overview

ABOVE
Plan showing location of the Tree-lined Boulevard

Location

The 'Tree-lined Boulevard' forms a primary movement corridor serving the majority of the residential area within the western half of the site.

Character

The reigning feature of this area is its formal avenue of trees that runs along its entire length, creating a leafy, enclosed space of dappled light that is very much distinct from all other urban residential streets across the site.

The feel of the this Character Area will be less formal that than of the 'Village Centre' - buildings will offer greater variety and 'softer' boundaries to plots will start to loosen-up the overall street-scene. However, the importance of this route must be acknowledged by maintaining a degree of formality. As such, the avenue of trees will be laid symmetrically, the designated cycleways will remain as will the higher densities through the use of terraced units.

Management

Management of buildings and plots will be undertaken by freeholders and leaseholders, highway elements by Oxfordshire County Council and parking forecourts by a management company.

Design Freedom

Rules regarding material palettes and boundary treatments have been removed in order to offer a greater level of design freedom than that found within other Character Areas. However, restrictions on minimum building heights and main facade positions will remain in order to keep a degree of uniformity.

Case Studies

ABOVE

Subtle differences between each terraced unit at Mollenplein in the Netherlands. Small variations in architectural form and materials of each individual unit creates a characterful elevation despite the presence of repetitive plot widths and building heights of the terraced composition.

Mollenplein, the Netherlands TAKEN FROM http://goo.gl/dN34gL

ABOVE RIGHT

The dappled, tree-lined avenue leading from the main entrance area of RAF Bicester Heritage illustrates the quality of space that can be afforded through the application of simple and robust detailing alongside visually strong landscaping statements.

RAF Bicester Heritage, Bicester, photo © GHVDC Ltd

RIGHT

Several design principles found along the waterside development in Oxford are to be incorporated including parking forecourts with 'soft' border planting, speed tables at key junctions and simple but high quality detailing consisting of silver-grey conservation kerbs, granite setts and resin bound gravel.

Waterside, Oxford, photo © GHVDC Ltd

FAR RIGHT

The existing water towers at Graven Hill are located at the point where the boulevard & 'Circular Railway' will meet. Their retention would form an exciting transition 'event' that is integral to the existing fabric of the site

Water towers at Graven Hill Bicester, photo © GHVDC Ltd

Design Rules

Requirements considered critical to achieving the desired Tree-lined Boulevard character

Off Plot Features

Hard Landscaping	Carriageways	Bitumous construction with pre-coated chippings. Granite setts to demarcate parking bays.
	Footways	Silver-grey concrete paving slabs. Flush conservation kerbs to plot boundaries & cycleways
	Cycleways	Bitumous with conservation kerb to carriageways.
	Table Junctions	Bitumous construction with precoated chippings. Ramps to be surfaced with granite setts.
	Parking Forecourts	Resin bound gravel to parking area.
Soft Landscaping	Verges & Street Trees	To be edged with silver-grey conservation kerbs. Informal planting design with long, tufty grasses & wildflowers. Mown edge strip to carriageway. Trees to be min. 15m high after 25yrs.
	Incidental Planting	Informal planting design with wildflowers
Street Lighting	✓ Columns	Standard columns with LED lantern units.
Street Furniture	✓ Benches & Bins	Robust & functional design.
Maintenance	✓ Streetscape Strategy	Amenity to be managed by CDC, highways by OCC & parking courts by a management company.

On Plot Features

Generic	Feature Plots	None of the 'Bespoke' rules (see below) apply.
	Build Zones	Area of the plot that may be developed. All facades that face onto the public realm must have windows
	✓ Building Performance	Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.
	X Max. Building Height (m)	Total building height (including roof) must not exceed this value.
	✓ Plot Boundaries	Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted
	Vehicular Access	Driveway access must be located as shown.
	Vehicular & Cycle Parking	No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.
	✓ Waste Management	Storage for 3 x 240l wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.
Bespoke to Tree-lined Boulevard	✕ Boundary Materials	Not applicable
	✕ Material Palette	Not applicable
	X Min. Building Height (m)	Total building height (including roof) must not fall below this value.
	Fixed Elevation Position	The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/ porches/balconies must not protrude more than 1.5 metres beyond this line.

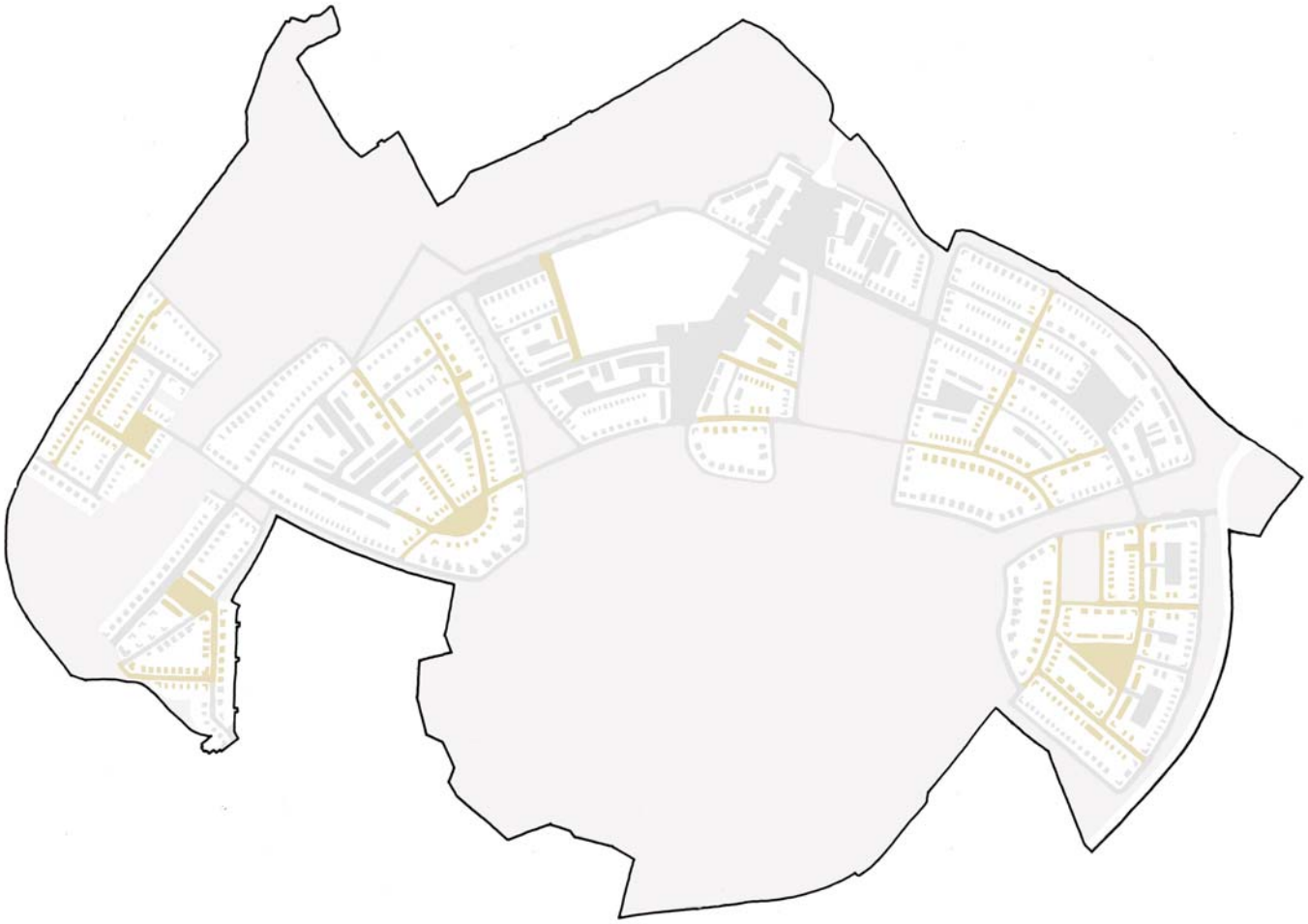
Character Area 4

Community Streets

Residential areas offering maximum design freedom

URBAN - HIGH DESIGN FREEDOM

Overview



ABOVE
Plan showing location of the Community Streets

Location

The 'Community Streets' are medium density, suburban areas predominantly consisting of detached plots.

They span between the site's inner urban streets and the outer rural fringes.

Character

Creative experimentation is encouraged to achieve the informal, vibrant & easy-going feel is desired along these secondary routes.

They will be defined from their primary counterparts by; reducing highway widths, resulting in a friendly, more enclosed feel; removing restrictions on facade positions, building materials, building heights and boundary treatments which, together with the detached nature of the houses, will result in a more varied street-scene; lower traffic flows, resulting in a quieter, more family-orientated environment.

A simple and neutral palette of materials will be applied to the public realm to provide a complimentary backdrop for the variety of building styles and external finishes that may be developed

Management

Buildings and plots will be managed by freeholders and leaseholders, the amenity areas will be managed by Cherwell District Council and the highway will be managed by Oxfordshire County Council.

Design Freedom

Plots within this area offer the highest level of design freedom. As such, only 'generic' site-wide rules are here applied.

Case Studies

ABOVE
A street in north Oxford contains a variety of building forms, materials, boundary treatments & architectural styles.

Elmthorpe Rd, Oxford TAKEN FROM http://goo.gl/Lc00yQ

ABOVE
A remodelled early Victorian, two-bedroom semi-detached house in Birmingham presents an inventive approach to sustainable design.

John Christopher's zero carbon house, Birmingham TAKEN FROM http://goo.gl/JIu7AB

Design Rules

Requirements considered critical to achieving the desired Community Streets character

Off Plot Features

Hard Landscaping	○ Carriageways	Bitumous construction.
	○ Footways	Bitumous construction with flush conservation kerbs to plot boundaries.
Soft Landscaping	● Verges & Street Trees	To be edged with silver-grey conservation kerbs. Informal planting design with long, tufty grasses & wildflowers. Mown edge strip to carriageway. Trees to be min. 15m high after 25yrs.
	✓ Columns	Standard columns with LED lantern units.
	✓ Benches & Bins	Robust & functional design.
Maintenance	✓ Streetscape Strategy	General amenity management is to be undertaken by Cherwell District Council. Highway management is to be undertaken by Oxfordshire County Council

On Plot Features

Generic	● Feature Plots	Not applicable as no 'bespoke' design rules apply to plots in this Character Area.
	● Build Zones	Area of the plot that may be developed n.b. all facades that face onto the public realm must incorporate windows.
	✓ Building Performance	Residential buildings must achieve the 'Passive Design Standards' as stipulated on page 5.
	▽ X Max. Building Height (m)	Total building height (including roof) must not exceed this value.
	✓ Plot Boundaries	Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted
	▶ Vehicular Access	Driveway access must be located as shown.
	▭ Vehicular & Cycle Parking	No. of vehicle bays shown must be provided (n.b position of parking bays within plot to discretion of plot purchaser). Min. of 2 secure cycle spaces/ unit must be provided within the plot area.
	✓ Waste Management	Storage for 3 no. 240 litre wheelie bins (59w x 107h x 74d (cm)) must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.
Bespoke to Community Streets	✕ Boundary Materials	Not applicable
	✕ Material Palette	Not applicable
	✕ Min. Building Height (m)	Not applicable
	✕ Fixed Elevation Position	Not applicable

Urban Lanes

Mews-like residential streets offering maximum design freedom

URBAN - HIGH DESIGN FREEDOM

Overview

ABOVE
Plan showing location of the Urban Lanes

Location

The 'Urban Lanes' are privately owned, shared-surface, tertiary routes that exhibit low traffic flows. They stretch between many of the secondary routes across the site and often contain small community courtyards, providing localised shared amenity for residents.

Character

The Urban Lanes are pedestrian friendly zones with a 'mews-like' feel.

Features are to encourage interaction between neighbours and provide a safe environment for children to play. As such, the Urban Lanes will typically be dual aspect to increase passive natural surveillance. They will also exhibit shared-surfaces, raised planters and narrower street widths - all of which help to deter vehicular use and create the opportunity to dwell in a communal setting. A close relationship between buildings and the street will be provided by the use of coach-house parking arrangements and reduced frontages.

Management

Buildings and plots will be managed by freeholders and leaseholder. The shared-surface zones between will be managed by a management company.

Design Freedom

As per the 'Community Streets' creative experimentation is encouraged with a view to achieving the informal, vibrant and easy-going feel desired. Plots within this area will, therefore, also offer the highest level of design freedom with only the 'generic' site-wide design rules here being applied to residential properties.

Case Studies

ABOVE
A shared surface street in Nieuw Leyden, Netherlands conveys the friendly 'mews-like' setting desired for all Urban Lanes at Graven Hill. Narrow plot frontages & the removal of designated highway zones (e.g. footways) are key design principles to achieving this.

Nieuw Leyden, Netherlands, photo © GHVDC Ltd

RIGHT
Community commotion at The Methleys, Leeds demonstrating the vibrancy that such shared-surface, mews-like environments can bring.

The Methleys, Leeds TAKEN FROM https://goo.gl/luipA7

Design Rules

Requirements considered critical to achieving the desired Urban Lanes character

Off Plot Features

Hard Landscaping	Shared Surface	Bitumous construction with sections of silver-grey conservation paving slabs and/or silver-grey ganite setts to . Flush kerbs to all plot boundaries to demarcate edge of highway.
Soft Landscaping	Verges, Raised Planters & Street Trees	Informal planting design with long, tufty grasses & wildflowers. Trees to be min. 15m high after 25yrs.
Street Furniture	✓ Columns	Standard columns with LED lantern units.
	✓ Benches & Bins	Robust & functional design. Each Urban Lane is to adopt a slightly different character.
Maintenance	✓ Streetscape Strategy	A management company will be responsible for general management of the shared surface zones including; grass cutting; watering; weed control; management of woody & herbaceous planting; reporting & repairing incidents of vandalism &/or incidental damage.

On Plot Features

Generic	Feature Plots	Not applicable as no 'bespoke' design rules apply to plots in this Character Area.
	Build Zones	Area of the plot that may be developed n.b. all facades that face onto the public realm must incorporate windows.
	✓ Building Performance	Residential buildings must achieve the 'Passive Design Standards' as stipulated on page 5.
	Max. Building Height (m)	Total building height (including roof) must not exceed this value.
	✓ Plot Boundaries	Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted
	Vehicular Access	Driveway access must be located as shown.
	Vehicular & Cycle Parking	No. of vehicle bays shown must be provided (n.b position of parking bays within plot to discretion of plot purchaser). Min. of 2 secure cycle spaces/ unit must be provided within the plot area.
	✓ Waste Management	Storage for 3 no. 240 litre wheelie bins (59w x 107h x 74d (cm)) must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.
Bespoke to Urban Lanes	✕ Boundary Materials	Not applicable
	✕ Material Palette	Not applicable
	✕ Min. Building Height (m)	Not applicable
	Fixed Elevation Position	The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/ porches/balconies must not protrude more than 1.5 metres beyond this line

Character Area 6

Circular Railway

East-west heritage route incorporating existing site railway

URBAN - SOME DESIGN FREEDOM

Overview

ABOVE
Plan showing location of the Circular Railway

Location

The Circular Railway is a primary east-west route that follows the line of the existing site railway. It also provides a route to a secondary (eastern) site access.

Character

The Circular Railway will incorporate features that reflect the existing railway, offering a unique experience for users that celebrates the site's rich military heritage. The treatments will focus on pedestrian areas and will be twofold; in 'urban' areas sections of corten steel will be embedded into footways; and in 'rural' areas corten steel sections will be used to create an elevated walkway that crosses. At various intervals, sections of existing track will also be left in-situ.

A unique streetscene exhibiting a variety of building styles is desired. Material palettes have, therefore, been removed and it is proposed that all units be detached to allow greater flexibility in form. As a primary route, a degree of formality will, however, be achieved by the use of higher densities, repetitive plot widths, designated cycleways and restrictions on front facade positions and building heights.

Management

Freeholders and leaseholder will maintain buildings and plots, Cherwell District Council the elevated walkway and Oxfordshire County Council for all features within the highway.

Design Freedom

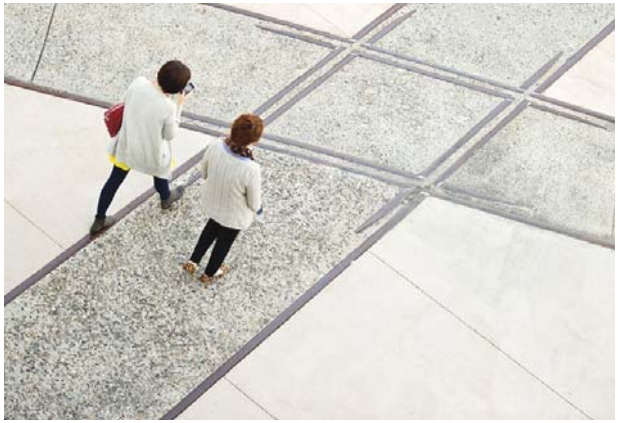
Some design freedom is afforded through the removal of material palettes and restrictions on boundary treatments.

Case Studies

BELOW

The use of corten steel, concrete (pavers & poured) & embedded former rail lines at the Philidelphia Navy Yard offers a unique, robust & industrial streetscape for users as desired along all urban sections of the Circular Railway.

Philidelphia Navy Yard, US TAKEN FROM http://goo.gl/3TNR1E



ABOVE

The elevated walkway at Südgelände Nature Park is made from an anti-slip metal grille deck that spans between 2 former site rail lines. This angular path crosses the surrounding wild landscape in a 'low intervention' manner. Both the physical & visual separation of the hard, industrial walkway against the wild, natural landscape gives the appearance of it being seemingly 'placed' into its surroundings. This approach is to be adopted along all rural sections of the Circular Railway.

Südgelände Nature Park, Berlin TAKEN FROM http://goo.gl/ow4NQ4

LEFT

Newhall in Harlow demonstrates a number of intended character traits for the streetscenes along the Circular Railway, including repetitive plot widths, strong street-lines & controlled building heights, a creative use of materials & contemporary architectural styles. A more varied range of building forms that than shown would, however, be desirable.

Newhall, Harlow TAKEN FROM http://goo.gl/F7xNI

Design Rules

Requirements considered critical to achieving the desired Circular Railway character

Off Plot Features

Hard Landscaping	Carriageways	Bitumous construction with precoated chippings. Granite setts to demarcate parking bays.
	Footways	Silver-grey concrete paving slabs to northern footway. Poured concrete to southern footways with embedded rails. Flush conservation kerbs to plot boundaries & cycleways
	Cycleways	Bitumous with conservation kerb to carriageways.
	Table Junctions	Bitumous construction with precoated chippings. Ramps to be surfaced with granite setts.
Soft Landscaping	Verges & Street Trees	To be edged with 145mm silver-grey conservation kerbs with 15mm upstand to carriageways. Informal planting design with long, tufty grasses & wildflowers. Mown edge strip to carriageway. Trees to be min. 15m high after 25yrs.
Street Furniture	✓ Columns	Standard columns with LED lantern units.
	✓ Benches & Bins	Robust & functional design.
Maintenance	✓ Streetscape Strategy	Amenity to be managed by CDC, highways by OCC (including embedded rail feature)

On Plot Features

Generic	Feature Plots	No 'Bespoke' design rules (listed below) apply.
	Build Zones	Area of the plot that may be developed. All facades that face onto the public realm must have windows
	✓ Building Performance	Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.
	X Max. Building Height (m)	Total building height (including roof) must not exceed this value.
	✓ Plot Boundaries	Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted
	Vehicular Access	Driveway access must be located as shown.
	Vehicular & Cycle Parking	No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.
	✓ Waste Management	Storage for 3 x 240 litre wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.
Bespoke to Circular Railway	× Boundary Materials	Not applicable
	× Material Palette	Not applicable
	X Min. Building Height (m)	Total building height (including roof) must not fall below this value.
	Fixed Elevation Position	The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/ porches/balconies must not protrude more than 1.5 metres beyond this line

Character Area 7

Swale Parks

Linear wetland habitats forming 'green corridors' within the development

RURAL - LOW DESIGN FREEDOM

Overview

ABOVE
Plan showing location of the Swale Parks

Location

The Swale Parks are linear wetland corridors that radiate from the base of the central wooded hill to the perimeter meadows. They play an important role in the sustainable urban drainage strategy for the site and, also, provide essential habitat zones within the developed areas of the site.

Character

The network of swales and attenuation ponds will provide a defining characteristic of many public spaces within the Graven Hill Village development.

Within these 'green buffers,' the landscape design consciously reflect the ecological processes that occur within water movement and vegetation typologies. They not only assists in the delivery of a valuable habitat resource, but also provide absorbing natural environments for the community to enjoy.

Management

The management approach to these spaces will be similarly flexible. This will include ensuring the swales & attenuation ponds function as drainage features, but also that public amenity & habitats are protected. Cherwell District Council will be responsible for the on-going management of these spaces.

Design Freedom

As strategic amenity, the Swale Parks do not currently offer opportunities for community design. The potential for later involvement with the on-going management, use & evolution of these spaces is to be explored

Case Studies

ABOVE

The Swale Parks are a key component of the proposed play space provision for the site. Alongside more enclosed areas containing natural play equipment, these wetland landscapes offer numerous opportunity for informal & creative play e.g. fishing adventures, stepping stones etc.

Location unknown: TAKEN FROM http://goo.gl/Z2dEuk

LEFT

Watrside properties south of Amsterdam, Netherlands depict marginal planting, swales and rivers in close proximity to housing with a rural and friendly character. Single-aspect streets face into these central landscaped zones offering natural surveillance for recreational activities.

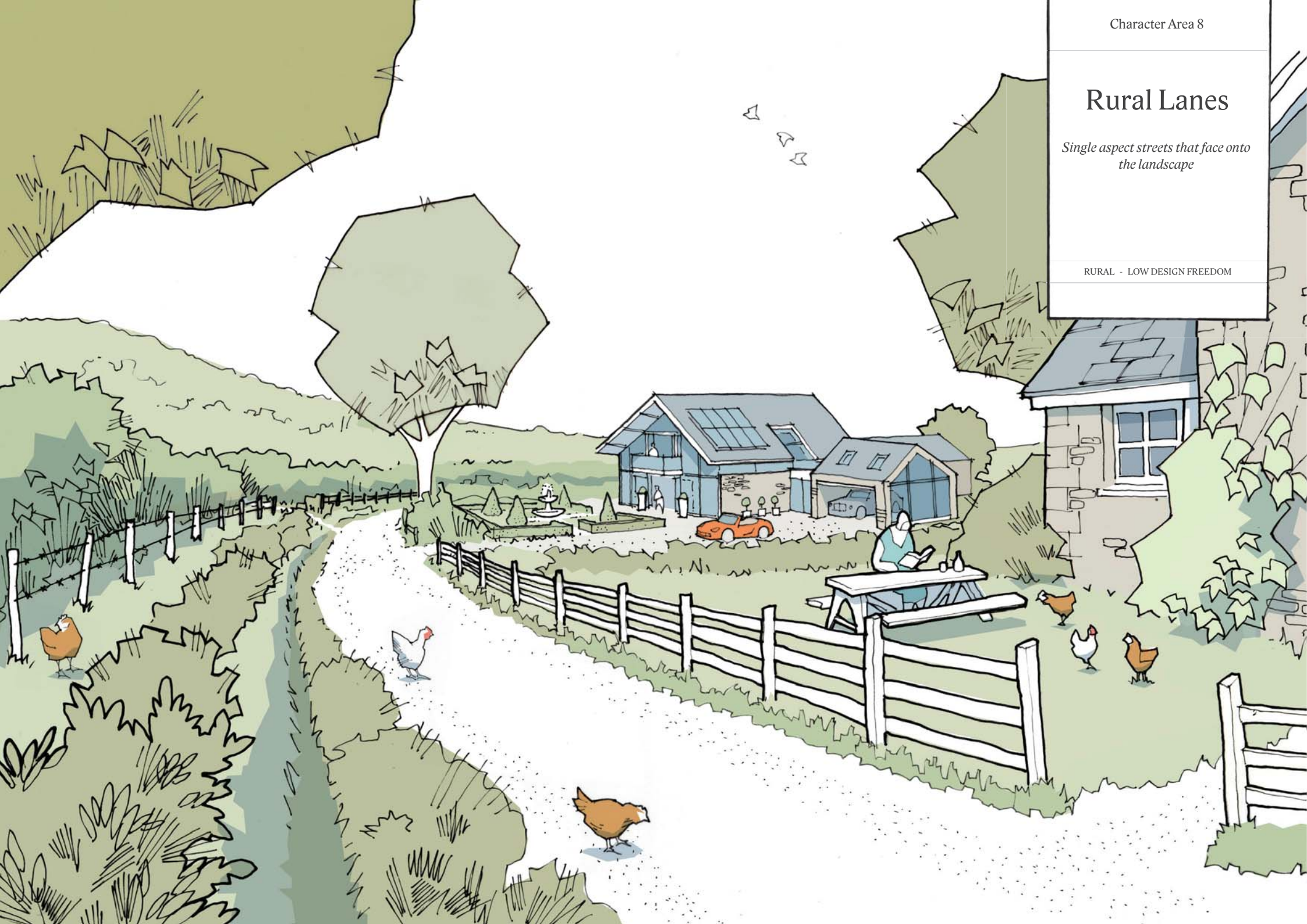
Waterside properties in the Netherlands, photo © of GHVDC Ltd

Design Rules

Requirements considered critical to achieving the desired Swale Parks character

Off Plot Features

Hard Landscaping	Footpaths	To be as visually unobtrusive as possible (e.g. use of natural materials, minimal widths & meandering layouts)
	Shared Cycle/ Pedestrian Paths	To be as visually unobtrusive as possible (as above)
	✓ Bridge Crossings	Simple design of a natural finish throughout (e.g. weathered timber). Elevated to minimise impact to habitats below. To be as discrete as possible with handrails only where necessary.
Soft Landscaping	Marginal	Informal design of predominantly native species
	Longer Grass	To contain wildflower species
	Shrubs	Informal arrangement of native species
	Trees	Fluid arrangement of native species to support wildlife flight paths, pollard management.
	Water Bodies	Swale as part of sustainable urban drainage (SUDS) strategy.
	Play Area	Naturalistic design incorporating proposed swale, elements of water & sand, stepping stones, bridges & other playful elements to interact with the water, encouraging creative play.
Lighting	✕ Any	Not applicable. Rural Lanes are to remain unlit.
Furniture	✓ Benches, Bins	Modest design. To be a weathered timber finish.
Management	✓ Habitat Corridor & Play Space Strategy	Management to be undertaken by Cherwell District Council.
		Selective use of natural regeneration from existing seed bank to assist with habitat creation
		Watering, weed control & general management of new tree, shrub & herbaceous planting during establishment period & beyond
		Maintaining and repairing path surfaces, edges, & boundary fencing/gates
		General pruning to ensure highway safety & encourage natural surveillance.
		General presumption in favour of dead wood retention (subject to safety inspections)
		Reporting and repairing incidents of vandalism or incidental damage & immediately restricting access to defective play equipment
		Regular safety check of all play equipment & associated features.



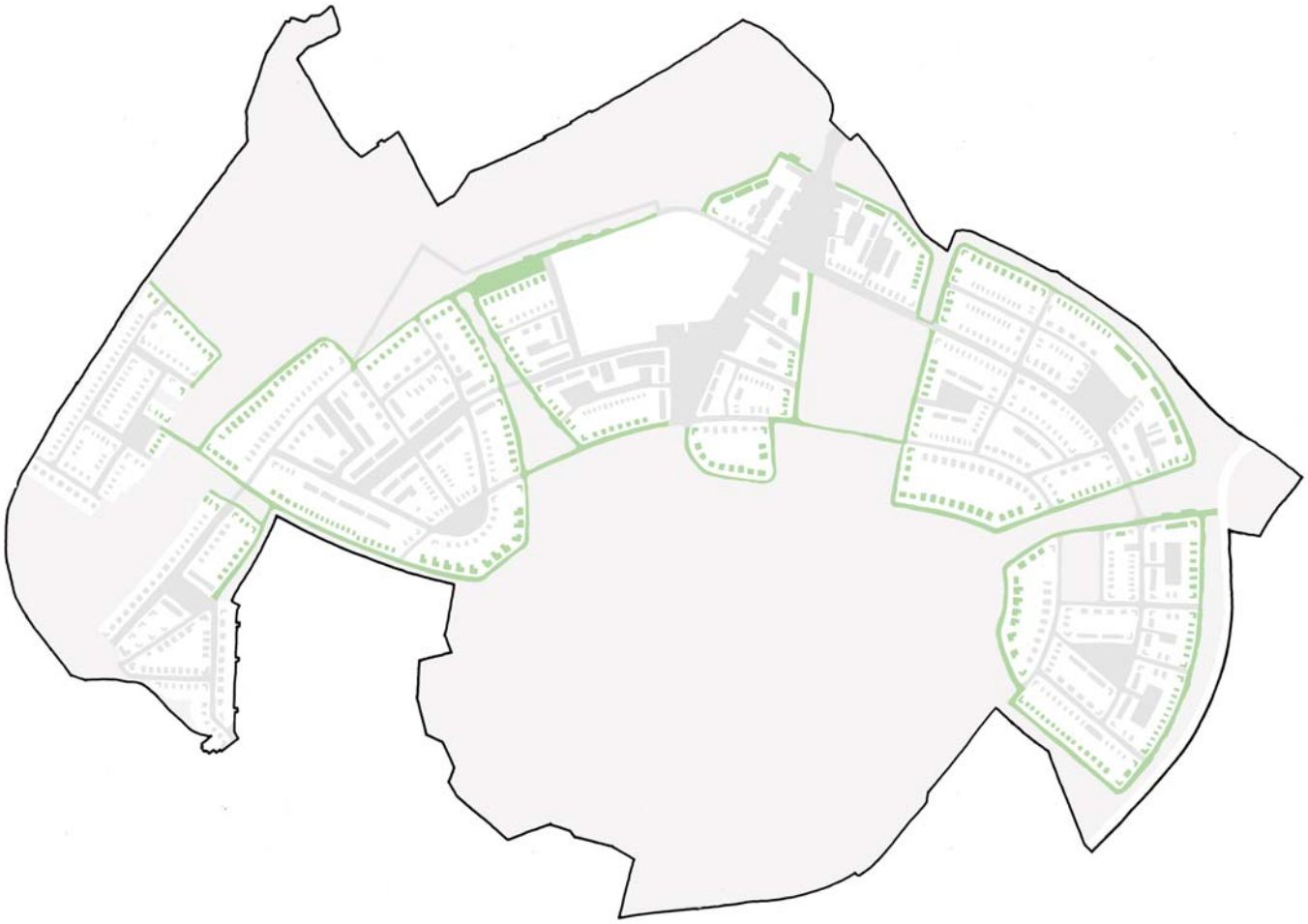
Character Area 8

Rural Lanes

Single aspect streets that face onto the landscape

RURAL - LOW DESIGN FREEDOM

Overview



ABOVE
Plan showing location of the Rural Lanes

Location

The Rural Lanes are single aspect streets that face out onto extensive landscaping.

Character

Unlike the more centrally located zones, these 'off -the-beaten path' areas are to adopt a rural tone that seemingly 'blends' into the landscape. This will be achieved through the use of dry-stone wall and planted boundaries (with hidden secure boundaries where desired), a rural material palette, undulating street-lines with the ability to have a variety of front garden depths & a simple highway treatment of a single, shared macadam surface bordered by wildflower verges. Buildings on the upper levels of the hillside will have a reduced height allowance to protect views to the hilltop from the surrounding areas.

Management

Freeholders and leaseholder will be responsible for the management of buildings and plots, Oxfordshire Country Council for the shared surface zones and verges.

Design Freedom

Due to the application of material palettes and boundary treatment requirements, the Rural Lanes are more controlled than other site components. This higher level of control ensures that the 'fringes' of the development sit comfortably in their setting and do not impact negatively on surrounding views. Despite the need for more control, design freedom is still afforded on several aspects, most notably the style and shape of buildings which are left entirely to the discretion of plot purchasers.

Case Studies

ABOVE
Existing 'rural lane' at Graven Hill showing the proposed, simplistic highway design of a single, shared macadam surface with grass verges either side. Also notable is the weathered timber fence that sits discretely in the landscape & the meadows beyond which are to be retained.

LEFT
Example of a single aspect 'rural lane' at Wardington, Oxfordshire. This image shows a variety of proposed features including 'hotch-potch' building forms held together through the use of a vernacular material palette & undefined boundaries that 'bleed' into the surroundings.

Photo of Wardington, Oxfordshire
TAKEN FROM http://goo.gl/0R4uta

RIGHT TOP
Beech hedgerows with intermittent timber access gates as proposed for plot boundaries to soften the transition between public and private space.

TAKEN FROM http://goo.gl/9589TY

RIGHT BOTTOM
Dogwood hedgerows as alternative plot boundary treatment.

TAKEN FROM http://goo.gl/CokPbQ

Design Rules

Requirements considered critical to achieving the desired Rural Lanes character

Off Plot Features

Hard Landscaping	Shared Surface	Bitumous construction. Flush kerbs to plot boundaries. 'Hidden' kerbs to verges either side of shared surface.
Soft Landscaping	Verges	To contain intermittent driveway crossings. To be of a natural, informal design with long, tufty grasses and wildflowers.
	Meadows & Woods	N.B. these areas do not form part of the 'Rural Lanes' but are shown here for indicative purposes.
Street Lighting	✓ Columns	Where Rural Lanes necessitate lighting, standard columns with LED lanterns are to be used.
Street Furniture	✓ Benches & Bins	Simple design of natural, untreated timber finish.
Maintenance	✓ Streetscape Strategy	Adopted shared surface zones and verges will be managed by Oxfordshire County Council.

On Plot Features

Generic	Feature Plots	No 'Bespoke' design rules (listed below) apply to these plots with a view to here encourage highly creative/exemplary designs.
	Build Zones	Area of the plot that may be developed. All facades that face onto the public realm must have windows
	✓ Building Performance	Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.
	X Max. Building Height (m)	Total building height (including roof) must not exceed this value.
	✓ Boundary Heights	Front boundaries to be no higher than 1.1m. Side & rear boundaries to be no higher than 1.8m. The use of close-board/lap fencing along any public facing boundary is not permitted.
	Vehicular Access	Driveway access must be located as shown.
	Vehicular & Cycle Parking	No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.
	✓ Waste Management	Storage for 3 x 240l wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.
Bespoke to **Rural Lanes**	✓ Boundary Materials	All public facing boundaries to be a native hedge mix consisting of equal amounts of Common Dogwood, Common Hazel, Guelder Rose, Field Maple & Wild Privet; or a single species hedge of Hornbeam; or a mortared natural limestone wall; or a timber post & rail or post & mesh fence (this can also be used as a secure boundary within a hedgerow boundary). Where hedgerows are installed, these are to be laid as double staggered rows & are to be cut approx 150mm after 3-4 years of unrestricted growth.
	✓ Material Palette	See external material options overleaf.
	✕ Min. Building Height (m)	Not applicable
	✕ Fixed Elevation	Not applicable

Rural Lanes Material Palette

Facade Options

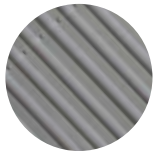
The 9 NCS render colour options for render as shown below have been chosen to match tones found within the local oolitic limestone. Where desired, readily available products of a similar tone may be used. Under these circumstances samples will need to be submitted for approval as part of the compliance process.

Limestone
To match local oolitic limestone

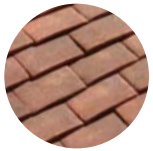
Brick Option 1
Deep red/orange to match traditional local brickwork

Brick Option 2
White painted bricks of any type

Brick Option 3
Deep pink/orange with kiln marks to match existing site buildings

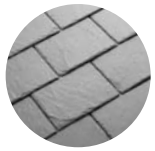


Metal Cladding
Any variety of corrugated cladding of an exposed weathered finish or of a grey colour



Tiles
Any variety of plain clay or smooth red/grey plain concrete tiles of a slim profile. Double tiles are not permitted

Timber
Any variety of a natural finish. This includes charred & natural coloured or dark grey/black stains



Slates
Any variety of natural slate or med/dark grey fibre cement slate

Render Option 1
Colour 1005-Y10R

Render Option 2
Colour 0505-Y20R

Render Option 3
Colour 0505-Y30R

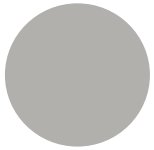
Render Option 4
Colour 1005-Y20R

Render Option 5
Colour 1010-Y30R

Render Option 6
Colour 1010-Y20R

Render Option 7
Colour 1510-Y20R

Render Option 8
Colour 2010-Y20R



Render Option 9
Colour 3000N

Lime Render
Natural colour

Minor Options

The following accent materials can be used on up to 30% of your home's total surface area .

Please note, the use of a green wall must be applied over one of the permitted facade materials as stipulated above..

White Render

Corten Steel

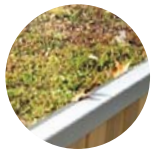
Structural Members

Green Walls

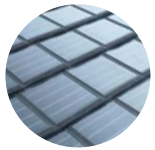
Mirror Finishes

Roof Options

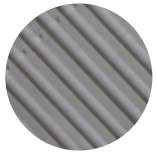
Please note: the metal, tile, timber & slate options shown opposite can be used wherever feasible. The 'flat roofs only' options are not permitted for use on pitched roofs.



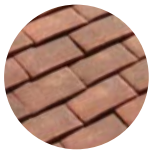
Additional Options for Flat Roofs Only
Any variety of green roof, felt, EPDM or fibreglass



Solar Tiles
Any variety of roof-integrated solar tiles, shingles or slates.



Metal Roofing
Any variety of corrugated or standing seam roofing of an exposed weathered finish or of a grey colour



Tiles
Any variety of plain clay or smooth red/grey plain concrete tiles of a slim profile.

Timber
Any variety of a natural finish. This includes charred & natural coloured stains. Dark grey/black stains also permitted

Slates
Any variety of natural slate or med/dark grey fibre cement slate

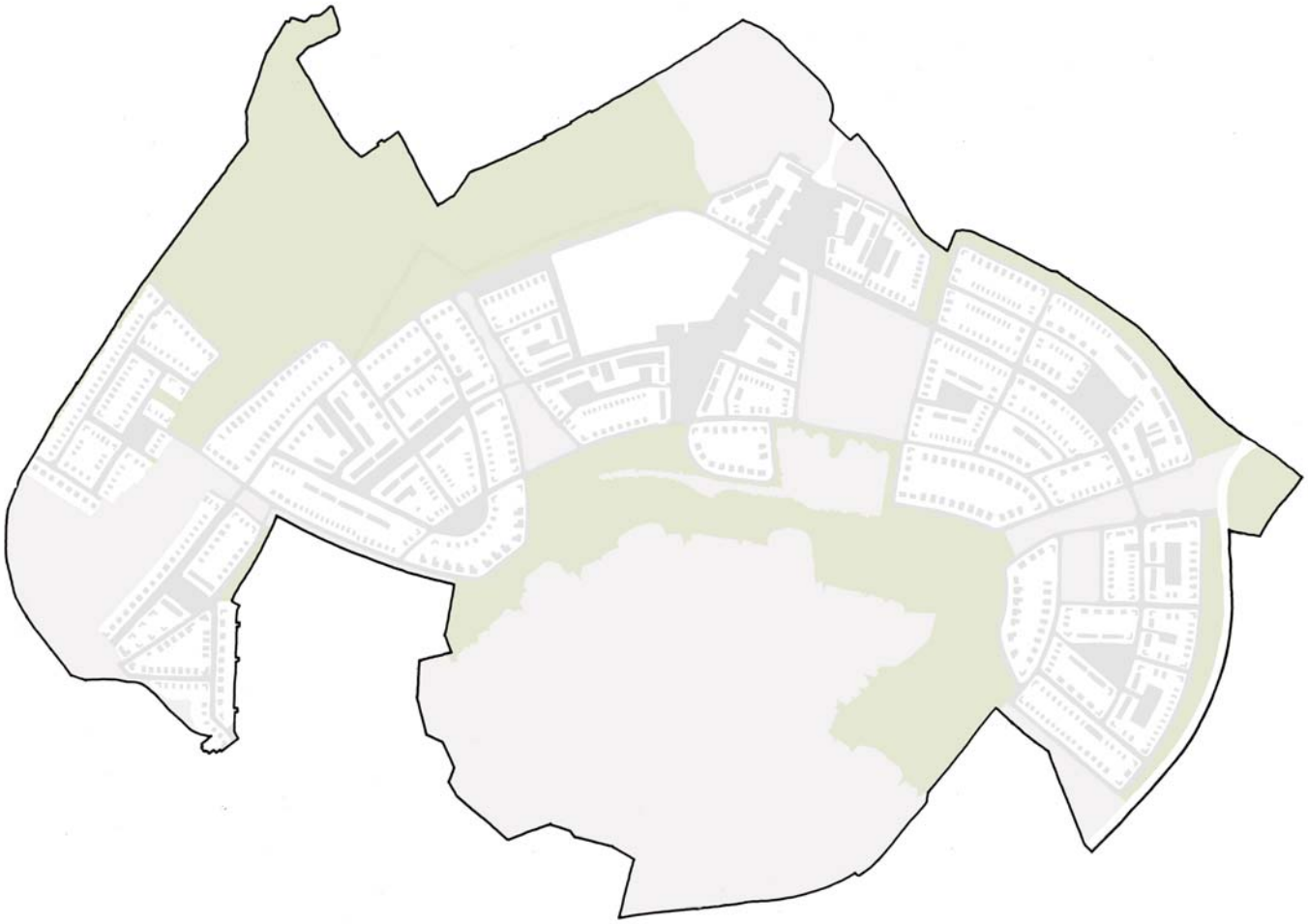
Character Area 9

Meadows

Field habitats containing a selection of retained heritage features

RURAL - LOW DESIGN FREEDOM

Overview



ABOVE
Plan showing location of the Meadows

Location

The meadows consist of existing pastoral farmland, predominantly situated on the upper slopes of the central hillside and to the north-west corner of the site.

Character

The meadow spaces within the Graven Hill Village will provide an impressive rural backdrop to the development.

These areas will be protected to provide an ongoing habitat and amenity resource.

It is proposed that the peppering of existing military features dispersed throughout the meadows be retained left in-situ wherever possible. These 'surprises in the landscape' will help root the development to its historical context and add interest along recreational routes.

Any existing variations in local topography (e.g. grass covered artificial mounds) are also to be retained as unique focal points.

Management

Cherwell District Council will manage this resource using traditional techniques that preserve the essential character of these spaces. Traditional techniques for grazing and seasonal cutting methods are to be explored.

Design Freedom

As strategic amenity, the Meadows do not at this stage offer opportunities for community design. The potential for later involvement with the on-going management, use and evolution of these spaces is to be explored

Case Studies

ABOVE
Photo of a landscaped drainage feature at Graven Hill. The interesting topographical quality created by such features is to be preserved.
Photo taken at Graven Hill. Bicester, 2016 © of GHVDC Ltd

ABOVE *A retained air raid shelter at Bicester Heritage creates a natural gathering point during events, its shadow offering some welcomed shade on hot summer days.*
Photo taken at RAF Bicester Heritage, Bicester, 2016 © of GHVDC Ltd

BELOW *Livestock grazing offers a traditional management solution to preserve character. Grazed meadow, Buckingham*
TAKEN FROM http://goo.gl/3a7BHt

LEFT
Example of modest furniture treatment desired.
Rivacre Country Park, Cheshire
TAKEN FROM
http://goo.gl/y08bp6

Design Rules

Requirements considered critical to achieving the desired Meadows character

Off Plot Features

Hard Landscaping	Footpaths	To be as visually unobtrusive as possible (e.g. a natural material finish & min allowable width)
	Shared Cycle/ Pedestrian Paths	To be as visually unobtrusive as possible (as above).
	Retained Heritage Features	Existing military features that fall within the Meadows are to be retained wherever possible. The plan opposite depicts an existing Emergency Water Supply (EWS) pond structure that could potentially be 'reinvented' & incorporated into design proposals. Other possible features include the known location of a roman road, air raid shelters & rail tracks.
	✓ **New Structures**	Any new buildings or structures to be located within the Meadows are to employ a vernacular palette of materials. Designs must be low-lying (to protect surrounding views) & be contextually relevant, either by reflecting the military heritage of the site or by 'blending' into the rural surroundings.
	Elevated Walkway	N.B. This feature forms part of the Circular Railway and not the Meadows. This feature demonstrates the design intention to incorporate 'reinvented' military features & so is annotated here for indicative purposes only.
Soft Landscaping	**Longer Grass**	To contain wildflower species.
	Shrubs	Informal design of predominantly native species
	Trees	Informal arrangement..
	Ditch	Varying profiles as part of SUDS.
Lighting	✕ **Any**	Not applicable. Meadows are to remain unlit.
Furniture	✓ **Benches, Bins**	Modest design. To be a weathered timber finish.
Management	✓ **Meadow Areas & Amenity Areas Strategy**	Management to be undertaken by Cherwell District Council.
		Report & undertake repair & replacement of trees, planted areas & grass.
		Watering, weed control & general management of trees, woody & herbaceous planting including removal of undesirable woody & herbaceous species from sward
		Check and maintain livestock fencing & access points to all grazed meadow areas
		Biannual cutting of grass within remaining meadow with regular cutting of path links
		Collection & removal of litter & other foreign materials

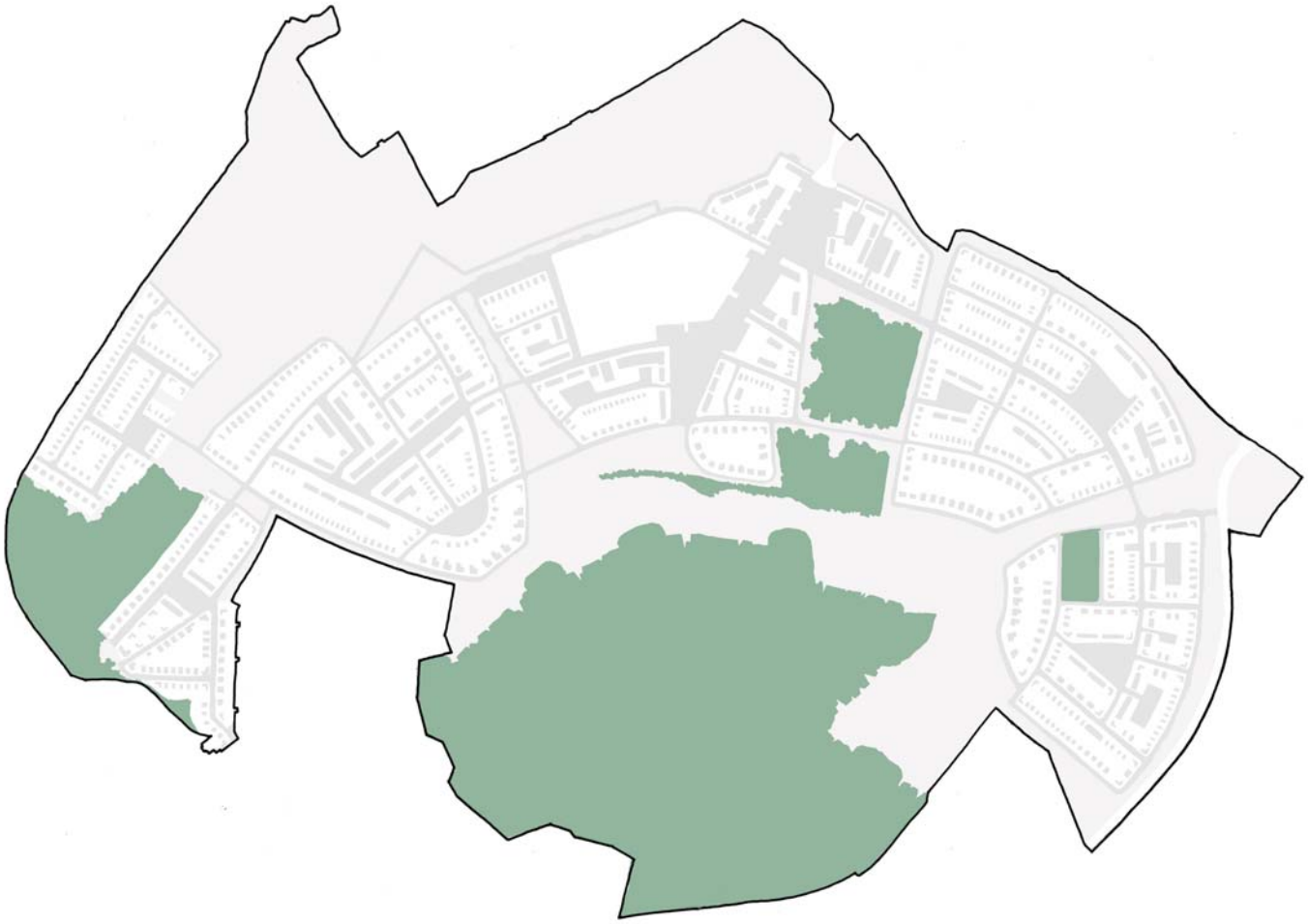
Character Area 10

Woods

Established woodland habitats incorporating recreational routes and play areas

RURAL - LOW DESIGN FREEDOM

Overview



ABOVE
Plan showing location of the Woods

Location

The existing woodland is predominantly located on the hilltop with smaller pockets located around the base of the hillside. The strategic locations of any new areas of woodland have been informed by the location of these existing habitats and where opportunities to fulfil additional functions can be best delivered. This has included the creation of new habitat corridors, woodlands within amenity spaces and productive trees located near areas of food production.

Character

The wooded areas within Graven Hill Village are to reinforce the defining natural backdrop of the development. They play a strong role in reinforcing the unique identity of the site.

Management

The untouched and naturalistic appearance of the existing woodlands is to be both protected & enhanced through the adoption of a 'low intervention' approach throughout, with reliance upon natural processes. As such, Cherwell District Council will manage these areas using traditional techniques that are sympathetic to woodland ecology. Existing pathways will be utilised wherever possible to reduce the potential impact of new interventions.

Design Freedom

As strategic amenity, the Woods do not at this stage offer opportunities for community input. The potential for later involvement with the on-going management, use and evolution of these spaces is to be explored

Case Studies

ABOVE
A wooded stretch of a former rail line at Nidderdale Greenway has been sensitively upgraded to form a well-used, meandering recreation route suitable for cycling, walking & horse riding.

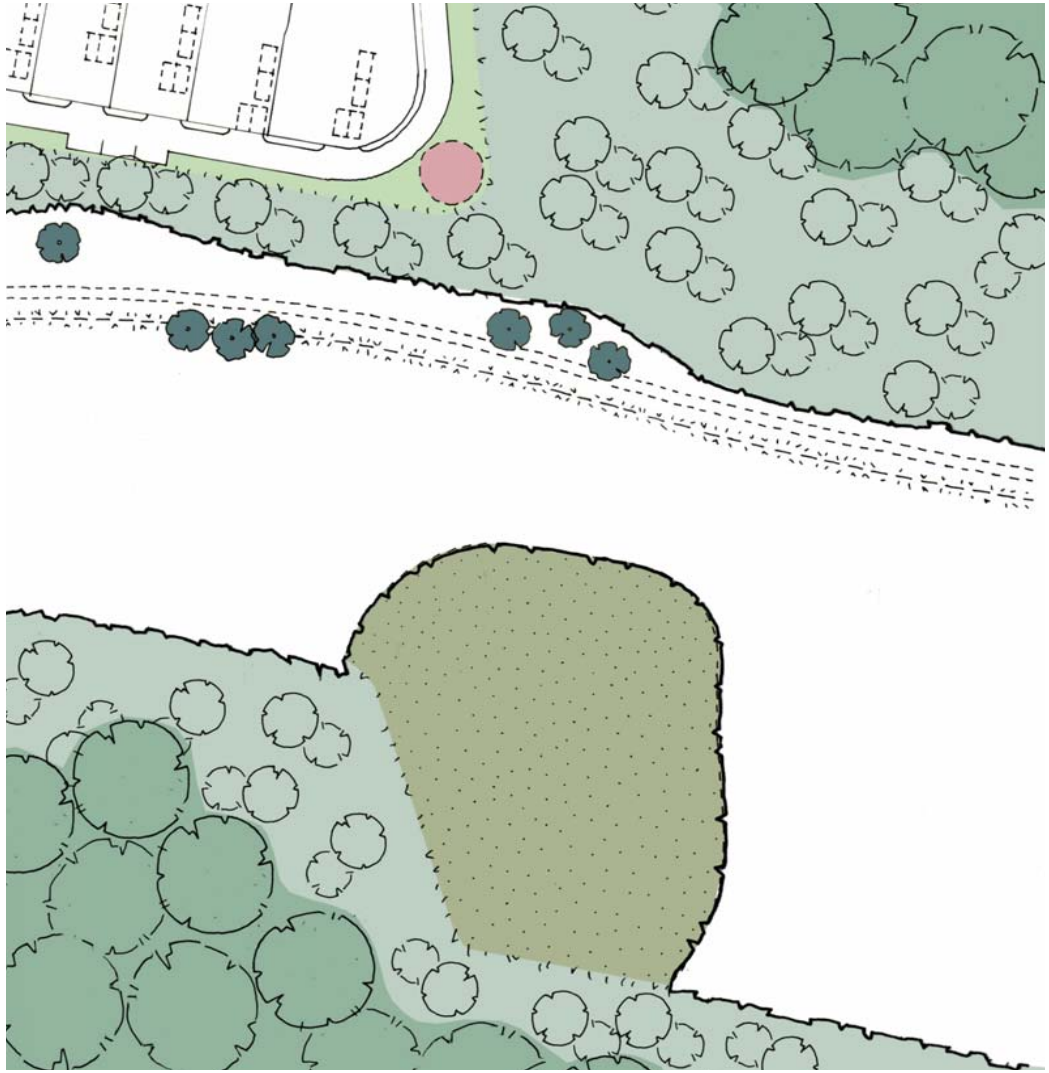
Nidderdale Greenway TAKEN FROM http://goo.gl/v7jvYN

ABOVE
Photo depicts an existing lowland pocket of woodland at Graven Hill with grassy ground cover. The untouched & naturalistic appearance of these woodlands is to be retained.

Photo of woodland at Graven Hill, Bicester, 2016 © GHVDC Ltd

LEFT
The playground at a campsite in Devon exemplifies the desired approach to playground equipment within the identified wooded provision. This includes the use of tree stumps, log frames, tyre swings & bark mulche ground covers.

Cofton campsite, Dawlish, Devon
TAKEN FROM http://goo.gl/JhO2Qo



Design Rules

Requirements considered critical to achieving the desired Woods character

Off Plot Features

Hard Landscaping	✓	Footpaths	To be as visually unobtrusive as possible (e.g. use of natural material, minimal widths & meandering layouts). Low-key improvements/ maintenance of existing access track(s)
	✓	Shared Cycle/ Pedestrian Paths	To be as visually unobstrusive as possible (as above). Low-key improvements/maintenance of existing access track(s)
Soft Landscaping		Existing Trees	To be retained.
		Existing Vegetation	To be retained
		New Trees	Informal arrangement
		Regenerating Woodland	New swathes of woodland to replace areas elsewhere.
		Play Areas	To be of a naturalistic design, integrated into existing woodland. Natural play is to be encouraged through the use of logs & stumps, climbing structures, swings and other play equipment.
Lighting	✕	None	Wooded areas are to remain unlit.
Furniture	✓	Benches, Bins	Simple design of a natural, untreated timber finish.
Management	✓	Deciduous Woodland, Coniferous Woodland & Play Areas Strategy	To be undertaken by Cherwell District Council.
			Watering, weed control & general management of trees, woody & herbaceous planting during establishment period & beyond.
			Selective thinning out of undesirable species, allow greater diversity of ground fora & encourage age diversity within the canopy
			Phased coppice management of under-storey areas
			Removal of undesirable tree/plant species including those impeding normal operation of paths & play spaces
			Presumption in favour of dead wood retention (subject to safety inspections)
			Use of natural regeneration from existing woodland seed bank & rootstocks within areas of minimal-intervention
			Undertake replacement of trees once cause of loss/ damage has been established
			Safety inspection of seating& informal areas of play. Reporting and repairing incidents of vandalism or incidental damage & immediately restricting access to defective play equipment.
			Maintaining and repairing path surfaces, edges & boundary fencing/gates

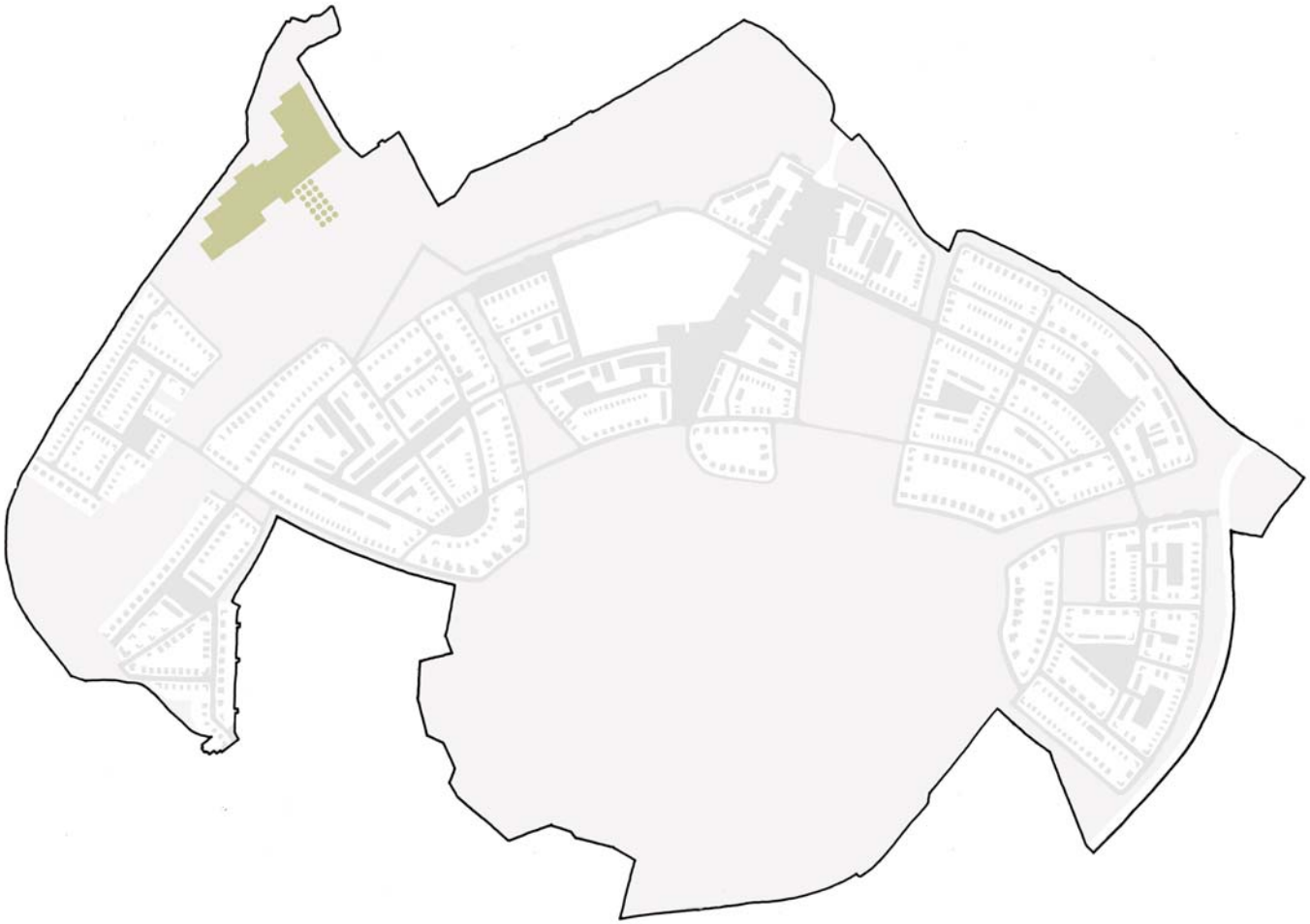
Character Area 11

Allotments

Co-managed amenity space offering opportunities for community uses

RURAL - SOME DESIGN FREEDOM

Overview



ABOVE
Plan showing location of the Allotments

Location

The allotment area has been located and planned to allow small scale subsistence production of food crops within an accessible location to the north west corner of the site

Character

As is typical of allotments generally, the intention is to create an informal social and recreational space where people from all walks of life will get 'stuck in.' A continuously changing environment that is clearly 'shaped' by its users is desired.

The accompanying community orchard (immediately south-east of the allotment plots) will provide produce that can be harvested ad sold by local groups, as well as a green haven for simple contemplation and enjoyment.

It is the intention that this space also be used for local festivities (for example 'apple days'), as well as more traditional activities such as orchard wassailing (an ancient drinking custom intended to ensure a good apple harvest that is still practiced in cider-producing regions).

Management

The Allotments will be co-managed by Cherwell District Council and leaseholders of the plots.

Design Freedom

Unlike other strategic landscape areas across the site, end-user creativity is here encouraged. Although the broad structure and layout is defined, the individual plots are deliberately designed to offer flexibility to leaseholders and users of the space.

Case Studies

ABOVE

The sale of food produce offers a potential revenue stream for on-going management of the allotments. A community 'homegrown' store located within the Village Centre would be desirable.

The 'Allotment Deli' shop, St, Ives TAKEN FROM http://goo.gl/2iDt6a

ABOVE

Alongside day-to-day activities, the allotments are to act as a social 'hub' with on-site facilities (the construction of which offer a good opportunities for a local group project) to hold regular events.

Summer Street Allotments, Newcastle TAKEN FROM http://goo.gl/QWGX9h

Design Rules

Requirements considered critical to achieving the desired Allotments character

Off Plot Developer

Hard Landscaping	Footpaths	To be as visually unobtrusive as possible (e.g. use of natural material, minimal widths & meandering layouts).
	Shared Cycle/ Pedestrian Paths	Provides sustainable means of travel from allotments to all other areas across the site. To be as visually unobtrusive as possible (e.g. stabilised finely grated aggregate or similar).
Soft Landscaping	Allotment Beds	Cultivated by allotment tenants
	Amenity Grass	Mown for access
	Longer Grass	To contain wildflower species.
	Shrubs	Informal design.
	Existing Hedgerows	To be retained.
	Incidental Trees	Fluid arrangement of native species to support wildlife flight paths, pollard management.
	Community Orchard	To be a mixture of regional varieties & commercially available fruit trees.
	Existing Ditch	To be retained
Lighting	✕ None	Allotments to remain unlit.
Furniture	✓ Benches, Bins & Cycle Stands	Simple design of a natural finish. Cycle stands to be provided (quantity TBC).
Management	✓ Allotment & Orchard Strategy	Management of individual allotment plots & some communal areas to be undertaken by leaseholders.
		Cherwell District Council to undertake management of all other areas.
		Biannual cutting of grass within remaining meadow & below orchard tree canopies with regular cutting of informal path links
		Collection & removal of litter & other foreign materials
		Reporting & repairing incidents of vandalism or incidental damage once cause of loss/damage has been established
		Removal of undesirable woody & herbaceous species from planted areas & grass sward
		Maintaining & repairing path surfaces & edges
		Control of weed growth and protection from browsing animals through initial establishment period of new orchard tree planting
		Formative pruning to allow suitable development for crop production

Useful References

For any enquiries relating to this Design Code or the self-build process, please get in touch on...

01295 753700

info@gravenhill.org.uk

or visit our website

www.gravenhill.co.uk

Cherwell District Council (2015) *Local Plan 2011 - 2031*, Cherwell District Council, UK
http://www.cherwell.gov.uk/index.cfm?articleid=1730

Department for Communities and Local Government (2007) *Manual for Streets*, Thomas Telford, UK
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

Oxfordshire County Council (2011) *Parking Standards for New Residential Developments*, Oxfordshire County Council, UK
https://www.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/roadsandtransport/transportpoliciesandplans/newdevelopments/parkingstandardsfornewresidentialdevelopments.pdf

Department for Communities and Local Government (2015) *Technical Housing Standards; Nationally Described Space Standard*, DCLG, UK
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/524531/160519_Nationally_Described_Space_Standard____Final_Web_version.pdf

Secured By Design (2016) *New Homes: 2016*, SBD, UK
http://www.securedbydesign.com/wp-content/uploads/2016/03/Secured_by_Design_Homes_2016_V1.pdf

AMEC (2011) *Redevelopment of MOD Bicester: Design & Access Statement*, Defence Infrastructure Organisation, UK
http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000

Glenn Howells (2015) *Parameter Pan Rev F*, Graven Hill Village Development Company
http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000

Glenn Howells (2015) *Masterplan Northern Area Rev I*, Graven Hill Village Development Company
http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000

Glenn Howells (2015) *Street Hierarchy Summary 02/09/2015*, Graven Hill Village Development Company
http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000

Hoare Lea (2015) *Graven Hill Passive Design Standards*, Graven Hill Village Development Company
http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000