Phase 9, Heyford Park, Upper Heyford, Bicester

Design and Access Statement to support an application for Full Planning Permission

PHASE 9, HEYFORD PARK, BICESTER Design and Access Statement

produced by

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On behalf of Dorchester Living

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# 1.0-Introduction

# 1.1 Purpose of Document

This Design and Access Statement is submitted on behalf of Heyford Investments LLP in support of a Full Planning Application for land known as Phase 9 at Heyford Park.

Planning Practice Guidance on Validation requirements states that "A Design And Access Statement is a concise report ..... They provide a framework for applicants to explain how the proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users".

It states that a Design and Access Statement must:

(a) explain the design principles and concepts that have been applied to the proposed development; and

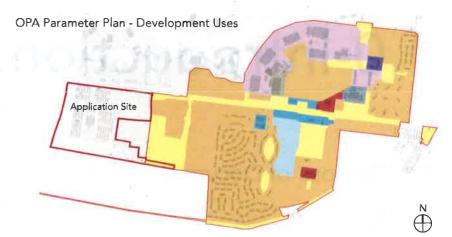
(b) demonstrate the steps taken to appraise the context of the proposed development, and how the design of the development takes that context into account.

A development's context refers to the particular characteristics of the application site and its wider setting. These will be specific to the circumstances of an individual application and a Design and Access Statement should be tailored accordingly.

Design and Access Statements must also explain the applicant's approach to access and how relevant Local Plan policies have been taken into account. They must detail any consultation undertaken in relation to access issues, and how the outcome of this consultation has informed the proposed development. Applicants must also explain how any specific issues which might affect access to the proposed development have been addressed.

This Application follows guidance set out in the Approved Heyford Park Design Code (ref Pegasus B.0286\_2I V5.2) and this report demonstrates how the Planning Application is compliant with this document. Although this is a standalone application, we thought it imperative to ensure a holistic design and therefore displaying compliancy towards achieving that consistency was the most logical approach.

This is shown through a  $\checkmark$  adjacent to coloured text which summarises the relevant guidance from the Approved Design Code.



# 1.2 Site Location & Planning Background

The Application Site comprises 12.04 hectares of land within the former RAF Upper Heyford military base. The military base was initially constructed in 1916 for use as an airfield during the First World War and remained operational for military use (with some minor periods of cessation) by the Royal Air Force (RAF) until circa 1950. At this time, whilst remaining a Ministry of Defence (MoD) site, its occupation was transferred to the United States Air Force (USAF) as part of the Cold War strategic defence. The USAF remained in occupation until 1994 when the site was handed back to the MoD and its military use ended. The military base was subsequently sold to private investors following which it has been the subject of two notable planning permissions for its redevelopment.

The first of these outline planning permissions for the formation of a new settlement of 1,075 dwellings with associated works and facilities, including employment uses, community uses, a school, playing fields and other physical and social infrastructure across areas centred

around Camp Road; together with changes of use to various employment use for many of the buildings and structures located across the former flying field area. The scheme was allowed at appeal on 11 January 2010 (reference APP/C3105/A/08/2080594).

The second of these permissions was concerned with only that part of the military base referred to as the 'New Settlement Area' which forms the central core, east of the Application Site and effectively provides a revised scheme for the main area of residential development and community uses. Outline planning permission was granted by Cherwell District Council on 22 December 2011 (10/01642/OUT), Pursuant to this outline planning permission, a Design Code has also been approved which seeks to create distinctive character areas whilst unifying the different development areas into a coherent whole. This permission excluded the Application Site but provides relevant context towards an overall design approach.

The redevelopment, now referred to as Heyford Park, is underway, being taken forward through a combination of changes of use with regards to the 'flying field' under the 2010 lead appeal, and various reserved matters permitted under the 2011 permission with regard to the 'new settlement area'. Further planning applications have been submitted by the Dorchester Group including the development of the Heyford Park Free School providing education for the 4 to 19 year age range; future development of the Village Centre to provide a hotel, bar/brasserie, local shopping and other community related uses; and for specific residential parcels located within the New Settlement Area.

Since the determination of those two notable planning permissions the Cherwell Local Plan was updated and duly adopted in July 2015. The updated Local Plan covers the period to 2031 and allocated Heyford Park and adjacent greenfield land for further development including an additional 1,600 homes, 1,500 jobs and associated infrastructure under Policy Villages 5. It also identified their potential to meet this additional development requirement.

# 2.0-Assessment

# 2.1 Site Location

The proposed development is located in the south western corner of the former Air Base, in the area known as School Huts. Kirtlington Road forms the western edge of the Application Site with Camp Road abutting it to the north, Izzard Road to the east and open countryside to the south. Access to the development is proposed from Camp Road and Izzard Road.

# 2.2 Flood Risk Assessment

The development site is located entirely within Flood Zone 1 (defined as land with less than a 1 in 1000 year probability of flooding from river or sea on an annual basis).

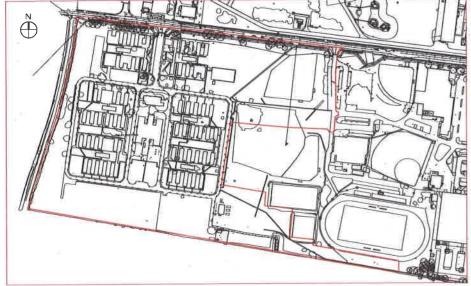
The geology of the site shows the area is underlain with silty clay and limestone gravel.

The geology therefore has the potential to provide some infiltration, however targeted infiltration testing will be required as part of the detailed stages to determine the specific infiltration capacity of the site. The proposed drainage strategy assumes no infiltration at this stage, with the recommendation following testing that the attenuation areas should be unlined if possible to maximise the latent infiltration potential of the scheme.

Surface water from the residential development will be directed towards an attenuation pond which must be located to the south east.

Water in the attenuation areas will be released to the adjacent watercourse at greenfield rates.

For further information, please refer to accompanying document produced by Peter Brett Associates.



Location Plan Dwg 0521-PH9-101

# 2.3 Ecology

A desktop study, habitat and faunal surveys were carried out to identify any potential significant effects on legal and locally protected ecological sites, valued habitats for wildlife and protected species.

The site does not have any ecological designation and none of the existing derelict buildings on site are considered to be used by roosting bats.

No active badger setts were found within the application site, but survey work did find evidence to suggest badgers pass through the area to foraging grounds.

No reptiles were recorded on the site.

A waterbody in the form of an oil interceptor tank lies to the south east but no great crested newts were found to be present. It was concluded that no habitats of nature conservation interest and/or protected species will be significantly harmed by the proposed development but that the following mitigation and enhancements are recommended to influence the design:

Habitats – An area of open grassland, subject to low intensity mowing, will be retained in the south and partly in the east, with a narrow strip of grassland adjacent to the hedgerow along the western boundary, maintaining a green corridor for the movement of wildlife around the Application Site.

Landscape Planting – New planting will utilise native species to provide spring blossoms, which will increase pollinated invertebrates into the site.

Existing hedgerows will be supplemented by tree and shrub planting to fill gaps and strengthen connectivity, whilst wildflower grassland be seeded to the edges of the site. Birds – Bird boxes will be erected onto new buildings where possible and will include for Avianex, Sparrow Terraces and Swift nest boxes.

Lighting – The proposed development will incorporate a sensitive lighting scheme so as to avoid the excessive illumination of retained habitats, which would continue to provide corridors for the movement of wildlife around the Application Site.

Bats - Eight bat boxes will be incorporated into the new buildings or erected into the retained trees to the western and northern boundaries.

For further information, please refer to accompanying document produced by Pegasus Group.



Habitats & Ecological Features - Figure 12.2 - DWG. No. 4130/ECO3 (Pegasus)

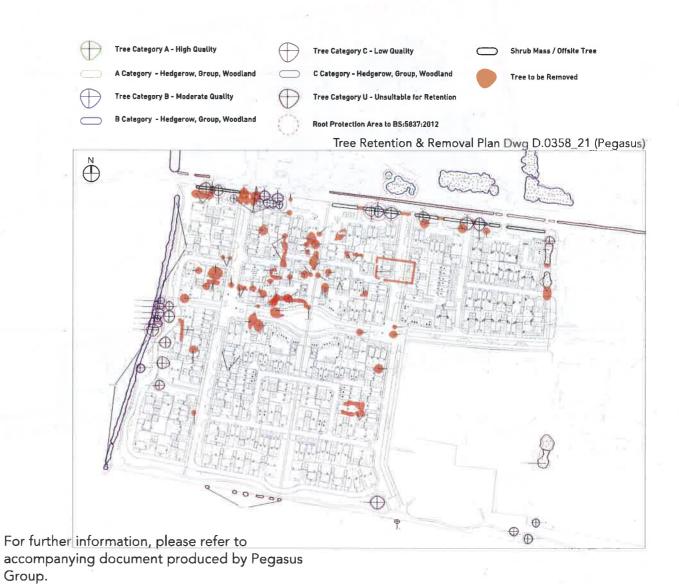
# 2.4 Arboricultural Report

An arboricultural survey was carried out to survey the trees, groups and hedges in accordance with BS5837:2012 'Trees in relation to design, demolition and constructions – recommendations.' Following on from this survey work and Arboricultural Impact Assessment which considered tree loss/protection and retention was created.

The tree survey findings determined that there were 92 trees, shrubs or groups within the site survey area. Of these 62 were Category C (low quality) and 23 were Category B (moderate). There were none of high quality or unsuitable for retention.

The greater majority of moderate quality (Category B0 items will be retained and the features that should be removed are shown in red on the Tree Retention and Removal Plan.

Some works to the northern footpath will be undertaken within the root protection areas of the retained trees so appropriate construction methods will be agreed for these in advance.



# 2.5 Landscape and Visual Amenity

A Landscape and Visual Amenity assessment was undertaken to assess the local landscape and visual resource and the potential effects of the proposed development.

#### Landscape Character

The character of the site is influenced by the presence of boundary vegetation, such as mature hedgerows along its western boundary, mature trees in its western and northern part and evergreen belts of trees in the south eastern corner. The site is relatively enclosed by the aforementioned vegetation with limited opportunities to gain views out, towards the surrounding countryside. Views of the recently constructed residential properties of Bovis Homes Limited can be gained to the east. Views of the open countryside can be gained mostly to the south.

The review of landscape receptors found within the preliminary 5km study area resulted in two Landscape Character Areas (LCAs) being considered, the Upper Heyford Plateau LCA and Cherwell Valley LCA.



Viewpoint 5

# **Visual Receptors**

In terms of visual receptors, the users of Public Rights of Way and road users in the vicinity are the most relevant with direct and often open views towards the Proposed Development gained from close proximity. Upper Heyford is the closest settlement, located to the west some 0.3km away. Other settlements are more distant and benefit from vegetative screening, which is one of the key characteristics of the Upper Heyford Plateau LCA.

There are a number of historic parks located in the surrounding landscape, mostly to the south and south west with Rousham Park the most relevant due to its proximity and elevation. Other visual receptors, such as cyclists and those travelling along railway lines have also been considered.

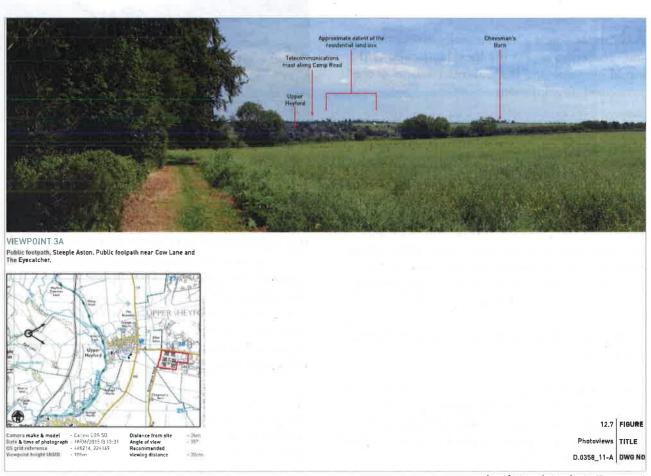
A number of viewpoints have been selected to inform the assessment upon the character of the local landscape and illustrate the visual effects of the Proposed Development. They have been selected at varying distances and location, and to represent different type of receptors, where possible.

# Likely Significant Effects

The effects of the Proposed Development upon the character of the Upper Heyford Plateau LCAs would result in negligible effects with the character of this LCA prevailing.

The Proposed Development would have little effect upon the fabric of this landscape and associated landscape elements such as tree vegetation. The visibility of the Proposed Development is also likely to be limited to close range locations and the overall appreciation of this landscape would be largely unchanged with the built form of the Former RAF Upper Heyford providing an appropriate context. It is worth reiterating that the Application Site is already characterised by the presence of buildings in the form of the derelict school huts.

For further information, please refer to accompanying document produced by Pegasus Group.



Example of Visual Analysis (Pegasus)

# 2.6 Architectural and Cultural Heritage

The archaeological and cultural heritage assessment for the Environmental Assessment comprised three 'strands' of potential receptors within a 1km study area around the site:

- historic buildings and structures (some of which may be Scheduled, Listed or locally designated);
- the historic landscape (elements of which may be protected by legislation or by designation); and
- archaeological deposits (elements of which may also be protected by legislation or by designation, and which are generally belowground).

### Archaeology

There are no known sites of significant archaeological interest within the Application Site, although remains of the Port Way Roman Road (OA 1047) may extend into the western strip of the Site in the form of an agger surface and/or flanking ditches.

# Unknown Archaeology

It is possible that along the whole route of Port Way as yet unknown sites and finds may be present dating from the Roman period, as cemeteries/burials and buildings were often located along these roads.

The whole Application Site has a high potential to contain deposits relating to settlement dating to the Iron Age and Romano-British periods. The evidence for this relates to the large amount of such sites seen in the Study Area.

There may be evidence in the Application Site from the medieval and post-medieval periods but this is likely to relate to the agricultural use of the land and whist their sensitivity is unknown, any such remains found are unlikely to be important.

In areas which have been identified as relatively undisturbed, eg the majority of the Application Site below the concrete hut bases and the grassed and tarmacked areas, survival of any archaeological features is likely to be good, particularly within the grassed areas.

### Historic Hedgerow

The hedgerow running along the western side of the Application Site is 'important' using the criteria of the 1999 Hedgerow Regulations. However, this will be retained during development as the western boundary of the Application Site.

### **Built Heritage**

There are no significant impacts on listed or unlisted buildings in either of the village Conservation Areas of Upper and Lower Heyford. The potential visibility of the site from the road between Lower and Upper Heyford in the vicinity of the Steam Mill will be a minor or negligible impact of no significance for the building.

#### Conservation Areas

There are no significant impacts on the village Conservation Areas of Upper and Lower Heyford, or their setting. The potential visibility of the site from parts of the Conservation Area on the road between Lower and Upper Heyford would be a minor or negligible impact of Slight significance.

### Historic Landscapes

There are no significant impacts on the Village Conservation Area on the road between Lower and Upper Heyford, or their setting. The potential visibility of the site from parts of the Conservation Area on the road between Lower and Upper Heyford would be a minor or negligible impact of Slight significance.

The site is visible from two viewpoints within the registered park and garden (RPG) at Rousham. The proposed development would form a relatively small element of these views and would not make a significant change to the character of the surrounding area. It is recognised that during the operational phase of the proposed development factors such as lighting associated with the residential properties and street lighting would have a potential effect upon the setting of the RPG. The visibility of the site from the RPG would be a negligible impact of Minor significance. If street lighting from the proposed development were to be visible from the RPG this would result in a minor impact of Moderate significance.

### Mitigation

To avoid possible impacts to any remains of the Roman Port Way which may extend along the western boundary of the Application Site, no development will occur within 12m of this boundary, which should ensure that there will be no impact to this feature by preserving it in situ.

Mitigation by design has also ensured the retention of the historic hedgerow (OA 1116) deemed Important by the 1999 Hedgerow Regulations.

To avoid significant impacts on the setting of conservation areas and historic landscapes, the Proposed Development should follow a sensitive design which limits the impact of the Proposed Development upon the views of the wider landscape from Rousham registered park and garden. There should be no street lighting along the western edge of the development or the lighting should be designed in such an array as to avoid a series of lights being visible along the skyline in distant views from the conservation areas towards the Application Site.

The loss of Conservation Area buildings within the site will be mitigated by the completion of historic building recording within the site and the production of a comprehensive report on the history and structures of the School site. For further information, please refer to accompanying document produced by Oxford Archaeology.

The site has the potential to contain as of yet unknown archaeological remains. Archaeological evaluation would allow an assessment of the presence, survival, importance and location of any archaeological remains to be carried out. The results of this work would inform the need for and scope of any further mitigation. Depending on the sensitivity of any features found it is likely that a programme of excavation and recording would mitigate the impacts of the development through preservation by record.

For further information, please refer to accompanying document produced by Oxford Archaeology.

# 2.7 Site Constraints and Opportunities

This section summarises the key constraints and opportunities of the site.

#### Vehicular Access

Vehicular access to the site can be provided from Camp Road along the northern boundary and from Izzard Road to the east.

### Pedestrian / Cycle Access

Pedestrian and cycle access to the site can be provided at a number of locations to ensure that the development provides improved connections with the wider Heyford Park community, notably to the school, village centre, sports facilities & areas of employment.

## **Existing Vegetation**

The majority of significant existing vegetation on site is located at the boundaries and will be retained and incorporated into the proposals. Root protection zones have been identified and the proposed development will avoid these where possible.

Vegetation located within the centre of the site will be removed and replaced with a new cohesive, landscape structure comprising trees, shrubs and lawns to avoid a constrained or contrived development area.

## Ecology

A circa 15m buffer zone from housing will be created to the western and southern boundaries of the site in order to retain a wildlife corridor. which will be planted to enhance biodiversity.

# Topography

Sloping gradients must be considered where the site falls from west to east from approximately 123 AOD to 120 AOD.

## Drainage

The lowest point of the site is towards the south east and provides the most suitable location for a drainage attenuation pond for the site. Extensive use of swales will also be required. A foul pumping station may be required subject to further investigation.

#### Views

There are potential views towards the southwest from the site which can be incorporated into the proposed design.

## Landscape Buffer

A landscape buffer is proposed along the southern boundary in order to integrate the development into the wider, existing landscape framework.

## **Existing Buildings**

There are a number of existing huts on site which will be removed as they are unsuitable for conversion.

# Interceptor Tank

There is an existing interceptor tank which is located close to the southern boundary. This will be removed.

## Landmark Building

The potential for a landmark building has been identified to be located in the north east corner to help provide a sense of identity along Camp Road.

### Roman Port Way

The western boundary is bordered by a route with historic significance and its character should be preserved by providing a 12m buffer.





Constraints & Opportunities Plan Dwg 0521-PH9-1001

# 3.0-Involvement & Evolution

# 3.1 Involvement

The design process initially involved discussions and meetings with Council. Early discussions started during 2015 over the potential redevelopment of the site and an initial parameter plan was produced to inititate those meetings. More detailed discussions in relation to detailed masterplan proposals which led through to detailed sketch layout designs started in June 2016, with subsequent meetings to discuss the proposals.

This was supplemented by a manned public consultation held in October 2016, inviting the public and key stakeholders to review the proposals and help further inform the design.

The public exhibition displayed detailed information on the proposal, the parameters of design and benefits to the community with personnel from Dorchester Living available to field questions during the event. The exhibition was arranged to give everyone interested the opportunity to attend at a convenient time.

Overall the comments received from the public exhibition were positive. Dorchester Living

have taken the view that the local community were happy with the proposals in the form they were presented and have proceeded to the application stage on this basis.















# 3.2 Design Evolution

In response to consultation with Cherwell District Council officers, Oxfordshire County Council, key stakeholders, public consultation and of course detailed technical baseline studies which included highways, landscape and ecology, drainage and utilities analysis, the design proposals have gone through several stages of development and evaluation resulting in a detailed layout that is representative of those agreements reached.

The annotations to each of the designs record the key design considerations and progression.

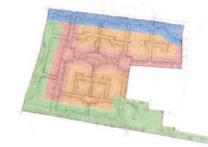


Initial Parameter Plan (Pegasus)



# Design Concept - 07.06.2016

A sketch masterplan was presented to Cherwell District Council (CDC) in June 2016 along with a series of parameter plans setting out the principles of street structure, density and storey heights, and proposed character areas. The illustrations also showed the landscaping principles for the scheme which are for strongly defined tree lined streets, a play and amenity focus to the south east corner, and well landscaped boundaries.



Sketch Character Areas Plan 0521-PH9-1005



Sketch Storey Heights Plan 0521-PH9-1004

There were a number of key comments received from the meeting including the request for a site walkover to ascertain an agreement in principle over the retention and removal of the existing vegetation to ensure it remains a key feature of any future development. Both the meeting comments and site walkover helped shape the next iteration of the masterplan which was tabled in July 2016.

The site walkover took place on 15th June 2016 with relevant officers from Cherwell District Council.

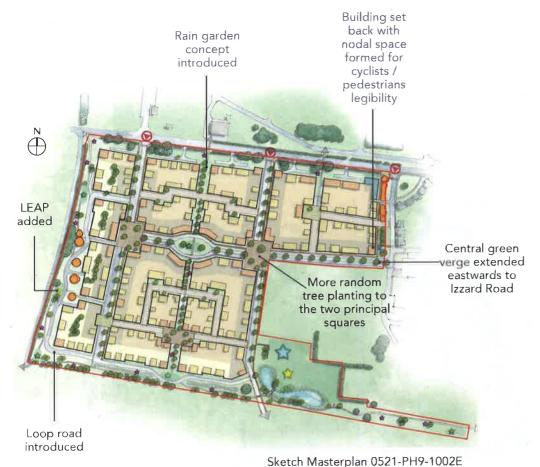
Design Concept - 12.07.2016

Following comments received from the Council at the June meeting and the site walkover, a revised sketch masterplan was presented to officers which showed a number of key changes, notably the retention of a number of additional trees towards the west and east boundaries.

edge

Key buildings relocated to north Change of street east corner, removing hierarchy and the crescent form treelined previously shown. Buildings set Highway back from looped formed retained trees to western A loop road was formed to the north east Buildings set back from retained trees LEAP relocated from north east to south east

Sketch Masterplan 0521-PH9-1002C



# Detailed Sketch Layout - 09.08.2016

A final meeting was held with CDC to present an updated version of the Sketch Masterplan along with a Sketch Layout showing more detail within the scheme. The design closely followed the structure and principles agreed with officers at the masterplanning stage to ensure continuity and achieve the design quality achieved at the earlier design stage.



Sketch Layout 0521-PH9-SK02A

#### EIA Parameter Plan

A Parameter Plan based on Sketch Masterplan Rev E has subsequently been produced to form the basis for the Environmental Assessment work.

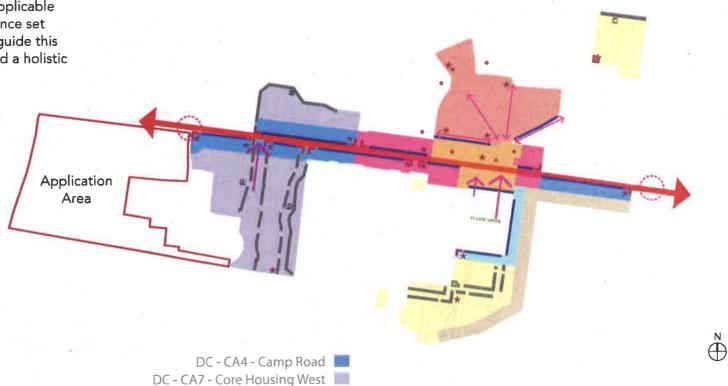
The Parameter Plan sets out the principles of the development and shows:

- Access points to the site.
- Location of residential land uses.
- Street hierarchy including footpaths and cycleways.
- Landscape infrastructure including vegetation to be retained, vegetation enhancement, public open space, green corridors and the location of attenuation pond.
- Location of play areas.
- Areas of 3 storey development.



# 3.3 Heyford Park Design Codes

The application site lies immediately to the west of the area covered by the Heyford Park Design Code so although the Code is not applicable on this site, the principles and guidance set out in the Code have been used to guide this application to ensure consistency and a holistic approach to the settlement area.



DC Regulating Plan showing Character Areas

Development Principles
The development principles established at
Outline Application stage will be applied to this
application.

	PRINCIPLES (FROM OUTLINE APPLICATION)
1	Retain key buildings and open space within the historic core of the administrative area to provide the backdrap to a new village community hub, which is distinctive and celebrates the heritage of the site.
2	Significantly upgrade Camp Road to provide a strong east west spine which provides the focal point for safer north south pedestrian movement and providing activity connecting north and south parts of the development area together in a more unified cohesive form.
3	Refain and enhance areas of significant green space within the development and provision of new quality public open space to create a comprehensive network of open space across the development, which acts as a focus for recreation and community interaction.
4	Provide all the right ingredients for a successful Village Centre at the heart of the settlament area, easily walkable from residential and commercial districts centred around the new Village Green space.
-5	Provide new facilities that are sustained by the community and provide essential local uses required to enable a vibrant community of residents and workers to exist. These facilities can reuse existing heritage buildings to bring them back into successful long term use and safeguard their future.
6	Reinforce the existing boundaries where these are well vegetated to maintain visual screen to site area and wooded character within and beyond the site, and to help integrate the development areas into the wider landscape.
7.	Provide new low hedgerows and intermittent native tree planting to the western site boundaries, to help integrate new development areas into the landscape in views from the west to the site, by replicating the softer, more informal edges of traditional rural settlements.
8	Retain existing housing and bungalows across the site as a sustainable and environmentally sensitive solution at Heylard Park and integrate new housing with existing properties.
9	Reconnect historic route ways into, through and connect beyond the site, to help integrate the site into the surrounding areas, and to establish new links into the flying field.
10	Establish distinctive 'gateways' at key locations to create a sense of arrival into the new sottlement.
1.1	Greate new character areas for housing to create local distinctiveness and a sense of place for Heylord Park's future evolution.
12	Use the existing distinctive landscape character areas of the site to create a variety of distinctive character areas across the development, which will help to reinforce the unique character of this site, and help to integrate the development into the wider landscape.
13	Retain and maintain, where practical the existing mature tree cover to the site.

#### DESIGN CODE RESPONSE

Retained buildings are used as key buildings and denoted as such in the regulating plan.

Village Centre design approach to reinforce its role as a landmark of community identity and include a new heritage centre.

Camp Road is given a unique character through dedicated building typology, edge character and landscaping lexisting and new tree planting!. Crossing points are defined in the code.

Create a green infrastructure strategy that promotes multifunctional open space overlapping passive and active planning uses alongside SUDs and engineering requirements.

Vittage Centre concept is retained and reaffirmed through design coding of new building elements.

The aspiration for delivery of new facilities is encouraged by updating the zone for mixed use Village Centre uses and providing a more defined framework for development. To include a new heritage centre & existing buildings integrated generally in positions of importance.

Boundaries will be reinforced with specific edge types and landscape framework around the development.

New native hedgerows and intermittent tree planting will be provided around the peripheral areas and built form varied building lines coded. Character areas promote 'rural' edge special character where adjoining eastern countryside edge.

The cade is designed to be deliverable over a period of time to create a recognisable character reflecting the better attributes of the existing housing and creating a self-sustaining catalyst for new development.

The design code strategy identifies east/west and north/south routes around the new residential development and defines Camp Road crossing points to limit severance of northern and southern areas.

The design code regulating plan defines galeways least/west| into the development on the Camp Road.

The design code character areas promote not only characteristics that reinforce the existing character, via arts and crafts theme reinterpretation of the original base architecture, but goes further to create distinctive new character such as the village green, SUDs corridor and the rural edge typologies.

Landscape character and space between built form is an intrinsic part of the design code with details provided to create distinct sense of place.

Tree survey work will be carried out in line with the conditions attached to the outline approval. The coding work and discussions reaffirmed the existing tree cover is, and should continue to be one of the defining characteristics of the site

DC Development Principles

#### Compliancy.

- n/a The site lies outside the core administrative area.
- ✓ The development fronts onto Camp Road and follows the Outline Planning permission Design Code Guidance for this Character Area 7 and be consistent with phases along this route.
- ✓ An ecological and landscape buffer zone has been added to the south and west. A planted rain garden and swales have been added which link to an attenuation pond to the south east and a series of 'naturalistic' play zones are spread across the development.
- n/a The site lies outside the village centre.
- n/a The site lies outside the zone for the Village Centre.
- ✓ The existing vegetation along the west, south and east boundaries is reinforced to help integrate the development into the wider landscape.
- ✓ New low hedgerows and intermittent native tree planting are provided within the western and southern corridors. The existing hedge remains undisturbed. A rural, lower density edge is proposed.
- $\checkmark$  n/a There are no existing buildings on site that would be suitable for reuse.
- ✓ The development provides a series of pedestrian and cycle links to off-site destinations utilising north-south and east-west axes.
- ✓ The development creates a new gateway along Camp Road in line with the Design Code Guidance with a new Gateway building to the north-east corner.
- ✓ The development is divided into a number of different character areas as set out in the Design Code, along with a new Character Area influenced by Carswell Circle.
- ✓ The proposed character areas have been informed by the existing character of the site and its surroundings and the creation of new landscapes such as the rain garden corridor.
- ✓ Significant mature trees are retained as agreed in principle with CDC following a site walkover with relevant officers.

# 4.0-Detailed Design

# 4.1 Layout

The Planning Layout represents an appropriate masterplan for the site which has responded to the local site conditions and context and the guidance set out in the Heyford Park Design Code.

Building densities and typologies will vary depending on location with larger, detached dwellings to the western end of Camp Road, and higher density, semi-detached and terraced blocks to the eastern end of Camp Road.

Throughout the development, dwellings will be outward facing to provide a sense of enclosure and overlooking to the public spaces and landscape setting of the development.

The layout is set out on a clear grid with a principal west - east green axis through the centre of the development. Perpendicular to this axis, a series of north - south links provide access and visual links through the development from Camp Road to the wider rural setting.

The main west - east axis will be a green link through the development which will be created by tree lined green verges set between traffic lanes, which widen out at the centre to form an oval space which reflects the Carswell Circle area of Heyford Camp.

Intersecting with this oval space will be a second key axis which runs north south through the development and will create a pedestrian friendly Rain Garden feature.

This Rain Garden will be pedestrian only, other than a limited number of west - east crossings for local traffic. The character of the space will be landscape led, with a central path flanked by sustainable drainage swales on both sides which will be planted with a range of native species.

Elsewhere within the development, tree planting will be located informally along streets and within key spaces to further reinforce green links.

The site's northern boundary will form a continuation of the Camp Road character while the site's western and eastern boundaries will be more rural and informal and will be well planted with groups of trees.

A peripheral footpath provides a circulatory route around the edge of the development.

Generally, play and leisure facilities have been zoned towards the edge of the scheme within these west and south boundary landscapes. This includes a number of LAPS, LEAPS, NEAPS, a MUGA plus trim-trail equipment which is set between the play areas as well as located at entrance points. A LAP is also included within the north south Rain Garden.

The NEAP and MUGA are combined and located in the south east corner of the site, where they are overlooked by dwellings but set at a reasonable distance away and separated by a landscape buffer.



Planning Layout 0521-PH9-102

# 4.2 Amount

#### Site Area

The site area is 12.04ha.

#### Residential

The Planning Application will provide 297 residential units. Of these, 208no will be open market, 62no will be affordable rented and 27no will be affordable intermediate units.

# Public Open Space and Green Infrastructure

The Planning Application will contain a range of open space which includes an attenuation pond and play areas.

#### Infrastructure

The site will include a pumping station.

Use	CDC Policy*1	CDC requirement	Proposed
Residential Use	(2)	-	9.04 ha
Infrastructure (pump station)	*	#1	0.01 ha
General Green Space	2.4 ha per 1000 urban dwellers 2.74 ha per 1000 rural / urban edge dwellers	1.733 ha*² *³	2.43ha
Play Space	0.78 ha per 1000 people	0.563 ha*²	0.563 ha
Outdoor Sports	1.13 ha per 1000 people	0.816 ha*2	Off site contribution
Allotments	0.37 ha per 1000 people	0.267 ha*2	Off site contribution
	Outdoor Recreation Total	3.379 ha	3.00 ha
	Site Total		12.04 ha

<sup>\*1</sup> Table 7: Local Standards of Provision - Outdoor Recreation

<sup>\*2</sup> Based on 297 units x 2.43 = 722 people

<sup>\*3</sup> Based on urban dwellers

# 4.3 Access and Movement

#### STREET CODES

The proposed development provides a clear hierarchy of streets and spaces. This hierarchy has been updated within Phase 9 to provide a similar yet more simplified structure to that provided within the Design Code although the principles have been retained.

## Hierarchy of Streets and Spaces

- ✓ The design of the streets and spaces provides continuity across the character areas.
- ✓ The movement network has been designed to be pedestrian and cyclist friendly.

#### Infrastructure

✓ A design speed of 20mph will be applied to Principal Streets with 10mph applied to all other lower order streets.

# Camp Road

Camp Road lies outside this application area but will provide direct access to a number of private drives along the northern edge of the development.



Street Hierarchy Plan

## **Principal Streets**

#### Movement Function

These streets will provide the main access into the development from Camp Road and will also provide a potential future link southwards from the site. They will also form the main circulation routes within the development.

These streets will provide access to Mews Streets and Lanes as well as direct access to onplot parking and parking courts.

These streets will contain on-street visitor parking.

# Character & Built Form

Principal Streets will be formal in character and defined by tree lined verges along their length, with strong building lines overlooking the streets. Building densities will be highest along these routes.

#### Landscape & Public Realm

Principal Streets will be characterised by having a 3m cycleway to one side and a 1.8m footway to the other side. The tree lined verges will be either adjacent to the cycleways, or for the west - east route, centrally where it widens out at the point it meets the north - south Rain Garden, providing good biodiversity connections.

Within the primary spaces along the west - east route, trees will be planted in informal groups to create a sense of randomness as a contrast to the wider, formalised structure of the streets and to act as a device to slow vehicular traffic.



Principal Street (Extract - Planning Layout)

#### **Mews Streets**

Movement Function

Mews Streets will provide access to more limited numbers of dwellings and will provide direct access to on-plot parking and Private Drives.

Character & Built Form

These streets will be shared surface streets with a contrasting surface material that will be informal in character and narrower than the Principal Streets.

Their design will be informed by Manual for Streets and their informal nature will ensure vehicle speeds are kept to a minimum. Landscape & Public Realm

Landscaping will include informal tree planting with low, shrub planting to front gardens.

The shared surface carriageway incorporates grassed verges to both sides where there are no driveways.



Mews Street (Extract - Planning Layout)

# Lanes (Green Edges)

#### Movement Function

Lanes will form single sided streets, located on the edges of the development and will provide direct access to private driveways.

These Lanes will widen locally to allow for some on street parking.

#### Character & Built Form

Lanes will be similar to Mews Streets but with a tarmac finish, reflecting typical country lanes.

### Landscape & Public Realm

Landscaping will include informal tree planting with ornamental shrub planting to front gardens.



Lane (Extract - Planning Layout)



Shared Private Drive (Extract - Planning Layout)

#### Shared Private Drives / Private Courts

#### Movement Function

Shared Private Drives lead off Camp Road and Tertiary Streets and provide short sections of street leading to a limited number of dwellings.

#### Character & Built Form

The shared private drives will be fairly informal in character.

The Private Courts will be more formal in character.

## Landscape & Public Realm

Landscaping will include informal tree planting with ornamental shrub planting to front gardens where these are provided.

# Traffic Calming

- ✓ All streets will be designed to discourage higher traffic speeds. This will be achieved through:
- Principal Streets horizontal deflection and raised block paved tables at junctions.
- Mews, Lanes and Shared Private Drives

   informal street alignment and contrast surfacing.

## LAPS and Street Integration

- ✓ The LAPs have been located where traffic movement is at relatively low levels and the design speed is below 30mph.
- ✓ The shared surface streets have been designed to encourage community use and will offer opportunities for casual play space over and above dedicated facilities.

# **Adoption Arrangements**

✓ All streets other than the Mews Tertiary Streets to the western edge of the development and Principal Streets will be built to adoptable standards.

	principal streets	mews	lane (green edge)	private drive / parking ct
DESIGN SPEED	20 mph	10 mph	10 mph	10 mph
FOOTWAY	1.8m to one side	shared surface	shared surface	n/a
CYCLEWAY	3m to one side	on street	on street	n/a
VERGE	4.5m centrally / 4.5m to one side	0.8m to both sides	none	none
BUS ACCESS	yes	no	no	no
MAX PROPERTIES	up to 300	up to 50	up to 50	up to 5
CARRIAGEWAY WIDTH	6m	6.6m min inc 2no 800mm verges	4.8m min	varies
ACCESS TO PROPERTIES	100% direct access	100% direct access	100% direct access	100% direct access
CARRIAGEWAY SURFACING	asphalt (HRA) with block paved junctions	asphalt (HRA)	asphalt (HRA)	block paved
VERGE SURFACING	grass	grass	grass	n/a
FOOTWAY SURFACING	as carriageway	n/a	n/a	n/a
KERBING	PCC half batter kerb 125mm upstand	flush / 125mm half batter or 25mm bull nose upstand for drainage	flush / 125mm half batter or 25mm bull nose upstand for drainage	flush / 125mm half batter or 25mm bull nose upstand for drainage
A	horiz deflection - left or right	3		•
TRAFFIC CALMING B	horiz deflection - central		-	-
OPTIONS	raised table		-	2
D	-	informal alignment	informal alignment	informal alignment / none
SWEPT PATHS	buses, refuse & emerg. vehicles	refuse & emergency vehicles	refuse & emergency vehicles	motor vehicles
ON STREET PARKING	visitor bays - 2.4 x 6m	n/a	n/a	n/a
FORWARD VISIBILITY	33m	10m	10m	n/a
JUNCTION SIGHTLINES	2.4 x 33m (2.4m x 70m to Camp Rd)	2.4 x 25m	2.4 x 25m	n/a
SUNCTION SPACING	site specific	site specific	site specific	driveway crossovers
JUNCTION RADII	6m	4m	4m	n/a
STREET LIGHTING (to be agreed at detailed stage with DDC;	column mounted	column mounted	column mounted	none
STATUTORY SERVICES	in footway	in carriageway	in carriageway	in carriageway
DRAINABE	gully or permeable paving	gully or permeable paving	gully or permeable paving / over edge	gully or permeable paving
LANDSCAPE/TREE PLANTING	regular tree planting centrally / to one side	intermittent tree planting	intermittent tree planting	intermittent tree planting

Street Hierarchy Table

#### PEDESTRIAN AND CYCLE MOVEMENT

Pedestrian and cycle movement within Phase 9 will be well integrated into the wider Heyford Park network, providing good connections to all destinations including the Village Centre.

Provision for pedestrians will be in the form of good quality footways either immediately adjacent to the carriageway or separated from the carriageway by verge.

Peripheral footpaths will also be provided within the landscaped boundaries to the north, west, and south of the site.

Dedicated cycle routes will be provided on one side of each of the Principal Streets. Elsewhere, cyclists will be provided for on-street.

- ✓ All routes will be direct, barrier free routes.
- ✓ All routes will be attractive, sensitively lit and safe.
- ✓ Routes will be designed to be used by everyone.
- ✓ All routes will be overlooked by properties with good levels of natural surveillance.

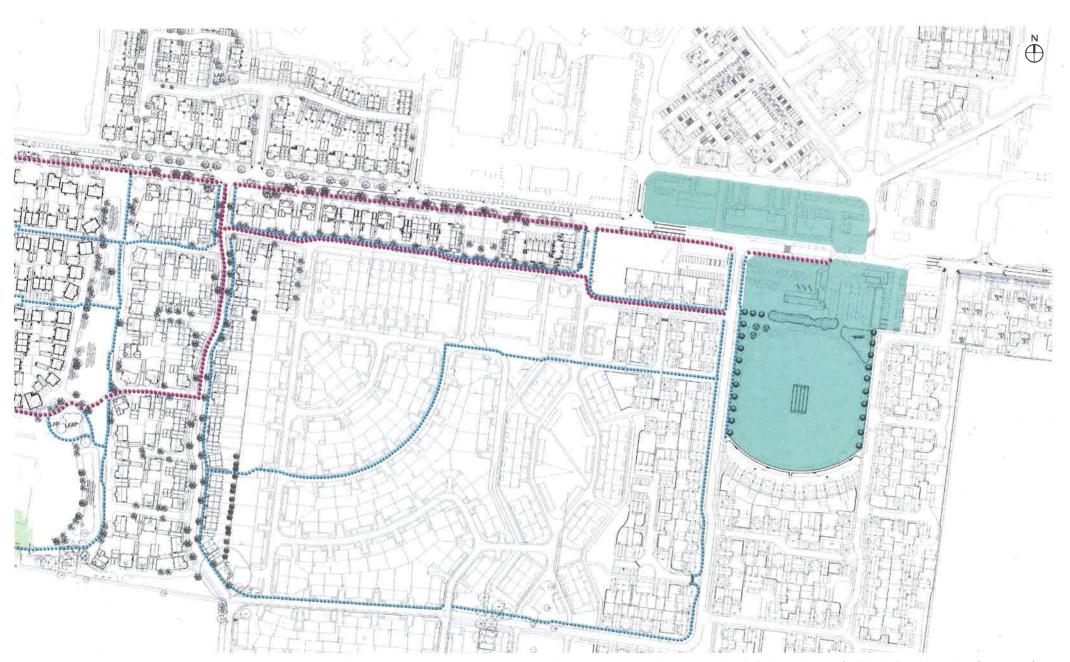




VILLAGE CENTR

\*\*\*\*\*\*

CYCLEPATH



Composite Plan showing key pedestrian and cycle links within Heyford Park (based on sketch masterplan)

#### **PARKING STRATEGIES**

The development will comply with the minimum space sizes as set out in the Design Code for the adjacent area.

✓ No more than 4 parking bays in a row will be provided on street.

## Parking and Garages

Parking will be provided within the curtilage of individual plots other than for the flats which will be provided with shared, courtyard parking.

Parking to individual plots will be provided as a mix of attached / integral garage, hard standing and detached garage.

Visitor parking will be provided on street in the form of parallel parking.

✓ Garages will have internal dimensions of 3 x 6m.

Cycle parking will be provided and will be secured and convenient, and the minimum level of cycle parking provision will be based on OCC standards of 1 space per 1 bedroom dwelling and 2 spaces per all other dwellings but will be consistent to other approved phases of development.

Cycle parking will be provided within garages or lockable stores / sheds for dwellings without garages.

PERPENDICULAR: EG.ON DRIVEWAYS AND PARKING COURTS	MINIMUM LENGTH (M)	MINIMUM WIDTH (M)
SPACE FOR PEOPLE WITH MOBILITY DIFFICULTIES	5.5	2.9+1.0
STANDARD SPACE (UNOBSTRUCTED)	5.0	2.5
STANDARD SPACE (OBSTRUCTED ON ONE SIDE)	5.0	2.7
STANDARD SPACE (OBSTRUCTED ON BOTH SIDES, INCLUDES CAR PORTS AND UNDERCROFTS)	5.0	2.9
INSIDE GARAGE (GARAGES BELOW THIS WILL NOT COUNT AS A PARKING SPACE)	6.0	3.0

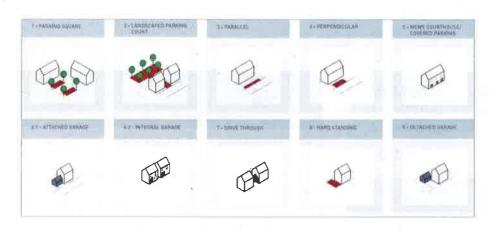
Design Code Minimum Space Size

		MINIMUM ALLOCATED SPACES	
1	1.5	1	0.25
2	2	1	0.25
3	3	2	0.25
4+	4	2	0.5

Design Code Parking Provision

/a =no mob	ility unit	s are pr	ovided.	
8				
/				
21				

	Compliancy							
$\checkmark$	refer to Parking Matrix							
V	refer to Parking Matrix							
✓	refer to Parking Matrix							
V	refer to Parking Matrix							



The various parking strategies are set out in detail within the Design Code identifying those that are relevant within each character area. We have hereby identified how we have complied with this approach.

								Char Char	CA6-	CA7 -C	Cars
Name	Туре	Allocated	Description	Comments	Character Area	Street type	Design Approach			US	
PARKING SQUARE	On/Off-plot	Optional	Group(s) of Parking bays located adjoining the main carriageway provideing convenient access to dwellings.	Convenient access to the parking, Good surveillance from neighbouring properties,	CA1/CA2/CA3	N/A				<b>√</b>	
LANDSCAPED PARKING COURT	On/Off-plot	Optional	Groupisi of parking bays and/or garages located within a shared countyard.	Generally limited to up to 8 dwellings,	CAB/CA7/CA8	N/A	Landscaped court encouraged in ca3 edged with low formal hedge.			1	1
PARALLEL	On street	Optional	Parking located parallel along the roadside. Accessed directly off the road.	Can be marked or unmarked. Easily accessible.	CA1/CA2/CA3/ CA5/CA6/CA7/8	5T2/5T3/ ST4/ST5	Not allowed on majority of camp road hence excluded from CA4 where away from Village Centre. Parallel parking is allowed in the Village Centre Itself.		<b>√</b>	1	1
PERPENDICULAR	On plot/On street	Optional	Parking located perpendicular along the roadside, Accessed directly off the road.	Can be marked or unmarked. Easily accessible. Generally suited to streets where speeds are kept to a minimum. Parking to be separated by landscaping and/ or footways into maximum rows of 4N°. bays.	CA1/CA2/CA3/ CA5/CA6/CA7/8	ST2/ST3/ ST4/ST5			<b>√</b>	<b>✓</b>	✓
MEWS COURT- HOUSE/ COVERED PARK- ING	On/Off-plot	Yes	Terraced garages with residential uses above, Serving dwellings in the vicinity.	Allows enhanced natural surveillance over parking and offers efficient use of land.	CA2	ST3/ST4					
ATTACHED/ INTEGRAL GARAGE	On-plot	Yes	Private garage adjoining the dwelling, often atlowing access into the house.	Can be located against the road or set back to allow parking in front. Convenient access to dwelling. Can be joined to neighbouring garage and allows for room above.	CA2/CA4/CA5/ CA6/CA7/8	ST1/ST5	Garages to be set back behind building line with tandem parking allowed in this instance camp road ca4 to serve 2 dwell- ings where possible.		<b>✓</b>	~	<b>√</b>
DRIVE THROUGH	On-plot	Yes	Parking bay and/or garage accessed through an archway on the street.	Helps avoid a car-dominated street scene whilst providing secure on-plot parking:	CA2	ST1/ST4	May have accommodation over access, if not habitable residential then enough depth to provide the appearance of habitable space.				1
HARD STANDING	On-plot	Yes	Parking bay located next to the dwelling.	Can be located against the road or set back to allow additional parking in front. Can be joined to neighbouring parking bay.	CAZ-CAS	ST1-ST5		V	✓	<b>√</b>	<b>V</b>
DETACHED GARAGE	On-plot	Yes	Private Garage often located next to the dwelling. Garages to be set back from prominent frontages. Careful design required to mitigate impact of parked cars on the streets entered to the streets of th	Can be located against the road or set back to allow parking in front. Can be joined to neighbouring garage and allows room above.	CA2-CA8	ST1-ST5	Garages to be setback from prominent frontages.	✓ 	✓	✓	✓

character area

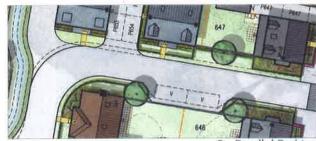
The various extracts below sample the relevant parking strategies identified across as being proposed within the scheme.



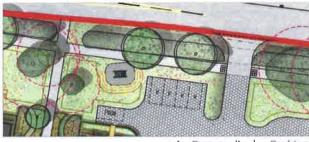
1 - Parking Square



2 - Landscaped Parking Court



3 - Parallel Parking



4 - Perpendicular Parking



6 - Attached / Integral Garage









9 - Detached Garage

#### **BUS ROUTES AND REFUSE COLLECTION**

## Bus Routes and Bus Stops

✓ A bus route will run along the Principal Streets from Camp Road allowing a walking catchment of 400m for the majority of the development.

No bus stops are proposed within the development.

## Recycling and Refuse Collection Strategy

The Refuse Storage Plan shows the location of areas for the storage of refuse and recycling. These will be positioned at a maximum distance of 30m from the furthest dwelling curtilage and positioned a maximum of 25m from the adoptable streets.

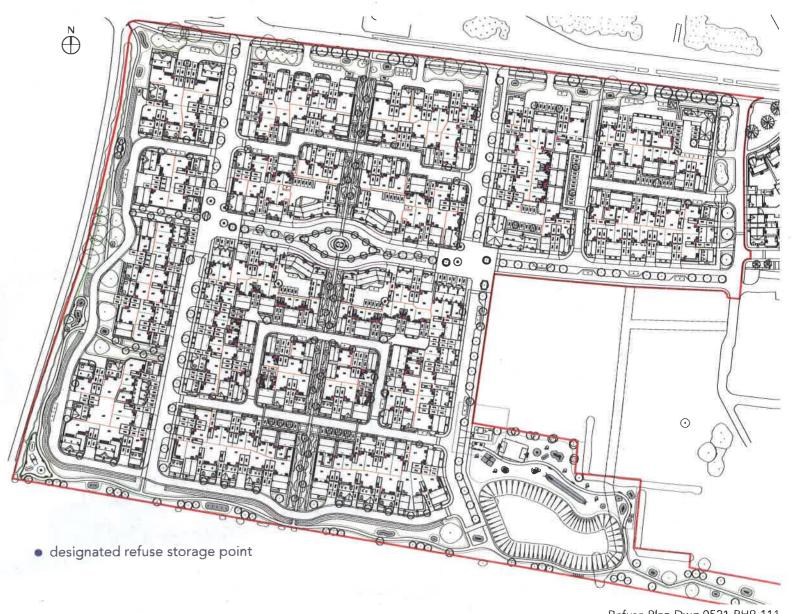
## **Dwelling Refuse**

✓ The Planning Layout provides pedestrian rear access to each dwelling to allow residents to store

containers away from frontages and within the dwelling curtilage.

#### **Apartments**

✓ Apartments will be provided with communal bin stores which will be screened from the public realm.



Refuse Plan Dwg 0521-PH9-111

## 4.4 Built Environment

#### GENERAL URBAN DESIGN PRINCIPLES

## **Key Frontages**

- Key frontages will be located at particularly prominent edges to the development.
- Particular attention will be paid to the massing, materials, and architectural detailing of the buildings framing key spaces and streets in order to create distinctive frontage character.

#### **Existing and New Landmarks**

The building and layout design, planting and views will all be utilised to create new focal points and identifiable routes, and to enhance existing landmarks adjacent to the site, where applicable.

### **Key Corners**

✓ The development will include a number of prominent development parcel corners that will become focal points and also provide animation and surveillance with both sides of the development parcel facing the public realm.





DC Composite Urban Design Principles Plan information overlain on Parameters Plan

## Key Spaces (Gateways)

The two Key Spaces identified in the Design Code represent the main gateways into Heyford Park along Camp Road.

As the development lies to the west of the currently defined Key Gateway, a new Key Gateway will be created at the junction of Camp Road with the eastern north - south Principal Street within this proposal.

This will include a landmark building, proposed to contrast significantly from the adjacent and proposed traditional architecture in order to enhance its gateway status.



Legibility Plan

Buildings surrounding the Landmark Building are proposed as 2 storey in height

Landmark Building sited forward of the build line along Camp Road.

Landmark Building

The design of the building has been influenced in part by the simple contemporary architecture of the Specialism Campus to the south, but more notably by those proposed at the Trident area and Village Centre, whereby gables and metal cladding are prominent features used to reflect some of the historic building features from the site.

This re-use of prominent features provides a strong connection to the core of the community.

The building has also been proposed to be higher than any of those around it which are all two storeys in height. At 3 storeys and with high pitched gables, the building will be prominent in the Camp Road skyline.

We have also proposed that the building sits forward of what is otherwise a strong and consistent build line, further adding to its landmark status.



The materials chosen to enhance the status of the building and to differentiate it from all others, is the introduction of a buff/yellow brick in what is a red brick area.

The buff/yellow colour has been proposed to be contrasted against through the use of a strong blue feature brick and small elements of smooth white render. A blue/grey metal cladding provides a further link back to the VIllage Centre/Trident area.

Grey window frames are used which appear more contemporary and further contrast against the light brick colour.

The biggest and most striking contrast however is the large black metal I-beams, used to form the projecting balconies and that provide a link back to the metal framed buildings, such as the hangers, during the site's former use.

Slightly tinted glazing infills the I-beams to form the enclosure to the balconies, further enhancing the modern appearance.



high / medium density 38-50 dph medium density 30-38 dph (CA6) medium / low density up to 30 dph (CA4, CA6, CA7)

Building Density and Heights
The proposal is for a gradual change of density
and grain from east to west, with densities

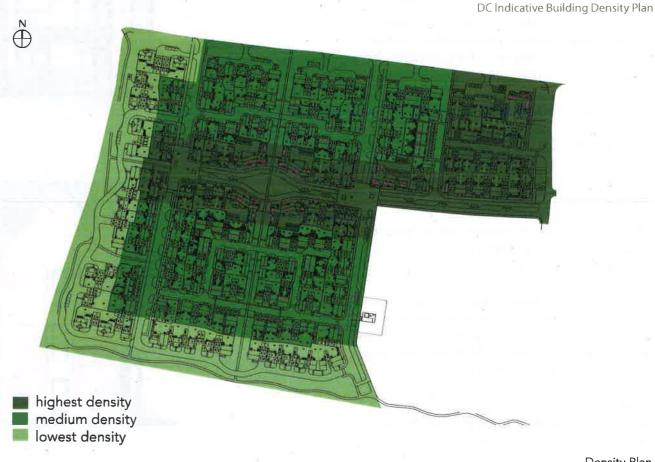
and grain from east to west, with densities reducing towards the outer edges of the development. The highest density and tightest grain of development is focussed around the Carswell Circle Character Area, with lowest densities along the western and southern boundaries.

✓ The Planning Layout lies outside the extent of the DC Density Plan but complies with the indicative densities shown on this plan for CA4 - Camp Road, CA6 - Rural Edge and CA7 - Core Housing West.

The new character area of Carswell Circle will be high density.

Overall, a density of 38 units per hectare has been achieved, which was agreed as appropriate with CDC at pre-application stage.

The majority of the site will be 2-2.5 storey with



predominantly 2.5 - 3 storey

2 - 3 storey

2 - 2.5 storey

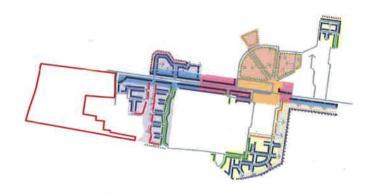
DC Indicative Building Heights Plan

some 3 storey development located along the west - east Principal Street, within the Carswell Circle Character Area and a single 3 storey block located to the north east corner of the site, providing a new landmark / providing part of the western Key Gateway on Camp Road.

✓ The Storey Heights Plan complies with the Design Code principles of a general predominance of 2-2.5 storey heights with limited areas of 3 storey development.



Storey Heights Plan



#### DC Frontages and Edge Treatments Plan

## **Urban Form & Morphology**

The way the buildings relate to one another is one of the most important aspects that can be used to define an area's character. These key aspects are addressed for each character area, and include:

- urban form including edge types
- building typology
- density
- building lines
- height / enclosure
- roofscape
- scale and proportion including fenestration
- building detail
- building materials
- landscape design
- parking

The character areas also provide more detail in relation to building heights.

#### Built Form - Plot Structure

- ✓ Buildings are arranged for the most part in perimeter blocks.
- Dwellings are terraced, semi-detached linked or detached, according to location.
- ✓ The design of the new areas retains and exploits the pattern of existing east-west axis development (within 30 degrees) to exploit the benefits of solar energy.

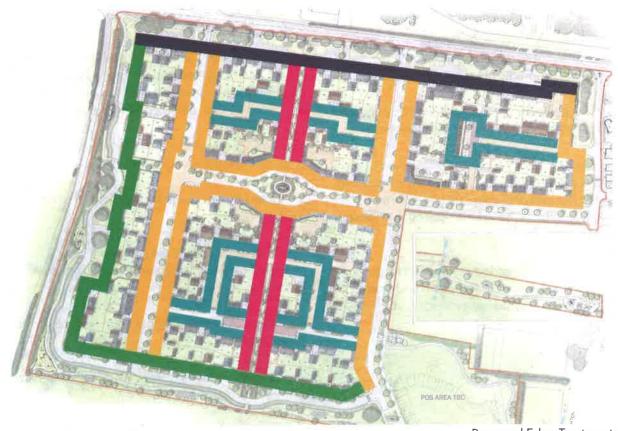
#### Edge Types

The proposed development provides a clear set of different edge treatments which respond to the hierarchy of defined street types. These Edge Types have been updated within Phase 9 to provide a simplified structure to that provided within the Design Code although the DC principles have been retained.

Phase 9 contains the following Edge Treatments:

- Camp Road these have 2m minimum building set backs along a consistent building line other than for key buildings. They include detached, semi-detached, terraced and flat blocks.
- Principal Streets these also have 2m minimum building set backs. These also include detached, semi-detached, terraced and flat blocks with building lines creating formal frontages along sections of street.

- Rural Edge these have varied building set back dimensions.
- Mews these have 1.2m minimum building set back and comprise mainly semi-detached and terraced forms with some detached dwellings.
- Rain Garden Frontage these edges face onto the Rain Garden feature with buildings having varied (3-6m) set backs from the central footpath. Building types are generally large detached and semi-detached units with flat blocks located at the centre of the Rain Garden where it dissects the main east west Principal Street.



Proposed Edge Treatments Plan

#### **CHARACTER AREAS**

The development contains four character areas. Three of these reflect the existing character areas identified within the Heyford Park Design Code with a new character area created which reflects the built form around Carswell Circle.

#### DC Compliance: CA 4 Camp Road

- ✓ A distinct linear character, reinforced by wide verges and avenue tree planting.
- The footpath / cycleway along Camp Road will be retained. This comprises a shared route, separated in sections by tree planted verges.
- ✓ Where junctions are required, priority over the private car with junction pinch points will be used.
- The character of the buildings will build upon the Arts and Crafts character of the Officers housing, located to the east of the site. This is typified by predominantly brick, detached housing, with simple detailing.
- Housing will be predominantly two storey and mainly setback from public footpaths and open space to take into consideration verge spaces.

#### DC Compliance: CA6 Rural Edge

- ✓ Detached dwellings, generally served off private landscaped drives and located adjoining the wider countryside.
- X Generally served off private, landscaped drives. Planning Application: rural edge dwellings are served from a looped Lane (Tertiary Street) as requested by CDC officers during pre-app.
- ✓ A more open form with a greater landscape emphasis and increased tree cover.
- ✓ A less formal character that fits with its more rural context.
- ✓ A lower density of detached and semidetached dwellings with some smaller terraces, forming loose clusters.
- ✓ Informal layout with less adherence to specific building lines.
- Greater variety of roof and ridge lines to create a more informal character.
- ✓ Development to maximise views over open countryside.

#### DC Compliance: CA7 Core Housing West

- Housing to be simple and formal.
- ✓ Tree planting to be located along shared routes between vehicles and pedestrians.
- √ Garages to be setback from building line.
- ✓ The character of development has been inspired by the simple Arts and Crafts form of Carswell Circle and the Officer's housing.
- ✓ A mix of formal and informal streets with dwellings providing a clear frontage onto streets and public realm.
- ✓ Eaves and ridge lines are typically consistent between groups of buildings but may vary along street.

## Carswell Circle Character Area Description

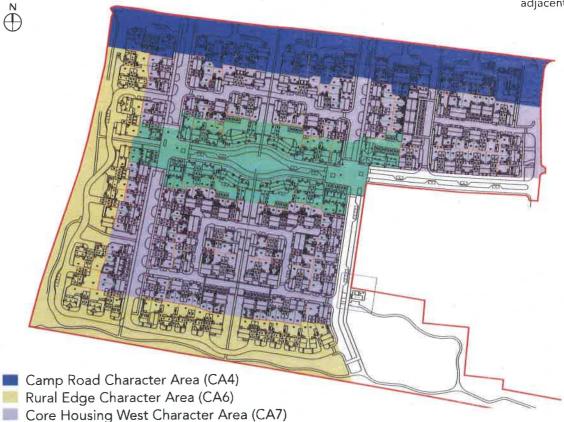
Carswell Circle Character Area is based on CA7 - Core Housing West with a greater emphasis on reflecting the character of Carswell Circle, and will include:

- Housing to be simple and formal.
- Tree planting to be located within formal verge areas.
- The character of the development has been inspired by the simple Arts and Crafts form of Carswell Circle.
- The streets will be formal.
- Eaves and ridge lines are typically consistent between groups of buildings but may vary along street.

The following sections demonstrate where the Planning Application is in compliance with the Design Code character area descriptions.



DC Character Areas Plan information adjacent development



Carswell Circle Character Area

Character Areas Plan

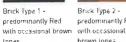
CA4	CODE CATEGORY	DEFINITION (MANDATORY)	COMMENTS		
i	URBAN FORM	Buildings mainly set back from Camp Road, direct access to dwellings from camp road.  This area of the site will provide the east and west gateway to development.  Generally larger family housing to provide an appropriate level of scale.  Development will reinforce the linear and green character of the street, by providing consistent high quality development along its length.			
2	BUILDING TYPOLOGY				
3	DENSITY	Will generally be medium/low across the camp road frontage - 25–29dph.     Density will be lower than other areas, reflecting the larger house types.			
4	Consistent frontage in terms of being setback from camp road with variations allowed from main frontage for gable and bay projections.  The building line will be set back from Gamp Road though main trontage to be consistent between groups of dwellings.		See edge type E1 where bay and gables extend from building front then consistent frontage line relates to the average setback line across the dwelling frontage		
5	HEIGHT / ENCLOSURE	• 2–2.5 Storey - predominantly 2 storey.	2.5 Storey at corner plots if used		
6	ROOFSCAPE	Consistencey in caves and ridge line required. Roof pitches should vary depending on the building typology. Dermer windows should be well set back to break up the roof line.	No single plane pitch allowed, Frequent gables variations in roof form encouraged, Dwellings should have a consistent ridge height with a minimum pitch of 35 degrees,		
7	SCALE AND PROPORTION	Street composition to provide variation rather than repetition through varied use of house types.  Proportional buildings with simple volumes encourages with the overall scale and massing being consistent.	Windows asymmetrical across frontage		
8	BUILDING DETAIL	Door canopies to be prominent flat pitched or gabled pitched. Gabled frontage to all Camp Road garages. Buildings will reflect the simple character of the existing Officers housing.	Bellcast headers, brick detail coursing, slone headers and cilis allowed.		
9	BUILDING MATERIALS	Walts - brick IZ types) to ground floor of detached villas, textured brown brick for feature detailing, Roof - State/state effect. Predominantly brick, with seme rendered key buildings.	Continuity required to CA1/CA2 hence no brown tile roofing. Predominantly brick, occasional render. State to western gateway Materials to be agreed at RMA stage.		
10	LANDSCAPE DESIGN	• Formal street tree planting at regular spacings within wide grass verges and/or front gardens. Residential frontages to be simple formal hedges. • Development will be set back behind a landscaped verge, this will be formally planted with avenue tree planting either on or off plot, species to be compatible with SUDS conditions.	Verges could be planted with spring flowering bulbs to create interest.		
11	PARKING	Predominantly on plot with paired arrangements of garages and driveways.			

#### Camp Road Character Area (CA4)

- ✓ Refer to Section 4.3 Built Environment General Urban Design Principles - Edge Types.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Typology.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Density & Heights.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Key Frontages & Edge Types.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Density & Heights.
- ✓ Refer to Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to Dwg 0521-PH9-102 Planning Layout, Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to Dwg 0521-PH9-108 Materials Layout.
- ✓ Refer to Section 4.4 Public Realm Codes & Dwg series 1619-A6 (Liz Lake).
- ✓ Refer to Section 4.2 Access & Movement -Parking Strategies.

#### PREDOMINANT BUILDING WALL MATERIAL







predominantly Red brown lanes

#### SECONDARY BUILDING WALL MATERIAL



Sand/Chalk White

#### ROOF MATERIALS



State/State Effect

#### WINDOW FENESTRATION COLOUR







DC CA4 Camp Road - Materials (or similar approved)

✓ Planning application external building materials reflect the Design Code. Refer to Dwg 0521-PH9-108 Materials Layout.



Street Scene 1

CA6	SODE CATEGORY	DEFINITION (MANDATORY)	COMMENTS
1	URBAN FORM	Adjoining countryside dispersed built form.  The area will have an informal character, made up of largely detached and semi-detached units which will form loose clusters.  There should be landscaped areas between groups of dwellings.	Sec edge type E7.
2	BUILDING TYPOLOGY	Heylord Farmhouses.     Detached and semi-detached to be dominant built form.     Dwellings will typically be detached or semi detached.     Short rows of terraces will also be supported.	See building typology table more than 50% of units to be detached. Opportunity for larger units and wide frontage properties are encouraged.
3	DENSITY	Will generally be low up to 24dph.	
4	BUILDING LINES	<ul> <li>Irregular with spaces between buildings allowing landscape to dominate.</li> <li>An emphasis on informat approach with be required.</li> <li>There will be no format building line and the informat configuration of dwellings needs to be considered as a whole.</li> </ul>	See edge type E7.
5	HEIGHT / ENCLOSURE	• 242.5 Storeys (prodominantly 2 storey).	Diffe of Employ
6	ROOFSCAPE	Overhang creating pronounced eaves will be required.  Varied eave height and gable ends to animate sides.  A variety of roof types are encouraged.	Pronounced eaves may be created by use of exposed rafter feet.  No single pitch roof on individual stand alone buildings.
7	SCALE AND PROPORTION	• Asymmetric buildings with either an 'L' or 'T' shaped footprint.	
8	BUILDING DETAIL	Door canopies to be simple pitched.     Traditional details, chimneys to act as prominent building feature:     Houses should be all brick or all render only.	Occasional bay windows to be at least one bay per 5 dwallings encouraged;
9	BUILDING MATERIALS	Walls - Brick with render.  Roof - State/State effect/clay tile.	Predominantly brick with occasional render. State effect predominant and occasional clay tile.  Materials for garages to be agreed at RMA stage.
10	LANDSCAPE DESIGN	<ul> <li>Informal tree planting will soften the urban edge and break up the built form, typically semi-native species and a range of sizes, shapes and colours. Larger landscaped areas provide visual transition. Residential frontages to be bounded by soft landscaping.</li> <li>Development should be landscape led and buildings should feather into the rural edge.</li> <li>The existing site boundary stone wall is to be retained.</li> </ul>	General planting to be informal with flowering herbaceous and shrub planting in a mix of colours and textures, mature species encouraged with decorative planting of individual cottage style' species adjoining houses.
11	PARKING	Parking will be informally located on plot, in garages or in informal parallel/perpendicular groups in front of dwellings	

### Rural Edge Character Area (CA6)

- ✓ Refer to Section 4.3 Built Environment General Urban Design Principles - Edge Types.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Typology.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Density & Heights.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Key Frontages & Edge Types.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Density & Heights.
- ✓ Refer to Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to Dwg 0521-PH9-102 Planning Layout, Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to Dwg 0521-PH9-108 Materials Layout.
- ✓ Refer to Section 4.4 Public Realm Codes & Dwg series 1619-A6 (Liz Lake).
- ✓ Refer to Section 4.2 Access & Movement -Parking Strategies.

#### PREDOMINANT BUILDING WALL MATERIAL



with occasional brown

#### SECONDARY BUILDING WALL MATERIAL



Sand Colour



State/State Effect

#### WINDOW COLOUR





DC CA6 Rural Edge - Materials (or similar approved)

✓ Planning application external building materials reflect the Design Code, Refer to Dwg 0521-PH9-108 Materials Layout.



Street Scene 2

CA7	CODE	DEFINITION (MANDATORY)	COMMENTS
1	URBAN FORM	<ul> <li>Arranged in perimeter blocks with strong sense of public-private realm definition.</li> <li>The area should have a mixture of formal and informal streets and places which will be articulated through the landscape and building form and detail.</li> <li>Dwellings will provide clear presence and frontage onto streets and public realm.</li> <li>Buildings adjacent to pedestrian connections to the bungalow area should turn the corner and have greater presence.</li> <li>Development will back onto bungalows. Management of buffer will be considered to maintain landscape edge.</li> </ul>	See edge types E2/E3/E4/E5.
2	BUILDING TYPOLOGY	<ul> <li>Detached and semi-detached housing with short terraces.</li> <li>Buildings will be predominantly single family homes.</li> <li>Buildings should be arranged in groups of 4 - 8 units which share similar characteristics to provide consistency across the street scene.</li> <li>Corner turner buildings are required at key junctions. These buildings should have greater presence and architectural detail.</li> </ul>	See building typology lable. Terraces encouraged to provide consistency across frontages and limit narrow gaps between smaller house types.
3	DENSITY	Density will typically be 30 - 35 dph but will vary through the site.     Further information is set out in the special condition code.	
4	BUILDING LINES	<ul> <li>Frontage in terms of setback may vary depending on edge type.</li> <li>Building lines should be consistent between groups of buildings but may vary along the length of the street, apart from in the SUDS special condition area.</li> <li>Irregular frontage to SUDs corridor</li> <li>Building lines will be permitted to move forward or back to give emphasis in key locations.</li> </ul>	See edge types E2/E3/E4/E5
5	HEIGHT / ENCLOSURE	• 2–2,5 Storeys	Preference for 2.5 storey, if used, to be on corners.
6	ROOFSCAPE	• Eaves and ridge lines will typically be consistent between groups of buildings, but may vary along the length of a street, • Dormer windows should be well set back to break up the roof line.	50% of dwellings have gable or dormer within roof form.
7	SCALE AND PROPORTION	Building scale to be complementary to adjoining buildings.     Plots scale and plot size to be proportionate to surrounding context.	Consistency of building scale and arranged on groups of 4–10 buildings that share similar characteristics.
8	BUILDING DETAIL	<ul> <li>Traditional details, entrance to be defined with canopy.</li> <li>The houses should be configured to ensure that, wherever possible, windows to habitable rooms front onto the street and public realm.</li> <li>Dwellings should be designed to ensure that there are no blank walls onto the street and public realm.</li> </ul>	Changes in canopy design between neighbouring dwellings iwhere not in terrace).  Window size may vary across elevation Door canopies to be simple pitched, occasional bay windows.  Render encouraged on landmark buildings occasional chimneys to act as building feature.
9	BUILDING MATERIALS	Walls - Predominantly brick with limited render.  Roof - Slate/Slate effect and tile,	Predominantly brick, occasional render. Predominantly state effect, occasional tile. Stone effect heads and cills allowed. Materials to be agreed at RMA stage.
10	LANDSCAPE DESIGN	• Soft landscaping to be simple and largely open frontages.	Street trees to be formal in habit along tertiary streets and secondary streets; and informal along shared surface streets and lanes.  Low walts may may be used occasionally.
11	PARKING	<ul> <li>Range of parking strategies following good practice guidance.</li> <li>On shared surface routes parking can be parallel to maximise efficiency.</li> <li>Parking will be predominantly on plot adjacent to the plot.</li> <li>Parking will be configured as part of the public realm design.</li> </ul>	
			11 12 12 12 1 2 2 2

#### Core Housing West (CA7)

- ✓ Refer to Section 4.3 Built Environment General Urban Design Principles Edge Types.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Typology.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Density & Heights.
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Key Frontages & Edge Types
- ✓ Refer to Section 4.3 Built Environment -General Urban Design Principles - Building Density & Heights.
- ✓ Refer to Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to Dwg 0521-PH9-102 Planning Layout, Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to 0521-PH9-HTB-Housetype Booklet.
- ✓ Refer to Dwg 0521-PH9-108 Materials Layout.
- ✓ Refer to Section 4.4 Public Realm Codes & Dwg series 1619-A6 (Liz Lake).
- ✓ Refer to Section 4.2 Access & Movement Parking Strategies.

## PREDOMINANT BUILDING WALL MATERIAL



predominantly Red with occasional brown tones

## SECONDARY BUILDING WALL MATERIAL



Render - Ivory or Sand Colour

ROOF MATERIALS



Tite State/State Effect

#### WINDOW COLOUR





Whi

DC CA7 Core Housing West - Materials (or similar approved)

 Planning application external building materials reflect the Design Code. Refer to Dwg 0521-PH9-108 Materials Layout.



STREET SCENE 3

Street Scene 3



STREET SCENE 5



STREET SCENE 6

Street Scene 6

Street Scene 5

A7	CODE	Carswell Circle Character Area	
1	URBAN FORM	<ul> <li>Development to provide a strong sense of public-private realm definition.</li> <li>Dwellings to provide clear presence &amp; frontage onto streets &amp; public realm.</li> </ul>	<ul> <li>Refer to Section 4.3 Built Environment - General Urban Design Principles</li> <li>Edge Types.</li> </ul>
2	BUILDING TYPOLOGY	<ul> <li>Semi-detached, short terraces &amp; flat blocks.</li> <li>Buildings will be a mix of family homes &amp; apartments</li> <li>Buildings to be arranged in groups of 2 - 3 units along with apartment blocks to provide consistency along the street scenes.</li> <li>Key corner buildings to be incorporated at key junctions.</li> </ul>	Refer to Section 4.3 Built Environment - General Urban Design Principle: - Building Typology.
3	DENSITY	Development to be high density.	Refer to Section 4.3 Built Environment - General Urban Design Principles - Building Density & Heights.
4	BUILDING LINES	<ul> <li>Building lines to be consistent between groups of buildings.</li> <li>Building lines to move forward or back to give emphasis to key locations.</li> </ul>	<ul> <li>✓ Refer to Section 4.3 Built Environment - General Urban Design Principles</li> <li>- Key Frontages &amp; Edge Types.</li> </ul>
5	HEIGHT / ENCLOSURE	• 2, 2.5 and 3 storeys.	Refer to Section 4.3 Built Environment - General Urban Design Principles - Building Density & Heights.
	ROOFSCAPE	<ul> <li>Eaves and ridge lines will typically be consistent between groups of buildings but may vary along the length of the street.</li> </ul>	Refer to Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
7	SCALE AND PROPORTION	<ul> <li>Building scale to be complimentary to adjoining buildings.</li> <li>Plot scale and plot size to be proportionate to surrounding context.</li> </ul>	Refer to Dwg 0521-PH9-102 Planning Layout, Dwg 0521-PH9-103 Streetscenes & 0521-PH9-HTB-Housetype Booklet.
	BUILDING DETAIL	<ul> <li>Dwellings to reflect existing Carswell Circle housing types.</li> <li>Housing to be configured where possible so that habitatble rooms front onto street &amp; public realm.</li> <li>Dwellings to be designed to ensure that no blank walls front onto the street &amp; public realm.</li> </ul>	✓ Refer to 0521-PH9-HTB-Housetype Booklet.
,	BUILDING MATERIALS	<ul> <li>Walls - predominantly white stucco render plus some brick.</li> <li>Roof - blue / black roof tiles.</li> <li>White window frames.</li> </ul>	✓ Refer to Dwg 0521-PH9-108 Materials Layout.
0	LANDSCAPE DESIGN	<ul> <li>Formal tree planting at regular spacings within wide grass verges.</li> <li>Residential frontages to be simple, formal hedges.</li> </ul>	✓ Refer to Section 4.4 Public Realm Codes & Dwg series 1619-A6 (Liz Lake).
1	PARKING	<ul> <li>Range of parking strategies following good practice guidance.</li> <li>Parking will be predominantly on plot.</li> <li>Parking will be configured as part of the public realm design.</li> </ul>	✓ Refer to Section 4.2 Access & Movement - Parking Strategies

## PREDOMINANT BUILDING WALL MATERIAL



Roughcast Render White

## SECONDARY BUILDING WALL MATERIAL



Brick Red mix

#### **ROOF MATERIALS**

WINDOW COLOUR



Blue/Black Flat profile



White

Carswell Circle Character Area - Materials



STREET SCENE 4

Street Scene 4

#### **BUILDING TYPES**

#### Built Form Guidance - Streetscene Overview

The Planning Application shows:

- Creation of active street frontages through movement at building entrances and visibility through fenestration.
- ✓ Visible end elevations treated as part of the street scene.
- ✓ Dwellings will have living spaces fronting streets. No bathrooms or ancillary rooms to dominate street frontage / public realm.

## **Building Detail**

The Planning Application shows:

✓ A relatively simple palette of materials which vary according to character area.

Refer to Dwg 0521-PH9-103 Street Scenes and Dwg 0521-PH9-108 Materials Layout.

### Built Form - Architectural Design

The Planning Application shows:

- ✓ Modulation of structural form to create varied, identifiable character. This includes:
- Deep eaves to provide shading and modelling on walls.
- ✓ Use of simple projections including window bays to provide modulation and shading.
- ✓ Use of deeper door and window reveals (min 65mm) to give a sense of depth to openings.

#### **Built Form - Fenestration**

#### The Planning Application shows:

- ✓ A hierarchy of parts, reflecting the relative importance of their functions. This includes:
- Entrances emphasised through set backs, recesses, canopies and steps.
- ✓ Windows of principal rooms (eg lounges and main bedrooms) expressed through larger size or greater prominence.
- ✓ Windows are located to allow ease of surveillance of property, especially at entrances.
- Scale and proportions of windows have been considered in relation to the facade composition.

**Built Form - Materials** 

#### The Planning Application shows:

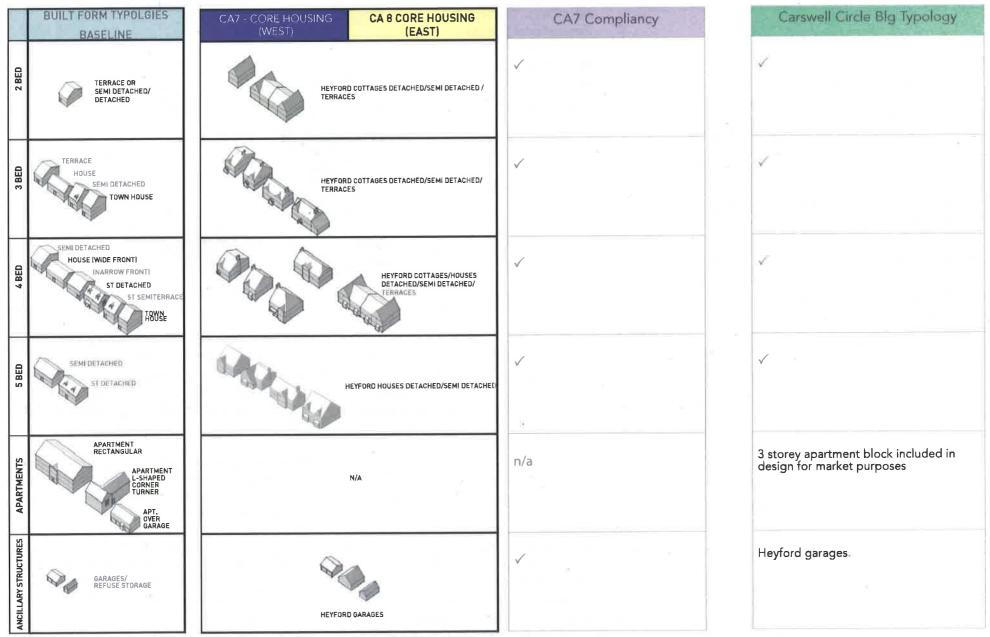
- ✓ A limited palette of materials which reflect the early 20thC Arts and Crafts architecture, and generally:
- ✓ Maximum 3-4 finishes in a single elevational composition.
- ✓ Change of materials used to express geometry of the building design rather than just for variety.
- Where buildings form a focus or marker, their main architectural elements such as entrances or projecting elements will be emphasised to create a feature.

## **Building Typology**

The Planning Application complies with the Building Typology Codes as shown on the following pages.

	BUILT FORM TYPOLGIES  BASELINE	CA 4 - CAMP ROAD	CA4 Compliancy	CA 6 - RURAL EDGE	CA6 Compliancy
2 BED	TERRACE OR SEMI DETACHED/ DETACHED	N/A	2 beds included in design for market purposes.	N/A	n/a
3 BED	TERRACE HOUSE SEMI DETACHED TOWN HOUSE	CAMP ROAD VILLAS DETACHED/SEMI DETACHED INO TERRACES)		N/A	n/a
4 BED	SEMIDETACHED HOUSE (WIDE FRONT) (NARROW FRONT) ST DETACHED ST SEMITERRACE TOWN HOUSE	CAMP RDAD VILLAS DETACHED/SEMI DETACHED (NO TERRACES)		MEYFORD FARMHOUSES DETACHED/SEMI DETACHED	<b>→</b>
5 BED	SEMI DETACHED ST DETACHED	CAMP ROAD VILLAS (DETACHED ONLY)	✓	HEYFORD FARMHOUSES DETACHED/SEMI DETACHED	✓ s:
APARTMENTS	APARTMENT RECTANGULAR  APARTMENT L-SHAPED CORNER TURNER  APT. OVER GARAGE	N/A	3 storey apartment block included in design for market purposes and to act as landmark to gateway space.	N/A	n/a
ANCILLARY STRUCTURES	GARAGES/ REFUSE STORAGE	CAMP ROAD PARKING GARAGES [GABLE FRONTED TOWARDS PUBLIC REALM]	~	HEYFORD BARNS	

Design Code Building Typology Table



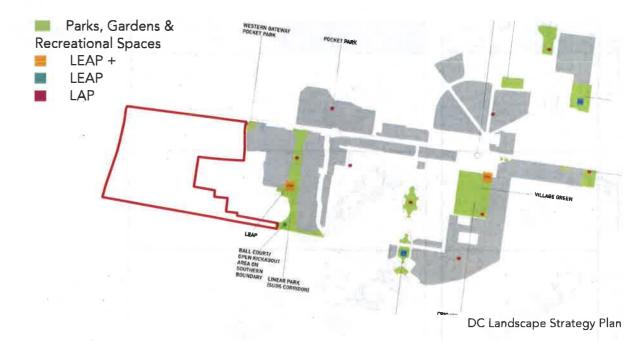
Design Code Building Typology Table

# 4.5 Landscape and Public Realm

## LANDSCAPE STRATEGY AND PLACE MAKING

#### Public Realm Code

The overall design and character of the public realm will help establish a clear and unified vision for the site that will transcend several development parcels. The design rationale for the external spaces varies depending on location and function, the key aspects of which are scale and orientation of open space, existing landscape features and planting and how this approach links to private gardens and frontages.



#### Parks and Gardens

A robust yet simple landscape planting palette is proposed which encapsulates a green hierarchical structure of low/medium native hedgerows, through which larger yet generally small canopied street trees will be implemented such as Tilia, Birch and Sorbus.

All existing trees of particular form and merit will be retained and made safe and managed appropriately to an agreed programme of works, giving the development parcel an instant feeling of age and maturity. Generally, where space permits native shrub planting will be implemented to include species such as Holly, Dogwood & field maple to create vertical height and structure below the existing tree canopies and to help integrate a green matrix

throughout the site. It is anticipated that overall the proposals will encourage a range of birds and invertebrates typically found in gardens in the local area and to further this aim, new and existing tree species will be provided with bat and bird boxes.

Whilst the scheme is relatively tight regarding physical space for planting to individual plots the key landscape strategy is to create belts of colour to house frontages, this will be in the form of shrub and herbaceous planting to break the linearity with belts of smooth, curving planting with the structure of low/medium/high planted in waves wrapping through the scheme and leading through from primary to secondary routes, this will unify the scheme and create a sense of place and arrival.

#### Rain Garden

The rain garden feature will form an integral landscape element and is aligned in a linear North/ South arrangement along the central spine of the phase and not only serves as a practical SUDs feature but provides a unique visually appealing landscape feature which gives a strong sense of place. The planting for the Rain garden feature will look to create the feel of a natural landscape, with a selection of plants and trees that can tolerate various soil conditions being used.

#### Linear Park / SUDs Corridor

The linear park which runs along the western and southern boundaries of the phase, not only provides the main pedestrian access around the site but creates a key landscape feature which provides areas for passive recreation. The Linear park plays host to many of the phase's play features such as the LEAP and trim trail. The Linear Park will be planted with large tree species, include grassed open swales and wildflower meadow grassland for seasonal interest.

#### Camp Road

The landscape proposals for Camp Road look to enhance and reinforce this main street scene with the use of Tree planting. This will be done by using species that are already found along the road providing continuity.

#### Gateway Feature

The gateway feature for this phase will look to utilise the existing trees located on site as a feature. All of the retained trees will be made safe and managed appropriately to an agreed programme of works, giving the parcel an instant feeling of age.

#### **PLAY AREAS**

The phase has various aspects of play throughout, catering for a wide range of age groups, with number of Local Areas for Play (LAPs), Local Equipped Areas for Play (LEAPs), a Neighbourhood Equipped Area of Play (NEAP) as well as a Trim trail.

#### NEAP

The Neighbourhood Equipped Area of Play (NEAP) provides a major focal point within this phase and provides the largest area of play space within this phase of the scheme. Located within the large POS (Public Open Space) to the south eastern area of the phase, the NEAP will have its own unique character, and provide a safe secure area of play that not only caters for various age groups but provides a large range of activities.

The general palette of materials consists of rubber play surfacing, self-binding gravel, 7 pieces of play equipment, benches and open

areas of grass with shrub and tree planting. The planting varies between the different LEAPs, but is chosen to provide seasonal variation in colour, with strong colours and fragrance to appeal to younger user groups. Feature trees and existing trees have been used to create features of visual interest, and areas of dappled shade. Taller shrubs are located around the boundaries of the spaces to buffer external road activities and noise.

The benches are located to allow resting places whilst overseeing play within the space. Furthermore, the NEAP is designed to be surrounded by a bow-top railing (approximately 1200mm in height) and self-closing gate, to enable a secure space for play but with good indivisibility to outside, thus creating a strong perception of safety and prevent any feeling of enclosure.





#### **LEAPs**

The Local Equipped Areas for Play (LEAPs) within this phase of the scheme have been design to provide safe, fun and secure areas of play for the local residents. Each of the LEAPs are individually designed to create distinct characters, specific to each phase, and thus improve orientation and enable local residents to experience a 'sense of ownership' of each space. Each of the LEAPs has been designed to provide a different play experience and offer a range of activities.

The general palette of materials consists of rubber play surfacing, 5 pieces of play equipment, benches and open areas of grass with shrub and tree planting. The planting varies between the different LEAPs, but is chosen to provide seasonal variation in colour, with strong colours and fragrance to appeal to younger user groups. Feature trees and existing trees have been used to create features of visual interest, and areas of dappled shade. Taller shrubs are located around the boundaries of the spaces to buffer external road activities and noise.

The benches are located to allow resting places whilst overseeing play within the space. Furthermore, each LEAP is designed to be surrounded by a bow-top railing (approximately 1200mm in height) and self-closing gate, to enable a secure space for play but with good indivisibility to outside, thus creating a strong perception of safety and prevent any feeling of enclosure.

#### LAPs

The Local Areas for Play (LAPs) within this phase of the scheme have been designed to provide safe and secure areas for the local residents. The LAPs are individually designed to create distinct characters, specific to each phase, and thus improve orientation and enable local residents to experience a 'sense of ownership' of each space. Two of the LAP's within the phase include play equipment aimed at younger children, and are designed to have an individual, secure and engaging feel.

The general palette of materials consists of selfbinding gravel, benches and open areas of grass with shrub and tree planting. The planting varies between the different LAPS, but is chosen to provide seasonal variation in colour, with strong colours and fragrance to appeal to younger user groups. Feature trees and existing trees have been used to create features of visual interest, and areas of dappled shade. Taller shrubs are located around the boundaries of the spaces to buffer external road activities and noise.

The benches are located to allow resting places whilst overseeing play within the space. Furthermore, each LAP is designed to be surrounded by a bow-top railing (approximately 1200mm in height) and self-closing gate, to enable a secure space for play but with good indivisibility to outside, thus creating a strong perception of safety and prevent any feeling of enclosure.

#### Trim Trail

The phase incorporates an integrated trim trail that runs North, West and Southern boundary. The trim trail looks to draw people around the site, creating and promoting a sense of community as well as an active lifestyle. The trim trail will consist of 11 stations offering a wide range of activities helping to develop balance, agility, strength and co-ordination.



#### **URBAN LANDSCAPED NODE**

The Urban Landscaped Node is located in the centre of the phase and provides a community hub and visual indicator for the project. The Node allows people too ordinate themselves, provides a meeting place and a place to play, based around a key feature tree within its centre, with low mounding creating a perimeter to the space. Street tree planting runs along the outside edge providing a clear demarcation of the space. The general palette of materials consists of self-binding gravel, feature block paving area, benches and cycle storage.



## BOUNDARY TREATMENTS AND STREET FURNITURE

The general boundary treatments across the site comprise of a mix associated with the street within which they are located.

Front garden treatments can briefly be described as follows:

Principle Streets Metal Railings

Mews Low shrub planting (open)

Lanes
A mix of low shrub (open) and low hedgerows

All rear garden boundaries that form key parts of the public realm will be masonry walling. Areas away from the public eye or within rear gardens, will be timber fenced.

Side access gates will be match board timber.

Street furniture will be a mix of timber and metal but with an emphasis on timber wherever possible and acceptable.

In reference to the Design Code, our proposals are consistent with design expectations set as follows:

## **Boundary Treatments**

- The existing development is typified by predominantly open frontages so proposed boundary treatments will replicate this approach. Refer to Character Areas.
- ✓ Proposed hedge planting alongside Camp Road will be in the public realm to ensure it is retained and managed in a consistent way.

#### Street Furniture

✓ Street furniture will be coordinated across
Heyford Park to create identity and be area specific
with an emphasis on timber furniture in the informal
landscape areas and more metal street furniture in
more formal areas.

- ✓ Street furniture will be coordinated and will be of a design to reflect the architecture.
- ✓ Height of street lighting columns will emphasise size of space, subject to Section 38 Technical Submission.
- ✓ Street name signage will be attached to . buildings wherever possible to minimise clutter.

# 4.6 Sustainable Design and Infrastructure

#### DRAINAGE INFRASTRUCTURE

### On-site Drainage Strategy

The Approved Flood Risk Assessment (FRA) prepared by Waterman sets out the approach to drainage and attenuation across the Upper Heyford site. The FRA makes the following statements/ indications:

- The proposed surface water strategy must mimic the existing situation, restricting flows to the existing rate while taking climate change into account.
- Surface water attenuation will be provided through the use of permeable paving and attenuation tanks where necessary. Swales will be incorporated within the development parcels where appropriate.
- The potential for infiltration techniques will also be investigated further at the detailed design stage, to confirm whether soakage rates are favourable.

 Phase 9 falls within catchment 4 which outfall to the north east of the development as part of the "Trenchard network".

## Adoption Strategy

- Foul and surface water sewers to be adopted by Thames Water as part of Section 104 Agreement.
- SUDS features and attenuation ponds to be maintained by management company as part of public open space, private roads and / or accesses.
- Highway gullies to be adopted by Oxfordshire County Council as part of Section 38 Agreement.
- Private drainage and SUDS features to be maintained by occupants.

#### Surface Water Sewers

The natural topography of the site drains towards Gallos Brook, which originates on the southern boundary within the south-eastern corner of the site prior to flowing south.

Immediately north of the existing outfall to Gallos Brook is an existing surface water treatment works which serves a 525 Ø culvert which crosses the site in a north-south direction.

The existing 525 Ø culvert transfers flows from the airfield to the north of Camp Road (which runs adjacent to the northern site boundary) and as such we will have to be maintained but diverted to eliminate a significant restraint on the proposed layout and drainage strategy.

The existing surface water treatment works shall be removed and replaced with a modern equivalent (Hydro International's Downstream Defender or similar approved) located to eliminate a significant restraint on the proposed layout and drainage strategy.

The proposed surface water drainage strategy shall consist of a combination of a conventional drainage network and Sustainable Urban Drainage Systems (SUDS) using the natural topography of the site to convey surface water run-off to a strategically placed attenuation basin located adjacent to the existing outfall to Gallos Brook on the southern boundary.

A flow control device shall be placed downstream of the proposed attenuation basin, restricting flows to the greenfield run off rate for the 1 in 100 Year event.

The attenuation basin shall comprise of a soft-landscaped feature with banks ranging from 1:5 minimum - 1:3 maximum, a depth of 1.992m minimum - 3.333m maximum (maximum depth of water = 1.514m) and a total volume of 4308m³ providing storage for the 1 in 100 Year event plus 30% climate change with a freeboard allowance of 478mm. The attenuation area will be constructed in 'cut' and graded into existing ground levels.

Finished floor levels are to be set a minimum of 600mm above the maximum water level of 120.142.

The following SUDS measures are to be incorporated in the proposed surface water drainage strategy:

- Swales adjacent to private roads and driveways - The use of swales will provide visual and ecological amenity while assisting in improving the quality of the surface water runoff by filtering out organic matter, silt and hydrocarbons as the water passes through the soft-landscaped channel.
- Open Channel Watercourse adjacent to adoptable carriageway - The use of watercourse will provide visual and ecological amenity while assisting in improving the quality of the surface water runoff by filtering out organic matter, silt and hydrocarbons as the water passes through the soft-landscaped channel.

- Permeable Paving within private roads, driveways and courtyards, tanked with an outfall to the downstream sewers - The use of permeable paving will assist in improving the quality of the surface water runoff by filtering out organic matter, silt and hydrocarbons as the water passes through the geo-textile and stone layers.
- Rain Gardens within public open space i.e. a 300mm deep depression with a planted filter bed at the base and drain conveying flows through the rain garden towards an outfall to downstream SUDS or sewers - The use of rain gardens will provide visual and ecological amenity while assisting in improving the quality of the surface water runoff by filtering out organic matter, silt and hydrocarbons as the water passes through the filter bed.

 Water butts - each affordable dwelling will be provided with a water butt attached to a rainwater pipe in rear gardens. This will allow surface water runoff from roof areas to be stored for reuse in the garden.

All adoptable foul and surface water drainage is to be designed in accordance with Sewers for Adoption 7th Edition and the Building Regulations.



Example of a rain garden

### Foul Drainage

Heyford Park is served by an existing private foul sewerage system and treatment works.

The existing sewers immediately downstream of Phase 9 have been deemed not to be to an adoptable standard due proximity to existing and proposed buildings and shallow gradients.

As such, it will be necessary to provide a pump station to convey the foul sewerage from the site to a previously agreed connection point towards the east of Phase 4.

The foul pumping station with Phase 4 has been designed and installed to accept flows from Phase 9 via Harris Road.

#### **BUILDING CONSTRUCTION**

## Building Fabric to Achieve Reduction in Carbon Emissions

The development will be constructed using the latest in building techniques and to the current building regulations.

A full construction specification document has been submitted as part of the planning application.

# 5.0-Access

#### INTRODUCTION

This section is designed to complement "Section 3a Design Code Compliance: Street, Movement and Network Codes" in order to inform the accessibility aspects of the scheme, meaning ease of access for all into the development and to all elements within the site.

Formal pre-application meetings have been undertaken to inform access issues on the site.

#### **ACCESSIBILITY**

#### Streets and Layout

The proposed street network and associated street hierarchy is based upon the principles in "Manual for Streets" which provides appropriate forms of access for all users and the layout is in accordance with building regulations for inclusive design.

The internal layout of the scheme has been designed to promote low vehicle speeds (through road narrowing, horizontal deflection and changes to surface materials) to encourage safe cycle and pedestrian integration.

Streets have also been designed in accordance with recent planning and technical approvals achieved on other phases at Heyford Park.

Pedestrians and cyclists will access the site as per the existing situation with several new links provided to enhance permeability.

Public Transport provision along Camp Road will be as per the existing situation with a half-hourly service on route 25A in line with the consented scheme.

#### **Buildings and Parking**

Level access is achieved to the front and/or rear of all dwellings to help achieve access for all.

## **Emergency and Refuse Vehicles**

The development has been designed to provide ease of movement for emergency vehicles. Adequate turning facilities for service and emergency vehicles have been provided.

Rear access is provided for pedestrians to all properties to allow for easy transportation of refuse and / or recyclable waste.

