



DESIGN & ACCESS STATEMENT

November 2007



ROGER EVANS ASSOCIATES LTD FOR NORTH OXFORDSHIRE CONSORTIUM LTD

Reference : IJobs\1135 Heyford Park\report\working\1135 Heyford Park Design&Access Statement.indd

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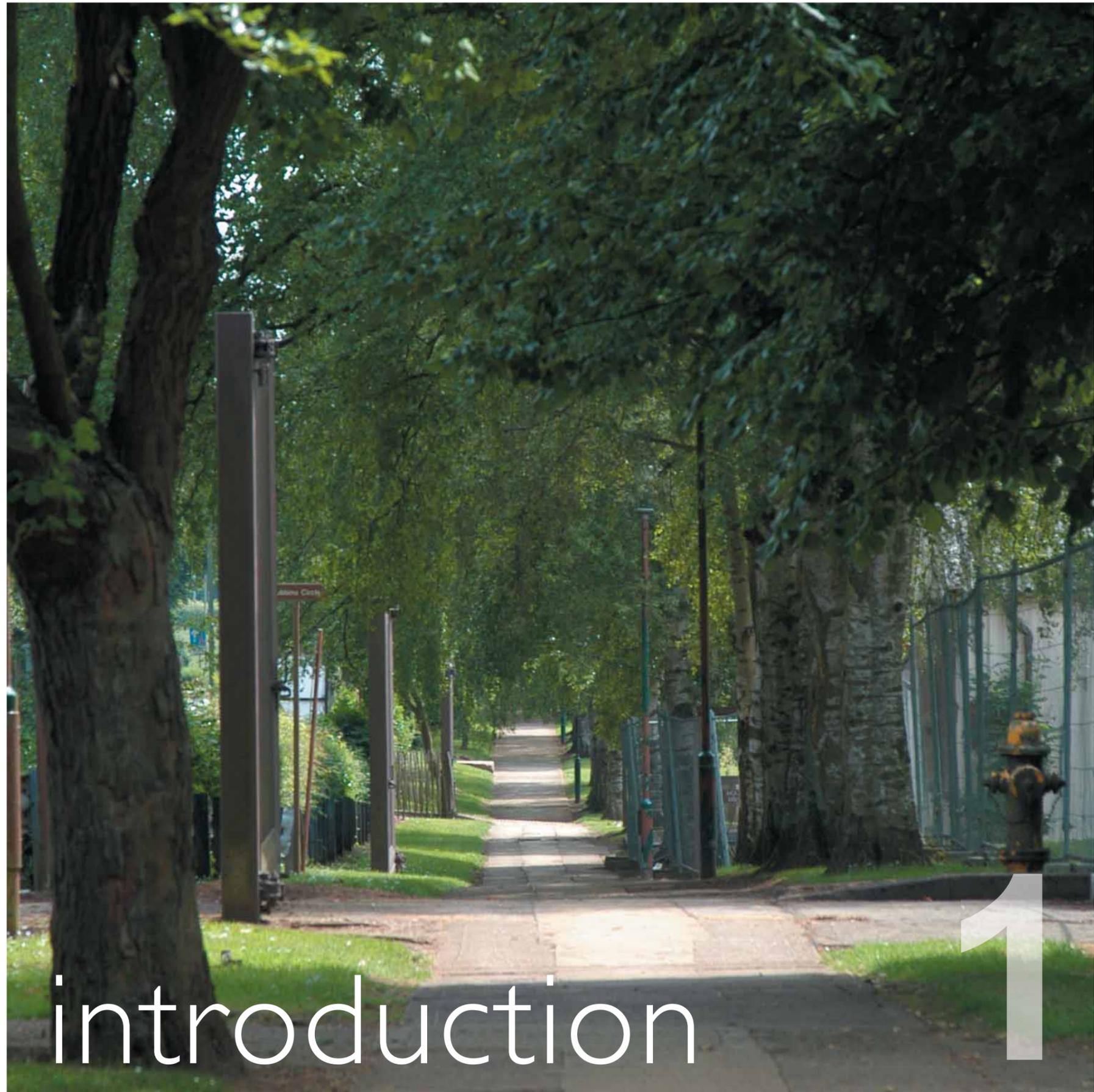
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Issued : November 2007

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introduction



1.1 Background

1.1.1 Heyford Park

Heyford Park is the name given to the development of the former RAF Upper Heyford establishment situated near to the village of Upper Heyford. North Oxfordshire Consortium entered into a lease with the MOD for the site in 1996 and completed the purchase of it in 2006, during which time it has continued to exist as a community providing both housing and employment. This Design and Access Statement accompanies an outline planning application for the regeneration of the whole of the airbase which, following public consultation, was allocated Conservation Area status in April 2006 in light of its historic Cold War significance. This application includes provision for new housing, employment, community, retail, education and leisure facilities, whilst also retaining existing site facilities.

Cherwell District Council's Draft Comprehensive Planning Brief for the site, adopted as a Supplementary Planning Document (SPD) on 5th March 2007, includes allowance for a total of about 1,000 dwellings on the site together with the provision of 1,300 jobs. It includes requirements for a primary school site to County Council standards, sports and play facilities based on adopted policy, and a mixed-use local centre with a community hall and place of worship. The vision set out for the site in the brief requires a comprehensive scheme that deals with the whole of the site including the development area and the wider airfield. Development proposals will need to demonstrate that they "will represent a satisfactory lasting arrangement and will deliver the environmental improvements and heritage interest required. Comprehensive proposals will also be required to demonstrate that a satisfactory relationship can be achieved between new development and existing buildings and between the new settlement and the historic environment".

1.1.2 Purpose and Structure of the Document

Changes to the operation of the development control system came into effect on 10th August 2006. They require an outline planning application to be accompanied by a Design and Access Statement to explain the design principles and concepts that have informed the development and how access issues have been dealt with. This Design and Access Statement should be read in conjunction with the Heyford Park Building Appraisal, the Environmental Statement (ES), the Transport Impact Assessment (TIA), the Base Management Plan and the Statement of Community Involvement (SCI), which accompany the planning application. All of these documents inform, and are informed by, the Design and Access Statement. The process is illustrated in the diagram opposite.

Following this introduction, the document is set out in these sections:

Section 2 - CONTEXT APPRAISAL

Identifies the key features of the site and its context and summarises the constraints and opportunities arising from landscape, building, ecology and archaeological surveys.

Section 3 - MASTERPLAN RATIONALE

Sets out underlying design principles of the design approach, explains the key design decisions contained in the masterplan and summarises sustainability issues to be addressed.

Section 4 - BUILT FORM

Explains and describes the three dimensional built-form (morphology) of the neighbourhood and its landscape and the range of character areas in the masterplan.

Section 7 - PHASING AND IMPLEMENTATION

Looks at the delivery of the masterplan.

Section 6 - ACCESS

Summarises access issues generally covered in the Design Statement, with reference to the specific requirements of DCLG Circular 01/2006.

Section 6 - APPENDICES A and B

Set out in tabular form a résumé of development planning policy and details of landscape species.

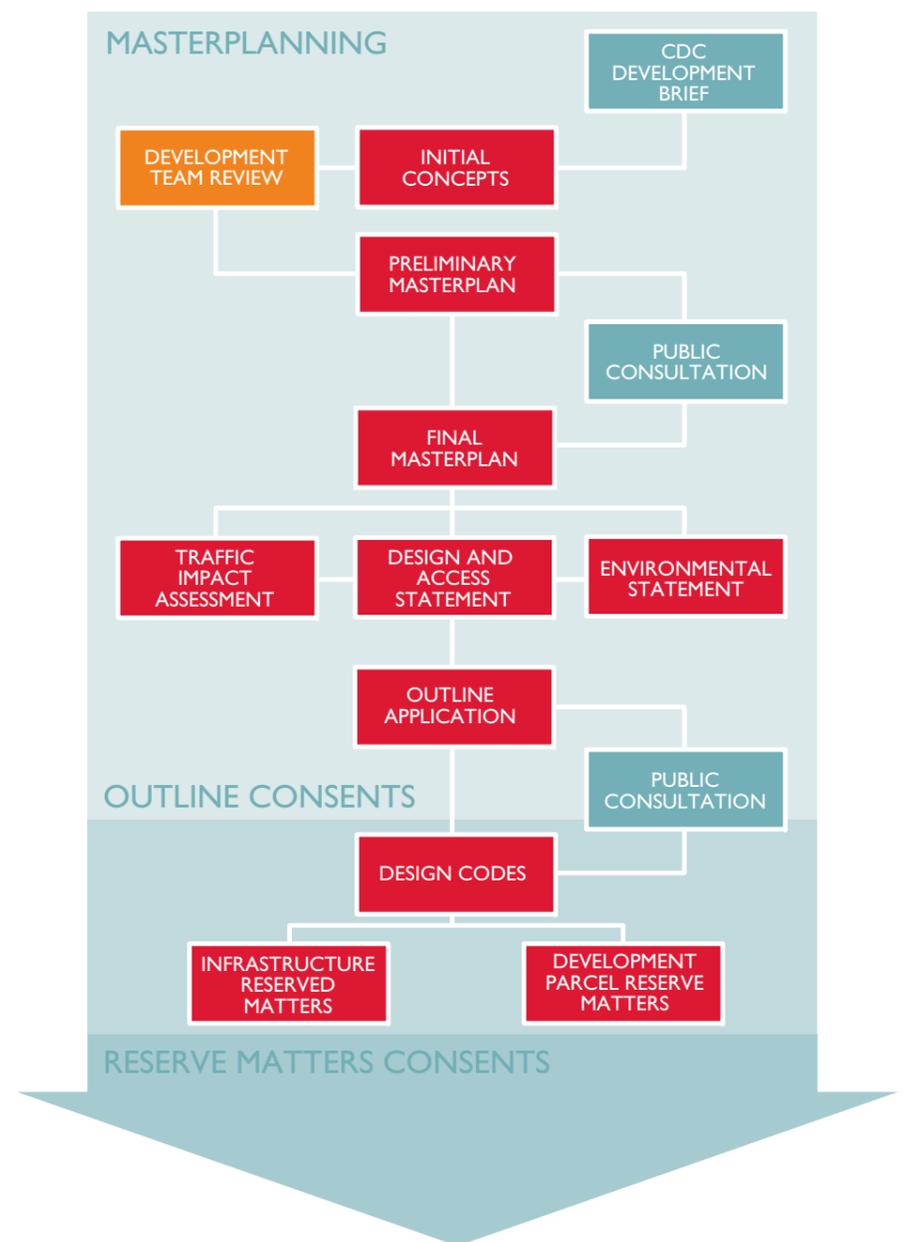


Fig. 1.1: Planning Process



1.2 Development Proposals

The proposal is for a mixed-use sustainable new community utilising the former RAF base at Upper Heyford. Heyford Park will provide a new settlement with necessary supporting infrastructure, including a primary school, appropriate community, recreational, amenity, heritage centre and employment opportunities whilst being protective towards the environment and the sustainability agenda.

The application site extends to a gross site area of approximately 516 ha. The development will comprise of a mixed scheme in two portions:

1.2.1 Proposed New Settlement Area to include the following uses and development:

- Class C3 (residential dwelling houses): up to 1,075 new dwellings (including the retention of some existing military housing) to be erected in 2 and 3 storey buildings.
- Class D1 (non residential institutions): change of use of Building 549 to provide accommodation for a Community Hall and 572 to provide accommodation for a Chapel; Buildings 126, 129 and 315 to provide a Heritage Centre and up to 4,200 m² together with associated car parking.
- Change of Use of Building 74 to Class C1/D1 use as a hotel/ conference centre of up to 4,150 m².
- Class A1 retail provision of up to 743 m² of floor space.
- Class A2 and Class A3 and A5 units: provision of up to 1,000 m² of floor space as part of a Local Centre.
- Change of Use of Building 103 to Class A4 Public House, provision of up to 340 m² of Class A4 floor space in total.
- Provision of 1 no. two-form entry Primary School on a site of 2.22 hectares.
- Erection of 6 no. Class B1 (a), (b) and (c) buildings comprising up to 7,800 m² of floor space.
- Change of Use of Building 172 to Class B2 use.

1.2.2 Proposed Wider Airfield Area to include the following uses and development:

- Change of Use of Buildings 80, 151, 320, 345, 350, and 354 to mixed Class B2/Class B8 use.
- Provision of playing pitches and courts, sports pavilion and four tennis courts plus incidental open space including NEAPS and LEAPS.
- Provision of all infrastructure to serve the above development including the provision of the requisite access roads and car parking to District Council standards.
- Removal of boundary fence to the south of Camp Road.
- Removal of buildings and structures within New Settlement Area as detailed in separate schedule.
- Landscaping alterations including the removal of some trees within the Conservation Area (see separate schedule) and planting of new trees and off-site hedgerows and access track.
- Change of Use for vehicle preparation and car staging comprising 17 hectares.
- Change of Use of Buildings 3205, 3208 to Class B1 (Business).
- Change of Use of Buildings to mixed Class B1 (Business) and B2 (Industrial) use.
- Change of Use of Buildings 234, 324, 350A, 3209 to mixed Class B1 (Business) and B8 (Storage) use.
- Change of Use of Buildings 259, 260, 292, 336, 337, 340, 1011, 3210 to Class B2 use.
- Change of Use of Buildings 221, 249, 325, 327, 328, 329, 366 to mixed Class B2/Class B8 use.
- Change of Use of Buildings 1001-1009, 1023, 1026-1038, 1041-1048, 1059, 1062, 1100, 1102-1109, 1111-1115, 1159-1185, 1372, 1601-1625, 2001-2009, 3001-3037, 3043-3051, 3056, 3140, 3200-3203, to Class B8 use.
- Removal of part of the boundary fence covering the perimeter ABCD and its replacement by a similar 3 metre fence along the route AD.
- Demolition of Buildings 3052-3055 and 3135 in the north-western corner of the flying field.
- Demolition of Buildings 3036-3042 in the south eastern corner of the flying field.
- Provision of all infrastructure to serve the above development, including the provision of the requisite access roads and car parking to Cherwell District Council standards.
- Reopening of Portway and Ave's Ditch as public rights of way.
- Associated strategic infrastructure, comprising main spine road formed by Camp Road with access to the main flying field to the north and residential areas to the south of Camp Road.
- Removal of trees as detailed in accompanying schedule.



1.3 Planning Application

1.3.1 Application content

This Design and Access Statement accompanies an outline planning application for the development scheduled above. The application area is indicated in figure 1.2. Other documents to be provided with the application include:

- Planning Application Boundary Drawing**
- Demolitions Plan**
- Employment Floorspace Statement (PB10)**
- Built-form Masterplan Drawing**
- Landscape Key Plan**
- List of Planning Documents**
- Parameter Assessment Plans**
- Phasing Plans**
- Affordable Housing Statement**
- Statement of Community Involvement**
- Planning Support Statement (incl. s106 HoT)**
- Base Management Plan**
- Building Appraisal**
- Conservation Area Demolition Application**
- Change of Use Justification and Plan**
- Employment Statement**
- Flood Risk Assessment**
- Sustainability Statement**
- Transport Assessment & Travel Plan**
- Tree Schedule/Plan**
- Waste Minimisation Strategy**

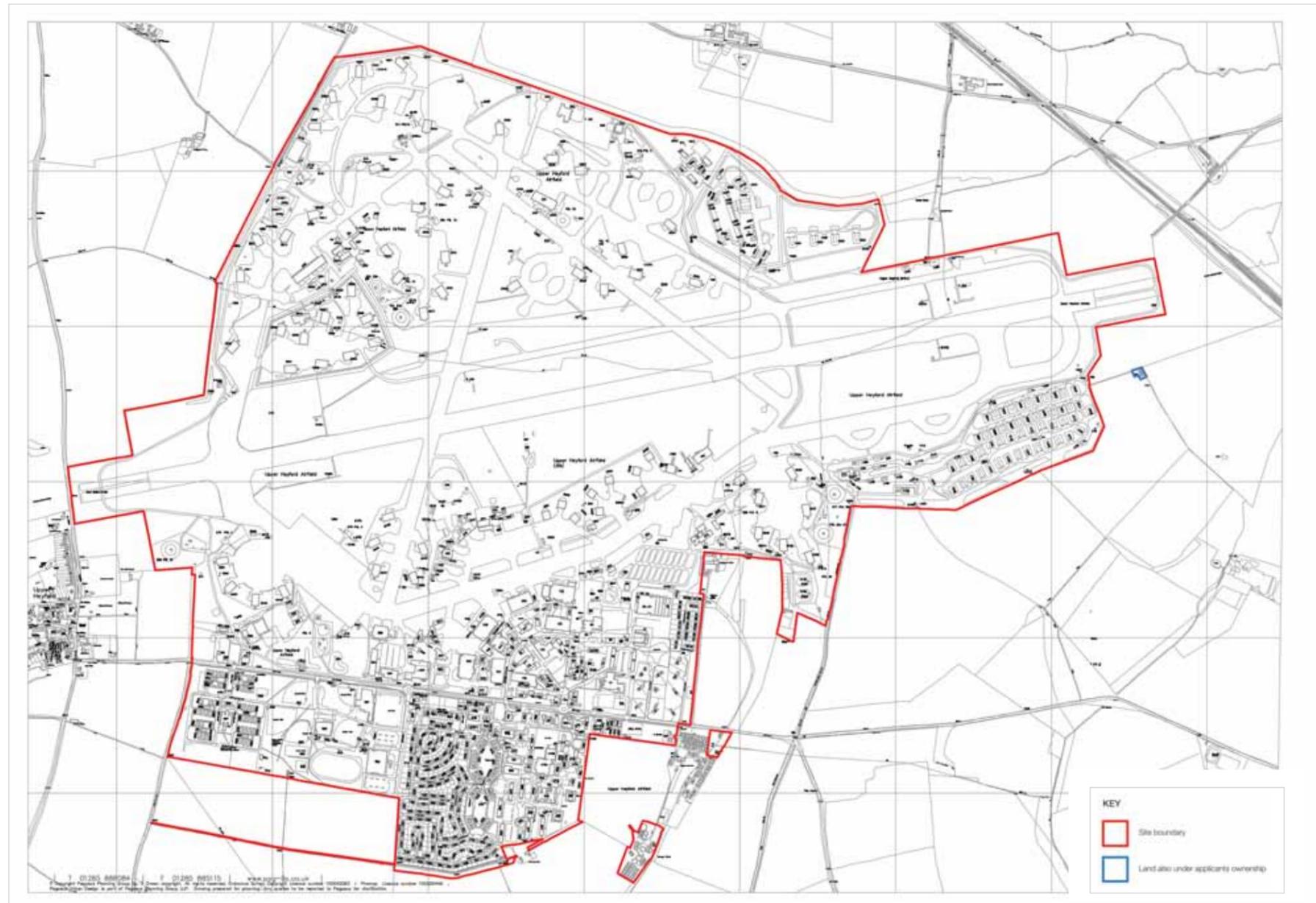


fig. 1.2 Application site

1.3.2 Environmental Statement

Cherwell District Council has provided a scoping opinion that an Environmental Statement (ES) will be required with the submission of the outline planning application. Accordingly, the ES includes the following sections:

1. **Introduction**
2. **Assessment Methodology**
3. **Proposed Development and Alternatives**
4. **Policy Context**
5. **Social and Economic Impact**
6. **Traffic Access and Movement**
7. **Utility Services and Waste**
8. **Construction Waste**
9. **Noise**
10. **Air Quality**
11. **Water Quality**
12. **Geology, Soils and Contamination**
13. **Surface Water Drainage, Hydrology and Hydro-geology**
14. **Landscape and Visual Impacts**
15. **Ecology and Nature Conservation**
16. **Cultural Heritage**

1.3.3 Traffic Impact Assessment (TIA)

The TIA includes:

- 1 **Introduction**
- 2 **The Site and Surrounding Road Network**
- 3 **Existing Traffic Conditions**
- 4 **Planning & Policy Framework**
- 5 **Proposed Development**
- 6 **Traffic Impact**
- 7 **2006 Base Traffic**
- 8 **2013 Base Year Traffic**
- 9 **Trip generation**
- 10 **2013 Opening Year Traffic**
- 11 **M40 Motorway Junction 10 (B430 roundabout)**

- 12 **Site Access**
- 13 **Accidents**
- 14 **Village Traffic Calming**
- 15 **Public Transport, Walking and Cycling**
- 16 **Travel Plan**
- 17 **Construction Issues**
- 18 **Appraisal of Impacts**
- 19 **Summary and Conclusions**

1.3.4 Planning context

Policies

The relevant planning policies are considered in detail within the accompanying Environmental Statement and are discussed in the Planning Supporting Statement. It is not the intention to repeat that detailed analysis in this particular statement. For reference, a summary table of the principal planning policies is included in Appendix A of this Design and Access Statement, which also notes compliance or otherwise of the proposals with policy.

The Development Plan for Upper Heyford is informed by the strategic Regional Planning Guidance for the South East (RPG9), the Oxfordshire County Structure Plan 2016, the Cherwell Local Plan (1996) and the Revised Comprehensive Planning Brief prepared by Cherwell District Council, adopted March 2007, which provide site-specific policies and guidance. In addition, there is the Non-Statutory Cherwell Local Plan 2011 which is a material consideration but was abandoned by the Council before it reached statutory adoption.

Of high relevance to the proposed development is a site-specific policy for the former RAF Upper Heyford, Policy H2, which states:

- a) *Land at RAF Upper Heyford will provide for a new settlement of about 1,000 dwellings and necessary supporting infrastructure, including a primary school and appropriate community, recreational and employment opportunities, as a means of enabling environmental improvements and the heritage interest of the site as a military base with Cold War associations to be conserved, compatible with achieving a satisfactory living environment.*

- b) *Proposals for development must reflect a revised comprehensive planning brief adopted by the district council and demonstrate that the conservation of heritage resources, landscape, restoration, enhancement of biodiversity and other environmental improvements will be achieved across the whole of the former air base in association with the provision of the new settlement.*
- c) *The new settlement should be designed to encourage walking, cycling and use of public transport rather than travel by private car. Improvements to bus and rail facilities and measures to minimise the impact of the traffic generated by the development on the surrounding road network will be required.*

Planning designations

The site is affected by a number of statutory planning designations that have significance for future development and management:

- the former RAF Upper Heyford Conservation Area, supported by the Conservation Area Appraisal Statement (April 2006), which covers the whole of the application area;
- scheduled monuments, which include areas and building groups of significance (such as the Quick Reaction Alert Complex and Northern Bomb Stores) and individual buildings such as the Battle Command Centre and hardened telephone exchange;
- a County Wildlife Site occupying the eastern area around the former main runway;
- five Conservation Areas designated in villages within 4 km of the site, from which parts of the site are visible;
- Rousham Historic Park, from which parts of the site are visible: the park is located in West Oxfordshire District and therefore the policies of the West Oxfordshire Local Plan also have relevance in this regard.

Current planning permissions

Many buildings on the site are subject to temporary planning permissions, including occupied employment buildings and dwellings. Permanent permissions allow the employment use of Heyford House and the Innovation Centre and residential use for no. 1 Soden Road.





fig. 2.1 Aerial view of whole airfield

2.1 Landscape

2.1.1 Summary of Assessment

The landscape and visual assessment section of the accompanying Environmental Statement, prepared by Cooper Partnership, provides a detailed appraisal of the site and its setting.

The former airbase is located on a plateau within the Farmland Plateau Landscape Character Area, identified by Oxfordshire County Council, National Character Area 107, Cotswolds, and identified by The Countryside Agency. Views of the plateau are possible from the southern edge of the settlement area and, along its western side, the plateau falls sharply into the Cherwell Valley. Historic landscape features around the site include woodland at the Heath to the southeast and Kennel Copse to the north. The western section of the copse was removed during construction of the airfield, along with internal field boundaries. Site boundaries to the north, northwest and south follow original field layouts.

The former airbase is designated as a Conservation Area. Two site structures have also been designated as scheduled monuments (ref 2.3.5), both of which require a sensitive and careful approach to the assessment of the impact on landscape character. Other scheduled monuments, Grade II listed buildings, historic parks and a Site of Special Scientific Interest (SSSI) also exist near to the site. In particular, Rousham Park (listed Grade I in the English Heritage Register of Parks and Gardens) lies within 2km of the site.

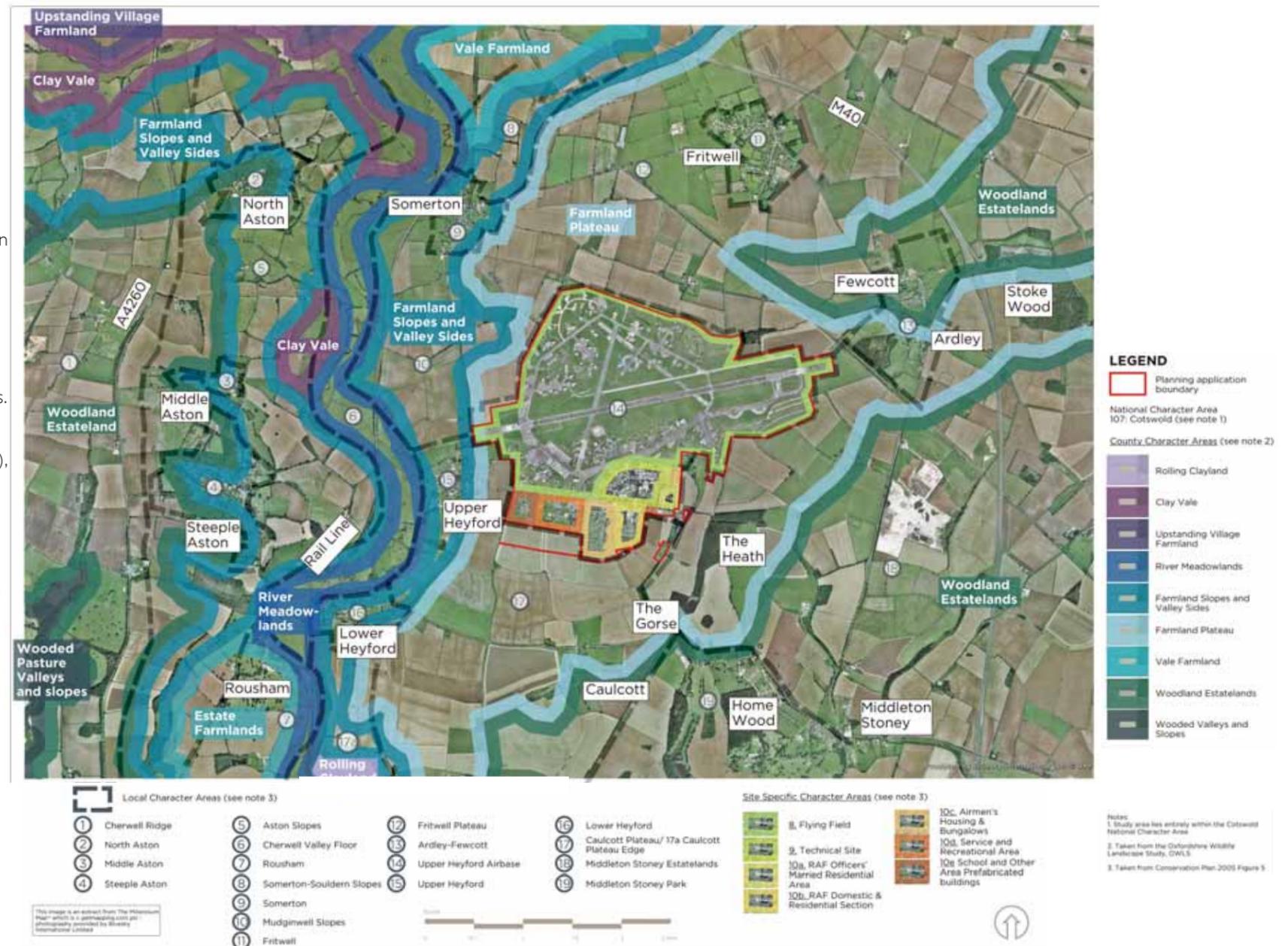


fig. 2.2 Landscape setting

Prominent features

The most prominent site features, are as follows:

- The security fence that encloses the western end of the runway, visible from Upper Heyford village.
- Many mature trees along the eastern edge of the settlement area, adjacent the officers' housing, help to assimilate the flying field into its surrounds.
- Two large steel water towers (buildings 291 & 63) are clearly visible from outside the base.
- Hardened aircraft shelters and a warehouse on the northern edge of the base (buildings 3052, 3053, 3054, 3055 & 3135) are visible from locations to the north/north-west of the site.
- Other large structures, such as the hospital (building 582) and school buildings (buildings 804 to 905) are visible from the south of the site.
- Bungalows along the southern edge of the settlement area are also visible from the south.
- The extensive tree cover within the site and along Camp Road.
- Inappropriate coniferous planting.

2.3	2.4	2.5
2.6	2.7	2.8
2.9	2.10	2.11

fig. 2.3 Security fence
 fig. 2.4 Chilgrove Drive forms part of the eastern boundary of the site
 fig. 2.5 Water tower at Gordon Road
 fig. 2.6 Warehouse buildings on northern edge
 fig. 2.7 Disused hospital
 fig. 2.8 View to the bungalows on Harris Road, south edge of site
 fig. 2.9 Mature planting and neat hedgerows on Camp Road
 fig. 2.10 Row of conifers on Soden Road
 fig. 2.11 Hardened aircraft shelter



2.1.2 Landscape Setting & Settlement Area

Views within the flying field

The airfield character will be retained for its open Cold War landscape - a combination of retained buildings, grassland, fencing, runways and taxiways. These include:

- views along the main runway, a new view of significance to be provided from Aves Ditch and Port Way.
- local views of the airfield buildings including the Victor Alert Complex, the bomb stores and groups of hardened aircraft shelters, especially when seen from Port Way, Aves Ditch and the Upper Heyford Trail.

Key views within the settlement area

Views are limited to and from the flying field and the wider site. Within the settlement area this is due to the enclosure offered by mature trees and significant buildings, which create contained vistas rather than open views. The main views are:

- Vistas along Camp Road east and west, contained by mature trees on both sides.
- Vistas through Carswell Circle north and south, framed by the narrow entrances into the main space and contained by the crescents of the houses on both sides.
- Views across the parade ground, contained by mature trees and the eaves lines of large barrack blocks.
- Vistas from the gatehouse along the four radial streets of the Trenchard layout, contained by mature avenue trees, particularly along the north-south arm which provides the potential main link between the north and south sides of the settlement area.
- Glimpses from the Trenchard area between the largest hangars to the wider airfield.



fig. 2.12 View along the main runway
 fig. 2.13 View of the Victor Alert Complex from the airfield
 fig. 2.14 Camp Road, eastwards - a mature tree-lined avenue
 fig. 2.15 View into Carswell Circle
 fig. 2.16 The parade ground - the major formal space of the historic establishment
 fig. 2.17 Views from the gatehouse along the arms of the Trenchard street layout - designed for easy surveillance
 fig. 2.18 Glimpses to the airfield between the Type A hangars



2.2 Ecology & Habitat

2.2.1 Summary

Because of the previous cultivation of part of the site and the hard landscaping undertaken to form the airfield, habitat of national value is absent from the site and large tracts of improved grassland and hard-standing dominate. However, where original soils have escaped disturbance, pockets of unimproved, moderate to species-rich grassland occur, most notably towards the eastern end of the runway. Here the grassland present has been designated as a County Wildlife Site (CWS). The open, semi-improved landscape present is, however, rare at this scale in Oxfordshire and thus a bird assemblage of County value has developed on the open grasslands. Due to the close proximity of Ardley Cutting and Quarry Site of Special Scientific Interest and the existence of open emergency water storage tanks on the airfield, Great Crested Newts, a European protected species, have moved onto the airfield and this population now contributes to a local metapopulation of this species of County value. Bats and badgers are also present on site. Further information on the ecological assessment is given in Chapter 15 of the Environmental Statement.

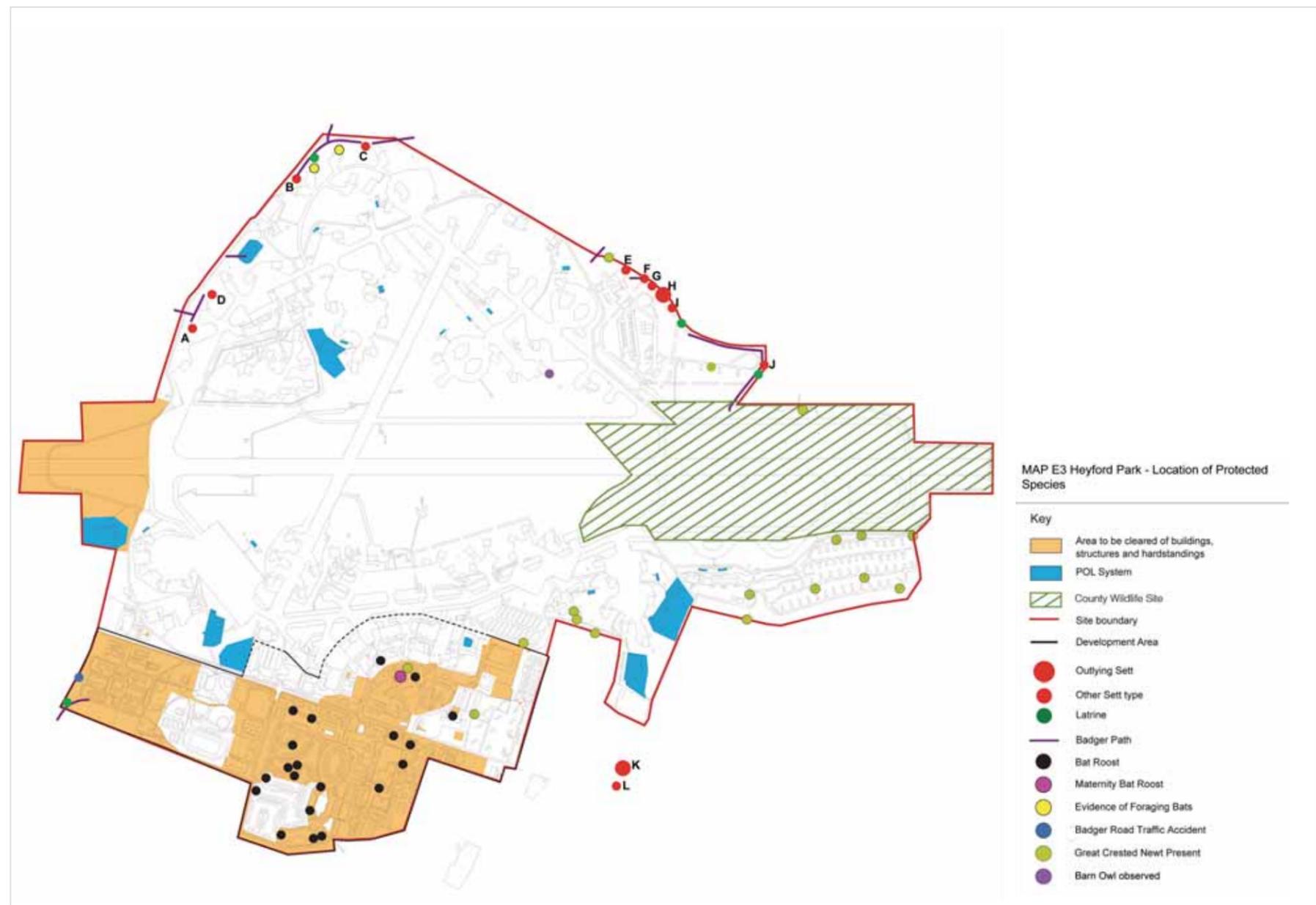


fig. 2.19 Location of protected species

2.3 Historical Context

2.3.1 Early Archaeology

The site has a proven potential to contain deposits of the Iron Age and probably the Roman period. Archaeological evaluation in the form of geophysics and trial trenching has confirmed the presence of Iron Age features associated with settlement, albeit it truncated and disturbed in places. The presence of Aves Ditch and Portway through the site is indicative of evidence from the Roman period. Aerial photographs of the area also suggest the landscape was extensively exploited during these periods.

2.3.2 Evolution of the settlement form

Origins

The airfield was created during the First World War for the Royal Flying Corps, precursor of the RAF, for temporary occupation. In 1924–25, the permanent facility was established, built to the standard RAF pattern - a distinctive radial plan of streets centred on the gatehouse and main administrative buildings and serving a quadrant of hangars on the airfield apron and supporting technical facilities behind. This arrangement has been named a Trenchard plan after the Chief of Air Staff who was responsible for the establishment of the first RAF bases.

Layout

The original general arrangement of the airbase, and the settlement area in particular, remains and strongly influences its present character and design options for future development. There is a clear functional division of land uses separating the technical area from residential and welfare accommodation. The technical area comprises the flying field, the quadrant of hangars and workshops and, separately, general stores and administrative offices. These facilities are all on the north side of Camp Road.

Residential and social accommodation for junior ranks is on the south side of Camp Road, including family housing and single airmen's barrack quarters. Junior messes and clubs are in the barracks area, and other welfare facilities, including shop, school and hospital, are located on the south-west side of the camp. The officers' housing and mess are located

away from the junior ranks on the north side of Camp Road, near the administrative buildings but removed from the technical area.

Present day

The most distinctive elements of RAF Upper Heyford date back to the 1925 development. Subsequent use by the United States Air Force introduced new buildings on the airfield to house quick-response aircraft and new housing and social facilities to meet American forces' standards. This has introduced an American character to parts of the area, but the underlying plan is unchanged. Most of the key buildings to be retained within the camp centre are original RAF structures and the Trenchard arrangement has created a green, open layout. The site has a maturity established by the strong tree cover of the central area and Camp Road – this was a deliberate design approach on RAF sites in the early days to blend administrative facilities in with their surroundings.

2.3.3 Cold War Landscape

The built heritage potential of the site is reflected in its designation as a Conservation Area and the recent scheduling of five Cold War sites dating from the period 1945-1993, whilst three further sites are currently being considered for protection. The closure of the airbase soon after the end of the Cold War means that the extent of survival is high with little demolition. The coherent Cold War landscape is almost unaltered from its original form, and this landscape of 'Flexible Response' is considered to be of national and, in some elements, international significance, as reflected in recent scheduling of key structures and areas. Overall, the structures dating from the periods of the World Wars (1914-1945) are located to the south of the Cold War landscape and are of less significance. Those relating to the Cold War history are situated in the vast area to the north, and generally the landscape and structures are of higher significance.

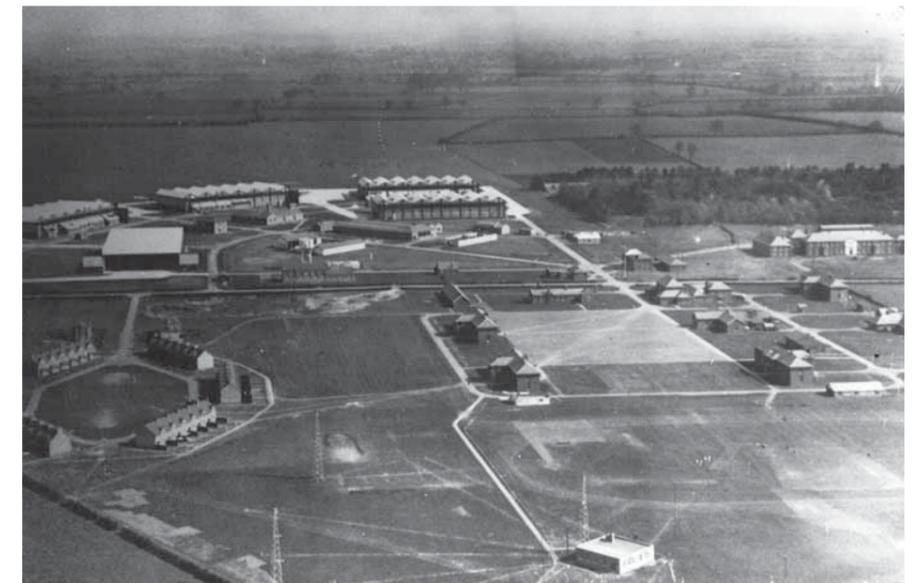


fig. 2.20 Historic photo of the airfield

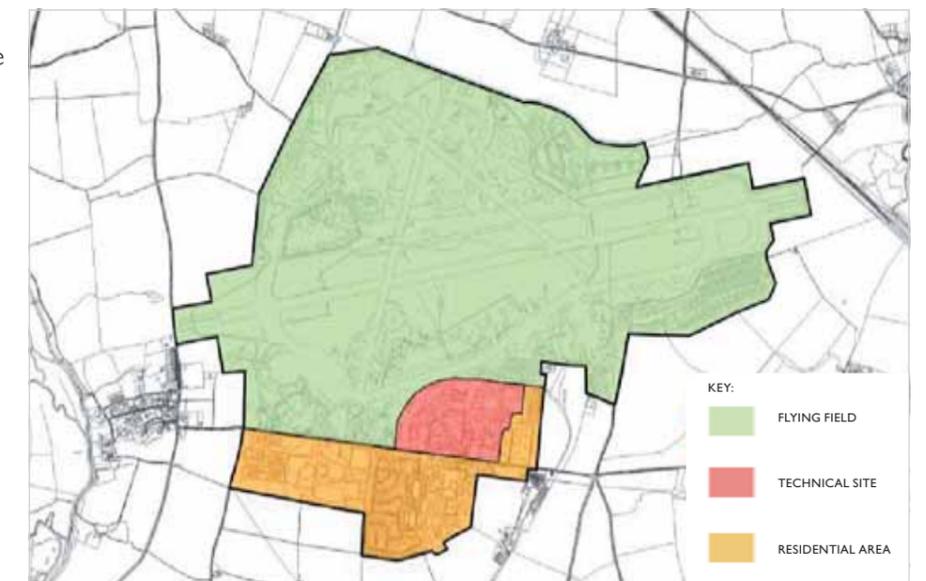


fig. 2.21 Broad spatial elements identified in Conservation Area Appraisal Statement

2.3.4 RAF Upper Heyford Conservation Area

Character areas – the flying field

The Conservation Area Appraisal Statement identifies three broad spatial elements: the flying field, the technical site and the residential zone.

It describes the overall impression of the flying field as one of openness, noting that the hardened aircraft shelters are dispersed over a wide area in the northern part and so present no visual barrier. It notes the different spatial organisation of enclaves such as the Quick Reaction Alert Area (QRA), Northern Bomb Store and Special Weapons Area and their siting in natural hollows that set them apart from the rest of the base. It further notes the relationship in the southern part of large buildings to the openness of the flying field, which imparts another visual character.

Character areas – technical site and residential zones

Together, these areas cover that included in the settlement area as defined by CDC's Comprehensive Planning Brief for RAF Upper Heyford. The density of their development contrasts manifestly with the openness of the flying field.

The defining features of the technical area include the arc of four Type 'A' hangars that mark the boundary between the technical area and the flying field; some original 1920s buildings such as the Officers' Mess; and the strong overall structure of the Trenchard layout, which is emphasised by trees and space that follow the geometry of the layout. The Appraisal Statement summarises the area as a "campus" layout of deliberately sited, mixed-function buildings, in an open setting with organised tree planting.

The residential zone is further divided into sub-areas that comprise the officers' family housing area, airmen's (junior ranks') family housing areas, airmen's and NCOs' barracks and social facilities, a service and recreational area, and an area of prefabricated buildings that included the school (see fig 48). These areas are distinct among themselves:

- **Officers' and SNCOs' family quarters:**

Originating with senior officers' large brick detached houses in extensive grounds, the area was added to in the 1950s with smaller junior officers' family houses which follow the same architectural

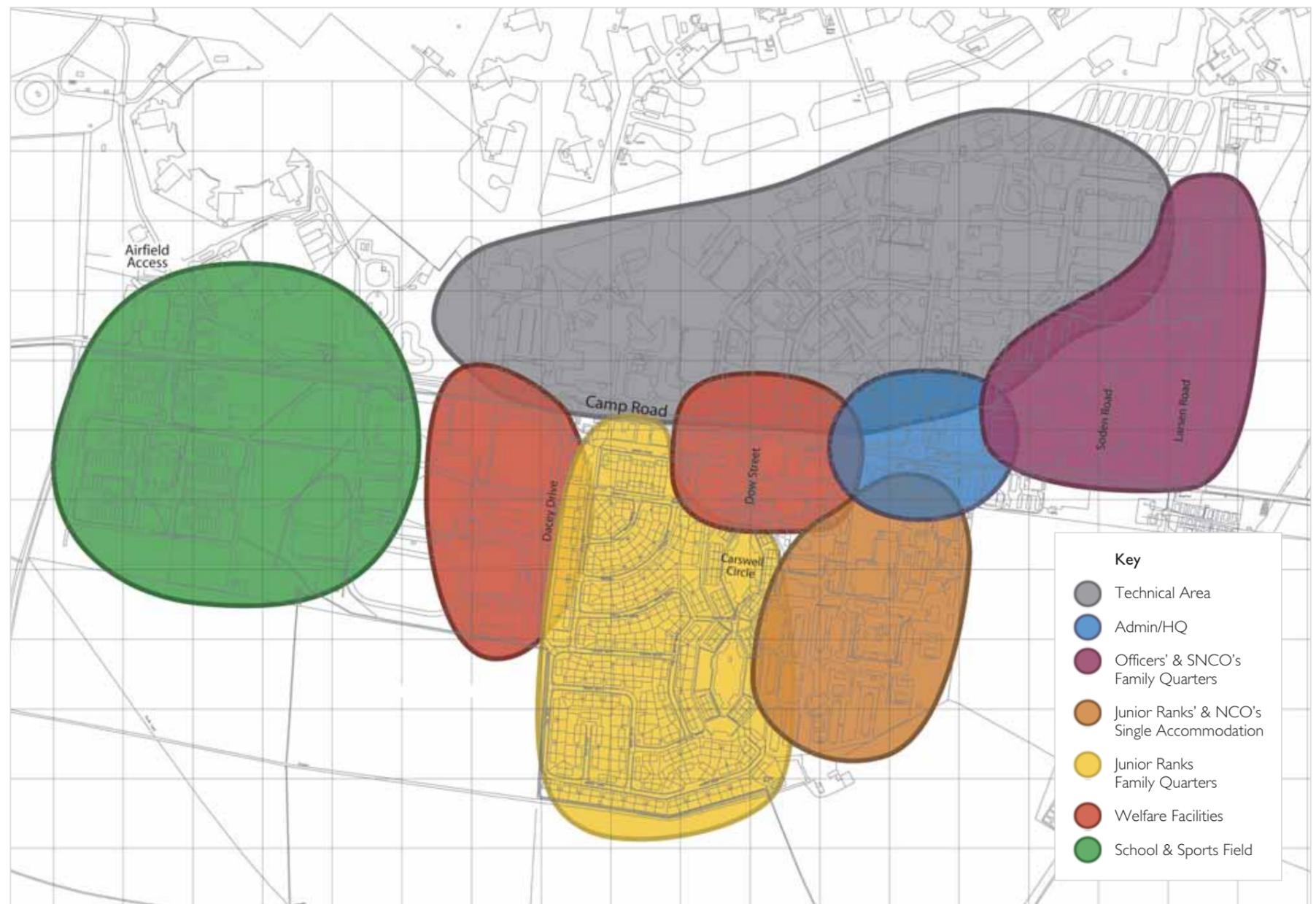


fig 2.22 Broad disposition of original uses (with reference to Conservation Area Appraisal)



fig. 2.23 Officers' housing

and landscape principles. The Appraisal describes a "leafy suburb' setting of grass and organised tree planting".

- **Junior ranks' (airmen's) family housing and bungalows:**
The original houses in Carswell Circle are described as "garden city style rendered buildings located originally in an open setting". This distinctive character is overwhelmed in the context of prefabricated bungalows that dominate the rest of the airmen's family housing areas, and the Appraisal is dismissive of the bungalows' architectural and landscape merit.
- **Barracks (junior ranks' and NCOs' single accommodation):**
The Appraisal identifies the grid-like orientation to the original parade ground and the architectural character of the original 1920s buildings. It again describes a campus-style character, but it is to a rectilinear geometry rather than the distinctive Trenchard fan-shape of the technical area. Later developments continue the orthogonal



fig. 2.24 Airmen's family housing and bungalows

siting of buildings, although a truly gridded street layout has not materialised because access routes and parking / service are often not distinguished in the external layout of the area.

- **Welfare facilities and recreational area:**
The Appraisal identifies no coherence in the layout of this area. It comprises large utilitarian buildings (hospital, family store) within areas of sports grounds and parking.
- **Prefabricated buildings:**
The area is isolated and the buildings are in poor condition. The Conservation Area Appraisal does not identify any conservation value in this area.

2.3.5 Heritage assets

Buildings and structures – statutory designations

In the context of a national review of recent military heritage, English Heritage (EH) considered that structures pertinent to the "Flexible



fig. 2.25 Barracks (RAF Domestic and Residential Section)

Response" period of the Cold War were of national and international importance and therefore worthy of preservation. These structures are proposed for statutory designation on the basis of their historic significance. On the wider airfield, these include the Control Tower, the Squadron HQ building, the QRA, the Avionics Maintenance Facility and the Northern Bomb Stores. Within / adjacent to the settlement area it includes the three Nose Docking Sheds, the Hardened Telephone Exchange and the Battle Command Centre. The scheduled structures within the settlement area are shown in figure 2.26

Buildings and structures that make a positive contribution to the special character of the Conservation Area

The Conservation Area Appraisal identifies over a hundred other structures that contribute significantly to the Cold War character of the airbase or shed light onto the historic development of the site as well as the social context of class division within the RAF. These range from small technical or operational structures, such as pillboxes, to some family housing and extensive and visually imposing buildings such as the Officers'

Mess. There is a general recognition of the significance of small features, such as fire hydrants, that reflect American influence on the appearance of the settlement.

Green spaces and biodiversity

The most significant green space is the flying field itself. Within the former technical and residential areas there are significant numbers of mature and semi-mature trees and areas of lawn and grassland that contribute to the character of the settlement. 56 hectares of the flying field is a designated a County Wildlife Site (CWS). See chapter 15 of the ES that accompanies this Design and Access Statement for further information.

Negative factors

The Conservation Area Appraisal identifies a number of factors that contribute to a “menacing and intrusive appearance in the rural landscape”. Nevertheless, these are characteristics intrinsic to the function and purpose of the airbase during its operational period – for example, the boundary fence.

It also notes the poor visual character of the bungalows and other prefabricated structures in the residential zone, and the nature of modernisation and maintenance works that have introduced elements and paint schemes not in keeping with original building designs or that have individualised buildings within formerly more coherent groups. It is also critical of the current use of areas of the base for outside storage, particularly of cars on runway areas where visible from afar.



fig 2.26 Scheduled structures

2.4 Building Stock



fig. 2.27 The 1920s buildings were constructed in traditional forms and materials (brick, slate) - office block No. 125



fig. 2.28 Interesting forms remain, but need adaptation and repair - narrow boat workshop block No. 103



fig. 2.29 Many buildings are in poor repair and of little intrinsic interest - disused offices block No. 403

2.4.1 Summary of Assessment

Building appraisal

Over 700 existing structures stand on the site, a significant number of which are still in day-to-day use. Prior to the commencement of work on design proposals, an external architectural assessment of all accessible structures on the flying field and settlement area was undertaken, to record any architectural features of note, determine their broad condition and to identify possible future uses to which they could be put. A separate Building Appraisal document accompanies the planning application.

Character

In summary, the current building stock is an eclectic mix of built forms and materials, which, common to most airfields, were for the most part built to serve functional needs; therefore little attention was paid to aesthetics in their design. However, within the settlement area, some of the original, brick built RAF buildings from the 1920s have been more thoughtfully

designed, as evident by the greater attention paid to their setting, form and the incorporation of architectural details. This attention to detail serves to give these buildings a more attractive character than some more recent structures that surround them, many of which are little more than prefabricated shells.

Condition

Those buildings that have continued to be used since the closure of the airfield are for the most part in a fair to good state of repair and fit for their current purpose. Some other buildings are dilapidated but could potentially be refurbished and put to commercial use, whilst some have declined to such an extent that demolition is the only real step forward for them.

Re-use

The simple, functional form of the majority of buildings on the airbase, combined with their location, effectively limits the number of uses to which they can be put. Nevertheless, as evident from the mix of

commercial occupiers now on site, a variety of imaginative uses have been found for a number of the common building typologies, therefore similar uses for currently unoccupied buildings could well be found in future.

2.4.2 Assets

Housing

As described in the Building Appraisal, all housing units across the site have been maintained in a generally good state of repair and the majority of units are currently occupied. The terraced, rendered, brick units that form the northern section of Carswell Circle and the former officers' housing to the north of Camp Road are regarded as particularly attractive residential areas which should be incorporated into the new development. The prefabricated, concrete bungalows to both the south and north of Camp Road, whilst not regarded as having any features of architectural merit, are spacious units and popular with their occupiers. However, their distinctive layout, in wide, shallow plots, does create an urban structure that would be difficult to redevelop to acceptable design



fig. 2.30 Carswell Crescent – 1920s RAF terraced housing: two units were later combined into one to meet American expectations for domestic space standards

standards. Other brick built houses to the south of Camp Road are not as attractive as the officers' housing or north Carswell Circle but are again well occupied.

Other Buildings in the Settlement Area

Several businesses currently occupy buildings in the settlement area both to the north and south of Camp Road. Other buildings in the area have also been identified by NOC as being suitable to let. Few of these buildings are regarded as being of significant architectural merit, however they provide employment opportunities for the area and an important source of income for the continued maintenance of the base. The former barracks area to the south of Camp Road is currently used by Thames Valley Police for training purposes, but no other viable use has been identified for the majority of the building stock there. Further investigations would be required to determine whether it is possible to convert the red brick buildings adjacent Camp Road (buildings 455, 457 & 459, area 1) to productive use. The settlement already possesses a small general store, a nursery, a community hall and a church (buildings 492,



fig. 2.31 Church - existing community facilities are well used and should be retained and improved

442, 549 & 572 respectively) that serve both the residential and business areas. Buildings to be retained are shown in figure 2.33.

Buildings on the Flying Field

Businesses also occupy many of the buildings and hard standing areas on the flying field and again others have been identified by NOC as potential lets, providing significant employment opportunities across the airfield as a whole. In addition, English Heritage has defined areas and individual buildings of special significance to the Cold War heritage of the airbase, which will be retained and preserved accordingly and may in future form part of a Heritage Centre.

2.4.3 Redundant Structures

Numerous ancillary structures including water-towers and fuel tanks, stores, generators and boiler houses across the site are now redundant and have no potential future use but contribute to the character of the airfield as a whole. Many buildings are in such a poor state of repair that it is not reasonable to consider them for conversion to other uses, these



fig. 2.32 Community hall

include the old school buildings to the south of Camp Road (see Building Appraisal area 4) and certain former squadron buildings on the flying field (see areas 8 and 9). Some buildings, such as the barrack blocks to the south of Camp Road, are in a fair state of repair but are unsuited to integration into a new development. The old hospital, shopping facilities and social complex also fall into this category. The gymnasium (building 583, area 3) is currently in use but not regarded as viable in the long term, and the neighbourhood shop (building 492, area 1) remains an essential neighbourhood facility.

2.4.4 Key Buildings & Structures

The site contains many buildings of historic importance, some of which have recently been subject to designation as Scheduled Monuments. Those buildings that are outside the settlement area should be unaffected by any construction processes, though some demolition work will be required in their vicinity and boundary treatments etc. will also need to be altered. The two monuments located within the settlement area should also be unaffected by construction work as they are situated away from the main regeneration zone. These concrete buildings were formerly used as the base's Battle Command Centre and Hardened Telephone Exchange (buildings 126 & 129, area 7) and will be adjacent to the Heritage Centre proposed on the site.

The form of the trident area and the old parade ground, to the north and south of Camp Road respectively, are also considered to be of historic significance in the layout of the air base. These elements will therefore be incorporated within the development and will serve to inform its character areas.



fig. 2.33 Buildings to be retained in the Conservation Area



fig. 2.34 Officers' Mess:- a landmark building from the original 1925 RAF development



fig. 2.35 Heyford House, former HQ building is currently in office use



fig. 2.36 The gatehouse:- the original 1925 part although extended by a poor later addition



fig. 2.37 Type A Hangars:- their relationship to the open expanse of the airfield is key



fig. 2.38 The narrow-boat workshop retains some of the character of the Technical Area

2.4.5 Character Buildings

The building appraisal illustrates a number of existing buildings, which, whilst not listed, possess a distinctive architectural character that has a significant impact on the site and which could be retained within the settlement area as a link with the history of the site, as noted below. Chapter 16 of the Environmental Statement (Cultural Heritage) gives further detail:

- Officers' mess (building 74): Red brick building, built in the 1920s has an impressive façade and original architectural detailing, enhanced by its formal setting. Significant investment would be required to bring the building up to modern standards.
- Heyford House (building 52): Red brick 1920s building, currently in use as offices. The building has a significant presence and a prominent location at the primary entrance to the technical area.
- Main gatehouse (building 100): 1920s building has similar detailing to Heyford House and shares its prime location.
- 'Type 'A'' hangars (buildings 151, 172, 315, 320, 345, 350): These steel frame buildings are recognised by English Heritage as prototypes for inter-war hangar design and have a significant role as the interface between the airfield and settlement area.

- Narrow-boat workshop: (building 103); Simple, brick, inter-war building with architectural features that are typically found in buildings of a more industrial heritage.
- Structures within the Barracks and Institutions area are also of merit.

2.4.6 Boundaries

The site is complex and there are several boundaries that require careful design and management, either with respect to the relationship between different building typologies, or between the built form and the neighbouring landscape. These are:

- between the airfield and countryside to the north-west, north, west and south;
- between the airfield and settlement area;
- between the 'Type 'A'' hangars and the trident area, and
- along Camp Road.

2.5 Transportation & Access

2.5.1 Existing Street Network

General traffic and access

The existing street pattern is summarised in figure 2.39. Camp Road is the prime vehicular access route both to and through the site and runs more or less directly east/west through the settlement area. It acts as a significant dividing element between the northern and southern sections of this zone from which traffic feeds into the site at selected points, some of which are gated.

To access the wider airfield, commercial traffic currently has to travel from east to west along the full length of the main settlement area to enter the site at the westernmost gate. There are no access points around the airfield perimeter. For businesses using buildings on the flying field there is an essential need to maintain security between the flying field and other parts of the development, and this constrains options for access. Other business traffic enters the site at the main gatehouse where formerly there was also vehicular access south to the barrack blocks.

Residential areas are accessed at just a few points off Camp Road. Other site areas are fenced off with only limited access provided for infrequent uses. The entry points into these areas could potentially be re-opened to increase permeability and linkage of routes through the development.

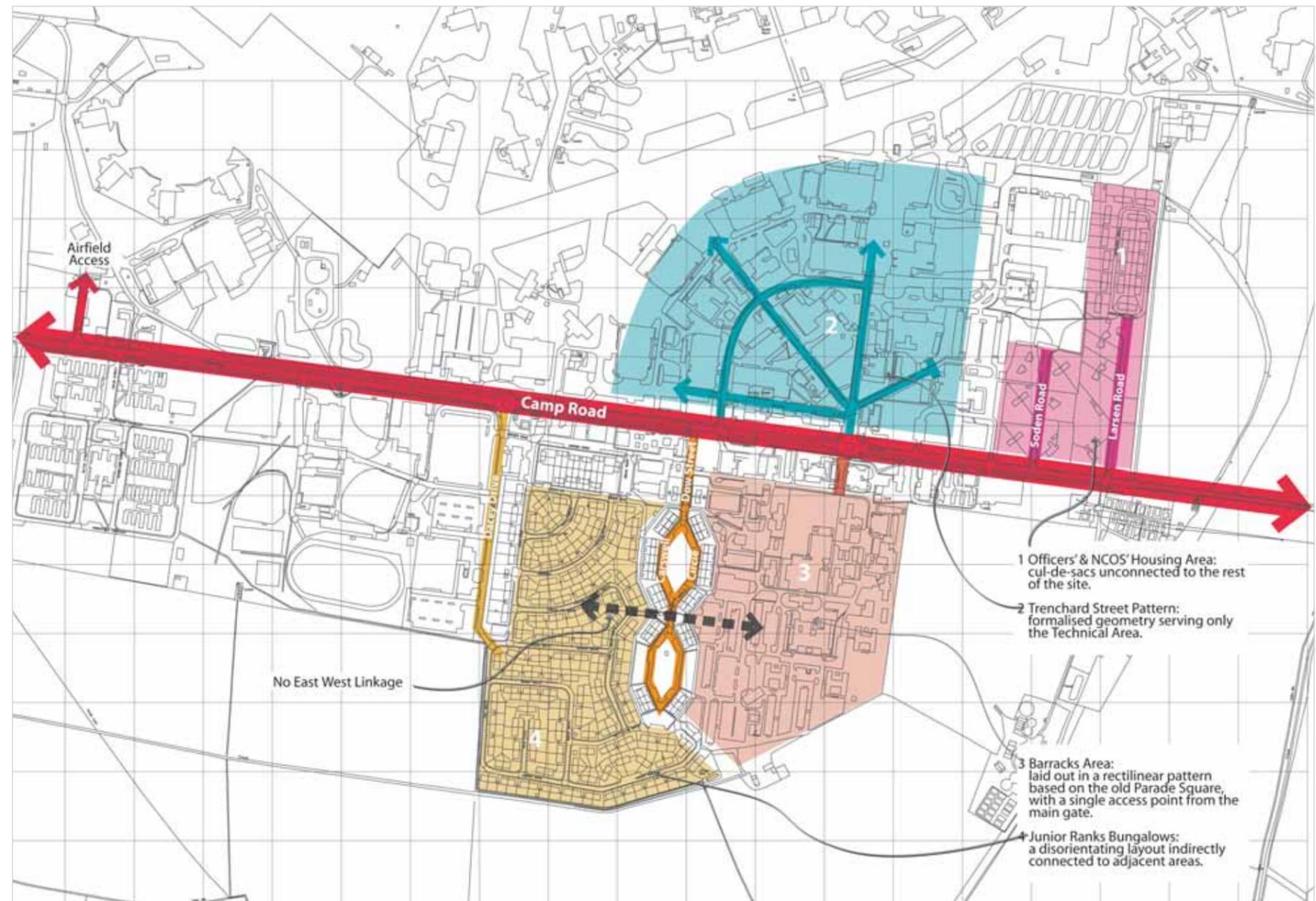


fig. 2.39 Existing street network: a cellularised street pattern with few east-west linkages

HGVs

The site is currently occupied by a number of businesses that are served by Heavy Goods Vehicles (HGVs), the majority of which approach the base along Camp Road having come from the M40 to the east. Access arrangements for these have been identified as a significant issue to be addressed in development proposals, as the main entry gate to the flying field currently lies to the far west of the settlement area.

Residential access

The existing street network enables a relatively good separation of residential and business traffic, although most of the heaviest vehicles have to pass the length of Camp Road to reach the western gate. Residential traffic turns off Camp Road at Dacey Drive and Dow Street to the south and at Soden Road and Larsen Road to the north. The main significance of this arrangement for the proposed masterplan is that the existing site is effectively cellularised into discrete areas, shown by the background shade in figure 2.39. Thus, the officers' housing, the junior ranks' bungalows, Carswell Circle and the barrack block area are separated from one another; therefore links between them will have to be established to create an integrated neighbourhood plan.

Camp Road

Traffic calming is currently achieved along Camp Road through 'build-outs' at either end of the main settlement area, which effectively narrow the street to allow traffic movement in one direction at a time. There are also two roundabouts between these features, one at the main gatehouse junction and one at the top of Dacey Drive. Speed ramps are employed within the trident area to reduce local traffic speeds.

2.5.2 Walking and cycling

The flat nature of the site means that both cycling and walking are relatively easy around the settlement area though the HGV usage of Camp Road is not conducive to safe cycling. Footpaths are provided in most existing residential zones, the main exception to this being along Trenchard Circle which serves the bungalows to the north of Camp Road. The trident also has some existing footpaths, as does the main barrack block area, but otherwise provision for pedestrians is minimal

across the base, as vehicular movement dominates. The potential for cycling and walking around the main flying field is somewhat restricted by the significant distances involved.

Historic routes

The site is bounded in part to the south-west by Kirtlington Road and to the east by Chilgrove Drive. These vehicular routes currently provide no direct site access. Public rights of way also partly bound the site to the north and west. In general, the development of the air base caused historic routes across the site to be disrupted or completely severed, including Portway to the west and Ave's Ditch to the east, and also some local footpaths. Improvement of footpaths and integration with the network offsite would be part of the strategy to reinstate longer distance walking opportunities.

2.5.3 Public Transport

Heyford currently has a limited bus service, which also provides links to Bicester railway station. It is intended that the service will be enhanced in order to reduce the number of car trips to and from the development.



2.6 Socio Economic Context

2.6.1 Background

Chapter 5 of the Environmental Statement gives a detailed report of the current socio-economic conditions that apply to Heyford Park, including employment, education, housing provision, retail provision, health provision, crime and community facilities.

Overlying policy for Heyford Park, the Regional Economic Strategy for the South East, sets out the key objectives for 2006-2016 aimed at achieving the vision for the south east region: "to be a world class region achieving sustainable prosperity". The strategy also outlines key needs and targets on a spatial level. In the rural south east, housing is identified as being vital for vibrant rural communities to be able to maintain a working population, particularly young people and young families.

The site is near the Oxford to Cambridge Arc, a designated growth area that covers the area between Oxfordshire and Cambridgeshire and includes parts of Bedfordshire, Buckinghamshire and Northamptonshire.

The planning brief sets out the principles for a new settlement on the site of the proposed development in relation to location, extent, conservation of heritage, living environment, settlement components, transport, design, sustainability and management.

2.6.2 Demographics

In summary, the population of Heyford Park is slightly more youthful than Cherwell, Oxfordshire and the South East. Heyford Park has a relatively high economically active population (79.3% of the total population). A higher proportion of the population is in full-time employment, and there is a lower proportion of retired individuals. This probably reflects the type and tenure of the existing housing stock.

2.6.3 Employment

The RAF Upper Heyford Revised Comprehensive Planning Brief 2007 states that currently the site provides approximately 1,000 jobs – this compares with the identification of 879 actual jobs in existing buildings, although there is capacity for up to 283 in currently vacant but usable

buildings (see table in 3.5.2). The largest employer is QEK, employing 550 people on the site for its car storage and distribution activities.

2.6.4 Housing

The broader Upper Heyford area has a higher proportion of dwellings with 7 or more rooms (35.6%) compared with Cherwell District (25.2%), Oxfordshire (27.0%) and the South East (24.6%). This is less true of Heyford Park itself, where a high proportion of the existing stock is two and three bedroom bungalows and houses. The wider area has a lower proportion of dwellings in all other size groups than Cherwell District, Oxfordshire and the South East. In particular, it has a much smaller proportion of dwellings with 2 rooms. This could reflect the rural nature of the surrounds and large country properties in the area, a greater proportion of households with 3 to 4 people and fewer 1 person households.

2.6.5 Retail provision

The RAF Upper Heyford Revised Comprehensive Planning Brief 2007 (Adopted SPG, March 2007) notes that the expected population of the proposed new settlement on the site would not be sufficient to support extensive retail activity. The Brief therefore recommends that this activity be accommodated in larger urban centres such as Bicester and that provisions made at the site be limited to the day-to-day needs of the population in order to reduce the need to travel unnecessarily.

This recommendation is supported by the fact that the proposed site is within 30 minutes travelling time between the three major urban centres in the Cherwell District as identified above. In fact, the proposed site is located approximately 18 km from Banbury and Kidlington and 13 km from Bicester. These urban centres already provide most of the major high street shops.

2.6.6 School Provision

There are no primary or secondary schools located within 1.5km of the site. The School Organisation Plan (2004-2009) notes the potential for a

new settlement at Heyford Park as outlined in The Structure Plan 2011 and draft Cherwell Local Plan.

2.6.7 Healthcare

No primary care facilities are identified within 1.5km of the site. The closest existing doctor's surgery is located at Deddington, approximately 8km. There are 2 branch surgeries operating part-time at Kirtlington Village Hall located 6.1 km. There are 3 dental surgeries located approximately 8km away, in Bicester, and these are currently accepting new fee paying NHS patients. There are several pharmacies and opticians in Bicester.

2.6.8 Community facilities

There are village halls at Upper Heyford and other nearby villages but the scale is limited since they are only intended to serve small communities.

On the site itself, the chapel annex is used by a number of clubs for community activities. One of the hardened aircraft shelters has been used as a venue for dance company, Oxford Inspires. In terms of sporting activities, the Oxfordshire Playing Fields Association has experimented with using one of the hardened aircraft shelters as a skate-park.

Nearby opportunities for informal recreation include:

The Oxford Canal – for boaters, walkers and cyclists;

The Oxfordshire Cycleway – a signed circular route for cyclists;

The National Cycle Network Route 5B and 6A – for cyclists.



2.7 Consultation

3.7.1 Stakeholder Engagement

Today, Heyford Park consists of some 300 residential properties, all of which were formerly used to house airbase personnel, and some 60 businesses that occupy a number of buildings and former aircraft hangars across the site. Both communities have become well established and a strong sense of 'belonging' exists on the base – this has been recognised by the NOC and its approach has been based on ensuring this sense of community remains and is enhanced.

Discussions about the development of Heyford Park have been taking place for a number of years. As such, commercial and residential tenants have long been aware that some form of development would be required at Heyford Park to secure its future.

Given the NOC's position as landlord for the residents of Heyford Park, consultation has been exhaustive and continuous. As well as embracing the spirit of consultation under PPS12, the NOC is itself part of the Heyford Park community and accordingly the consortium has done everything possible to ensure its commercial and residential tenants have been an integral part of the development process, that their views have been sought and considered and that their desire to remain residents of Heyford Park continues.

This pre-application consultation process has been designed to fulfil four primary objectives:

- To provide clear and up-to-date information on the emerging proposals for the commercial and residential tenants of Heyford Park, the surrounding local community and other key stakeholders involved with the site – in advance of submitting an outline application.
- To engage with all stakeholders, with a particular focus on existing residential and commercial tenants, and provide an opportunity to give feedback on the plans, prior to the submission of a planning application.
- To seek views on the steps needed to be taken to ensure a long-term and sustainable future for Heyford Park.

3.7.2 Consultation Methodology

Consultation stages

It was agreed between the NOC and Cherwell District Council that pre-application consultation would consist of three distinct 'rounds'.

Round One – outlining the broad principles of development at Heyford Park in line with the Oxfordshire Structure Plan 2016 and Cherwell District Council's Draft Revised Comprehensive Planning Brief.

Round Two – exhibiting a draft version of the proposed masterplan and gathering feedback and comments.

Round Three - exhibiting a final version of the masterplan submitted to Cherwell District Council for outline planning approval.

Round One

Round One took the form of a public meeting/exhibition and was organised by Cherwell District Council. It took place at the Heyford Park Chapel on the 8 August, 2006 and was attended by approximately 100-150 people. More details on the exhibition, its objectives and feedback are available directly from Cherwell District Council.

Summary of Round Two Consultation Activities:

- Discussion and confirmation of consultation methodology with Cherwell District Council.
- Individual briefing meetings with key elected representatives.
- Writing to key stakeholders, including all residential and commercial tenants, officers and members of Cherwell District Council, representatives of Oxfordshire County Council and the Government Office of the South East, Heyford and neighbouring Parish Councils, local business groups and representatives from the media.

- For the consultant team to take on board, as far as is reasonable, feedback from the consultation process in the evolving plans for the proposed development.

- Dedicated briefing meeting with residential tenants.
- Development of Q&A document.
- Advertising in local media and press release regarding the public exhibition.
- Public exhibition with information to take away and feedback form with freepost reply.
- Proactive media relations, including press briefings with the Bicester Advertiser, Bicester Review and BBC Radio Oxford, resulting in strong coverage throughout the local area and wider region.
- Closed exhibition session for residential and commercial tenants.
- Closed exhibition session for elected members.
- Creation and distribution of scheme newsletter including copy of draft masterplan.
- Setting up of dedicated hotline phone number, e-mail and freepost address.
- Continual engagement with commercial and residential tenants through written and verbal communications.

Round three

Round three is yet to be undertaken.

3.7.3 Conclusions and Masterplan Response

The main points arising from the round two consultations are set out below, with the consequent design responses that were incorporated into the masterplan.

- There were some comments concerning mixing residential and commercial areas and risks to health and safety that this might present. The reason for this arrangement is the expectation of Cherwell District Council's Comprehensive Planning Brief for the site that the Trenchard area of the existing settlement should be developed as a mixed residential and business area. Health and

safety was a prime consideration when designing this part of the scheme, and accordingly the business area will be accessed via its own segregated entrance / exit, which does not pass through the residential part of the settlement.

Whilst respondents' comments were noted on this issue, it was not felt that any changes to the plan were needed or possible to accord with the Planning Brief.

- Many respondents felt that the buildings and hardened aircraft hangars should continue to be used sympathetically for business purposes. This has also been a subject of discussion throughout the consultation process and with over 20% of residents living and working on the base, the need to provide jobs for the local and surrounding community has been a priority.

Accordingly, the NOC is liaising with Cherwell District Council to find suitable tenants for all the buildings and aircraft hangers where sympathetic commercial use has been deemed appropriate. In many cases, this would simply mean retaining those businesses that already occupy the buildings.

- The demolition of the majority of existing residential properties has dominated discussions with residents throughout the consultation process. It has been the subject of numerous meetings and has accounted for the vast majority of calls to the hotline. Whilst news of demolition was not unexpected, residents were clearly concerned about their future. Many wished to remain at Heyford Park and a priority for the NOC was to look at ways this could be achieved.

The NOC is working with Cherwell District Council to agree a Local Lettings Policy whereby existing residents who qualify for affordable housing would be given priority in the allocation of new affordable homes at Heyford Park.

- The security fence proved a point of contention with a number of residents. Some felt it was an eyesore that should be removed, allowing the flying field to be opened up to the public, whilst others felt it was important to retain because of the security it afforded and

also that it was an integral part of Heyford Park's heritage.

Acknowledging all sides of the debate, it was decided that the fence would be removed to the east of the site around Aves Ditch (except around the Southern Bomb Store). Where the fence remains in other parts of the site, the barbed wire will be removed from the top and planting will minimise visual impact. However, it was determined that the barbed wire had to remain around the Northern Bomb Store and the QRA as these had been scheduled by English Heritage as Cold War monuments.

- Visitors to the exhibition and representatives from Oxfordshire County Council have expressed a desire to see public access improved across the former flying field.

The NOC is now working with Oxfordshire County Council to provide additional footpath links into Heyford Park.

- The idea of a Heritage Centre at Heyford Park to act as an education resource for both residents and visitors to the base received widespread support.

The NOC's plan will have provision for a Heritage Centre in a former aircraft hangar close to the former Cold War Command Post.



2.8 Summary of Constraints & Opportunities

2.8.1 Constraints

Figure 2.40 and 2.41 map the key constraints to development presented by the site. There are major areas of constraint on the former flying field, which determine that new development will largely be restricted to the existing settlement area. Within the settlement area, the effects of many of the more minor constraints can be mitigated, but the layout of proposals is very significantly determined by physical constraints such as trees and buildings to be retained. The main issues include:

- Conservation area and listed / scheduled buildings.
- Ecological designations.
- Visual and physical barriers and intrusions.
- Redundant structures and areas of defective infrastructure.
- Root protection areas.
- Areas of contamination due to the former Petrol/Oil/Lubricants (POL) system and other minor contaminant risks.

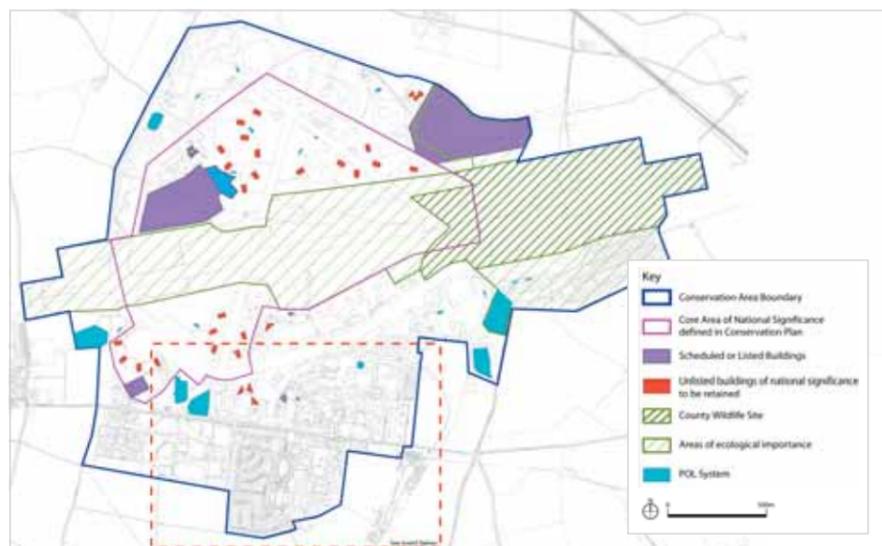


fig. 2.40 Constraints across the wider area

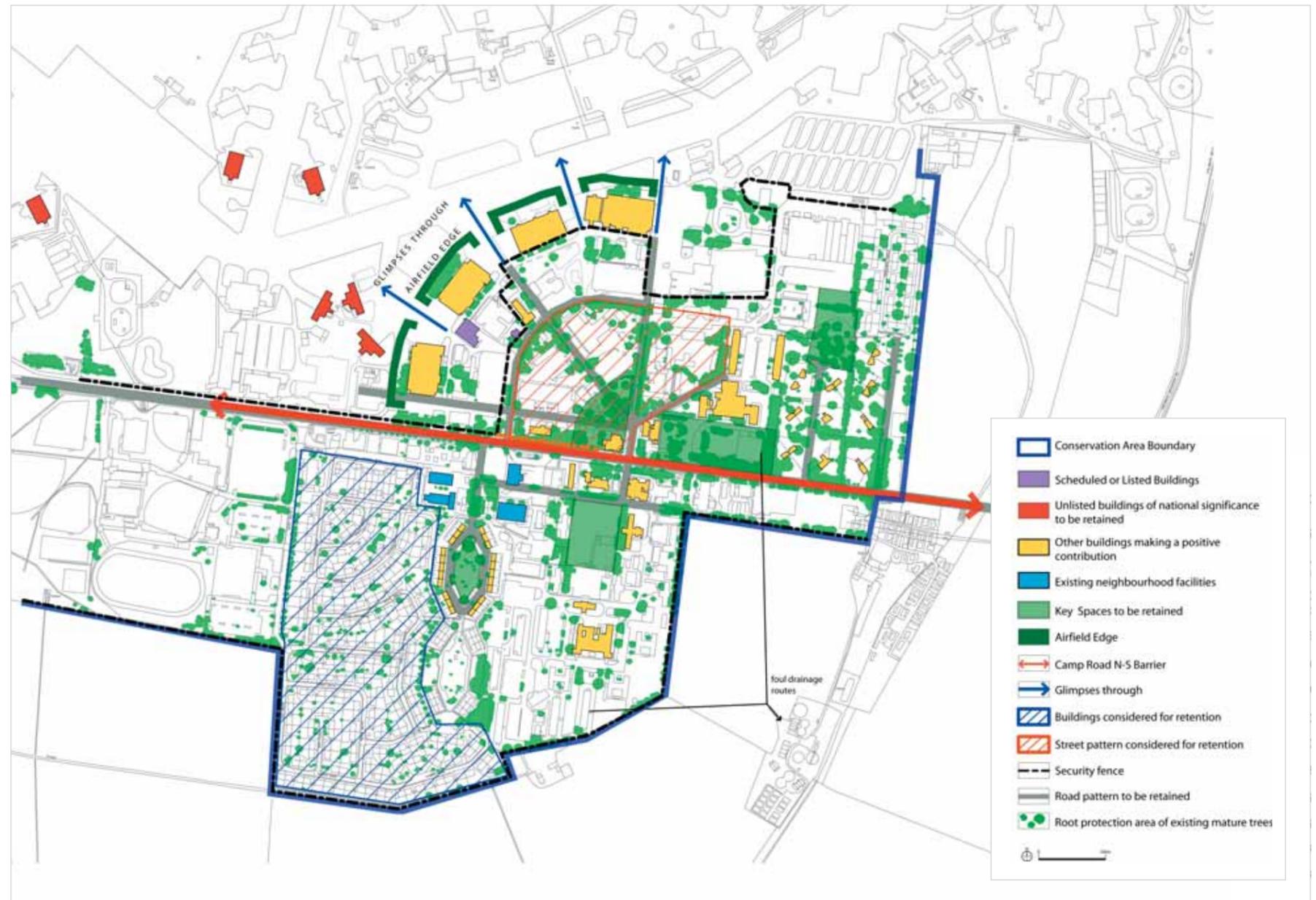


fig. 2.41 Constraints within the development area

2.8.2 Opportunities

Figure 2.42 shows the broad scope of opportunities for new development in the settlement area and benefits that could be gained in the wider context. As a living and working environment Heyford Park can be made more attractive and sustainable by:

- improving physical links between the existing separate areas within the settlement area – e.g. north to south across camp road and east to west between family housing and adjacent areas;
- creating a compact settlement area with neighbourhood facilities and public transport within 400 metres of most housing;
- retaining existing trees and buildings of attractive historic character;
- extending the formal avenue structure of the original RAF layout;
- enhancing green links within the settlement and to adjacent countryside;
- creating focal points around neighbourhood facilities and historic groups of buildings.



fig. 2.42 Opportunities within the development area



fig. 2.43 Landscape objectives and opportunities

2.8.3 Landscape opportunities

Specific landscape and visual objectives for the proposals are to:

- remove the buildings of greatest visual impact, so far as this is possible within the need to retain structures and buildings of historic interest in accordance with PPG15;
- provide a carefully selected palette of locally indigenous plants, suitable for the plateau landscape, to soften, but not screen, selected views and without creating inappropriate large areas of woodland;
- retain and protect the historical landscape character of the site, as a Cold War airfield and command centre, for the benefit of future generations;
- provide a landscape management regime to protect the Cold War airfield landscape character and to restore existing copses and hedgerows;
- restore the key north-south pedestrian routes of Portway and Ave's Ditch, and link these to other pedestrian footpaths and bridleways;
- provide appropriate open space and tree planting within the proposed settlement area;
- remove fencing close to Upper Heyford village which is inappropriate to modern day uses and will not undermine the airfield's special historic character;
- survey, retain and restore the existing tree cover of the proposed settlement area and of the airfield. Provide public access and understanding of the historical and ecological features;
- enhance key views, particularly from Rousham, by the removal of water-towers and chimneys.

2.8.4 Ecology

Opportunities to enhance the ecological asset of the site include:

- To protect and enhance the County Wildlife Site.
- To maintain the favourable conservation status of protected species on the site.
- To manage the whole site in an integrated manner for its nature conservation interest as part of the Base Management Plan.
- To retain a bio-diverse environment for communities.

2.8.5 Heritage and buildings

A number of opportunities emerge in respect of the conservation assets of the site.

Conservation Plan

A Conservation Plan was prepared and agreed in September 2005 that was the starting point for the preparation of the Conservation Area proposals. It set out, in four key objectives, a vision for the site that is:

- a landscape in which buildings of international and national heritage significance (whether this arises individually or as part of a group or as features in the landscape) are conserved in an appropriate setting;
- a landscape of high nature conservation value in sustainable management;
- a landscape that is integrated with the rural landscape of the Cherwell Valley without compromising its integrity as a monument to the Cold War;
- a landscape where the Cold War plan and functional relationships can be read even where buildings of local significance have been removed or landscaped.

The settlement area

These broad objectives apply across the whole air base and, for the flying field, physical change will be limited. Within the settlement area there will be significant development, and objectives will be to:

- reflect the military character established by the original buildings on the site in urban form and architectural approach;
- retain buildings and structures that make a positive contribution to the special character of the Conservation Area in appropriate new uses where possible;
- retain the distinctive layout patterns of the Trenchard area and express them in new development;
- retain the character of existing tree cover and the avenue character that it lends to existing street patterns in the Trenchard area;
- retain / restore reference to historic spaces such as the Parade Ground;
- explore the potential for creating a new boundary landscape to integrate the conserved airbase features and character within the surrounding landscape;
- reflect the distinctive scales of sub-areas within the technical site and residential zone in the character of new development;
- recognise the critical relationship of scale between the "A" type hangars and the flying field (including glimpsed views between them); and
- mediate between the scale of the general domestic scale of new development and the character of the flying field and hangars.



masterplan
rationale



- 1 New Housing
- 2 New Offices
- 3 Business Area
- 4 Employment Area
- 5 Retail Area
- 6 Existing Housing
- 7 Existing Bungalows
- 8 Existing Nose Docks
- 9 Heritage Centre
- 10 Pub/Restaurant
- 11 Hotel/Conference Facilities in former Officers' Mess
- 12 Community Centre
- 13 Church
- 14 Primary School
- 15 Nursery
- 16 Parade Square
- 17 Sports Facilities
- 18 Landscape extended as paddocks into the development
- 19 New neighbourhood centre park
- 20 Network of equipped areas for play

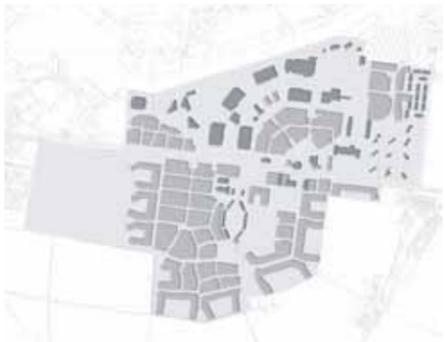


fig. 3.1 Built-form masterplan



3.1 General Approach

3.1.1 Design issues and response

This Design and Access Statement (DAS) sets out the thinking behind the masterplan for Heyford Park. It follows detailed study of the existing and historic context of the site, which is set out in detail in the accompanying Environmental Statement and which has informed the development of the design concept. The DAS summarises this contextual background in the preceding section (Context Appraisal) and draws from it principles for the future development, which are set out in this section.

The site's special significance is embodied in the designation of the former military establishment of RAF Upper Heyford as a Conservation Area for its importance as an historic example of a Cold War airbase. The original military use was imposed uncompromisingly on the landscape and its subsequent development has added further intrusive features. Now, the major challenge for the site and its design is to resolve the many conflicting layers of development that its history has created.

At the heart of the masterplan proposals are some fundamental objectives to address the design tensions that arise from these issues:

- Create an open and integrated community living and working at Heyford Park, where historically these functions were segregated and access denied to most of the airbase
- Retain the character of the flying field and specialist buildings in the Conservation Area, while recognising their visual impact in the wider surrounding landscape
- Maintain the very large scale of the relationship between historic buildings and the flying field, while achieving the human scale required of residential areas
- Determine an appropriate character for the development, noting that the established RAF character differs significantly from local historic character in both settlement layout and building traditions

The design response, which is set out in detail in this document, is based on some key ideas:

- Place new development only within the area of the existing core

settlement, in order to maintain the relationship of the built area and the open landscape and flying field

- Remove the clutter of poor buildings and structures close to the settlement area in order to emphasise the settlement in its landscape setting
- Use development patterns from local village forms to create a new settlement edge that fits into the landscape in an unobtrusive way
- Retain the formality of the street layout in the existing settlement and extend it into new and redeveloped areas
- Reinforce the existing settlement centre with new shopping and school facilities and to retain and improve key community buildings
- Provide new uses for retained buildings both within the settlement centre and on the wider airfield; and
- Achieve these objectives through the use of sound urban design principles.

3.1.2 Responding to context

Historic context

RAF Upper Heyford is one of six Conservation Areas within a four-kilometre radius, but all five others are traditional rural settlements of high architectural and environmental quality. They have grown into the landscape, while RAF Upper Heyford was imposed upon it. The masterplan must integrate the settlement with its landscape as naturally as possible.

The other Conservation Areas are characterised by a consistency of architectural scale, form and / or materials; domestic in nature except for one or two landmark buildings. At Heyford Park, scale varies very greatly; certain parts of the settlement and landscape have very different architectural characters, and there are some uncomfortable juxtapositions. These attributes contribute significantly to the unique character of the Conservation Area, but the masterplan will have to resolve design issues that derive from the change of an institutional



fig. 3.2 Clifton:- showing a main street with lateral lanes and paddocks extending to the centre of the village

establishment into a coherent new settlement providing modern residential and employment development.

Socio-economic context

The masterplan also responds to local needs in terms of employment, housing and community facilities. The structure of the settlement around a central hub of facilities is fundamental to the masterplan, with a focus on local shops, a primary school, a pub/restaurant and the existing chapel and community hall.

3.1.3 The settlement in its landscape

In considering the relationship of the redeveloped settlement to the landscape, the traditional development patterns of villages in the local area are a useful reference. The aerial view of Clifton (fig 3.2) shows how a main street has become established with a fairly continuous frontage of buildings, with lanes joining it laterally. The edge of the settlement is quite ragged, and the landscape frequently extends into the village as fields and paddocks between the lateral lanes. This arrangement allows



fig. 3.3 Kings Sutton:- recent development creates a hard edge at existing field boundaries

a high proportion of properties even in the centre of the village to have a strong association with the landscape, and hedgerows and paddocks close to the village provide a transition between the built edge of the village and the open countryside. The example of Kings Sutton (fig 3.3) shows traditional attributes close to the centre; however the southern edge illustrates how recent development located hard to field boundaries creates an unsympathetic development edge.

At Heyford Park, there is no shortage of potential development land because of the limit of dwelling numbers imposed by the Comprehensive Planning Brief and the need to achieve average densities above 30 dwellings per hectare to meet the expectations of PPS3. It is also an objective to reflect the open and spacious character of the Conservation Area in new residential development, and to extend the benefits of this setting to as many future residents as possible. Currently, the existing southern edge, in particular, presents a hard line to the open countryside at Harris Road and Tait Drive, and an approach more like that of the surrounding villages could both improve the visual impact of the

development edge and provide residents with more visual contact with open landscape. This approach is illustrated in the built form masterplan at figure 3.1.

3.1.4 Character within the settlement

The appraisal notes the variation in character areas presented by development in the settlement area and across the airfield. Much of the existing building stock in the settlement area will be demolished to make way for new housing, because it is either unsuitable for adaptation or impractical to upgrade to acceptable environmental standards. However, reference will still be made to the strong architectural character of the early RAF development – particularly the controlled geometry of street layouts and spaces, the “British Military” (quote, Conservation Area Appraisal) style of the key buildings using traditional materials and details in simple ordered designs, and the quiet formality of green elements. These characteristics can translate comfortably into modern residential design.

3.1.5 Masterplan Objectives

The special character of Heyford Park is attested by the designation of the whole of the former air base as a Conservation Area. CDC’s Comprehensive Planning Brief and the Conservation Area Appraisal Statement (2006) set out this special character and it is analysed further in section 3 of this Design and Access Statement. The masterplanning approach has been to embrace the special open setting, military context and modern history of the airbase and express this in a way that affords a taste of its heritage to everyone who will live and work here. The open landscape character, RAF history, a sense of military formality, spaciousness and modern Americana all contribute to this flavour and are used to create attractive, desirable and unique locations.

Six specific masterplan objectives are identified:

1. Plan for neighbourhoods

It is essential that the development is conceived as a true neighbourhood and not just as a housing estate. At Heyford Park the neighbourhood will include not only housing but also extensive areas of employment. The

vision for the neighbourhood must also take account of the interests of the many people who already live or work here.

Neighbourhoods are distinguished by having a centre with a range of facilities within easy walking distance of residential areas and accessible by all. Most people are prepared to undertake a five to ten minute walk in their daily lives and this prescribes a neighbourhood with a radius of a quarter to half of a mile. At Heyford Park the masterplan must provide a balanced development, with housing in both the existing residential areas and the original camp centre.

2. Design with nature

There are a number of major natural assets that need to be incorporated into the masterplan. The retained elements should be connected by landscape corridors to create both visual continuity of landscape and provide potential for wildlife corridors.

The key elements which inform the plan include:

- Many mature trees, of which a substantial number are of the highest grade.
- A defined open character plateau landscape.
- Agricultural fields surrounding the airbase.
- Gentle slopes southwards, picking up the natural drainage of the area.
- Ecological habitats, preserved because of limited public access due to airfield security.

3. Create a legible public realm

The network of streets, squares, open space and incidental spaces will shape people’s view of the new neighbourhood. The way in which street pattern, townscape, land use and human activity are combined is therefore at least as important as the individual buildings.

A permeable street layout (i.e. that which facilitates a choice of convenient walking routes) combined with a hierarchy of street types, differentiated through width, enclosure and design treatment, emphasises

the relative importance of routes within a network. Views and vistas, nodes and landmarks should aid orientation, creating memorable sequences of spaces as one moves through the neighbourhood.

4. Promote local distinctiveness

Successful neighbourhoods have unique characteristics that flow from the way in which buildings respond to the natural landscape. By careful placement and orientation of buildings, the underlying topography of the site can be revealed, extending the area's natural features into the neighbourhood and helping to establish a 'genius loci' that makes the neighbourhood unique.

At Heyford Park, there is the very special built and historic setting of the airfield and military settlement related to it. This provides precedents for the scale, form, materials and layout of new development, but also sets challenges for designs that mediate between the scale of buildings like the aircraft hangars and residential areas.

5. Ensure safe and convenient access for all

A range of residential densities should be provided to suit different locations within the site and make efficient use of land. Amenities such as primary education, community facilities, convenience shopping and essential local services should be provided within the development to minimise the need for off-site travel. Land use and movement patterns are interrelated and the following criteria set out requirements for streets and paths:

- Pedestrian and cycle movement is to be encouraged through a 'permeable' or connected street structure.
- Streets other than the main access roads will seek to restrict vehicular movement to 20 mph through design.
- The bus route should be located such that stops can be provided within 400m distance of most dwellings.
- Measures must be employed on Camp Road through the settlement area to calm traffic speeds and give priority to movements within the settlement, i.e. across the road from north to south.

6. A lasting arrangement

The masterplan must provide a framework for a lasting arrangement for the preservation and management of the historic and natural assets of the whole of the site. At the same time it must ensure sustainable development principles are embedded in the design of new parts of the neighbourhood, minimising the consumption of power, water and fuel and reducing the environmental impacts of waste, drainage and construction materials.

Most buildings should be capable of adaptation over time to ensure that change and flexibility of occupancy is achieved. A range of house types, size and tenure can encourage a broad social mix and enable people to remain in their community throughout the changing circumstances of their lives.

Careful consideration of orientation, fenestration, materials and energy standards can minimise the use of energy in construction and operation.

3.4	3.5
3.6	3.7
3.8	3.9

- fig. 3.4 **Plan for neighbourhoods**
New neighbourhood centre facilities will be provided, including an improved local store
- fig. 3.5 **Design with nature**
Tree cover north of Camp Road – mature trees are an integral part of the 1930s RAF establishment and buildings and roads must be planned to avoid disturbing them
- fig. 3.6 **Create a legible public realm**
The layout of the RAF establishment was strongly ordered around formal elements such as the Trenchard street pattern and Parade Ground. Spaces like these will continue to provide local character and reference.
- fig. 3.7 **Promote local distinctiveness**
Type A hangars are an essential part of the historic site, but are of a difficult scale in relation to new development.
- fig. 3.8 **Ensure safe and convenient access for all**
Camp Road is traffic calmed, but with priority for moving vehicles rather than pedestrians or cyclists.
- fig. 3.9 **A Lasting arrangement**
Hardened telephone exchange and essential Cold War structures will be retained, and a Heritage Centre created on the site.



3.2 Landscape Structure

Heyford Park is a distinct settlement within the wider landscape setting described above (ref 3.1). It is characterised by openness and by areas of mature trees within the settlement area. The treatment of this landscape is therefore a key structuring element of the design.

3.2.1 The edge of the settlement

The design approach adopted for the interface between new residential areas and the adjacent landscape draws on the pattern of development evolved in local villages and discussed above. In the proposals for Heyford Park, primary streets link the residential areas to Camp Road (see Movement Structure, below) and lateral lanes connect internally and also run to the landscape edge. These outer lanes terminate at the development boundary and provide glimpses from the street layout to the countryside. They can provide pedestrian access into the countryside, and new house plots along them enclose green spaces as extensions of the surrounding field pattern. This approach avoids recreating the hard line that the existing housing presents (and which is common in much edge-of-settlement residential development elsewhere). Viewed from the wider landscape, only the houses at the ends of the lateral lanes occur at the edge, and others are set back behind new paddocks and field boundaries providing a layered sequence of landscape elements between the countryside and the new development.

3.2.2 Landscape Structure of the Airfield

The masterplan seeks minimal impact on the landscape of the wider airfield. The landscape structure of the airfield will be achieved by:

- selective removal of the most visually obtrusive hardened aircraft shelters in the north-west corner;
- to the north, replanting of alien species and management of existing woodlands;
- to the west, removal of the runway nib and replacing the former hedgerow along Portway;
- to the south, the replanting of a hedgerow with trees along the farm track leading to Field Barn Farm;

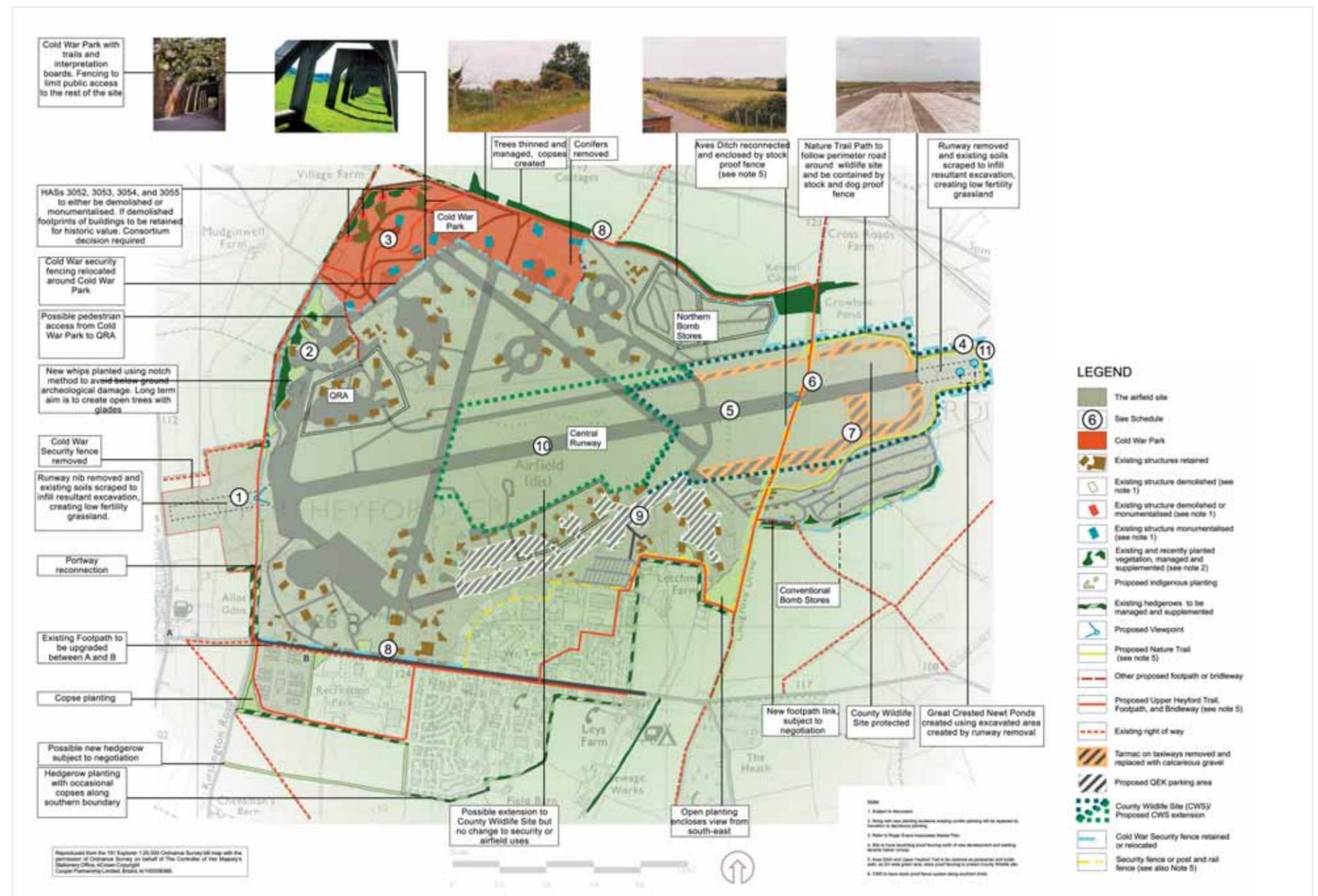


fig. 3.10 Landscape proposal for the airfield

- within the site, new viewpoints will be introduced by the Ave's Ditch and Portway. Viewpoints of the runway will be celebrated by information notices. A new Cold War Trail will be introduced to allow visitors to walk or cycle an 8.8km route linking key elements of the airfield.

3.2.3 Green Network within the Settlement Area

As noted in the Site Appraisal, trees and green space are key to the character of Heyford Park. The Conservation Area Appraisal makes much of the "campus style" of development that is essential to RAF Upper Heyford's special quality. The extension of a network of green space throughout the settlement area is therefore a primary objective of the masterplan and is important to maintaining the character of the Conservation Area in new development.

Figure 3.11 shows the concept of a green network, which starts with existing green space and mature trees at the centre of the settlement area on Camp Road and extends through the site. This network reinforces the link between green spaces and the surrounding countryside; it creates an integrated neighbourhood landscape, a network of green routes and the promotion of walking and cycling throughout the site. This strong landscape based approach produces the distinct areas of built form that constitute the principal character areas of the masterplan.

3.2.4 Retention of existing trees

One of the major constraints identified in the Site Appraisal is the extent of existing trees. The constraints plan, figure 2.41, shows the influence of their root protection areas. Development proposals, including both new buildings and new hard surfaces, are carefully set out to minimise impact on these areas. There has been close coordination between the urban design, the landscape design and CDC's arboriculturalist to ensure that individual trees are considered and proposals amended to be able to retain them wherever possible. Inevitably some trees will have to be removed to allow viable redevelopment, but the great majority of these will be grade C, preserving grades A and B. Grade D trees are recommended for removal in any case, and new tree planting is proposed as part of the proposals, which will compensate for losses. The tree



fig. 3.11 Landscape structure within settlement area

schedule attached to the ES gives a detailed assessment of each tree to be removed and reason for its removal.

3.2.5 New Tree and Hedgerow Planting within the Settlement Area

New trees will reinforce the planting along existing streets, and along new streets, to soften the impact of the built form and help provide a sense of place. The type of planting proposed will aid in creating distinct character streets and in differentiating street hierarchies across the development. New tree planting is proposed to soften the edges between the settlement area and its surrounds. Dying or diseased trees will be removed.

3.2.6 Protected Areas

The County Wildlife Site and all its potential extension will be protected from inappropriate public access in order to retain the value of its grassland.

3.2.7 Recreation Space within the Settlement Area

Formal and informal open spaces are proposed. Formal spaces include the area previously occupied by the parade ground, the centre of Carswell Circle, the lawn in front of the Officers' Mess and the amenity space proposed in front of the new school. The northern and southern areas of the development will be linked by tree structure and associated pedestrian/cycle routes. To this end, pedestrian crossings across the road will take priority. Other smaller areas of formal hard landscaping, such as the square proposed next to the community buildings are also included in the proposals which will provide focal points for public activities. Informal open spaces include the new linear park and existing play area at the end of Soden Road, both dictated by the existing trees that will be retained in these zones.

3.2.8 Sports Pitches and Play Areas

Playing fields

Formal sports recreational facilities will be provided to the west of the settlement area, south of Camp Road, in line with the National Playing Field Association (NPFA) standards, which require that 6 acres (2.42 hectares) be provided per 1,000 people. 1,000 dwellings would therefore require approximately 1.9 hectares of children's play space and 3.8 hectares of playing field space with associated changing facilities. Detailed discussions regarding exact requirements for sports facilities have taken place with the County and District Councils.

Play areas

Play areas at Heyford Park will incorporate the equivalent of:

- Local Area for Play (LAP)
- Local Equipped Area for Play (LEAP)
- Neighbourhood Equipped Area for Play (NEAP).
- Informal play areas

As it is intended to integrate as many different sectors of the community as possible at Heyford, it is proposed to take a less rigid view about segregating distinct users of the public realm. Many public spaces will therefore be designed for use by different user groups at different times of the day.



fig. 3.12 Provision of play and recreation space (diagram)

3.3 Neighbourhood Structure & Uses

3.3.1 Walking Distances

It has been a key aim of the masterplan for the new Heyford Park settlement to keep the layout of new and retained development areas well connected and compact within the constraints of the existing site. Most people are willing to undertake a five-minute walk to reach local shops and services from their home or place of work. A maximum distance that people might be prepared to walk for everyday purposes is generally considered to be 10 minutes. Those walking times translate into walking radii (or 'pedsheds') of 400m and 800m respectively, and these are critical dimensions for planning the neighbourhood. Most people living and working at Heyford Park will be within convenient walking distances of the local shop, community facilities and school. The new neighbourhood centre is more or less equidistant from the furthest housing areas, 640 metres from new housing in the south-west and existing retained housing in the north-east. As far as possible, bus stops will be located within 400m (a 5 minute walk) from all areas of the site.

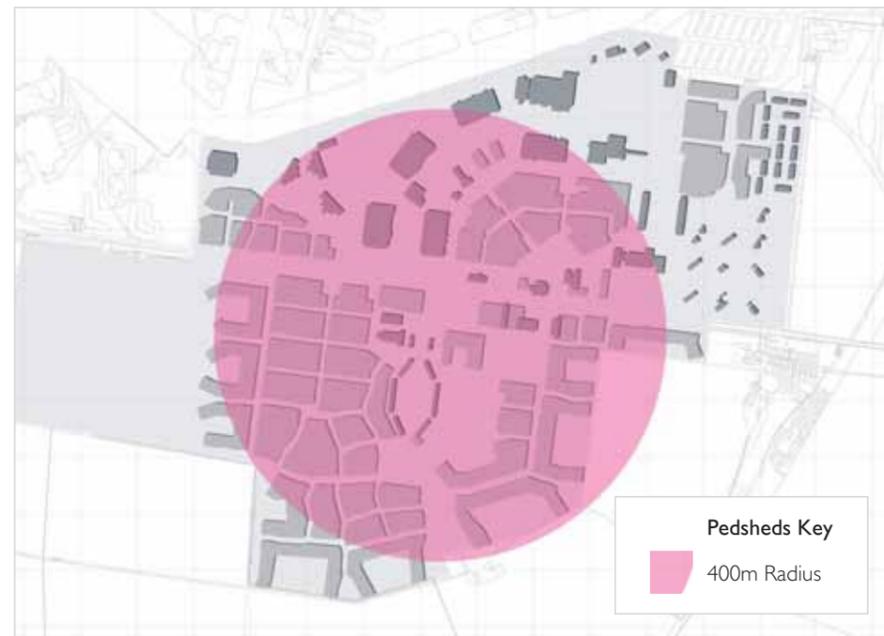


fig. 3.13 Walking distances

3.3.2 Neighbourhood Centre

A further aim of the masterplan has been to establish a strong neighbourhood centre as the focus for all areas north and south of Camp Road, and a critical issue for the proposed new settlement structure has been the creation of a satisfactory relationship between new and retained community facilities. The operation of the military base dictated that the main gatehouse on Camp Road was the focal point of the establishment in visual, functional and traffic terms. Some of the key buildings to be retained are grouped around this point, so that it remains the strongest visual focus of the neighbourhood; but the key community buildings - shop, church and hall - are sited some 250 metres to the west, making integration difficult.

Options considered for creating a strong, well-integrated centre for the neighbourhood included:

- Moving the visual focus on Camp Road from the Main Gate to the area around Dow Street, retaining the existing shop, church and hall.
- Redeveloping the area of the existing shop, including its car park and petrol station, with higher density mixed use development.
- Rebuilding the shop, church and hall in a more focal location – e.g. at the existing Main Gate.
- Alternatively, rebuilding the shop, church and hall in a focal location north of Camp Road, using the Trenchard street layout as the structure.

While the church and hall are poorly orientated and probably oversized buildings, it was concluded that there was little benefit in rebuilding them, especially if their setting could be improved. The shop, on the other hand, occupies a site that could be far better used for development or amenity space, and there could be justification for providing a more commercially attractive building. A further key building to be accommodated in the masterplan is the primary school, and options for its site include a central location. The preferred option taken forward in the masterplan brings these elements together around a small park, previously the site of the shop, which becomes a focal space for the

neighbourhood centre. The preferred option for the neighbourhood centre is described in more detail at 4.6.2 below.

3.3.3 New Primary School

Schools are excellent opportunities for striking, iconic buildings, but the impacts of their site layouts can be detrimental to neighbourhood design. In particular, they bring with them large, potentially dull areas of playing fields, which require visually intrusive security fencing and disrupt the finer grain of compact residential development. It would be very desirable to integrate well-designed school buildings into the street scene of the neighbourhood but, often, detailed site layout requirements preclude such ambition.

A number of options were explored and discussed with the County and District Councils. These included options for the site on the south-western and south-eastern sides of the site, where the visual impact of school fields could be absorbed into the surrounding landscape. After consideration, the preference is for a central location, immediately to the east of Carswell Circle, where the school will be reasonably equidistant to residential areas and also close to other community uses.

3.3.4 Business

Business uses are all located north of Camp Road. Access for heavy goods vehicles (HGVs) is a key issue, and section 3.4.1 below sets out how it will be provided to minimise impact on the neighbourhood, especially residential areas. Most business activity will remain in existing buildings in the core settlement area of the neighbourhood and on the airfield.

The settlement area

The Trenchard area is proposed for mixed business and residential uses. Some new business accommodation will be provided around the quadrant road, south-east of the A-type hangars between existing buildings and new residential development. Descriptions at 4.6.4 below, show how new office buildings could mediate between the large scale of the hangars and that of the new housing. Poorer quality existing buildings will be demolished to provide space for better residential

and employment development, which also includes potential for new extensions to improve the usefulness of retained buildings.

The wider airfield

Buildings on the former flying field currently provide significant employment accommodation, in many cases for specialist uses which the secure / hardened structures can uniquely provide for. Many of these are also required to be preserved for conservation reasons. Consultation has indicated wide support for the continued use and re-use of these structures, and the NOC will continue to maintain them for appropriate business activities.

3.3.5 Other commercial uses

The requirement to retain buildings within the central area of the settlement calls for imaginative ideas for their re-use. Existing buildings are capable of accommodating a range of new uses including a number which would support the mixed use character of the settlement centre, such as a family pub / restaurant, a nursery school, a heritage centre / museum and a conference centre.

3.3.6 Land use surrounding the site

The former RAF Upper Heyford was established within open farmland and this remains the general context of the settlement. There are a number of farmsteads within 200 metres of the site boundary with associated agricultural and residential uses. The settlement is separated from the village of Upper Heyford by open landscape, and this separation will be further enhanced by the clearance of former school buildings in the south-western part of the site. A mobile home site, Heyford Leys Park, lies to the south-east of the settlement, separated by an agricultural field, and the sewage treatment works lies to the south of Heyford Leys Park.



fig. 3.14 Broad disposition of proposed uses



3.4 Movement Structure & Street Pattern

3.4.1 Overview

The proposals for Heyford Park maintain a balance between residential and employment development that reflects its planned population and the broad separation of these uses that is long established in the current settlement pattern. This arrangement helps the objective to minimise the potential impact of heavy goods vehicles (HGVs) on residential areas, while retaining employment close to the settlement centre. Camp Road remains as the main link between the settlement and its surroundings, with all business uses to the north. A dedicated new route will provide access to them from Camp Road. The residential areas can then be laid out separately in a network of streets and spaces designed to the scale and speed of pedestrians rather than vehicles. Camp Road itself is central within the new settlement and is to be redesigned with traffic calming measures integrated with the facilities of the neighbourhood centre.

3.4.2 The Flying Field

Access and management

The Base Management Plan sets out in detail how access will be provided and maintained to the former Flying Field. Businesses in buildings on the Flying Field require access for goods and deliveries, often by HGVs, and for employees. The Flying Field is very extensive, so that vehicular rather than pedestrian access is more practical in most cases. An attractive aspect of the location for many existing businesses is the secure nature of the site, and their preference would be to have minimal access points with a high degree of control over movements.

In addition, there are conservation issues. There is an ambition to have greater public access, but at the same time to mitigate any impacts on ecology, including areas of grassland towards the eastern and western ends of the runway and the County Wildlife Site in particular. Where public rights of way cross or pass close to the site, there is the opportunity to allow provision for enhanced interpretation of the site's history and ecology including the introduction of a circular walk around the Airfield, the Upper Heyford Trail, as set out in Landscape Key Plan of the Environmental Statement.

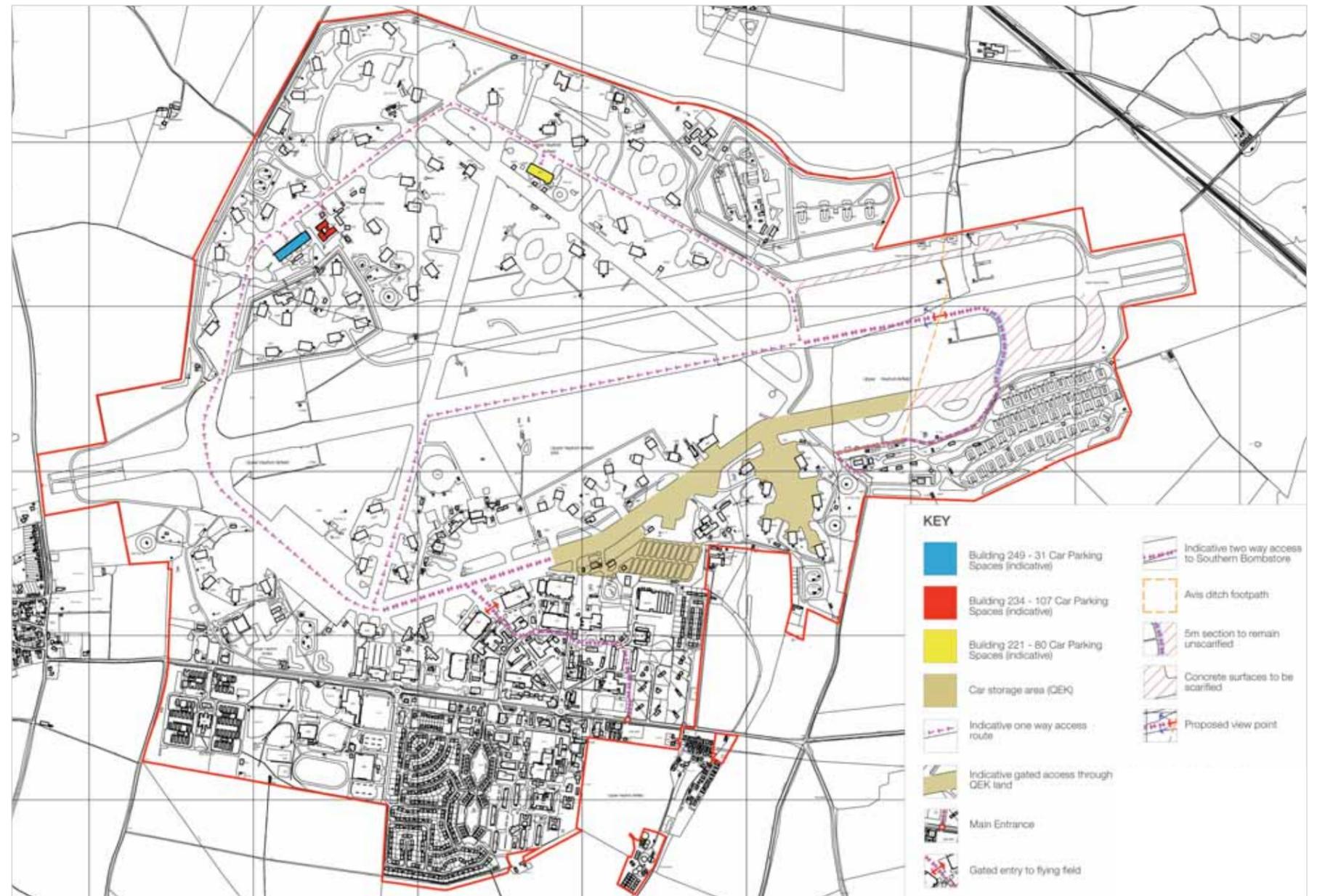


fig. 3.15 Indicative access plan

Proposed access routes

A new route for commercial vehicles is proposed to the immediate east of the officers' mess linking to existing roads close to the Innovation Centre. It is proposed that vehicular access to the Flying Field area will be through a security control as shown in figure 3.15. A one-way circular route has been devised around the Flying Field giving access to all buildings with the only exit being through gated security control: . As the use of the majority of buildings is limited to storage (Class B8), parking requirements are likely to be limited. However, some buildings are proposed for Class B1 or B2 uses and these have adequate existing vehicle parking in place as a remnant of their former military use. For all other buildings small groups of 3-4 parking spaces per building will be identified and marked appropriately. The development proposals will allow for the reinstatement of the ancient routes of Portway and Ave's Ditch to enable links to other rights of way outside the site. However, they both cross the ecologically sensitive areas, so that they will be outside a proposed new fence to prevent public access.

Visitors

The proposals for Heyford Park include the establishment of a Heritage Centre in Hangar 315, with a permanent exhibition of material from the Airbase. This facility is within the new development area and will be linked with the Hardened Battle Command Centre and Hardened Telephone Exchange (SAMs) with dedicated access from Camp Road and associated car parking. In addition to this visitor facility, limited demand for public tours of the base is likely to remain over the longer term. Future management of the base will therefore allow for limited organised tours, (associated with the ticketing and entry system for the proposed Heritage Centre) compatible with the need to maintain the overall security for commercial uses on the site.

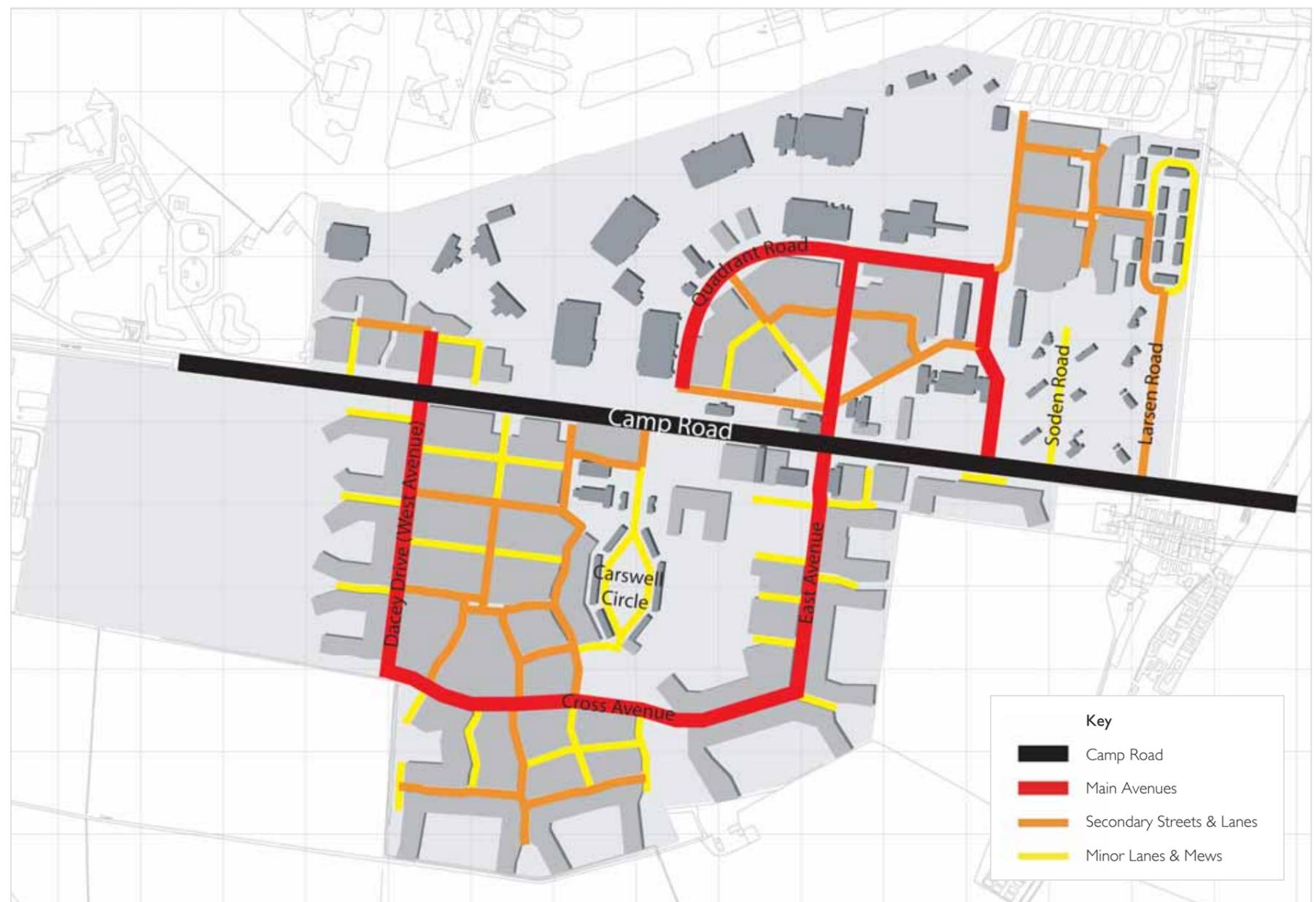


fig. 3.16 Proposed movement structure

3.4.3 Proposed street network within the settlement

Camp Road

Camp Road will remain as the main vehicular route to the settlement area, and measures will be taken to mitigate its impact as a busy through-route that divides the site. At present it relies on build-outs to create stopping points with single direction priority at a number of locations through the developed area. Links between the areas to the north and south of the road will be improved and gated access points directly onto Camp Road will be removed. Priority to pedestrian movement will also be given throughout the development and roundabouts will be replaced with managed junctions as necessary.

Options were considered to redirect traffic from Camp Road through the central area onto parallel routes on its north or south sides as a more radical speed attenuation measure. On balance, it was judged that this would affect areas within the neighbourhood, extending the effects of through traffic, and that the strength of the Camp Road alignment is a fundamental characteristic of Heyford Park which the design should work with and not deny. Detailed treatments to calm traffic on Camp Road are discussed at 4.4.1.

Principal streets

Land use proposals seek to provide more balance of residential development each side of Camp Road and to strengthen the function of the neighbourhood centre. A reduction of heavy traffic along Camp Road within the settlement is very desirable, but business traffic needs to be separated as far as possible from residential traffic north of Camp Road. Figure 3.16, 'Proposed Movement Structure', shows how the street pattern will be ordered using existing and new streets to structure the neighbourhood.

The main features of the principal roads are:

- Camp Road is retained as the main through route, linking the neighbourhood to the surrounding area.
- Main streets are extended from Camp Road at Dacey Drive and the Main Gate to serve residential areas.
- A new east-west street is created that links Dacey Drive to the barracks area to complete the principal street grid south of Camp Road.
- A new main road extends northwards from Camp Road, beside the former Officers' Mess, which brings the main heavy business traffic into the business area via the Innovation Centre. HGVs will therefore no longer need to travel along the full length of Camp Road to gain access to the flying field.
- The quadrant road south-east of the hangars is developed to serve existing businesses beside and on the flying field, in addition to new business buildings within the quadrant.

Residential street network

Within this main structural street grid is the network of interconnected minor streets that serve the majority of the development. Consideration has been given to using the existing street pattern where possible, but in most cases road construction and geometric standards are unsuitable for future adoption. Generally, a new lattice street pattern has been devised to suit a new residential layout and protect mature trees, giving a comprehensive access network throughout the neighbourhood. Section 4.3 gives detail of the design principles.

3.4.4 Car parking

Residential parking standards

The current Oxfordshire County Council guidance on car parking provision for areas outside urban centres is for maxima of:

- Single bedroom dwellings: 1 space
- 2 and 3 bedroom dwellings: 2 spaces
- 4 bedrooms or more: 2 spaces or more "on merit"

These levels date back to guidance given in PPG3, which is superseded by a more flexible approach in PPS3 that takes local issues into account. Recent research in Oxfordshire shows that Cherwell District has a higher car ownership rate than average, particularly in rural wards such as Upper Heyford. The research also indicates that over half of garages are not used for car parking. The effect of these characteristics is that there is more potential pressure on street space for car parking and that street and plot layouts need to be flexible in the way they accommodate parking.

At the same time, it is a basic design objective that the visual impact of vehicles in the public realm should be limited as much as possible, and that parked cars in particular should not dominate the street scene. Parking can be introduced into the scheme in a number of ways that allow building occupants good surveillance of their vehicles, that allow safe and flexible access for visitors and that reduce the visual impact of groups of vehicles in the public realm. Parking is accommodated in the following ways:

- In designated bays on the street, or in shared surface street areas.
- In parking squares and designated areas off the carriageway but within the public realm.
- In small shared areas behind houses (serving no more than three houses and visible from them).
- In courts serving flats, with good visibility from them.
- On plots beside / behind houses, not in front.

Provision for cars and parking is led by the masterplan design, fitting into rather than dictating it. The design is strongly based on the character of the public realm and there is a good capacity for parking to be accommodated within it. The informal character of lanes and mews allows incidental parking provision, incorporated into street features and tree planting. More formal on-street parking can be provided in the larger squares and spaces on the primary streets. Detailed examples in parts of the masterplan are included in section 4.

Parking for employment areas

The majority of employees in the settlement area work in existing buildings. The buildings to be retained are mostly large scale with significant associated hard surfaced areas that are used for parking. The masterplan shows parking reorganised to use existing and new hard surfaced areas between buildings, within the limits of tree root protection areas in the trident area.

Parking for new employment buildings in the trident area broadly follows the design principles described for residential development, and for flats in particular. Buildings are placed to front onto the main access street (the quadrant street facing onto the A-type hangars), with parking behind visible from the rear of the buildings. New tree planting is incorporated into the parking layout, and planting separates the car park from housing backing onto it. Access into the car park is controlled to promote security for the car park and neighbouring housing, and some visitors' parking is available at the front of the buildings on the street in designated bays.



fig. 3.17 Pedestrian and cycle routes

3.4.5 Public Transport

Heyford Park lies on bus route 25 to Bicester and Oxford. The present bus stop is at the proposed neighbourhood centre: a shelter would be located on the new green close to the proposed general store. The primary avenue route through the residential area south of Camp Road is designed to accommodate buses, and stops will be located on this loop back to Camp Road to ensure that most dwellings are within a 400 metre walk of a stop.

Improvements might be made to the frequency of the service and links to Bicester North railway station, but these would not necessarily affect the route through Heyford Park.

3.4.6 Pedestrians and Cyclists

The lattice street structure creates a permeable layout that allows movement through the development without having to travel up and down arbitrary road hierarchies. This promotes walking and cycling, and all streets will be designed in detail to allow safe use on dedicated paths or shared surfaces. In addition, there are some strategic routes, which are shown on figure 3.17. The main points include:

- The landscape belt on the north side of Camp Road will include a safe cycling and walking route that will be well separated from the traffic.
- A strong east-west axis through the neighbourhood centre which picks up all the main facilities and extends into the street pattern.
- A strong north-south axis through Carswell Circle and the neighbourhood centre, which crosses Camp Road at a controlled crossing to link with routes on the north side.
- A diagonal route from north-east to south-west, which is designed into the development and will connect to countryside walks outside the neighbourhood itself.



3.5 Amount of Development & Density

3.5.1 Amount of development

The Comprehensive Planning Brief sets a residential development target of “about 1,000” dwellings. Estimates of population and employment generation are linked to this number, based on average statistics in Cherwell district for household occupancy and the level of economic activity within the population.

Housing

In developing the masterplan, it has been established that about 1,000 houses is indeed an appropriate approximate level of development for the settlement area proposed in the Comprehensive Planning Brief, but that up to 10% more could be provided when more detailed consideration is given to the layout. This level achieves all the objectives for the settlement area set out in the brief without significantly increasing the impact of the development on its context. More intensive development of the site than this, however, would be difficult to achieve in view of the physical constraints of the site, most notably required root protection areas (RPAs) around retained trees. The proposals are accordingly for 1,075 dwellings, set out in tables in the following section, “Housing Types and Tenure”. 1,005 of these are new build and 70 are retained existing houses.

Employment

The Brief notes that 1,000 dwellings would create about 1,331 economically active people. Pro rata, 1,075 dwellings create 1,431 economically active people. Including jobs already based at Heyford Park, it is estimated that new employment development and the re-use of vacant buildings will create about 1,500 jobs in total.

3.5.2 Residential Density

Existing housing densities are low by current standards, at less than 20 dwellings per hectare (dph) in areas occupied by bungalows and below 10 dph in areas of officers' housing on Soden Road and Larsen Road. Low density is thus characteristic of Heyford Park, within a setting of mature trees. New housing areas will reflect both these attributes: high densities would be inappropriate because of, not only the established



fig. 3.18 Housing densities

visual character of residential areas, but also the constraints presented by existing trees and other features to be retained.

The average density proposed for new housing is therefore just over 30 dph, i.e. within the range of acceptable residential densities indicated in PPS3. This density excludes areas of existing housing to be retained (see figure 2.34). The area of residential development is 29.5 hectares: this would give a density of 31.5 dwellings per hectare for houses in a scheme of 1,000 units, and 34 dwellings per hectare for the proposed scheme of 1,075. The Comprehensive Planning Brief suggests that 35 dph is an appropriate average density for the new settlement.

Density ranges

Within areas of new housing there will be different residential characters (described at 4.6 below) ranging above and below the overall average density. Density variations relate primarily to the variety of plot widths that the masterplan provides: higher densities where there are more apartments than average (i.e. 45 dph or more), medium densities where medium and narrower plots predominate (30 - 45 dph), and lower densities where wider and medium plots predominate (18 - 30 dph, similar to existing densities on the site).

Figure 3.18 shows broadly where these areas of density lie, i.e. with higher densities closer to neighbourhood facilities at the centre of the settlement where greater numbers of people will have easiest walking access to them. The highest densities are in the Trenchard area and immediately adjacent to the centre, where three-storey development that includes apartments is proposed to achieve the more formal area character appropriate the historic form of the original RAF base.

Dwelling size related to density

The masterplan shows clearly the variation in plot sizes in each development block. Individual houses types will vary, but there will be a broad correlation between the width of plots and the size of house that it can accommodate, and the range has been planned with reference to housing demand. The mix in any particular location is also designed to provide visual variety and appropriate development character (also see 4.5.2).

Section 3.6 below, tabulates the range of dwelling sizes related to plot widths. Broadly:

- Narrow plots: 4.8 - 6 metres wide, 2 – 3 bedroom houses, 76 to 90 m²
- Medium plots: 6 – 10 metres wide, 3 – 4 bedroom houses, 90 to 105 m²
- Wide plots: 10 - 20 metres wide, 4 – 5 bedroom houses, 105+ m²
- 3-storey plots: < 6 metres wide, 3 – 4 bedroom houses, 90 to 105 m²
- Apartments: averaging 60 m² + 15m² common parts

The settlement edge

The approach to the design of the new settlement edge described above sets out how the surrounding landscape will extend into the developed area creating paddocks and other open green space, including structural landscape within the neighbourhood. In line with PPS3, these areas are not included in the overall residential development area, which is applied only to new residential areas as indicated on figure 3.18.

3.5.2 Employment Areas

Heyford Park currently provides 141,000 m² of employment space supporting 879 jobs. These are in office, workshop, light industrial and storage activities, and approximately 300 are not related to specific buildings (e.g. QEK and other workers employed in activities such as driving). The masterplan allows for bringing 64,000 m² of currently vacant buildings back into productive use, primarily in workshop and storage uses, which have relatively low rates of occupancy. Some buildings, such as HASs, will be for essentially unattended storage and generate only a notional number of jobs (a HAS has a scheduled floor area of 930 m² but would attract no more than a single job). These currently vacant buildings could provide a further 283 jobs, bringing the projected total of jobs to 1,162.

The balance of jobs to be provided at Heyford Park will be in new buildings in the settlement area, north of Camp Road. 8,906 m² of

Upper Heyford employment buildings	Area	Employees
Airfield		
Buildings in current employment use	46,692	181
Demolish	7,803	0
Other employment not in buildings		300
Total	38,889	
Vacant	68,383	
Vacant for reuse	56,374	244
Total usable	95,263	725
New settlement		
Buildings in current employment use	30,907	398
Demolish	11,127	
Total	19,780	
Vacant	7,530	
Vacant for reuse	3,326	39
Total usable	23,106	437
Totals		
Buildings in current employment use	77,599	879
Demolish	18,930	
Total	58,669	879
Vacant	75,913	
Vacant for reuse	59,700	283
Total usable	118,369	1,162
New build in settlement area	8,906	287
Future totals	127,275	1,449

new office buildings will provide 287 further jobs, bringing the total employment at Heyford Park to about 1,500. There will be an overall reduction in employment floor space.

The table shows the breakdown of these estimates. For the purposes of the calculation, the same occupancy levels have been used as are accepted for the calculation of traffic generation from the site, i.e.:

office use in existing buildings:	21m ² per employee
office use in new buildings:	31m ² per employee
workshop use in existing buildings:	50m ² per employee
light industrial use in existing buildings:	80m ² per employee
storage use in existing buildings:	100m ² per employee

Of the 127,275 m² of the future total employment accommodation, the breakdown by type of use is:

B1:	15,658 m ²
B2:	17,106 m ²
B8:	83,800 m ²
Retained vacant:	11,211 m ² - these are buildings on the airfield, which are not lettable for various reasons.

It is estimated that this development area will support about 1,500 employees.

3.5.3 Shops & Services

Retail

The existing "Shopette" provides an essential retail service to the present residential population and to people working at Heyford Park, but is a utilitarian and unattractive facility. Its location in the settlement is nevertheless good, being central to all users and on the main route through Heyford Park, which extends its catchment beyond local customers to passing trade.

The proposals are for a new general store to provide late daily opening and extended Sunday opening. To meet this need it is planned with a 280 m² (3,000 ft²) net sales area and 92.5 m² (1,000 ft²) storage. In addition, unit shops of a typical area of 92.5 m² (1,000 ft²) each are to be included for other services not provided within the general store.

The proposals are:

1 no. General store	4,000 ft ²	4,000 ft ²	372.5 m ²
4 no. Unit shops	1,000 ft ²	4,000 ft ²	372.5 m ²
		8,000 ft ²	745 m ²

Family restaurant / public house

The proposals include for the conversion of the existing narrow boat workshop (building 103 on the north side of Camp Road). The existing building provides 340 m² and has some double height space that might accommodate a further 60 m² mezzanine area.

3.5.4 Education

Primary School

The floor area of the proposed primary school is currently under discussion with Oxfordshire County Council. It is expected to be a two-form entry school, and a site of 2.22 hectares has been identified.

Nursery School

The childcare centre currently occupies approximately 200 m² of building no. 442. It is proposed to relocate the facility in accommodation of similar size, using part of building 457, with potential for expansion.

Conference Centre

The Officers' Mess is identified for conversion to conference / educational use. The total existing complex is over 5,000 m², of which approximately 4,000 m² might be suitable for re-use. The complex could be enlarged with a new wing of up to 1,250 m².

Heritage Centre

Hangar 315 is identified as a Heritage Centre to provide interpretation

and exhibition space in the existing buildings of 2,450 m², and new visitor facilities including a café of 400 m².

3.5.5 Buildings to be demolished

The Demolition Schedule and Plan within the Planning Documentation lists buildings to be demolished within the Conservation Area, summarising the reasons for their removal. The list includes some within the settlement area that were identified in the Comprehensive Planning Brief as appropriate for retention and some required for retention. All those required for retention in the brief will be retained, as are key spaces that the Brief identifies. Three buildings are described as appropriate for retention but will be removed in the masterplan:

Former offices, building 474

This single storey brick building has an aspect over the parade ground. The barracks area generally is to be redeveloped as a housing area and for the primary school. This particular building is one of the original 1925 buildings and was built as an office, but it is less significant than the HQ buildings of the same date north of Camp Road, which are to be retained. It has little potential for viable change of use within the new residential area.

Barrack block 595

This building also dates to 1925 and was one of a group facing onto the parade ground. This context was lost with the subsequent construction of the mess complex in front of it on the parade ground. While it is not viable to convert it into housing within the new residential area, it did, with other barrack blocks, establish a scale of enclosure of the parade ground which is reflected in proposals for new three-storey housing facing over the Parade Square.

Social club and dining facility, building 488

This is a later building (1935), which has been enlarged on its northern side with a clutter of extensions. It includes some large recreation rooms and halls. The scale of the building does not lend itself easily to conversion to residential use and other uses are not appropriate in this part of the new settlement.



3.6 Housing Types & Tenure

3.6.1 A mixed and balanced community

The NOC is committed to creating a mixed and balanced community for the scheme. This will be achieved through a variety of house types, sizes, tenures and the ability of existing residents to remain at Heyford Park for the long term.

Standards:

All the dwellings shall be built to current Building Regulation standards and will achieve Eco Homes Very Good status. This will reduce the energy running costs for the occupiers as well as contribute to the sustainability agenda. If public subsidy is received then the affordable housing can be built to the prevailing Housing Corporation standards. The provision of a number of mobility dwellings will need to be identified for specific occupiers and incorporated within the development.

3.6.2 Market Housing

Within the market sector, dwelling types will range from one and two-bedroom flats to five-bedroom houses. The masterplan is designed for a range of plot widths which are able to accommodate different sizes of house. The table shows the mix of house types possible within the layout. The disposition of plot widths to create variety, mix and distinctive characters in different parts of the neighbourhood is described in 4.5 below.

3.6.3 Affordable Housing

A range of dwelling sizes and types of tenure is proposed for the new neighbourhood. 30% of the dwellings are to be affordable, in line with the Council's adopted policy. The mix indicated in the table, right, is based on the Council's initial assessment of need. This may be amended as specific requirements for rehousing tenants at Heyford Park is established.

Design and tenure

The affordable dwellings shall be built to the same high standards as the open market dwellings. They shall be 'tenure neutral' in that it should not be possible to identify the difference in tenure between the rented, intermediate and open market dwellings. As such they will be built using the same high quality bricks, doors, windows, roof tiles etc.

Totals affordable and market housing, including existing stock				
116	Wide	10m +	4-5 bed	10.8%
434	Medium	6-10m	3-4 bed	40.4%
268	Narrow	< 6m	2-3 bed	24.9%
102	3 storey	< 6m	3-4 bed	9.5%
155	Flats	n/a	1-3 bed	14.4%
1075	Total			100%

Totals affordable and market housing, new build				
100	Wide	10m +	4-5 bed	9.9%
382	Medium	6-10m	3-4 bed	37.9%
268	Narrow	< 6m	2-3 bed	26.6%
102	3 storey	< 6m	3-4 bed	10.1%
155	Flats	n/a	1-3 bed	15.4%
1007	Total			100%



3.7 Scale & Appearance

3.7.1 Scale

All of the existing family housing at Heyford Park is one or two-storey, although most of it is to be replaced. Key character buildings in the settlement are also one or two-storey and some, such as Heyford House and former barrack blocks, are two storey but on a larger scale than the domestic character of the family housing. The appraisal points out the dramatic contrast in scale between the A-type hangars and other buildings in the technical area.

Residential development

New residential development will be predominantly two-storey, reflecting the established scale of most of the settlement area. In key locations, for example around formal spaces such as the parade ground or Trenchard area, buildings heights will be three-storey to reflect the larger scale and formality of the early RAF buildings in those locations. Figure 3.19 shows the location of three storey buildings within the masterplan. More specific detail of building heights is given at 4.5.1.

Employment development

New employment buildings are proposed between the Type A hangars and new three-storey residential development in the Trenchard area in order to mediate between their differing architectural scales. These will be two storey buildings, but of a larger scale than houses (equating to about three residential storeys) to reflect the greater storey heights required by mechanical and electrical services for modern office buildings. They relate in function and style to the employment buildings on the one side, and in scale and landscape treatment to the residential buildings on the other.

3.7.2 Architecture and Materials

The most consistent architectural precedents at Heyford Park are the 1925 RAF buildings. These are designed in simple, controlled styles with careful thought for the placement and proportion of elevational elements such as windows and doors and a minimum of applied decoration. Materials are almost exclusively red brick walls and brown clay plain roof tiles, assembled to good quality, traditional details (e.g. flat-arched brickwork window heads, bonnet roof hips). The Officers' Mess is



fig. 3.19 Building height

notable for its pale stone portico. Bright colours are not used for painted elements. It is noticeable that the traditional materials of the region (e.g. stone walling and slated roofs) are not used.

This architecture can readily be referenced in the design of new housing and other buildings. Simple “traditional” designs would be suitable, but equally more contemporary designs that express modern methods of construction and the simple rectilinear proportions of the original buildings would be appropriate. In any case, stylistic pastiche, architectural “add-ons” and other embellishments are unnecessary: distinctiveness for individual properties will be achieved through their unique positioning in a carefully considered street scene.

3.7.3 Landscape Design

The mature setting of retained housing areas at Heyford Park is an essential part of their special character. Species of new planting will be selected to reinforce and complement this character. A table of proposed species and typical usage is included at Appendix B.

3.7.4 Design Criteria

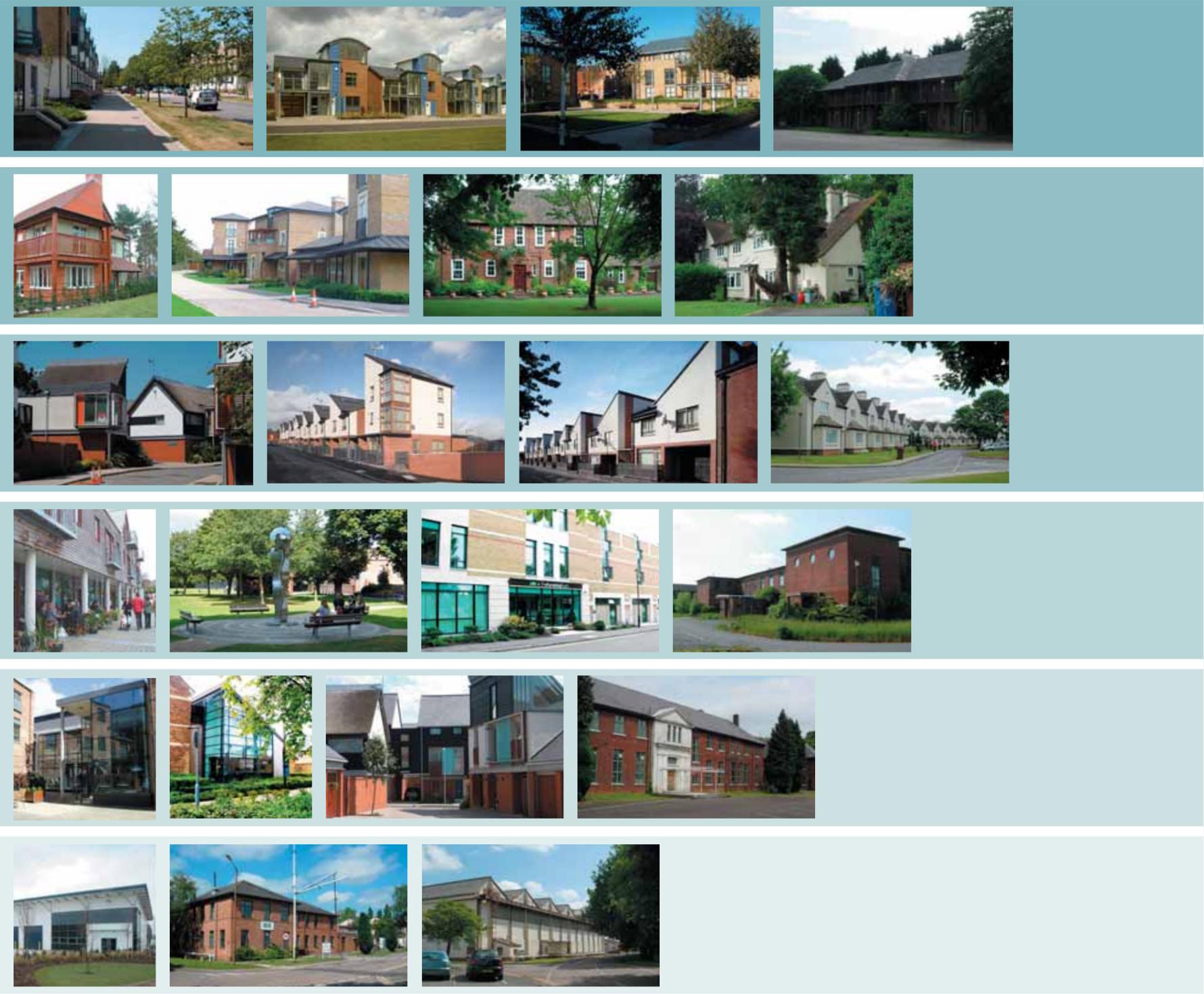
The matrix shown on the following page spread sets out the main design criteria that determine the particular character of areas within the masterplan. These headings will be defined in detail by design codes in sub-categories similar to those listed in 3.8.2, following this section. The main matrix describes the key characteristics in broad terms, which are nevertheless specific to each area. The illustrations on the facing page show possible design responses through precedent photographs and by reference to key characteristics of existing buildings at Heyford Park.



fig. 3.20 Collage of materials and details as a basis for development of future building designs

	Formality of layout	Nature of development edges	Density of development	Containment of public realm	Street character	Use / types of buildings
South east housing area	Very formal around parade square, with regular plot widths and continuous frontage. Relatively informal to south, with varied plot widths and landscape space between buildings.	Quiet, with all access to private houses from the street. Some car parking in parade square. To the south, access to private houses from the street through front gardens.	Lower than average, i.e. below 30 dph.	High around parade square, with three storey continuous frontages, space defined strongly by buildings. Open to the south, public realm defined by hedgerows and informal boundaries rather than by buildings.	Formal, green, set by parade square and main access avenue. Avenue trees, on-street parking, bus route. Lateral streets informal green lanes and mews.	Residential. 3-storey terraced houses to parade square, linked and terraced houses to main access avenue and mews. Larger houses in space at perimeter.
South west housing area	Very informal and relatively openly laid out, with varied medium and wide plot widths and landscape space between buildings.	Very quiet, with all access to private houses from the street through front gardens.	Lower than average, i.e. below 30 dph.	Open, public realm defined by hedgerows and informal boundaries rather than by buildings.	Formal, green access avenue with avenue trees, on-street parking, bus route. Lateral streets informal green lanes and mews.	Linked and terraced houses to main access avenue and mews. Larger houses in space at perimeter.
Central and Tobacco housing	Informal but tightly planned with varied narrow and medium plot widths.	Active, with access to private houses and flats directly from the street and car parking within the street space.	Higher than average, i.e. above 30 dph.	High to medium, with continuous frontages and some three storey elements. Building frontages rather than boundary features define the public realm.	Informal, urban. North-south green lanes, east-west urban lanes. Urban mews of intimate scale within the area.	Terraced houses and apartment blocks on east-west alignments. Linked houses on north-south alignments to catch solar gains
Neighbourhood centre	Formal, with large buildings facing over public space.	Very active, with shop fronts and community buildings facing directly onto public space and public car parking. Recreational activity within public space.	High, i.e. above 40 dph within residential parts.	High, with public buildings and apartments relating directly to main public space	Formal green character set by Camp Road (see character area descriptions). Includes street trees, generous pedestrian areas and cycle paths. Main pedestrian broadwalk connecting all community facilities.	Larger building forms for apartment buildings and community/retail facilities.
Trenchard area	Very formal, based on Trenchard street pattern, with relatively regular / narrow plot widths.	Active, with access to private houses and flats directly from the street and car parking within the street space.	High, i.e. above 40 dph within residential parts.	High to medium, with continuous three storey frontages. Building frontages rather than boundary features define the public realm.	Formal green character set by Trenchard street pattern. Existing tree avenues reinforced with new planting. Urban mews of intimate scale within the area.	3-storey terraced houses and apartment blocks: some 2-storey elements in smaller mews.
Business area	Formal, based on Trenchard street pattern, with landscape space between and behind buildings for parking and amenity.	Active, with access to office buildings directly from the street and visitor car parking within the street space.	High, i.e. up to 6,000 sq.m. per ha.	Well contained by 2-storey building frontages and linking landscape elements. Open behind buildings, providing parking and servicing.	Formal green character set by Trenchard street pattern and quadrant alignment of main access avenue. Existing tree avenues reinforced with new planting. Urban mews of intimate scale within the area.	Larger ground-plan BI buildings: 2-storeys with greater floor-to-floor height for building services. Buildings mediate between retained A-type hangars and Trenchard housing area.

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3.21 3.22 3.23 3.24

- fig. 3.21 Formal tree-lined character of main access avenue (Newhall, Harlow)
- fig. 3.22, 3.23 Building forms facing Parade Square - 3-storey apartments or town houses
- fig. 3.24 Existing form of barracks buildings in the Parade Square area

3.25 3.26 3.27 3.28

- fig. 3.25 Red-brick forms reflecting form of existing officers' housing in lower density areas (former Queen Elizabeth Barracks, Guildford)
- fig. 3.26 Alternative brick forms: former Caterham Barracks, Surrey
- fig. 3.27, 3.28 Existing form of officers' housing - simple brick and rendered traditional forms

3.29 3.30 3.31 3.32

- fig. 3.29 Informal higher density streets defined by building frontages using traditional materials and modern architectural forms
- fig. 3.30, 3.31 Building forms for north-south streets giving higher density, strong containment and opportunities for solar gain on southerly faces (Selwyn Street, Rochdale)
- fig. 3.32 Strong containment in Carswell Circle (to be retained), with repeated gable elements and rendered façades

3.33 3.34 3.35 3.36

- fig. 3.33 Active shopping frontage with residential accommodation above: new general store facing central park and Camp Road
- fig. 3.34 Formal neighbourhood park using artwork and simple landscape design
- fig. 3.35 Forms for 3-storey apartments with commercial or residential uses at street level: facing central park and Camp Road
- fig. 3.36 Original community buildings in plain architectural language (former junior ranks' mess, to be redeveloped)

3.37 3.38 3.39 3.40

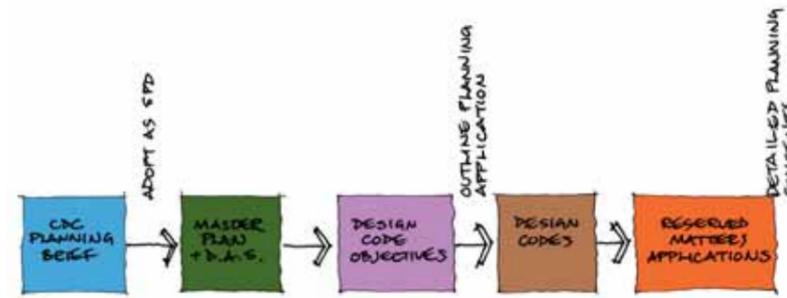
- fig. 3.37, 3.38 Simple modern additions in reusing existing buildings - e.g. gatehouse, officers' mess (Round Foundry, Leeds)
- fig. 3.39 3-storey mews development within the Trenchard layout
- fig. 3.40 Officers' mess to be reused for hotel / conference use

3.41 3.42 3.43

- fig. 3.41 Two storey modern office buildings addressing the street and mediating between large-scale hangars and new three storey residential development (Business Park, former Haddenham and Thame Airfield)
- fig. 3.42 Retained brick office buildings
- fig. 3.43 Existing form of A-type hangars - metal cladding, bold forms

3.8 Design Codes

CDC's Revised Comprehensive Planning Brief seeks to use design codes to guide development to ensure that the detailed design of phases of the development following outline planning permission will be of a consistent high quality. Design codes express in concise terms what is required of buildings, engineering and landscape to achieve the objectives of a masterplan. Codes can communicate the design vision, bringing clarity and certainty about what is required. It is expected that design codes will be agreed for the whole masterplan prior to the submission of reserved matters for the architectural design of individual phases.



3.8.1 Masterplan Codes

Masterplan codes are, in effect, the working drawings of a masterplan. They are usually applied to an urban extension or new neighbourhood. A key stage in this process is the production of a regulating plan which sets out the mandatory requirements of the masterplan without any illustrative material. The regulating plan will tie many of the codes to specific locations within the plan.

Objectives for design codes

The primary task of a design code is to deliver the masterplan rather than control the architecture. It is helpful to divide codes into different levels of consideration, for example:

3.8.2 Possible code content

Level 1: Movement and spatial hierarchy

- Street pattern and connections
- Movement and access
- Spatial hierarchy
- Street alignments

Level 2: Massing

- Street section
- Front building lines
- Building heights and form
- Outline dimensions
- Plot series
- Position relative to street hierarchy
- Access and frontage
- Internal arrangement
- Visibility and privacy
- Parking - off-street and on-plot
- Communal gardens

Level 3: Architectural and public realm detail

- Design detail
- Architectural vocabulary
- Fenestration
- Palettes of colours and materials
- Street trees, lighting, furniture, signage and art



3.9 Sustainability

3.9.1 Conservation of Existing Assets

Sustainability is critical to CDC's Comprehensive Development Brief for the site. The Brief sets the amount of housing and employment in the future Heyford Park settlement at a scale that balances the impact of total new and existing development on its surroundings with the benefits of maintaining employment, providing new homes and managing the historic and natural resource of the Conservation Area.

At the heart of the masterplan proposals is the re-use of existing development assets, which allows the retention, improvement and future management of the whole site resource. Accordingly, Heyford Park is a compact settlement on previously developed land, providing residential dwellings, key community facilities and business and employment areas. The development will enable conservation and preservation of sites of historic significance including the RAF Upper Heyford Conservation Area, Scheduled Ancient Monuments and a County Wildlife Site. Sustainability principles are embedded in the masterplanning and layout of the neighbourhood and the standards of design and construction.

NOC commissioned a Sustainability Appraisal from Arup, using their Sustainable Project Appraisal Routine (SpeAR®). This report is separately attached to the planning application and it is not proposed to reiterate its findings in detail here.

3.9.2 Masterplan Layout

More sustainable development can be achieved not only in the detail and method of design and construction, but also in the overall settlement layout. The pattern of existing development at Heyford Park lies close to the optimum east-west axis to benefit from solar energy, and the design of new areas in the street network intentionally retains and exploits this attribute. Environmental issues have particularly influenced the layout through the following opportunities:

Orientation & design for solar gain

- Maximising opportunities for solar gain by the orientation of buildings, dwelling type and internal layout design

- Maximising internal amenity and controlled solar gain
- Minimising the effect of overshadowing on gardens and to principal living rooms

Street trees and microclimate

- Ensuring the provision of street trees by early coordination of services and agreements with local authorities
- Ensuring that trees do not excessively shade windows
- The mix and location of trees will have regard to high and low level protection from winds

Using existing site assets

- Laying out the street network to incorporate retained buildings into street frontages
- Siting individual buildings to avoid the root protection areas of retained trees, to avoid damage that might affect their health

Local facilities

- Providing a good range of neighbourhood facilities, so that most of the needs of people living and working in the settlement can be met locally rather than by unnecessary travel
- Re-using and upgrading existing facilities – chapel, community hall, narrow boat workshop, for example.

Sustainable Urban Drainage Systems (SUDS)

- Alignment of streets and green spaces and design of street cross-sections to be able to accommodate filter drains and swales falling with the natural topography

3.9.3 Social Sustainability

Social responsibility

The site is contained within the current limits of development. The development employs a design approach that strengthens the sense

of place and local distinctiveness and responds to the character of the former airbase. The development has the potential to improve community interaction through the centralising of meeting places and communal areas, complemented by provisions of play and recreational areas.

Amenity

The development at Heyford Park will be focussed around a neighbourhood centre containing the local shops, pub/restaurants, primary school, church and community hall. All facilities are within a five to ten minute walk from the outermost areas of the housing development. Formal and informal recreation spaces will be integrated throughout the development. Communal recreational space will be provided in residential areas to provide circulation areas for social interaction, with the aim of enhancing community cohesion.

Security

The detailed designs will be further developed following the principles of 'Secured by Design' and will be fully accessible for people with disabilities. In particular:

- All public space is well overlooked from the windows of adjacent buildings
- Main entrances and doors to buildings are key elements of the street scene, giving direct access between the public realm and buildings and promoting a high degree of activity and surveillance of the street
- The length of boundaries between private amenity space and publicly accessible space is minimised in the masterplan to reduce the risk of intrusion
- Private car parking spaces are located within close sight of dwellings that they serve
- Lighting schemes will ensure good nighttime visibility to pedestrian and shared parking areas, designed to limit overspill of light into the night sky and adjacent dwellings

- Detailed design will include appropriate security and safety measures to building openings
- Discreet security fencing is to be maintained to the former flying field to ensure an appropriate level of security to businesses occupying retained buildings

Health and wellbeing

The layout of the development encourages walking and cycling as there is easy access to key facilities and the development is interspersed with areas of multi-use public open space. Improvement of links to the local footpath and bridleway network will encourage people to access the countryside.

3.9.4 Water Quality and Discharge

The site lies within a low flood risk area. While the majority of the site's catchment will remain unchanged, development of the Heyford Park neighbourhood will result in changes to the surface water run-off characteristics. A surface water management strategy will be developed to facilitate the implementation of SUDS best management practices. Three key components will be developed as part of an integrated surface water management strategy:

- Maximise natural run-off losses through infiltration techniques;
- Maximise surface water run-off quality improvements through natural BMP techniques such as bioremediation;
- Attempt to reduce the total volume of surface water run-off discharged.

A sustainable approach to water management will be employed across the site which includes minimising hard surfaces and the use of innovative drainage systems including permeable conveyance systems, filter drains and swales. A Flood Risk Assessment has been prepared which determines that, provided suggested mitigation measures are in place, the proposed development will not adversely affect on-site, neighbouring or downstream developments and their flood risk.

3.9.5 Biodiversity

The former flying field contains a County Wildlife Site (designated for its species rich grassland) and protected species (badgers, bats and great crested newts) have been noted across the site. The grassland habitats also support bird assemblages of County value.

The existing County Wildlife Site will be enhanced through the development of the scheme. Works will include the scarification of a major part of the taxiway and removal of the east and west nibs of the runway. Important areas of the County Wildlife Site will be fenced off and public access will be controlled to protect the habitat for ground nesting birds. The whole site will be subject to a base management plan to maintain favourable conservation status and ensure continued habitat for protected species (see 3.9.9 below). The core settlement area also includes a network of green spaces to promote local biodiversity.

Existing trees and mature vegetation will be retained throughout the development as far as possible.

3.9.6 Sustainable transport

Pedestrian and Cycle Transport

Pedestrian and cycle movements are encouraged through the design of the proposed development in order to discourage the unnecessary use of motor vehicles for short journeys. The neighbourhood layout offers an acceptable walking time to key facilities of five to ten minutes. The flat nature of the site means that walking and cycling around the core settlement area is easy. Pedestrian linkages and rights of way across the wider site and off-site footpaths which currently do not connect to the site, will be reinstated to encourage recreational walking and cycling.

Bus Transport

There are three existing bus stops located within the Heyford Park settlement; all on Camp Road. The site is currently serviced by a single bus route (25/25A/25B) between Oxford and Bicester, via local villages. The masterplan provides for a route through the main residential area suitable for buses. Measures to improve the local bus services have been

discussed with Oxfordshire County Council and will be supported by the NOC subject to final agreement.

Further discussions have been held with Chiltern Railways related to the investigation of a shuttle mini-bus service to serve Bicester North station form Heyford Park.

Travel Plan

A Travel Plan will be developed as the design of the scheme progresses. Further detail on the proposed improvements to public transport and the Travel Plan framework can be found in the Heyford Park Transport Assessment accompanying the planning application.

3.9.7 Building Form

Construction detail will be designed to EcoHomes "Very Good" or the equivalent code. In preparing schemes for reserved matters applications, the following objectives will influence detailed design:

Amenity of dwellings

- Provide dwellings with a high level of internal amenity, for example, space standards, views from rooms, flexibility of rooms to accommodate different furniture layouts
- Maximise internal daylighting and sunlight penetration
- Minimise noise nuisance particularly between attached dwellings and apartments and also between internal rooms

Efficient Built Forms

- Encourage the use of efficient built forms that use fewer materials during construction and are more efficient to heat and cool

Adaptable Built Forms

- Design buildings that are able to adapt to changing circumstances – both uses and users
- Provide dwellings that allow greater lifestyle flexibility including live/work homes, life-long homes and Lifetime Homes

3.9.8 Waste

Construction process

Buildings will be designed to minimise waste generation during the construction phase. The refurbishment of existing properties may result in a reduction of overall waste generated in comparison to a 100% demolition and new-build development. The efficient use of materials during construction will be encouraged to minimise waste and actively re-use and recycle where possible.

Construction materials

Materials to be used across the development will be chosen to minimise environmental cost. Material will be generated through the demolition of existing buildings on the site. Where appropriate this material will be re-used.

Refuse

Opportunities for a reduction in the generation of household waste will be optimised and recycling and composting by the end users will be encouraged. The development will comply with Cherwell District Council's recycling policies. Refuse storage will be planned for individual buildings: two wheeled bins for each apartment and three for other dwellings.

3.9.9 Management

Minimise resource use

- Minimise environmental cost by careful choice of materials and construction systems.
- Encourage the efficient use of materials including waste reduction, re-use and recycling. Maximising opportunities for household waste reduction,
- Re-use, recycling and composting.

Resource efficient buildings

- Design and construct buildings with a low energy loss.

- Install systems that minimise resource use, including water efficient appliances.

New residents

- Inform and advise the new community of the low-energy measures applied to their dwelling
- Provide clear requirements for small extensions to the dwelling, particularly conservatories to ensure that the location and design of the extension does not compromise the low-energy measures of the original dwelling design.
- Include information on the design and development principles of Heyford Park.

Landscape

Landscape Design and management will seek the minimum level of energy use and to re-use resources. In particular:

- Trees will be grown on locally, using locally indigenous materials.
- Mulches and soils will be created using recycled materials from trees to be removed, appropriately composted on site for a minimum of two years.
- Planting will be indigenous and low maintenance.
- Care will be taken not to use inappropriate or unnecessary chemicals.

Base Management Plan

A management company will be set up to ensure the preservation and enhancement of the historic and natural heritage of RAF Upper Heyford. It will fund a liaison group with representatives from freeholders, managing agents, English Heritage, wildlife organisations and from Parish, District and County Councils. Its remit will cover four key areas:

Historic and cultural heritage

- to preserve and enhance the character and appearance of the Conservation Area,

- to maintain the fabric of all retained buildings and structures,
- to retain of the functional relationship between buildings and structures,
- to allow public access to parts of the site with historic significance commensurate with the need to maintain adequate security.

Landscape

- to retain the visual openness for the flying field,
- to achieve the aims of landscape character guidance.

Ecology

- enhancement of biodiversity across the site,
- extension of the ecological interest within the site.

Public access and movement within the flying field

- improved public access to the site and from surrounding villages to the facilities within the new settlement,
- interpretation of the site's history and ecology,
- controlled access to the site's historic and cultural assets,
- safe access for occupants of buildings within the flying field.

A Base Management Plan has been prepared and is a supporting document to the planning application



built form

4

4.1 Approach

This section describes the main elements of the built-form masterplan for the proposed new settlement area and its relationship to the wider flying field.

4.1.1 The Public Realm

The masterplan aspires not just to create a layout within which well designed buildings and amenities can function satisfactorily, but to also create a public realm - a common ground in both a geographical and a human sense - which engenders a sense of community. This realm comprises the streets, squares and parkland through which the place will be experienced. Individual elements can become communal outdoor 'rooms' and are joined together in a way that will make the settlement 'legible' to residents and visitors alike.

4.1.2 Design Method

An initial street pattern diagram was prepared and then transferred to a 1:500 scale photographic base model. Using models representing individual buildings and their plots, a three-dimensional model was then built up. This process tested original street placements and highlighted opportunities for built form development. The model was then photographed from above and the photographs assembled to produce a distortion free plan. That plan has provided the basis for subsequent modifications.



fig. 4.1 Photo of working design model



fig. 4.2 Early concept sketch of the proposed development south of Camp Road, showing the approach to the development edge and the creation of different residential character areas (View taken from south-west)



4.2 The Masterplan



fig. 4.3 Built-form masterplan

4.2.1 The masterplan shown at figure 3.1 and inset, left, shows the broad layout of the proposal for the settlement area, identifying its main components and relationships. The key features, which are described in the rest of this section, include:

- Visual links between the development and the surrounding countryside.
- A green network which links open spaces within the settlement area.
- The retention of existing trees throughout the development, so far as this is possible.
- The extension of green links and lanes southwards within the development.
- Drainage systems which minimise rapid run-off of rainfall, with swales alongside green lanes and retention ponds.
- A neighbourhood centre at the heart of the settlement, easily walkable from residential and employment areas, centred around a new green space on Camp Road.
- A new convenience store and shops in the neighbourhood centre, with a new primary school, facility for a crèche, and the narrow-boat workshop converted to a pub/restaurant.
- Camp Road traffic calmed at frequent intervals by street junctions and pedestrian crossing points and refuges.
- New flats and housing on the Trenchard street pattern north of Camp Road.
- Existing houses retained on Soden Road, Larsen Road and Carswell Circle.
- Business traffic rerouted past the former Officers' Mess, keeping it out of the residential area.
- New office buildings between the aircraft hangars and the Trenchard residential area.
- Existing buildings around the gatehouse tidied up and extended with new office and residential accommodation.
- A new linear park along Camp Road, using existing trees in that area.
- New housing areas east and west of Carswell Circle, replacing existing bungalows and barracks accommodation.
- A landscaped southern edge to the new housing areas, with paddocks, allotments or community gardens providing a soft edge.
- Pitches laid out on existing sports fields to the west of the settlement area.



4.3 Street Pattern

The network of streets is the starting point for the plan. The appraisal notes that there are strong existing street patterns within the technical and residential areas of the settlement, and that they fall into distinct character areas, which are poorly linked to each other. The street network is one of the primary elements that will unify the whole settlement, and it is an essential purpose of the proposed street layout to make strong linkages throughout the scheme.

4.3.1 Retained Street Patterns

The only direct road link between Heyford Park and surrounding areas is Camp Road. While the detailed arrangement of the highway may change (see below), its essential function as the primary street of the development is retained and it feeds the main streets serving residential and business areas of the settlement. These main streets also follow the existing pattern of access, with junctions onto Camp Road northwards and southwards at the Main Gate and at Dacey Drive. Figure 4.4 shows this overall structure with the new east-west link south of Camp Road.

North of Camp Road, the Trenchard trident street pattern of the airbase technical area is retained for its historic significance. It creates a formal character that is reflected in the form of proposed new buildings facing the camp entrance and it serves both employment and higher density residential areas. The informal cul-de-sacs of the officers' housing in Soden Road and Larsen Road and the "Tobacco Houses" in Trenchard Crescent are retained and linked to new housing.

South of Camp Road, the area of the barrack blocks lacked a comprehensive street pattern, although the blocks themselves were laid out in a fairly organised and rectilinear arrangement. Consideration was given to retaining the area of concentric crescents between Roper Road and Eady Road, but the condition of underground services and the existing road construction and geometry gave particular problems for future adoption and satisfactory housing layout. At Carswell Circle, the layout of the houses in a long oval is intrinsic to the special character of this part of the airbase, and it is retained in its complete form.

4.3.2 New Streets

The main area of new streets within the existing development is south of Camp Road. Within the former barrack block area, the original layout is very rectilinear, giving a sense of formality to its character. It is particularly strongly expressed around the former parade ground, which is to be retained as reference to former military use. This develops simply into a rectilinear grid, with the main street from the Main Gate as its spine.

West of Carswell Circle, Dacey Drive is the only remaining street from the earlier pattern, and a similar network of streets is established between it, Camp Road and Carswell Circle. This area would be of medium residential density (30 - 45 dph). Towards the edge of the developed area, the block pattern enlarges and becomes more informal, with more open, green lanes and more widely spaced buildings.

The streets are planned to subdivide the land into convenient plot depths. At minimum, streets are spaced two plot depths apart in order that buildings can address the street and gardens can mostly be kept private, within the block.

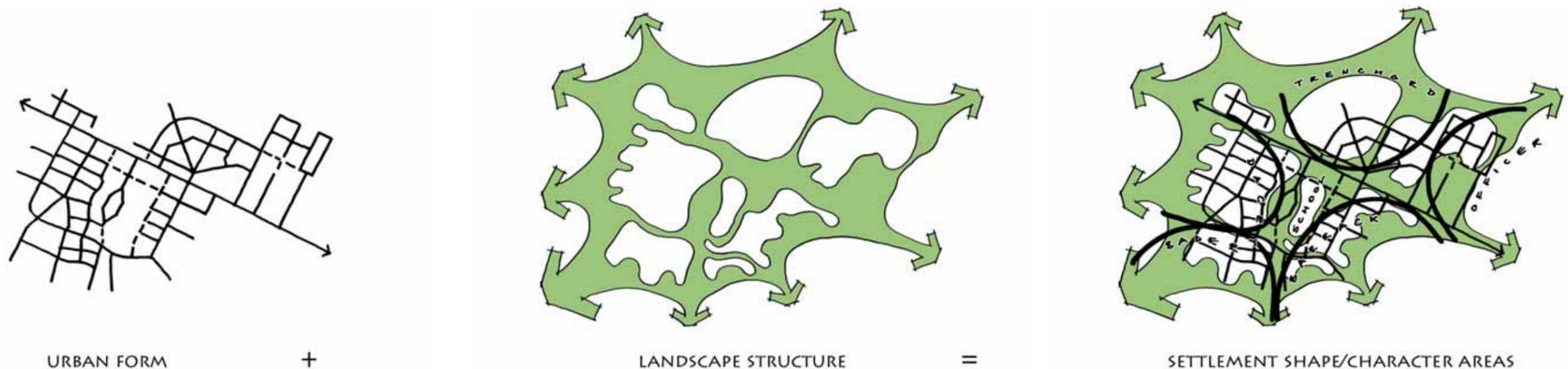


fig. 4.4 Evolution of concept

A clear hierarchy has been established for streets, in urban design as well as highway engineering terms. These street types will be the subject of design codes prepared for the Heyford Park development. Where major lines of movement intersect, there is an opportunity to create a 'node', a court or some form of square or green space.

The hierarchy of streets establishes the framework for character areas that are realised through the design of street sections, series of plots and individual buildings.

4.3.3 Approach to Street Design

Standards adopted for the provision for vehicular movement and parking are a major influence on the appearance and functioning of residential neighbourhoods. The standards determine the character of the public realm.

The key principles of the approach to highway design are:

- The plan is a semi-lattice movement structure that creates a large number of street intersections. These junctions are memorable places which aid legibility. Very few cul-de-sacs are planned.
- All roads provide frontage access. Distributor roads that do not provide direct access to buildings tend to have poor surveillance, are hostile to pedestrians and are inappropriate within a neighbourhood.
- Street junctions are the places where pedestrians will most often want to cross the road. The masterplan therefore creates informal courts at these locations – technically raised tables – in order to give priority to pedestrians and slow vehicles.
- Each street has the potential to be unique by virtue of its alignment – both horizontal and vertical – and the containment afforded by buildings. Kerb-lines therefore follow building lines rather than fixed carriageway widths.
- Traffic speeds are reduced through design rather than signage.
- A simple palette of high quality materials will be used for all streets.



fig. 4.5 Street junctions are where pedestrians most often want to cross the road (Newhall, Harlow)

These principles apply both to retained and new streets. Most existing streets already form part of lattice-type layouts, and new streets are planned to extend and increase the interlinkage of these patterns.

4.3.4 SUDS

The incorporation of sustainable urban drainage systems (SUDS) is intrinsic to the design and layout of streets within the settlement in a number of ways. In broad terms, surface water drains southwards to outfalls into watercourses at the perimeter of the site. (See also 3.9.4)

The street network follows this natural direction of flow allowing a number of higher order routes in the network to be developed as green lanes with swales and other open drainage features. In the detailed design of the lower order lanes and mews, surfaces for parking and pedestrian priority areas will make use of porous materials and construction methods. Wherever possible and appropriate, access to individual properties will be via shared access ways, which can more easily



fig. 4.6 Sustainable urban drainage in the USA

meet SUDS standards than fully adopted highways. The retention of trees requires permeable surfaces in root protection zones.

4.3.5 Services

Piped and ducted services will run in defined strips within the adopted highway. Routes will have to take into account tree root protection areas to avoid damage to retained trees, and new street trees will be planted using methods that contain root growth.



4.4 Landscape Proposals Within The Settlement Area

4.4.1 Tree Strategy

Trees will be planted that characterise each area. Refer to the schedule included at Appendix B. Selected species will reflect space available in the masterplan and broad types of land use, i.e. residential, business park and open areas/airfield.

The underlying soil is limestone - trees which grow best are:

- Ash *Fraxinus Excelsior*;
- Hawthorn *Crataegus*;
- Beech *Fagus*;
- Field Maple *Acer campestre*;
- Hornbeam *Carpinus betulus*;
- Apple *Malus*;
- Prunus - Japanese types;
- Rowan *Sorbus aria x intermedia*; and
- Elm *Ulmus*.

4.4.2 Residential Areas

Tree planting is integral to the design of streets and other public open spaces. Appendix B identifies distinct ranges for:

- each of the three primary access avenues
- larger public open spaces
- smaller public spaces
- as feature specimens in public open spaces, and
- small trees for front / back gardens

4.4.3 Street trees

Species are identified for street planting to suit the scale of the proposed street, e.g.:

- Medium width avenues – *Carpinus betulus*
- Narrow avenues - *prunus* species, *pyrus*
- Small streets – *Acer campestr*, *prunus* species, *sorbus* species

4.4.4 Strategic planting

Different selections are identified for copse planting around the airfield perimeter, for new hedgerows and for the settlement edge. At the interface between the flying field and the settlement area, fencing and planting will be used that allow views through to the flying field but maintain security for activities there.

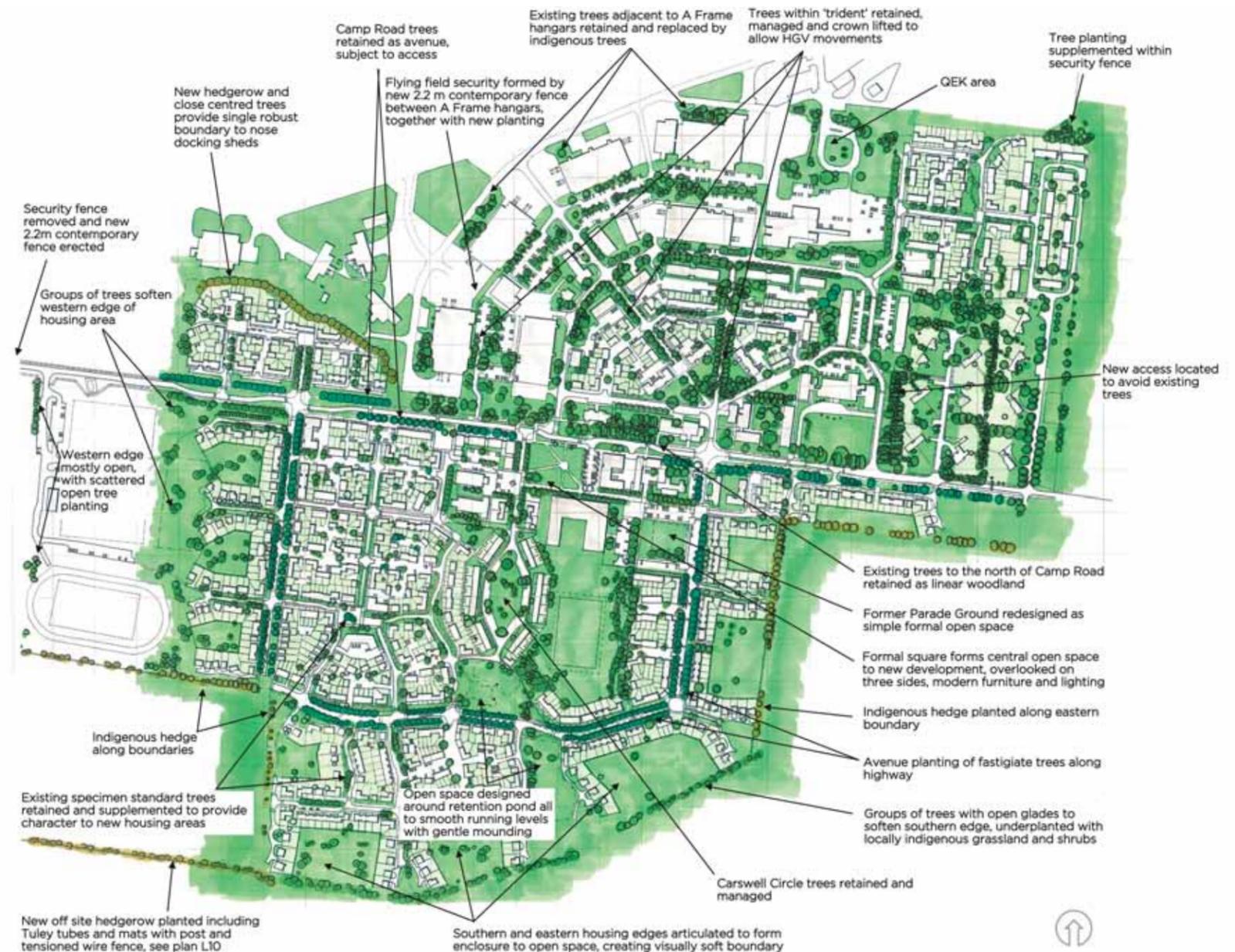


fig. 4.7 Summarises landscape design proposals within the new settlement area.



4.5 Blocks, Plots & Buildings

Buildings are arranged for the most part in perimeter blocks that define public fronts (streets) and private backs (gardens and courtyards). Block dimensions have been calculated to maximise the privacy of rear gardens at given densities. Most dwellings are sited at the front of the plot in order to delineate streets and optimise private gardens. In general, minimum back-to-back dimensions of 20 metres are allowed, with an 8 to 10 metre zone for the dwelling itself. At the front of the block, street corridors are 15 to 25 metres depending on the street type (see street hierarchy at 4.7, below). These dimensions generate minimum block sizes of 40 metres between street corridors and a street network of typically 60 metres between centre lines.

Dwellings are terraced, linked or detached according to location. The pattern of existing development at Heyford Park lies very close to the optimum east-west axis to benefit from solar energy, and the design of new areas in the street network intentionally retains and exploits this attribute. Streets running within 30 degrees of an east-west axis benefit from access to passive solar energy and are largely terraced or linked houses. North-south streets contain a higher proportion of detached or part-detached houses to provide solar access on gable walls.

4.5.1 Position and architectural distinctiveness

Buildings are unique by virtue of their situation e.g. overlooking a square or green space, addressing a main street or at the head of a mews. The detailed design of house types will respond to the range of conditions that the masterplan generates. In particular, locations are created for:

Landmark buildings

There are some locations where a 'landmark' building is called for, for example at the end of a long vista or at gateways to character areas. These are indicated by symbols on the masterplan.

Corner buildings

The importance of street junctions has been highlighted, and corner sites are therefore critical in the overall plan. Where identified, buildings should 'turn the corner' i.e. be designed with elevations that address both directions, not leaving visible ends blank.



fig. 4.8 Urban design key plan

Buildings overlooking mews courts

At least two houses should front a mews court and houses at the entrance to a mews should ensure that some windows overlook the space to provide natural surveillance.

Building height

In general, new buildings are two storeys, rising to three at landmark locations and close to retained hangars in the Trenchard area (see figure 4.9, opposite). Some apartments will be required in the affordable provision and apartment blocks can be used where the masterplan demands greater height and visual impact.

The character of the Trenchard area is described in more detail at 4.6.3, below. Building heights are arranged so that new office buildings provide a transition between the hangars and new housing. The hangars are 8-10 metres at the eaves, while 3-storey housing is 7.5 to 8 metres. The office blocks are two storeys, but with storey heights of 3 to 3.5 metres, and are of a larger architectural scale generally, so that in form and scale they mediate between the hangars and other development.

4.5.2 Plots

The plan will provide a range of plot widths and depths. Formal frontages with an architectural rhythm, such as a terrace of town houses, may require a uniform division of land into plots. Informal streets, however, may benefit from a mix of plot widths to give variety along the street. The uniform repetition of detached houses will generally be avoided. Plot widths relate in part to dwelling size, and a good mix of plot widths in a given area indicates a good mix of dwelling sizes and types. Wider plots are also useful where plot depths are limited, helping to achieve good private garden areas.

Blocks are generally of sufficient depth to achieve privacy through distance between houses. In many cases this will allow wide frontage, shallow depth plots on one side of the block with narrow deep plots on the other. Houses on smaller plots will need to create privacy through layout; larger gardens can create their own privacy. The masterplan also creates a special kind of garden space around the southern edge, backing onto open paddocks without intruding onto the open countryside.



fig. 4.9 Heights parameter plan



4.6 Character Areas

Character areas

The overall principles of settlement structure and residential density are discussed at 3.3 and 3.5 above. The future Heyford Park settlement will include character areas that vary according to the nature of existing buildings to be retained, development uses and, in housing areas, the intended residential character. The main character areas are summarised in the following paragraphs and illustrations.

4.6.1 Camp Road

Camp Road gives the first impression to anyone arriving at Heyford Park, and so is extremely important for the whole settlement. The biggest issue is the impact, particularly the speed, of through traffic. To keep speeds down, significant incidents must check drivers every 60 metres or so. Cross-routes and junctions can provide some of these, with priority given to north-south movements, which connect the two halves of the settlement, over movements along Camp Road. Existing roundabouts will be replaced by priority junctions, light controlled where necessary, to allow easier pedestrian crossing and reduce the impression of free-flow vehicle priority.

Camp Road marks the settlement centre by special treatments at the Main Gate and the Dow Road junctions. At these points the carriageway is offset southwards, to provide calming for through traffic on Camp Road, and emphasise north-south movements of traffic and pedestrians within the settlement. The junctions themselves will be designed with surface changes, levels that ease pedestrian and wheelchair / pram crossing and possibly signage or artwork indicating neighbourhood facilities. The carriageway surface between the two junctions could be of a different material to the rest of Camp Road, and could include bus stops, pedestrian refuges and other elements appropriate to the centre of Heyford Park.

Camp Road is also part of a broad green tree belt running through the settlement as a linear park on the north side where it continues to provide a setting for some of the former RAF buildings. On the south side, it provides visibility of the new settlement centre, which is particularly important for passing trade supporting the commercial facilities there.

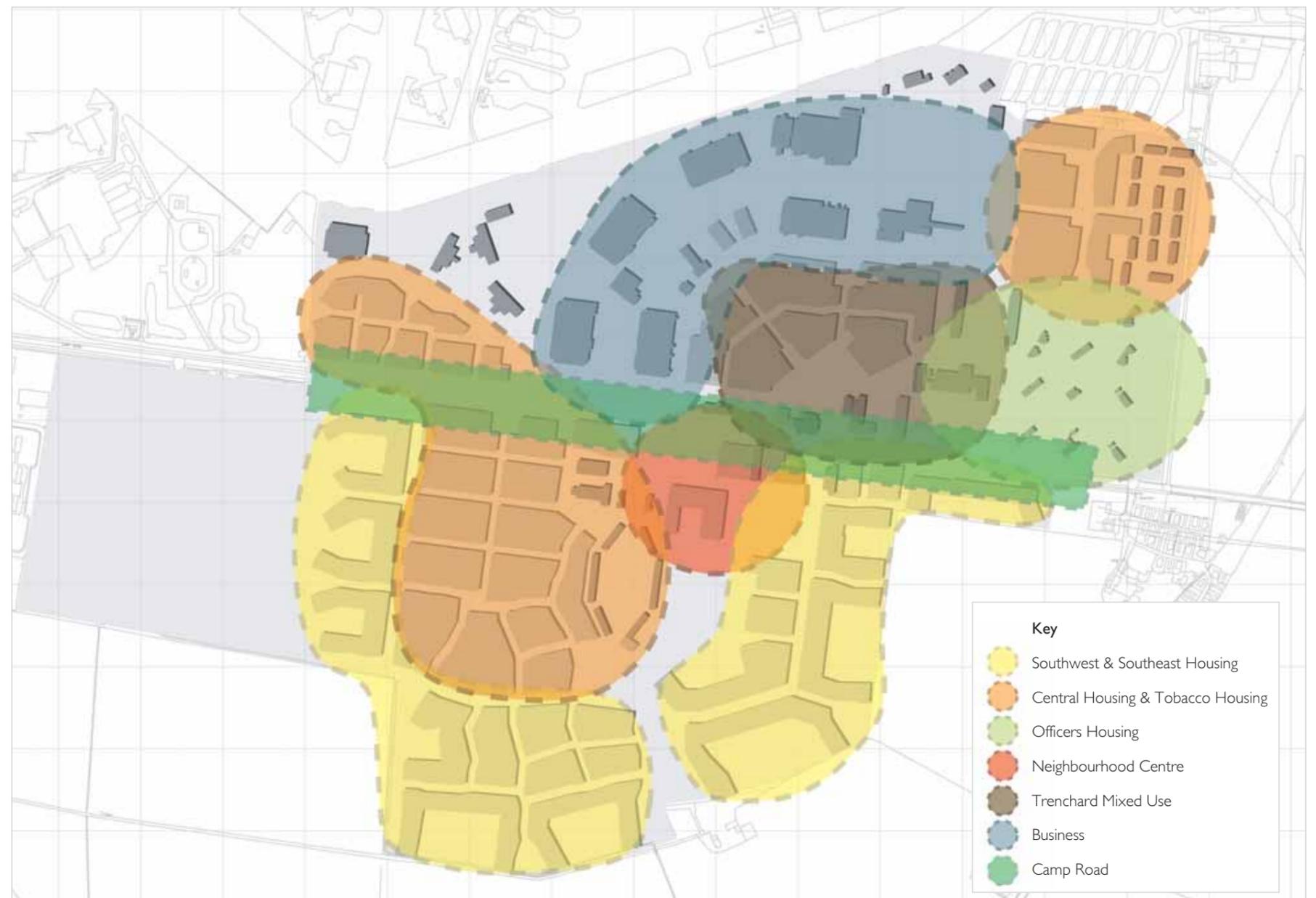


fig. 4.10 Character area key plan

4.6.2 The Centre

Shops and community facilities

The centre accommodates the key community buildings of school, shops, public hall and church. Options for siting these elements within the overall settlement are discussed above. The preferred option illustrated here shows the church and hall retained in their present positions, and the existing shop, car park and petrol station cleared and landscaped as the centrepiece. The masterplan proposes that new shops should be built overlooking this new park space on Camp Road where there is excellent visibility for passing trade. There is the potential for unit shops adjoining the store, overlooking the park. The centre then becomes both a key component of the green structure described above, and a focus for community buildings.

North of Camp Road and overlooking the park, the existing narrow-boat workshop is to be retained and converted to use as a pub-restaurant. Camp Road at this point will be heavily traffic calmed and designed in detail to allow easy pedestrian movement across the road. This completes all four sides of the park and ensures that the centre provides a focus for the whole settlement and a strong link between areas north and south of Camp Road.

Pedestrian spine – Park Walk

The east-west link between the former parade square and the church and hall is a key component of the movement structure, providing a pedestrian-only alternative to Camp Road as the main east-west link in the settlement centre. It is intended as a broad park walk, linking all the main community facilities, providing safe access to entrance points on the north elevation of the school, and running past the unit shops and the possible crèche facility. The single house at 4 Dow Street would be cleared so that the community centre is visible at the end of the walk. The building could have a new entrance built at the eastern end, and paving and planting schemes would tie in with the church.



fig. 4.11 Detail plan of proposed retail area showing pedestrian walkway

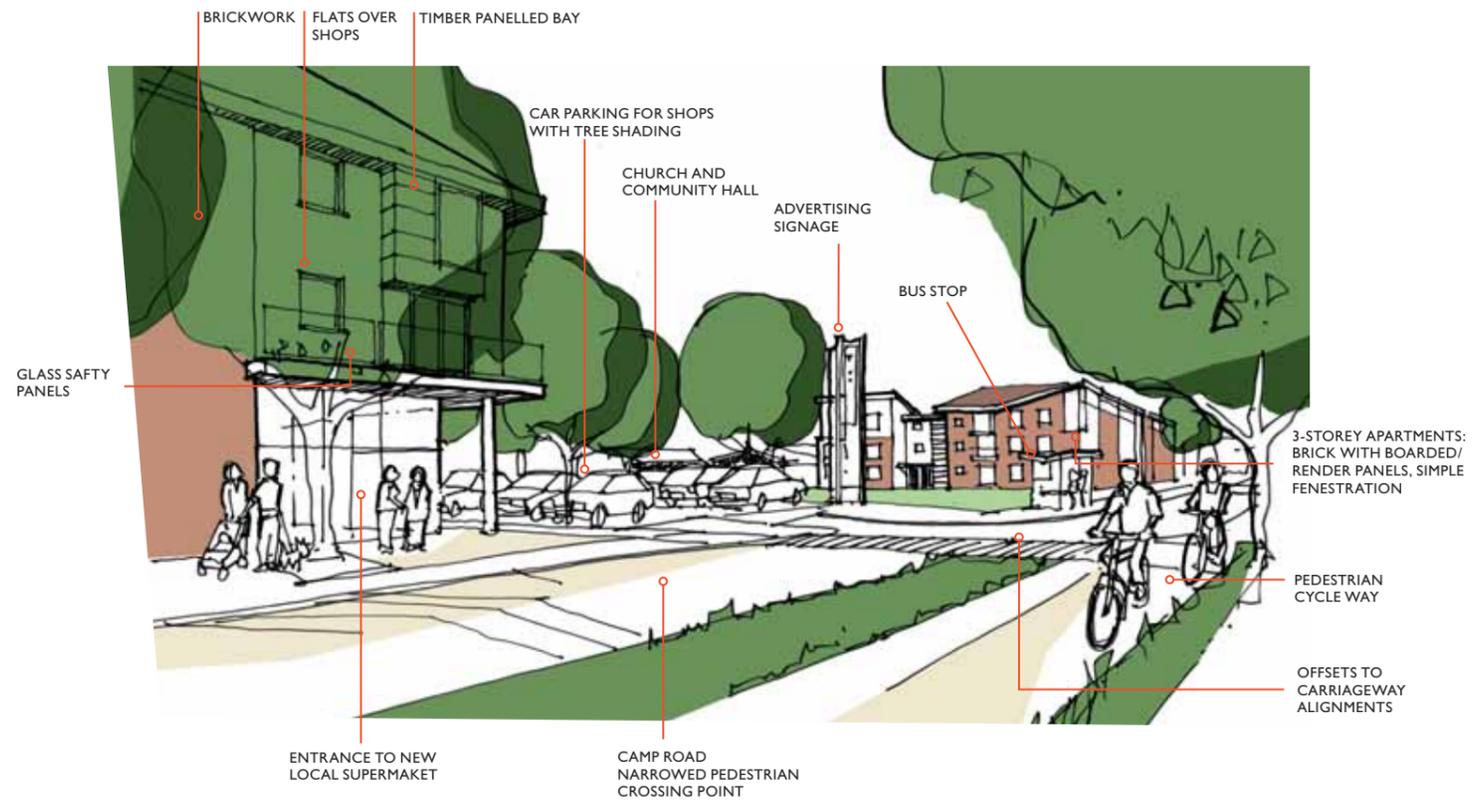


fig. 4.12 View over Camp Road and Central Park

The park walk crosses Dow Street at a shared surface square, possibly with public art related to the church and community hall. Dow Street itself will be retained as a low-key vehicular access into Carswell Circle. Dacey Drive will provide the main access route to the west and the former entry to the barracks area from the Main Gate will provide the main access to the east. Figure 4.11 shows the main features of the pedestrian spine.

Primary school

A major element of the green structure of the masterplan is the school site, which Oxfordshire County Council requires to be 2.22 hectares. The school building is sited at the north of the site, where it has a direct aspect over the neighbourhood centre park. The school buildings should have a main elevation with access points off the park walk. This position also allows flexibility for the design of buildings with a southerly orientation over the school fields, allowing interplay between classroom and outdoor spaces. The eastern elevation of the school is set back behind trees retained on demolition of the barrack blocks and faces the former parade ground, which is to be retained as a garden square, Parade Square. It is anticipated that vehicular access and visitor parking would be provided on this side, off the square.

The school buildings are positioned so that they can have the maximum presence on the street scene, defining space to the neighbourhood centre park and the Parade Square. Most of the school field back's onto private gardens, making the boundary more secure, with less visual intrusion. The eastern side adjoins a landscaped walk linking the ends of residential mews which overlook the route. This green edge will screen the security fence as far as possible.

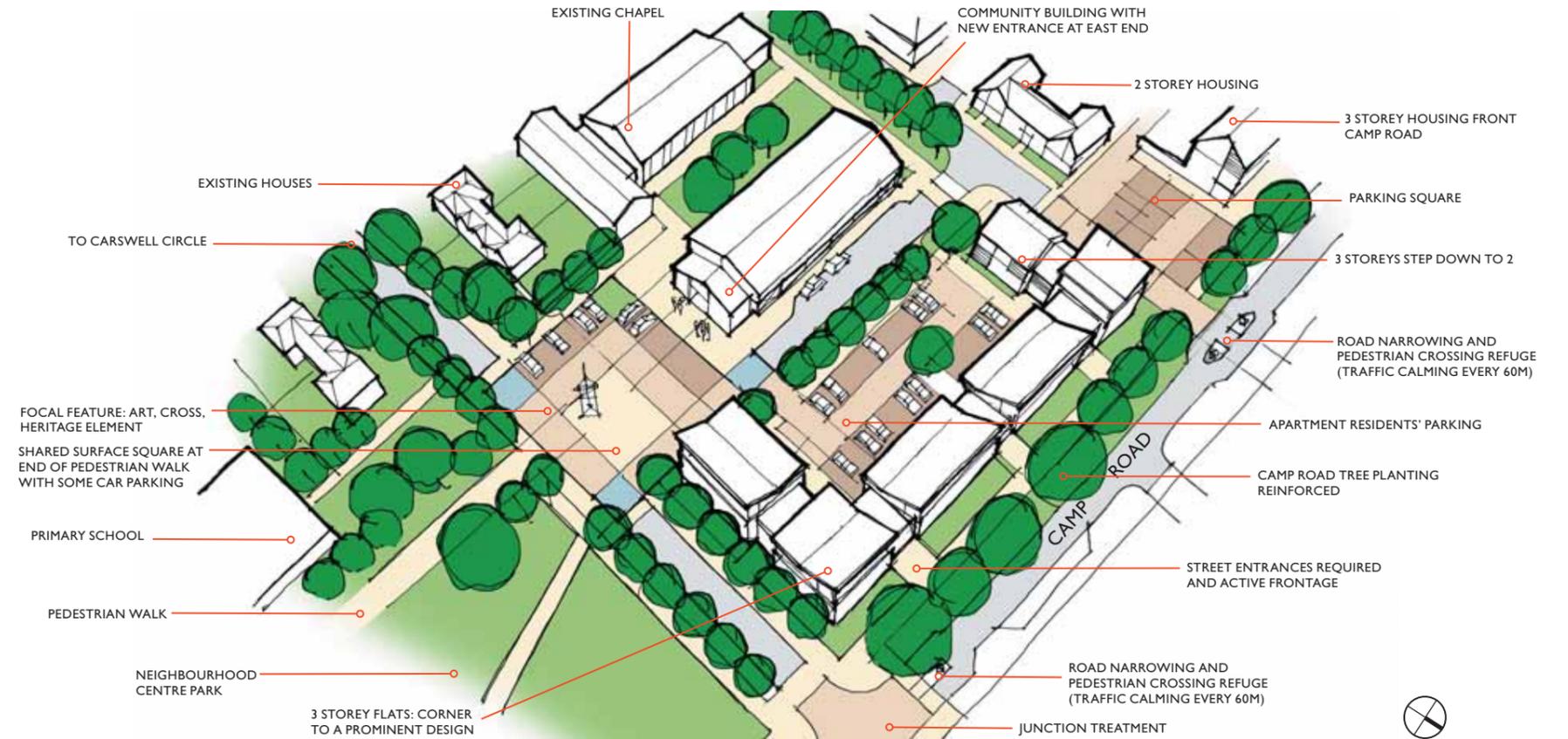


fig. 4.13 Aerial view of proposed community facilities



fig. 4.14 Aerial view of proposed retail area and school

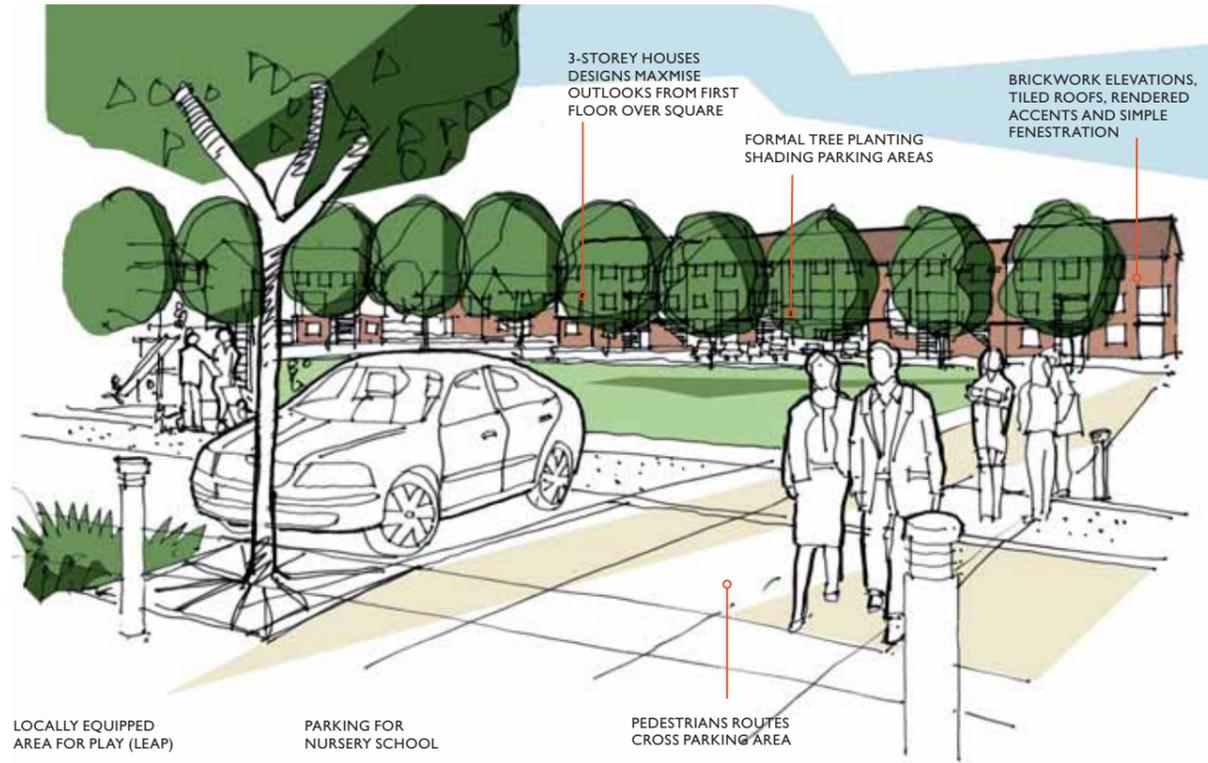


fig. 4.15 View of Parade Square

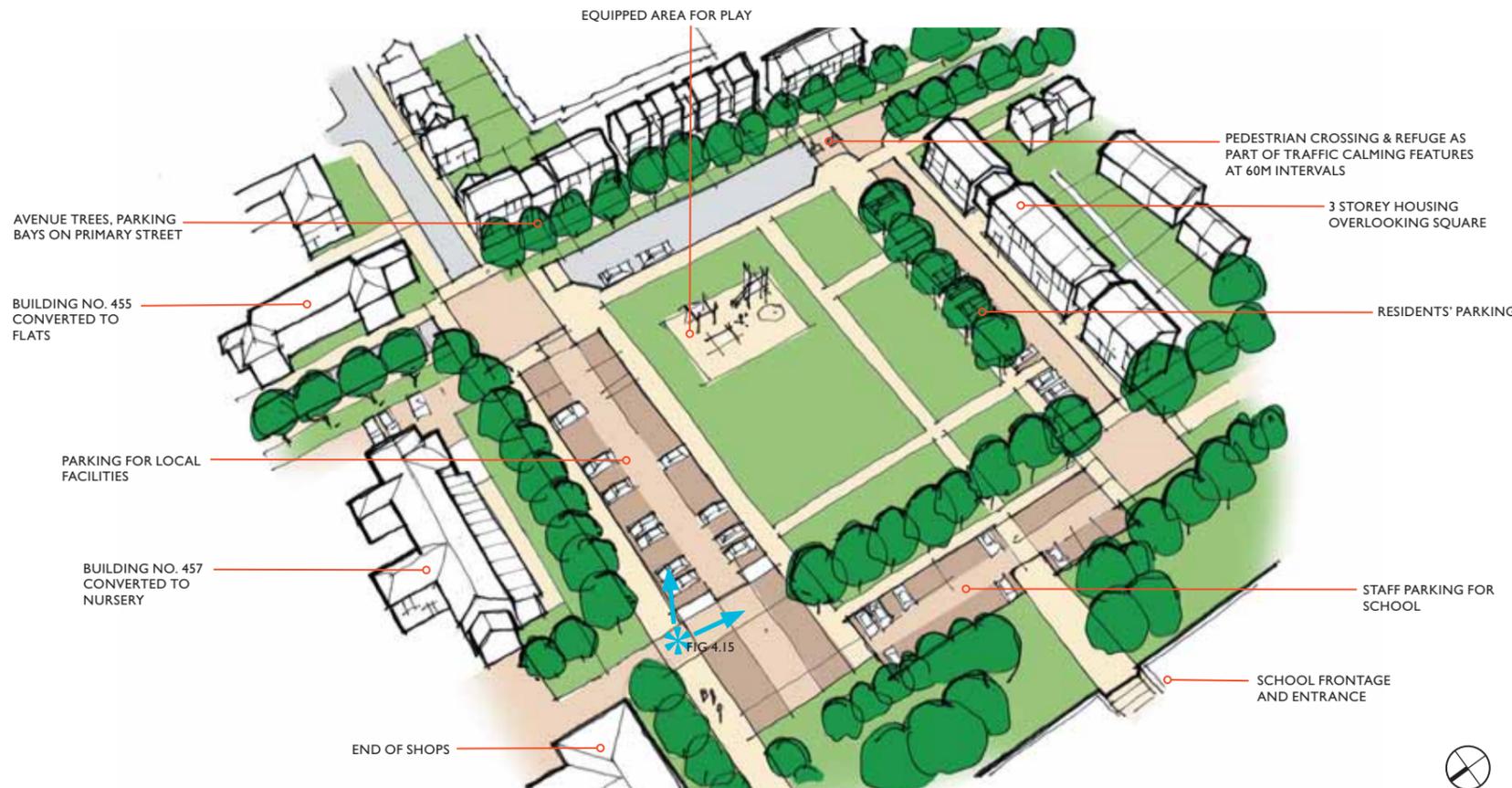


fig. 4.16 Aerial view of Parade Square

Parade Square

The parade ground was a significant space in the life of the airbase, and related to the relatively formal layout of barrack blocks and welfare facilities around it. There is a consensus that this historic character should be reflected in the layout of the new settlement, appropriately adapted to residential rather than institutional use. The proposed Parade Square occupies the northern half of the original parade ground - which had been partly built on since originally laid out in the 1920s. In keeping with its original paved character, it is envisaged that it would accommodate car parking for the crèche, school and adjacent new housing, but the large area at the centre would be formally landscaped with lawns and trees.

4.6.4 Central housing area

The central housing area occupies the former area of bungalows west of Carswell Circle. It also extends north of Camp Road into the area south of the Nose Docks. It is characterised by a high proportion of narrow and medium width plots (see 3.5, above), providing predominantly two and three bedroom houses. There are some three-storey houses and apartment buildings sited in more prominent locations.

The street pattern is gridded and set out to the alignments of the existing main streets of Camp Road and Dacey Drive. It has a dominant east-west alignment, allowing terraces to be oriented southwards for maximum passive solar benefit. Dwellings facing Camp Road are located to avoid the need for a service road to the frontage and the simple device of an open-ended housing mews gives well supervised car access and parking close to the dwellings served. The end blocks on Camp Road are of significance as corner buildings, and provide strong three-storey elements at key points in the street scene. Apartment blocks also have the advantage of being able to face a main street without the need for front vehicular access as they can be serviced from the rear.

The intersections of mews and streets in the centre of the area are designed as raised tables with pedestrian priority. The central space shown at figures 4.17 to 4.19 is the largest example. Corner houses are positioned to create a road junction which acts as an informal public space where the shared pedestrian vehicular surface extends right to the buildings. The aim is to reduce vehicles to very low speeds.



fig. 4.17 Detail plan of square within housing area

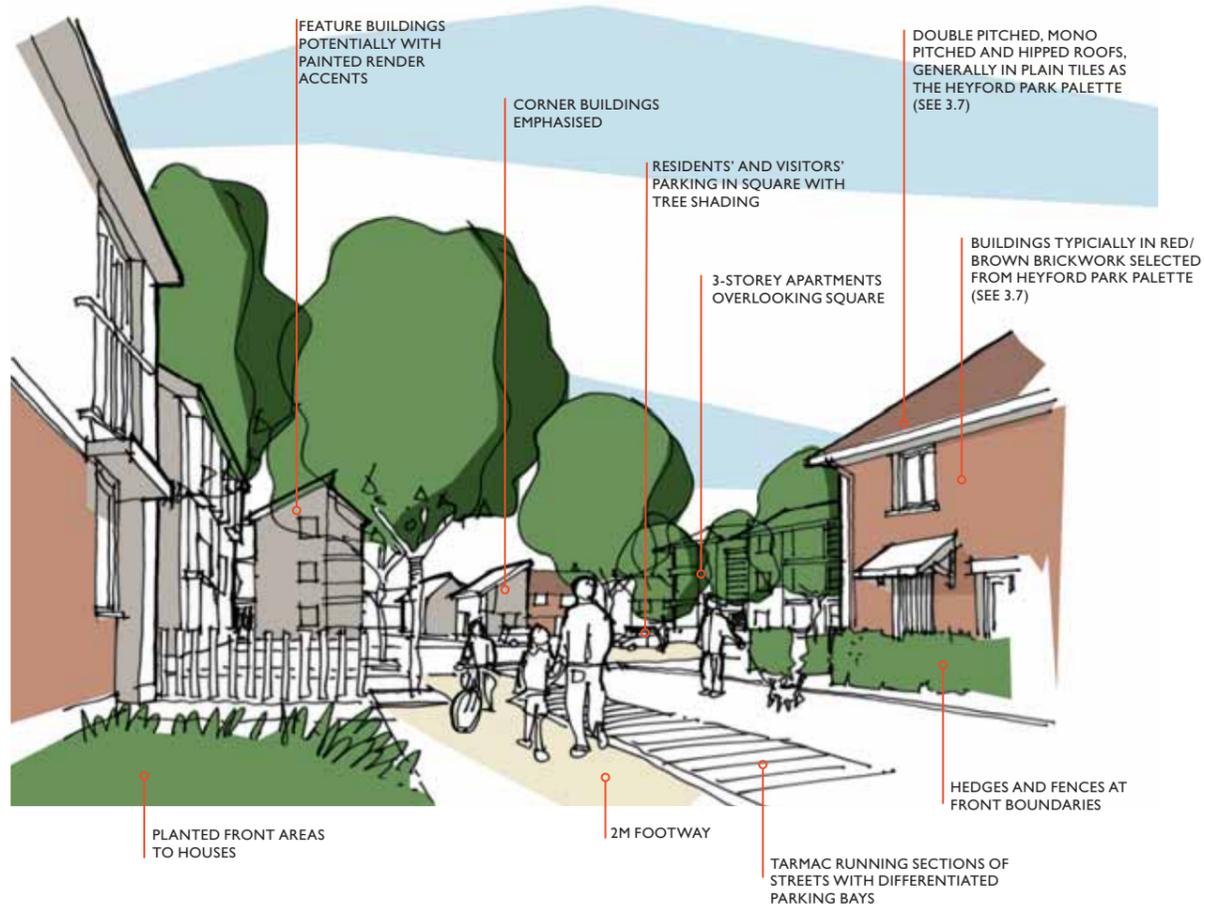


fig. 4.18 View into Central Space



fig. 4.19 Aerial view of square within housing area

4.6.3 Trenchard mixed-use area

Figure 4.15 shows the concept for the mixed-use area located around the Trenchard street layout north of Camp Road in the former airbase technical area. It comprises new housing, with apartments, some new business buildings and a number of retained employment buildings, including the hangars to be retained on the airfield apron. The main design issues here are to express the distinctive trident street pattern, to preserve the strong belt of green space along the northern side of Camp Road, and to mediate between the massive scale of the retained hangars and the domestic scale of new residential development. This issue is of concern, since it is recognised that the relationship of the hangars to the flying field is fundamental to the character of the airbase, but that their relationship to possible future development, especially residential, could be difficult.

Street layout

The street layout retains the Trenchard plan almost completely. The Main Gate provides access to both employment and residential areas for light traffic only. It is proposed that the north-westerly diagonal is made a pedestrian-only route at the existing five-way junction in front of Heyford House and is closed to vehicles, simplifying the junction and discouraging commercial traffic through the housing area. The character of the Trenchard pattern is retained in the layout and by reinforcing the avenue tree planting along the existing radial streets.

The heaviest traffic is to be routed via the Innovation Centre to the east onto the quadrant road serving hangars 151 and 315. From here, access can be gained into existing employment areas and the flying field via a number of possible routes between and around buildings. This route has a particularly important function in the street network, forming the "seam" between retained business uses to the north-west and new residential development to the south-east. Primarily it serves business uses, with new business buildings on the south-east side forming a buffer between the hangars and new housing.



fig. 4.20 Concept layout showing Trenchard mixed-use area

Residential development

The area is close to the main gate of the original airbase where the existing character is set by the scale and style of the remaining administration buildings, notably the Heyford House office block (building 52) and by extensive areas of mature high-canopied trees. The design response here is formal, with three-storey apartment blocks facing the Main Gate across retained green space and trees. Existing buildings within the quadrant are generally single-storey, architecturally poor and of little value in either current or new uses. New housing will replace all of these buildings, generally at medium development densities (30 - 45 dph) in two and three-storeys arranged around new access streets and mews.

Business development

New buildings are proposed on the south-east side of the quadrant road backing onto new residential development. These would be of two storeys, but with storey heights greater than typical residential dimensions, to accommodate servicing and structure. Sites would be well landscaped and provide maximum allowable levels of car parking. Figure 4.22 shows how the scale of new business buildings mediates between existing 8–10 metre high hangars and new 5–8 metre high houses and flats.

The original part of the gatehouse building (no. 100) is to be retained, but most of the later additions to it will be removed, and these will be replaced with modern office space, up to two storeys high. New buildings will be set back from the retained building and fit between existing trees, so as not to dominate the existing structure.

Public realm

The radial streets from the Main Gate and the quadrant road are lined by mature trees, which contribute greatly to the existing character of the area. These avenues will be maintained and strengthened, and the avenue treatment extended to other streets in the network where appropriate to their status. The southern side of the area is bounded by a belt of green space and mature trees some 40 to 50 metres wide, which separates the developed area from Camp Road. There are currently various small buildings within this belt, many of which are of low value for retention, and it is proposed, with the exception of buildings 100 and 103 (gatehouse and narrow-boat workshop), that they are cleared to form a linear park as part of the green corridor that extends right through the settlement along Camp Road. This section of the green corridor coincides with the neighbourhood centre park, south of Camp Road (see 4.6.2), emphasising the green heart of the masterplan.

Innovation Centre

A new route for HGVs will be provided into the business area as part of the movement strategy described at 3.4 above. The junction with Camp Road would effectively be the gateway to the new settlement and would include detailed design features accordingly. The route passes the Innovation Centre, where car parking will be reconfigured to suit.



fig. 4.21 Detail plan of Trenchard mixed-use area



fig. 4.22 Aerial view showing proposed business area

4.6.5 South-west and south-east housing areas

The south-west and south-east housing areas are to be redeveloped on the former bungalow and barrack block areas respectively, south of Camp Road. They are at the interface of the residential neighbourhood and open landscape and their lower density character (18 - 30 dph) reflects this. They are characterised by a high proportion of wide plots, 10 - 20 metres wide, with direct views over open countryside.

The adjacent countryside has been extended into the housing area as horticultural areas, orchards, allotments or sports facilities. It breaks down what otherwise would be a hard urban edge to the settlement and sets back new houses from the wider countryside, greatly reducing their potential visual impact.

The north-south street pattern is extended as green lanes with wide verges and swales and new hedgerows on the front boundaries of plots. Most houses in north-south streets will be detached to allow solar gain to southerly elevations. Car parking on plots is between detached buildings so that vehicles do not dominate front areas visually. As lanes terminate in the landscape, they may open out to landscape views, and the last groups of houses may be served by shared private drives (up to 5 in such a group). This all helps to reduce the visual impact of street surfaces and to increase the informality of the overall appearance. Areas facing onto major open space – green edges – will be handled in a similar way.

East-west streets will have a higher proportion of medium width plots and some narrow ones, creating groups of linked and terraced buildings. These will benefit directly from a southerly elevation, and the variety of width and type will create visual interest and mix.

Some parts of these housing areas away from the landscape edge will have a mews and lane character similar to the central housing area. A particular example is between the eastern access avenue and the school where mews courts end facing out onto a belt of landscape as a green walk from Parade Square.

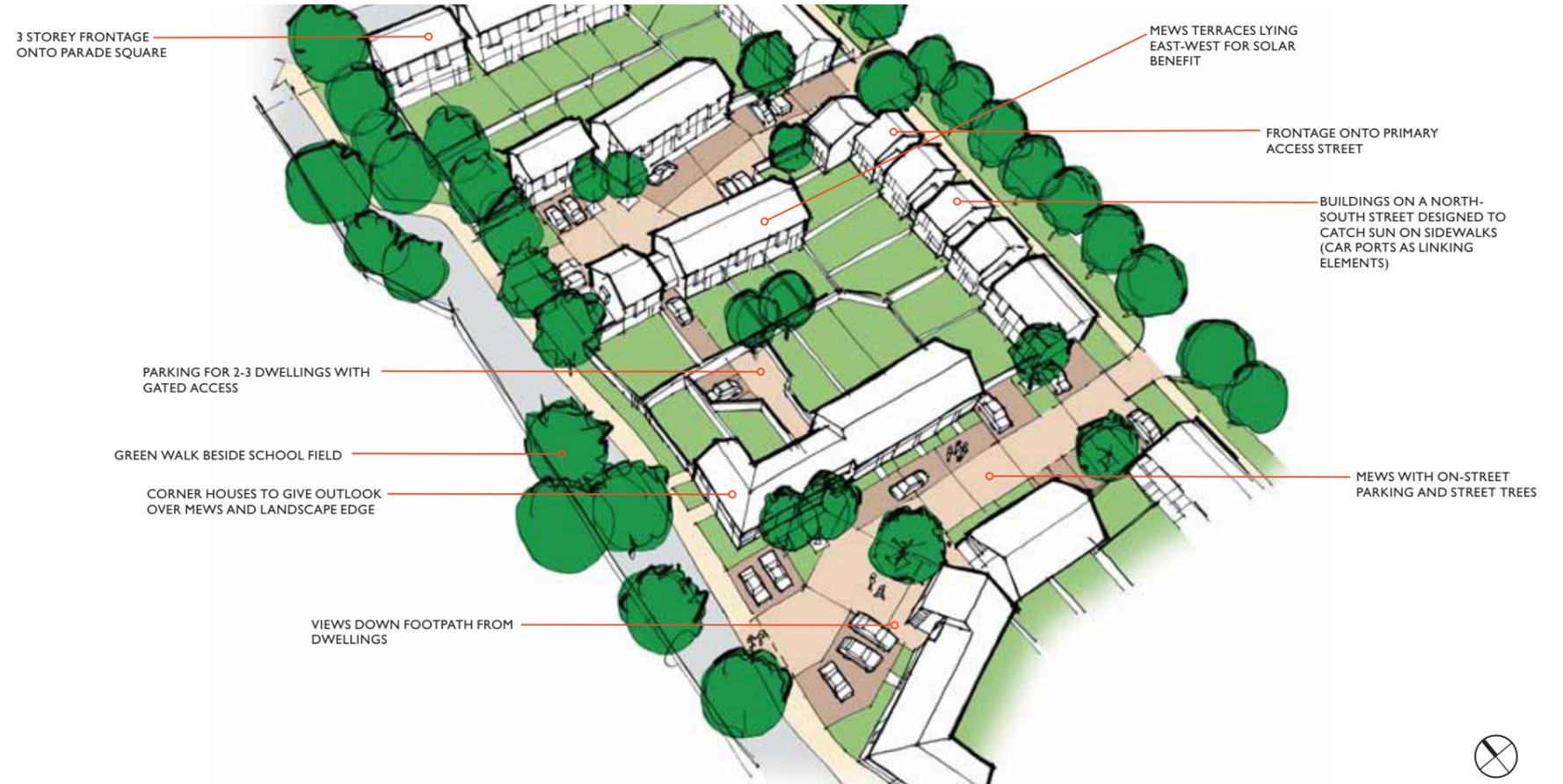


fig. 4.23 Aerial view of housing area



fig. 4.24 Aerial view of housing area

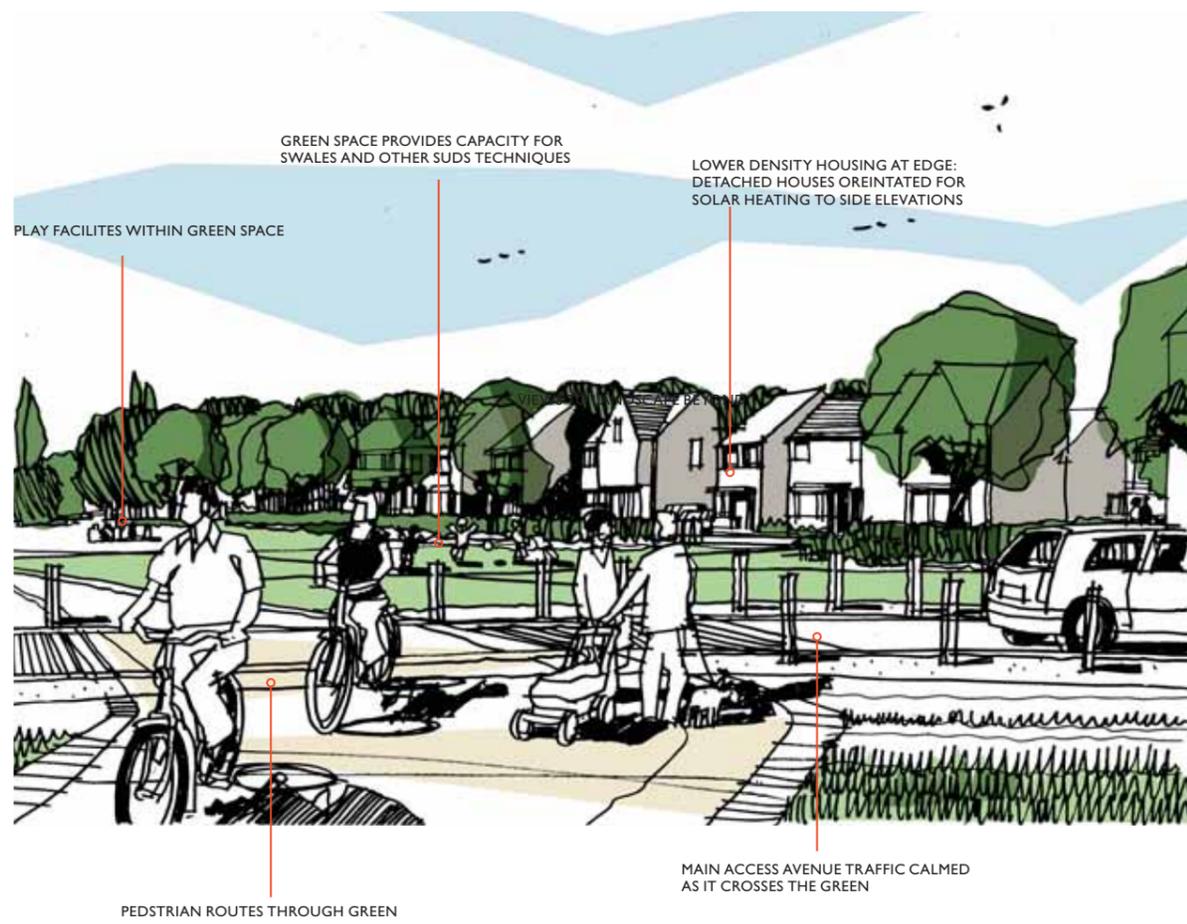


fig. 4.25 Relationship of housing in the southern area to the landscape spine

BUILDINGS POSITIONED TO SIGNAL JUNCTION TO ROAD USERS

INFORMAL STREET DESIGN TO SUB 20MPH STANDARDS

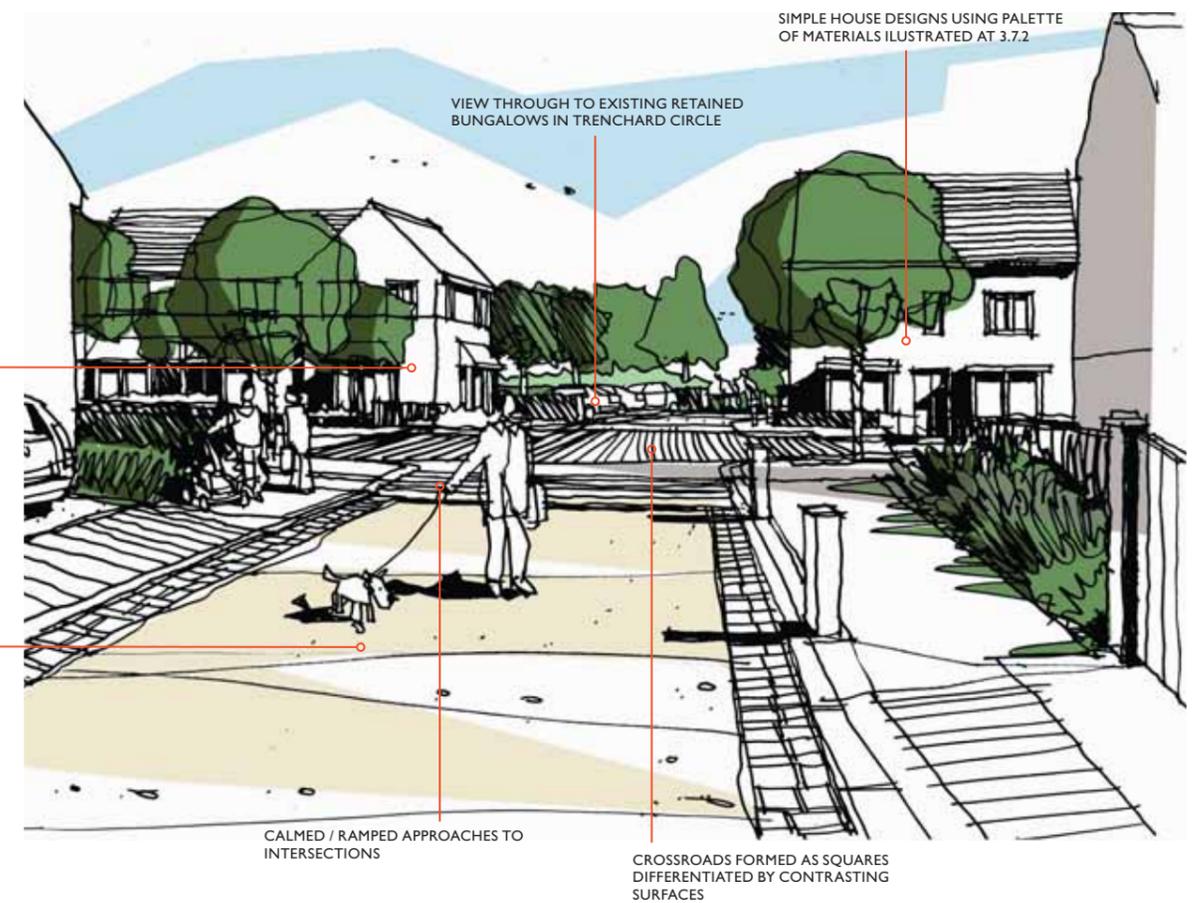


fig. 4.26 Typical higher density street in new Tobacco housing area

4.6.6 Tobacco housing area

New housing in the north-east of the site links into retained bungalows on Trenchard Circle (the “Tobacco Houses”) with the removal of one pair to make a new street access. It is also served from a new street facing the existing employment area running north from the Innovation Centre. 28 bungalows in 14 pairs remain. The character of the area is similar to the central housing area, but without flats and with a broad green lane running north-south and connecting it to the existing green space of the officers’ housing area. There is possible access to the airfield from the western road.

The quadrangle form of the existing residential block north of the Innovation Centre is shown retained, and it may be converted or rebuilt to provide a square of 16 narrow plot terraced houses. To the south, the 16 officers’ houses are all retained, and the green space is connected as a major pedestrian route from the perimeter of the airfield, through the existing play area and onto Soden Road (which is retained as a pedestrian priority, shared surface cul-de-sac).

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4.7 Street Hierarchy

4.7.1 Primary

Main access roads into the neighbourhood

These are the largest and most important streets in the hierarchy and include Camp Road. They form the main entrances to the development and give access to the settlement centre. They are formal streets with street trees. Pedestrian tables at junctions provide crossing points and traffic calming. Development reflects the formal nature of the street and may be three storeys.

Camp Road

The design character of Camp Road is discussed at 4.6.1 above. In sections the carriageway will be rebuilt offset from existing alignments between junctions and crossing points. Existing footways will be retained, and additional footway cycleways added into wide verge sections where none exist at present.

Key dimensions for new sections:

- Carriageway width – 6.5 metres clear to accommodate bus routes, with on-street parking in additional bays;
- Pavement width – typical min. 2.0 metres, on both sides of street.
- Design speed – 20 mph maximum

Main avenues

Main avenues are extended north and south from the existing gatehouse and Dacey Drive (adapting the existing street as necessary). An east-west main avenue links these two. The overall corridor is wide, allowing avenues planting on both sides and parking bays on the street, while accommodating bus routes as required.

Key dimensions:

- Carriageway width – 6.5 metres clear to accommodate bus routes, with on-street parking in additional bays;
- Pavement width – typical min. 2.0 metres, on both sides of street;
- Design speed – 20 mph maximum.

4.7.2 Secondary and Tertiary

East/west street

The east-west 'streets' are intended to permit passive solar gain to dwellings on both sides of its carriageway. Houses on these streets are more likely to be terraced.

Key dimensions:

- Frontage to frontage – 12 - 16 metres;
- Carriageway width – min. 4.8 metres, widening to accommodate car parking;
- Front gardens – min. 1.5 metres, max. 3 metres;
- Pavement width – min. 1.35 metres;
- Design speed – 20 mph maximum.

North/south street

'Streets' running north/south will generally be fronted by wider plots and detached or linked houses which have passive solar potential on gable walls. Linking elements are therefore of paramount importance. The street has pavements on both sides of the carriageway which widen to accommodate occasional street trees or informal parking.

Key dimensions:

- Frontage to frontage – min. 10.5 metres;
- Carriageway width – min. 4.8 metres, max. 8.8 metres widening to accommodate parking and street trees;
- Pavement width – min. 1.35 metres;
- Front gardens – min 1.5 m, max. 3 metres;
- Design speed – 20 mph maximum.

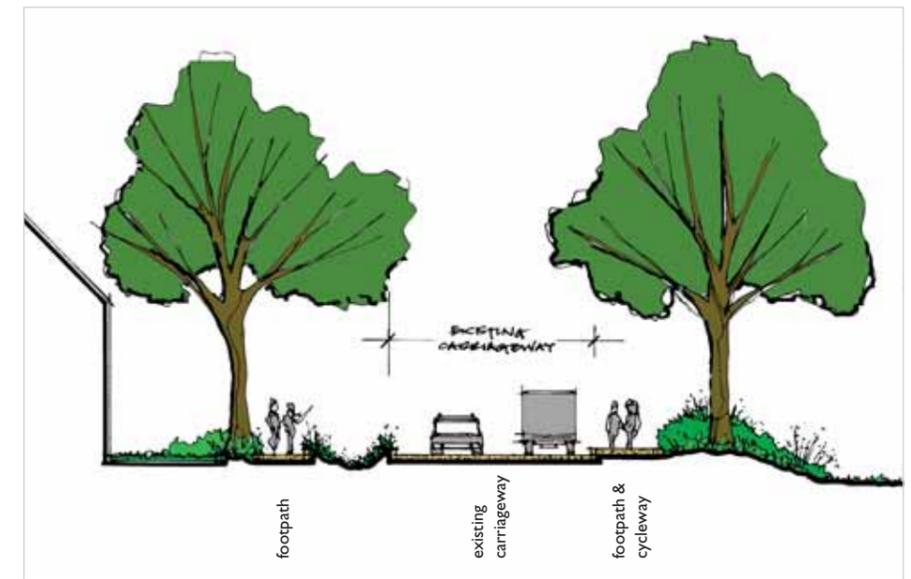


fig. 4.27 Camp Road

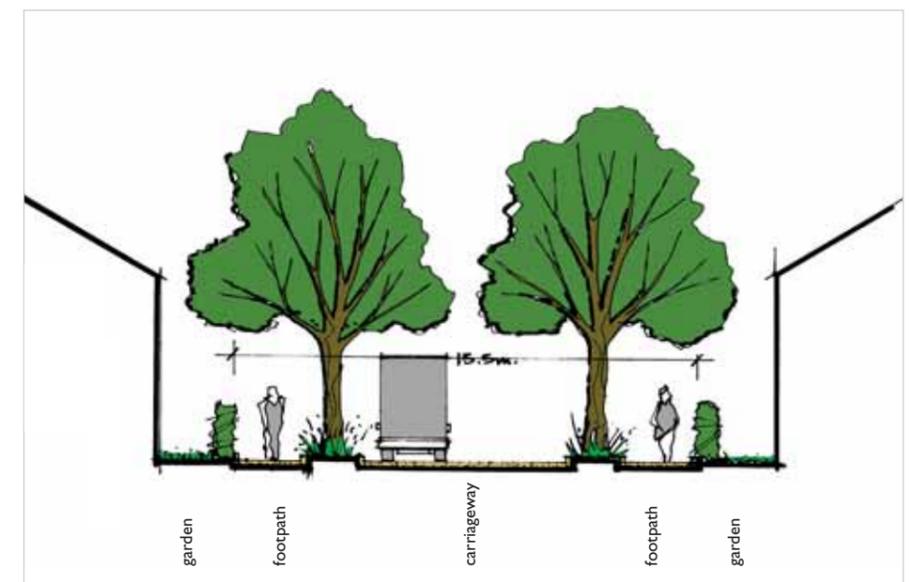


fig. 4.28 Main avenue

Green Lane

Reflecting the spaciousness and landscape influence at Heyford Park, a number of streets are treated as green lanes, with a broader, more informal section allowing the introduction of swales for drainage and appropriate planting (see SUDS at 3.9.4 above). The range of plot sizes will be similar to streets, depending on orientation.

Key dimensions:

- Frontage to frontage – varies, but generally 20 metres+;
- Carriageway width – min. 4.8 metres, max. 8.8 metres widening to accommodate parking and street trees;
- Pavement width – min. 1.35 metres;
- Front gardens – 3 to 5 metres;
- Design speed – 20 mph maximum

4.7.3 Minor

Minor lane

Minor lanes (as distinct from green lanes) are informal, shared surface streets which are defined by the building frontages on both sides. Buildings are positioned directly on the street, often with no formal front boundary treatments. The lane can widen in places to form a parking court with vehicles accommodated either at right angles or parallel to the houses.

Key dimensions:

- Frontage to frontage – min 7 metres;
- Carriageway width – min. 4.8 metres;
- 0.5m non-adoptable margin where houses have no front gardens – should be capable of accommodating climbing plants and shrubs;
- Shared surface for pedestrians and vehicles;
- Design speed – 10 mph maximum

Green edges

Green edges exist against some formal and informal green space. Their characteristics can therefore be quite different and may be similar to green lanes. Houses could be set back from the carriageway to allow larger front gardens, or a more formal frontage may be appropriate against parkland.

Key dimensions:

- Carriageway width – 4.8 metres widening to 6.8m to accommodate casual on-street parking;
- Pavement width – typical min. 1.35 metres, on inside of street only;
- Design speed – 20 mph maximum

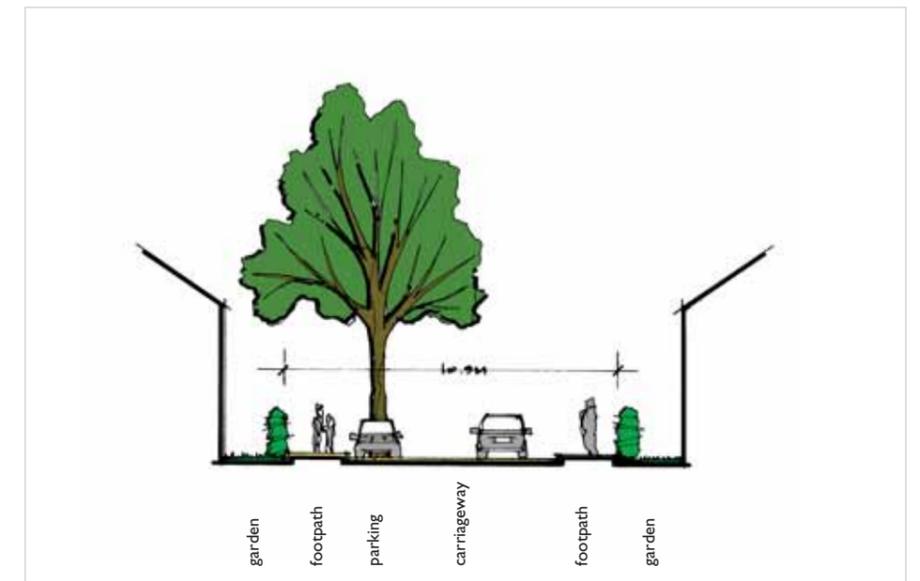


fig. 4.29 Tertiary road

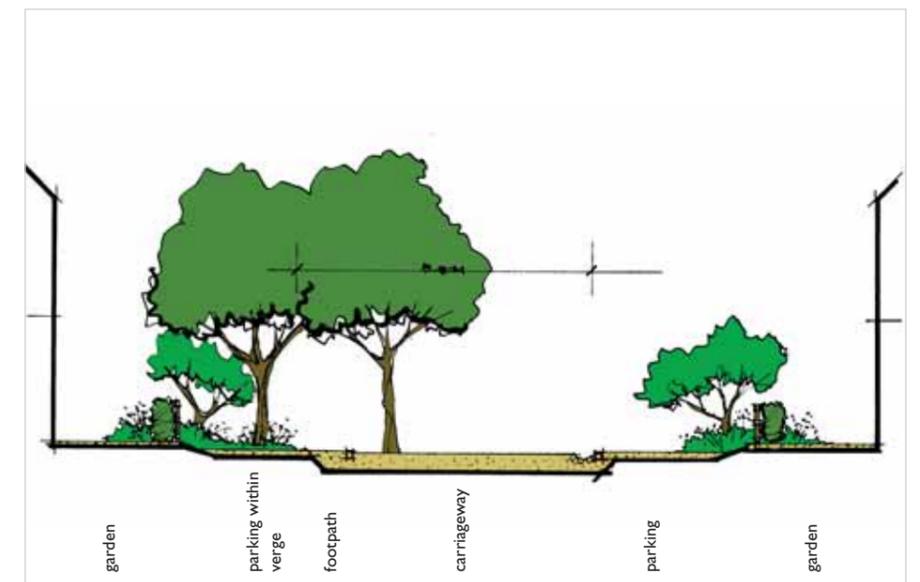


fig. 4.30 Green lane

Mews

The 'mews' are the lowest in the street type hierarchy, located within deep perimeter blocks with a return frontage and vehicular access at both ends. It is an informal, shared surface street accommodating small groups of houses and parking arranged to maximise surveillance of the space. Trees will be positioned to terminate vistas, shade parking areas and act as traffic calming devices.

Key minimum dimensions:

- Typical frontage to frontage – 10 metres;
- Minimum carriageway width - 3.7 metres;
- 0.5m non-adoptable margin where houses have no formal front gardens – should be capable of accommodating climbing plants and shrubs;
- Design speed – 4 mph

4.7.4 Shared drives

Shared drives are a useful way of extending access to individual properties from informal streets and lanes near the perimeter of development, avoiding the potential visual dominance of full carriageway construction. They are not intended for local authority adoption, and may serve up to 5 dwellings. The end of the adopted street must give appropriate turning provision for service vehicles.

Key dimensions:

- Driveway width – 3.0 metres widening to 4.8 metres to accommodate passing and turning at junctions of individual property access points;
- 0.5 metres non-adoptable margin where houses have no front gardens
 - should be capable of accommodating climbing plants and shrubs;
- Shared surface for pedestrians and vehicles;
- Design speed – 4 mph

4.7.5 Planting

By contrast, planting within housing areas will follow urban design aims, with plants used mainly in an architectural or formal way to complement the built form. A limited palette of plants will be selected for a particular street or mews court from an agreed list of suggested species. Street trees form an important part of the concept, and particular care will be taken over location and species selection. House foundations will be specified to accommodate trees.

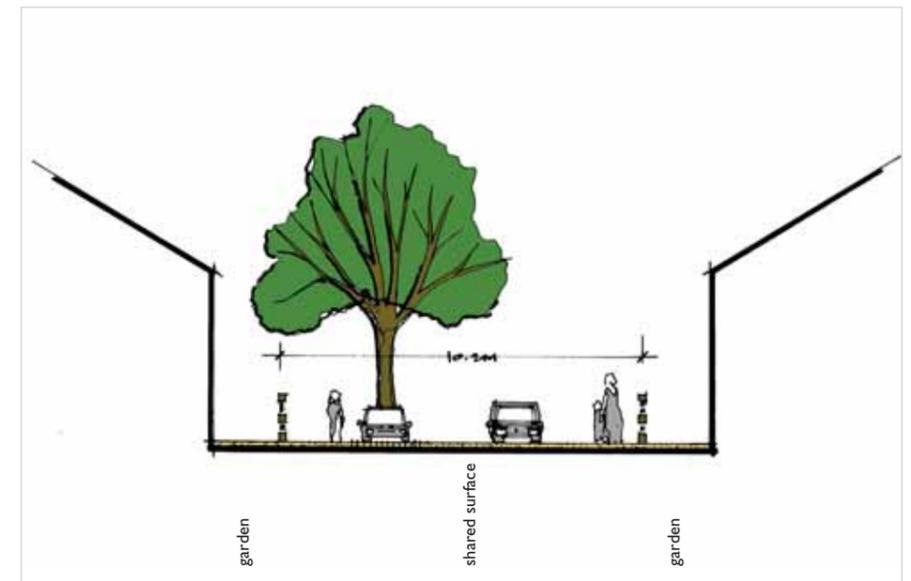
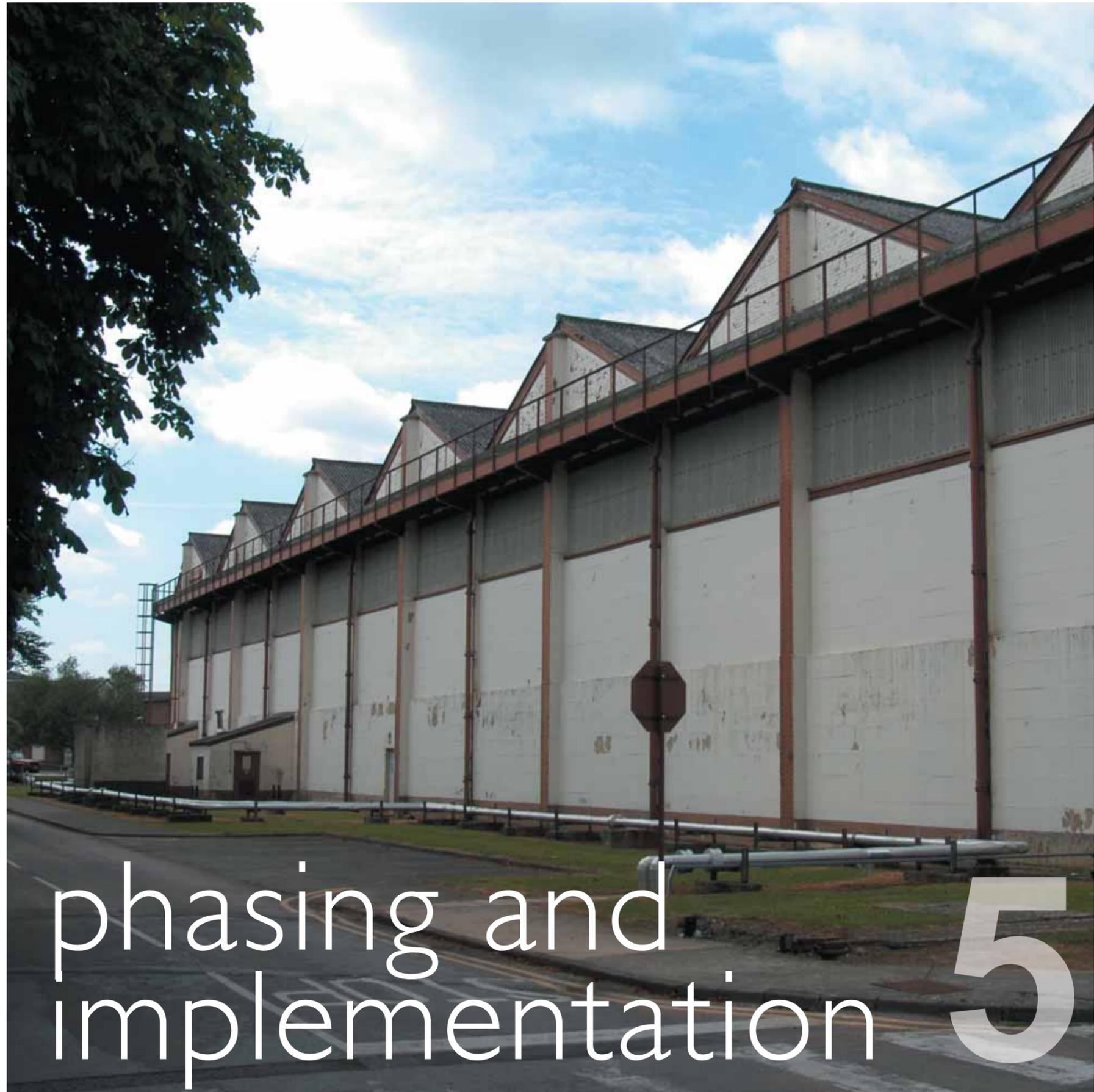


fig. 5.31 Mews/Minor lane



fig. 5.32 Shared drive



5.0 Phasing

5.0.1 Residential phases

Figure 5.1 shows, in broad terms, the sequence of development for new housing at Heyford Park. The major factor in developing the phasing strategy is the ability to rehouse NOC's tenants (those who wish to remain at Heyford Park) as demolition and redevelopment of their existing houses progresses. A further factor to be considered is the availability of new infrastructure, especially sewerage, which will be renewed from the south-east and its connection to the existing sewage treatment works. The broad progression of redevelopment would be clockwise from the north-east, building new infrastructure and replacing existing housing in a rolling programme.

Phasing also needs to take account of an appropriate range of house types for each stage, reflecting both the different planned characters of development areas and the need to provide housing affordable to existing tenants at an early stage. The detailed planning of the phasing strategy should also consider exactly where boundaries between phases occur. Completion of infrastructure, for example, will typically be street by street, so that there are benefits in planning phases accordingly. This has the benefit of completing streets with their infrastructure and public realm design together: phases based on blocks are likely to border a number of streets, which may compromise the properly coordinated completion of the public realm.

Year 1

The first stage of redevelopment will be the clearance of the existing barracks area south of Camp Road and part of the technical area north of the Innovation Centre (buildings 32-35). This will allow the construction of 140 – 150 new houses in parcels connected to the Tobacco Houses, around the Parade Square and along the eastern part of Camp Road. A high proportion of the units made available in this first phase will be suitable for tenants of the existing bungalows.

Year 2

This will allow, in the second stage, clearance of the existing housing south of Carswell Circle and the bungalows south of Gibson Drive. Most of



fig. 5.1 Phasing plan

the southern area can then be completed, including infrastructure and the main east-west avenue linking Dacey Drive and the first new housing phases.

Year 3

The third stage will include the clearance of more bungalows and completion of higher density housing in the central area.

Year 4

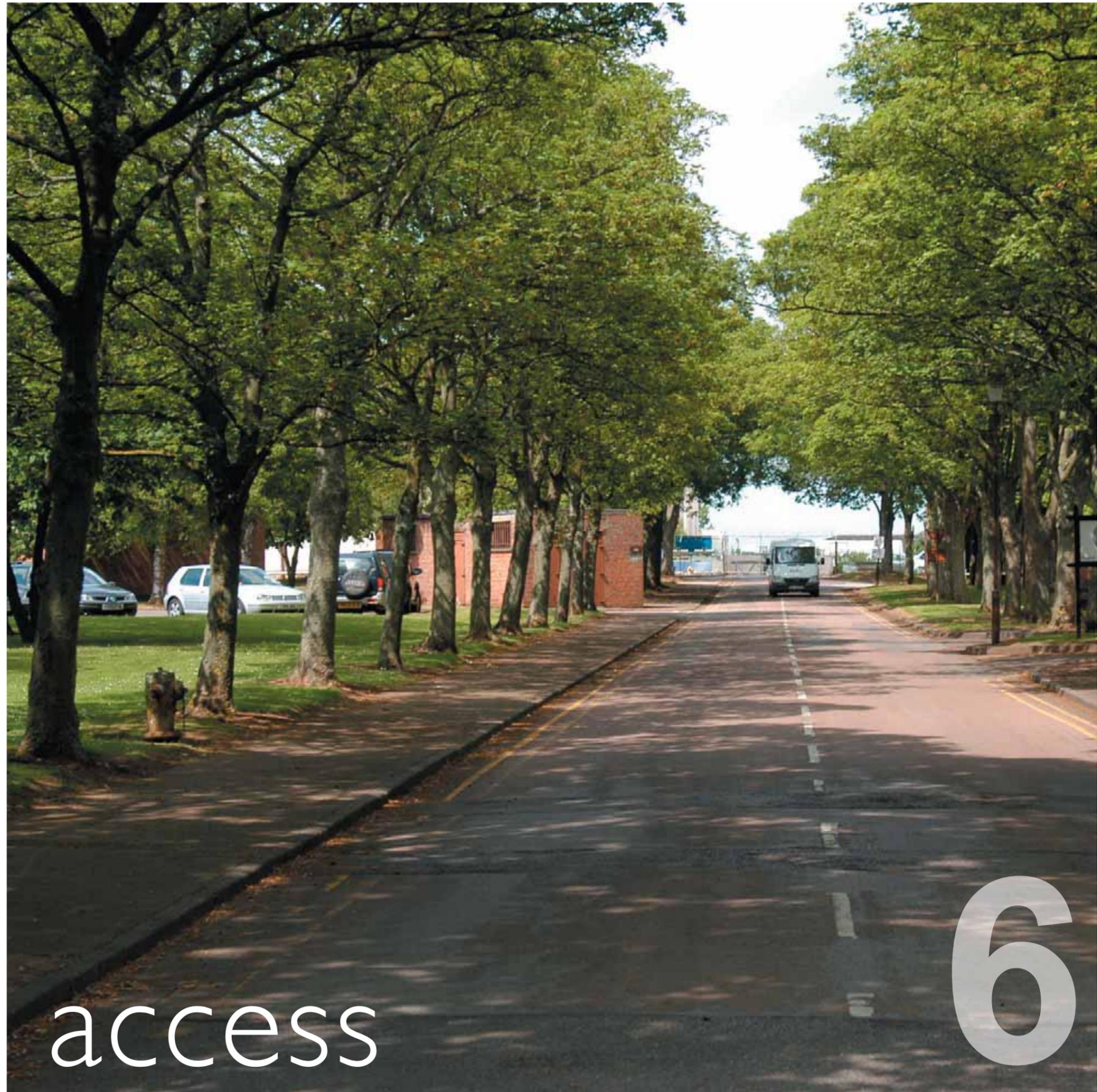
All housing south of Camp Road is completed, including most elements of the neighbourhood centre. A programme for provision of the school is still to be agreed.

Year 5

The final phase of development is housing north of Camp Road. This is dictated primarily by the availability of infrastructure, although no clearance is required for the earlier development of the housing area south of the nose-docks.

5.0.2 Employment phases

It is envisaged that new employment development will begin during the later phases of the residential redevelopment, when the necessary infrastructure is in place.



access

6



6.0 Access (Summary of Principles)

The masterplan takes access and accessibility as its starting point; these issues are fully integrated into the design approach. Different considerations apply within the redeveloped settlement area and the broader site, which includes the flying field. Fundamental to the concept are clear and legible movement networks to structure it, and distinctive character based on the design, function and spatial quality of streets.

Within the new development area, the siting of buildings within the masterplan is carefully considered in the way access relates to the street: essentially direct, convenient and promoting high levels of activity and surveillance. Access related problems, such as car parking, refuse collection and servicing all inform concepts for the public realm. As a general point, the site is flat and presents few intrinsic impediments to walking or cycling as the preferred modes of moving around the settlement.

This chapter summarises the approach to access taken in the masterplan and throughout this Design and Access Statement with particular reference to the requirements as set out in the DCLG's "Guidance on changes in the development control system", 2006.

6.1.1 Vehicular and transport links

Wider context

Proposals for vehicular and transport links are examined in detail in the Transport Assessment (TA) and chapter 6 of the Environmental Statement (ES), "Traffic, Access and Movement". They are also discussed in relation to the masterplan in section 4.3 of this Design and Access Statement. The TA identifies only limited impacts from the development beyond the immediate site. The key proposals for transport and access improvements in the wider context are:

- An increased frequency of buses to destinations beyond the settlement
- Improvements at two junctions on the surrounding road system, at Middleton Stoney and the M40 junction 10
- Improvements to rural footpath connections around the settlement

area, reinstating some that were interrupted by the construction of the airfield

Flying Field

Access to the Flying Field area will broadly be limited to businesses based in buildings there and controlled at a single access point. Many of the uses of these buildings, e.g. storage, create few jobs on the site. The nature of the business activities and the distance of many of the buildings from the settlement centre are such that most people will arrive by car from the access gate.

The general public will be able to visit the flying field on organised tours from a heritage centre to be established in hangar 315. The main proposals for access and movement around the wider site are:

- A new junction immediately east of the existing officers' mess to take heavy goods vehicles more directly into the airfield business area without passing the length of Camp Road through the settlement
- Controlled access into the Flying Field area through a security gate in the Trenchard business area
- A one-way circular route around the airfield providing HGV access to all businesses within the secure area: this uses existing hard surfaces including taxiways and the perimeter road

Settlement area

Movement around the settlement area provides the rationale for the street pattern, both where a strong form is established, such as the Trenchard area, and in new development areas. The network is designed primarily for pleasant and convenient walking and cycling routes. Vehicles are accommodated within the layout so that it can be safely accessed and serviced, and many features are incorporated into the masterplan that discourage high speed and limit the visual impact of highways and the vehicles themselves. Fundamental layout considerations are:

- Introducing a structure of main access avenues extending into development areas across Camp Road which remains the main spine to the whole settlement

- Using the avenues to create street links between existing enclaves of the settlement area, which are at present poorly connected, creating a much better integrated settlement
- Providing direct access to all buildings in the settlement through an interconnected lattice of access streets, limiting cul-de-sacs and allowing easy circulation for service and emergency vehicles
- Facilitating the extension of existing bus routes into the residential area

Detailed masterplan measures

Within the settlement area, there are many small-scale design decisions that integrate good access with other features of the masterplan:

- Traffic calming along Camp Road: a variety of features at approximately 60 metre intervals to cause vehicles to pause or change direction, in order to calm traffic speeds
- Changes in street surfaces to indicate changing road-user priorities
- Street design that includes on-street parking, street trees and urban design techniques that promote a sense of urban activity to discourage speed
- Footpaths alongside the main routes, separated by green verges in many instances.
- Shared surface areas where pedestrians have clear priority over vehicles
- Car parking in small areas under high levels of supervision from surrounding houses
- Similarly, parking for community facilities in groups to provide choice and convenience for access, and reduced visual impact of parking areas

Emergency access

The masterplan layout is based on an interconnected lattice of streets, which provides alternative routes through most of the development

that facilitate emergency access. At the edge of the settlement, lanes extend to the surrounding landscape with informal turning arrangements that allow emergency and refuse vehicle movements. In some instances frontages are connected by shared drives, which allow vehicles to approach close to all buildings, and which will be constructed to appropriate standards for emergency and refuse vehicle loadings.

Dedicated HGV routes are planned for access to the former flying field and these will provide the main emergency routes. In principle, HGVs are discouraged from passing through the settlement and will turn off Camp Road close to the former officers' mess to access business areas. An alternative access is provided onto the Trenchard quadrant road from Camp Road for use in emergencies – this currently operates as an emergency gate.

Public transport

There is currently a bus service along Camp Road with a stop and turning area beside the Shopette. New stops will be provided as part of the redesign of the settlement centre area, and the route can be extended via the new access avenues into residential areas to the south, providing stops within 400 metres (five minutes' walk) of most dwellings. Stops on Camp road will serve people working in buildings within the settlement area, again within 400 metres for most.

6.1.2 Access to buildings

Built form

This Design and Access Statement does not deal with the internal arrangements of buildings, but the masterplan does influence the way in which internal planning would relate to the external environment. In particular:

- In most character areas, buildings are sited close to the street, so that they are a very strong part of street character and access is related strongly to street activity and surveillance.
- Key buildings are positioned to hold a particular vista or viewpoint, and the intention is that doors / access arrangements will be an essential part of the design in these locations.

- Other locations, such as street corners, are opportunities for doors and windows to have prominence.
- Car parking for both community buildings and private houses where parking is in the public realm should be close, convenient and visible to building access points.

6.1.3 Inclusive access

All of the access opportunities set out above are available equally to the able-bodied and to others. The connected lattice street layout allows vehicles to penetrate the development for the convenience of the disabled without allowing the car to dominate visually. Public parking areas, such as the settlement centre, will include dedicated disabled spaces closest to facilities. Since the site is flat, wheelchairs and those using walking aids can negotiate all public areas of the site without ramps or other special provision. Street design incorporates variations in surface texture and colour to define access areas and, the public realm will be detailed to assist those with impaired vision or mobility to use and cross streets safely. Further consideration of detailed design issues in later stages of the development of the scheme will take specific access needs and requirements into account.

6.1.4 Local development policy

A summary of all local development planning policy is included at appendix A. With specific reference to transportation and access policy, the following points are noted:

Oxfordshire Structure Plan 2016

The proposals particularly respond to Oxfordshire County Council's policy in respect of public transport (T3), in proposing that the main access avenues through new residential development will be designed as bus routes and that the frequency of bus services will be increased. The masterplan is founded on the establishment of movement networks that satisfy policy requirements for networks for pedestrians and cyclists (T5) and vehicle access (T6). Proposals include off-site improvements of junctions on the surrounding road network and the support of increased bus services to mitigate adverse transport impacts (T8).

Cherwell Local plan (1996)

Cherwell District Council's policies reflect similar aims. In addition, there are specific policies to eliminate conflicts between vehicles and other road users (TR2), to minimise the visual impact of cars and parking (TR5), to devise a legible hierarchy of roads in residential areas (TR9) and to avoid HGV impacts through residential areas (TR10). All of these transportation objectives are embedded in the masterplan.

Policy R4 seeks the safeguarding of existing public rights of way, and the proposals go further in reinstating historic routes lost when the airbase was first built.



Appendix A Development Planning Policy Résumé

A.1 The table below sets out a summary of the principal planning policies as set out in the Development and their application to the development proposals.

Regional Planning Guidance 9		
Planning Policy	Policy Context	Heyford Park Proposals
RE1	Support and further development of the regional economy	Additional employment opportunities created
RE10	Economic diversity should be encouraged, facilitating small and medium enterprises, and supporting the growth of a variety of economic sectors including manufacturing.	Development proposals will provide a range of flexible business premises offering a range of employment opportunities.
H4	A range of dwelling types and sizes should be provided, including alternative forms of tenure, in order to meet the needs of all sectors of the community and to plan for balanced communities. Affordable housing should be provided to meet locally assessed need.	The development of Heyford Park will provide an appropriate density, mixture tenures and sizes of dwelling commensurate to the requirements of local and sub-regional need.

Oxfordshire Structure Plan 2016		
Planning Policy	Policy Context	Heyford Park Proposals
G2	Improvement of the quality and design of development	Proposals for Heyford Park will: remove unsightly derelict buildings; restore areas of the site for the benefit of residents, workers and tourism, and; create and enhance wildlife habitat.
G3	Providing infrastructure and service	Development proposals will provide for appropriate and necessary infrastructure, both on- and off-site. These include measures addressing, recreation, leisure, educational, health and community facilities, utilities and environmental improvements. These are addressed in more detail within the Environmental Statement and other documents supporting this application.
G6	Energy and resource conservation	Proposals incorporate best practice in energy efficiency and resource conservation commensurate with National, Regional and District guidance and policy
T1	Improvement of travel choice and reduction of dependence on motorised travel	Proposals for Heyford Park will introduce and enhance public transport options for the locality and the wider district, with the aim of reducing the need to rely on private motorised transport; this is further discussed within the Transport Assessment and Environmental Statement.
T2	Car parking	Heyford Park proposals have adopted a comprehensive approach to the provision and management of car parking spaces, with the aim of promoting sustainable travel choices, including the application of maximum parking standards.

Oxfordshire Structure Plan 2016		
Planning Policy	Policy Context	Heyford Park Proposals
T3	Public transport	Development proposals seek to increase use of public transport through the provision, encouragement and promotion of convenient, reliable, secure and high standard public transport services.
T4	Freight	The development of Heyford Park will at all stages encourage the use of non road based freight carriage where possible.
T5	Networks for pedestrians and cyclists	Networks of routes for pedestrians and cyclists will be promoted and developed
T6	Networks for motorised travel	Development proposals will promote and support a comprehensive strategy for the safe and convenient carriage of people and freight from and to Heyford Park.
T8	Development to provide adequate access and to mitigate adverse transport impacts	Development proposals will seek the improvement of the surrounding highway network commensurate with the creation of an enlarged community, (See Transport Assessment).
EN1	Development to contribute to the protection, maintenance and enhancement of Oxfordshire's landscape character	Proposals for Heyford Park will: remove unsightly derelict buildings; restore areas of the site for the benefit of residents, workers and tourism, and; create and enhance wildlife habitat.

Oxfordshire Structure Plan 2016		
Planning Policy	Policy Context	Heyford Park Proposals
EN2	Promotion of biodiversity and protection of the sites of nature conservation importance	The significant ecological interests associated to Heyford Park will be protected, with significant enhancement to take place, see Environmental Statement for further elaboration.
EN7	Protection of geological sites of Special Scientific Interest	Development proposals include the provision of interpretation facilities and wildlife paths through the County Wildlife site - see Environmental Statement for further elaboration.
EN8	Development not leading to a deterioration in water quality	Proposals for Heyford Park will, through effective management, lead to the watercourses and water quality being protected.
EN9	New development not leading to an increase in run-off which would exacerbate flood risk elsewhere	Proposals at Heyford Park will manage and mitigate for any potential flood risk through the use of appropriate attenuation, see Environmental Statement for further elaboration.
EN10	Water resources and waste water infrastructure	Development will provide adequate water resources and waste water infrastructure for the development. Commensurate with utilities provision and District requirements.
E1	New employment development provided in accordance with priorities of the plan	Employment use is not a priority of the plan, but will achieve economic growth

Oxfordshire Structure Plan 2016		
Planning Policy	Policy Context	Heyford Park Proposals
E4	Small firms and local employment diversity	Development at Heyford Park will provide and encourage small scale business through the provision of premises (up to about 500 m ²)
E5	Tourism and culture	Tourism projects at Heyford Park will be based on the conservation, education and enjoyment of the site's historical significance and the presence of protected wildlife species and habitat.
H1	The amount and distribution of housing	Heyford Park will assist in meeting Oxfordshire County Structure Plan dwelling requirements to 2016.
H2	Upper Heyford site specific policy establishing the allocation of the site	In line with Structure Plan policy proposals provide for a new settlement, reflecting the Revised Comprehensive Planning Brief and policy and guidance relating to sustainable development.
H3	Design, quality and density of housing development	Housing development proposed at Heyford Park will be at a minimum density of 30 dwellings per hectare commensurate with National, Structure Plan and Local policy and guidance.
H4	Affordable housing	Heyford Park will provide affordable housing and key worker housing at a level demonstrated by housing need within the District and Central Oxfordshire.
R1	Countryside recreation	Proposals provide opportunities to create new outdoor facilities which are appropriate in scale and are sensitive to the rural location.

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
R2	Access to the countryside and rights of way network	The existing network of public rights of way, including routes to neighbouring villages will be maintained and improved.
EG1	Proposals for renewable energy development	Development at Heyford Park will help meet Oxfordshire's contribution to regional targets, acting to support development of a more dispersed and locally based pattern of energy generation and use.
H2	Housing Delivery	Proposals at Heyford Park accord with the housing trajectories for Cherwell District, assisting meeting of targets established within Structure Plan and Regional guidance.
H4	Delivery of housing for the elderly and those with special needs.	Heyford Park will provide housing schemes for the elderly and people with disabilities, in locations within convenient reach of shops, community facilities and public transport.
H5	Affordable Housing	Heyford Park will provide for affordable housing and key worker housing at a level commensurate with Cherwell District and identified local housing need.
EMP4	Employment generating development in rural areas- redevelopment of an existing employment site is acceptable, subject to safeguarding amenity/ landscape	Development of existing site is proposed to provide business units in accordance with use class B1, B2 and B8 as part of the creation of a mixed use new community in line with the Revised Comprehensive Planning Brief.

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
TR1	Before proposals for development are permitted the council will require to be satisfied that new highways, highway improvement works, traffic-management measures, additional public transport facilities or other transport measures that would be required as a consequence of allowing the development to proceed will be provided.	Heyford Park will provide as required new highways, highway improvement, traffic-management measures, additional public transport facilities or other transport measures as outlined by the comprehensive development of Heyford Park.
TR2	In considering proposals for development the council will seek to minimise conflict between vehicles and pedestrians, cyclists and people with sensory and mobility impairments by securing segregated provision, controlled crossings or other measures as appropriate.	Proposals will minimise conflict between vehicles and pedestrians, cyclists and people with sensory and mobility impairments.
TR3	Provision of a Traffic Impact Assessment for development proposals.	This document will be provided as part of the Transport Assessment undertaken as part of the planning application.

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
TR4	Public Transport	Increased use of public transport will be sought through the encouragement and promotion of convenient, reliable, secure and high standard public transport services.
TR5	Parking and Servicing provision	Development proposals will provide necessary highway safety requirements relating to access, turning, servicing and parking provision, including appropriate measures to reduce visual impact.
TR7	Minor Roads	Development proposals will minimise and mitigate the impact of the development on the surrounding minor road network.
TR9	Road hierarchy in residential areas	Development proposals will devise a hierarchical road network for Heyford Park, creating safe and liveable communities.
TR10	Heavy goods vehicles - development that would generate frequent HGV movements through residential areas or unsuitable urban or residential roads and where traffic problems would adversely affect the amenity of residential areas or villages will not be permitted - minimisation of HGV movement by using rail	Lorry and freight traffic routing agreements to be agreed to avoid residential areas.
R4	The safeguarding of existing public-rights-of-way network.	Proposals for Heyford Park will enhance and improve the existing rights of way associated to the surrounding settlements and landscape.

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
R10	The extension of sporting and recreation facilities	Development proposals will provide recreation and leisure facilities commensurate to the size of the working and resident population in line with District standards
R11	Loss of sporting and other recreational facilities	Development at Heyford Park will maintain (existing gyms to be demolished) and enhance the level of sporting and recreational facilities for the benefit of the existing and new community.
R12	Minimum provision of public open space	Proposals at Heyford Park will meet Cherwell District Council's requirement for 2.43 Hectares (6 acres) of public open space per 1,000 population.
R15	Provision of village halls, sports fields, allotments and other local facilities.	Development proposals at Heyford Park will enhance and give additional provision of community facilities commensurate with Policy R15 and other applicable policies of the Local Plan and the revised Comprehensive Planning Brief.
T1	Provision of new or improved facilities for tourists and enhancement of the area for tourism.	Heyford Park proposals will, provide a tourism facility in recognition of the historical and wildlife aspects of the site.
C1	Promotion of the interests of nature conservation	Existing wildlife habitats maintained and enhanced, see Environmental Statement for further elaboration.
C2	Species and habitat Protection	Existing grass and woodland habitats and associated species given due protection within development proposals in accordance with International, National and District policy and guidance

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
C3	Provision of interpretative facilities and schemes that provide or increase access to wildlife	Provision of new nature trail/walk through the County Wildlife portion of Heyford Park.
C4	Promotion of the creation of new habitats whilst seeking to protect the ecological value and rural character through the control of development in the flood plain of the River Cherwell	Existing grassland habitat retained and enhanced protection within development proposals in accordance with International, National and District policy and guidance
C7	Development will not normally be permitted if it causes demonstrable harm to the topography and character of the landscape	Proposals for Heyford Park will: remove unsightly derelict buildings; restore areas of the site for the benefit of residents, workers and tourism, and; create and enhance wildlife habitat.
C28	Appropriate standards of layout, design and external appearance, including the choice of materials	Development proposals for Heyford Park comprehensively take account of the historical character of the site. With the scheme proposed taking full account of National and District guidelines and advice on layout, design and external appearance. See the Design and Access Statement for elaboration.
C31	Compatible development in association to proposed residential areas.	Proposals for Heyford Park will, through appropriate positioning of new structures, maintain the strong character and sense of place relating to Heyford Park while protecting the visual amenity of the residential portion of the new community to the south of Camp Road.

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
C32	Development which fully considers the needs and requirements of disabled people.	Through comprehensive design, all new and existing areas will be made accessible to disabled people, in accordance with National and District Council guidance and policies.
C33	Retention of undeveloped land important in preserving character of a loose-knit settlement structure or the setting for a listed building or the preservation of a view or feature of recognised amenity or historical value.	Due to the strong boundary constraining Heyford Park, proposals do not intend any alteration to the character of the surrounding landscape and neighbouring settlements.
ENV1	Development likely to cause materially detrimental levels of noise, vibration, smell, smoke, fumes etc will not normally be permitted	Proposed uses have been assessed and mitigation measures provided as necessary where required to address any environmentally detrimental impacts.
ENV7	Protection of water quality of surface or underground water bodies	Water quality to be protected through mitigation and management of the hydrological environment

Cherwell Local Plan (1996)		
Planning Policy	Policy Context	Heyford Park Proposals
ENV9	Treatment and handling of surface water run-off and development impacting on watercourses and habitats	Through the evidence supplied within the Environmental Statement, development proposals at Heyford Park will mitigate for the effects of surface water run off on watercourses and associated habitats created by the development through the enhancement and provision of additional capacity as required for the development of a new community. In addition, management schemes will be put in place to provide effective stewardship of the hydrological environment.
ENV10	Proposals likely to damage or be at risk from hazardous installations.	Development proposals will identify and mitigate against the presence of hazardous pipelines and installations which may exist as part of a trans national shipment network. All remnant Petrol, Oil and Lubricant facilities within Heyford Park will be placed in a permanent 'out of use' state.
ENV11	The placement and location of installations handling hazardous substances will not be permitted in close proximity to housing and other land uses	Proposals will place all remnant Petrol, Oil and Lubricant facilities within Heyford Park 'out of use' for the safety of residents, workers and the environment.
ENV12	Land contamination and measures to address possible threats to the environment and human health.	In accordance with National and District guidance and policy, a comprehensive assessment of the pollution threat created by Heyford Park's former use has been made, with effective measures outlined in the Environmental Statement for the mitigation of this threat.

A.2 In addition, the proposals have been assessed against the emerging Development Plan and other planning policy;

Submitted Regional Spatial Strategy (March 2006)		
Planning Policy	Policy Context	Heyford Park Proposals
H1	Housing Provision within the District	The development of Heyford Park will assist Cherwell District Council in meeting its housing requirement of 11,800 for the Plan period to 2026.
H3	The location of housing	In line with Regional policy and guidance Heyford Park allows for creative use to be made of brown field land for the creation of a mixed tenure, new community that contributes to the quality of life within the District and Sub-region.
CO2	Scale and distribution of housing in Central Oxfordshire	Heyford Park will assist in the delivery within Central Oxfordshire of housing requirements of the South East Regional Plan, building on the sub-region's economic strengths, particularly in education, science and technology
CO4	Affordable Housing	Heyford Park will provide for affordable housing and key worker housing at a level commensurate with Regional and Cherwell District guidance and policy.

A.3 Non-Statutory Cherwell Local Plan 2011

Non-Statutory Cherwell Local Plan 2011		
Planning Policy	Policy Context	Heyford Park Proposals
UH1-UH4	Site specific policies for Upper Heyford	Development proposals propose a new community for about 1075 dwellings, (about 1000 or just state 1075?) community facilities and employment commensurate with Policy H2 of the Oxfordshire Structure Plan and Revised Comprehensive Planning Brief.
H1a – 7	Housing	Heyford Park accords with the housing trajectories for Cherwell District. Heyford Park will provide an attractive new community.
TR1-6, TR8-11, TR16, TR19, TR36	Transportation network	Development proposals will: provide necessary highway safety requirements relating to site design and access; provide a transport environment which places public transport at the heart of accessibility while minimising the impact on the surrounding road network of the development and its occupation.

Planning Policy	Policy Context	Heyford Park Proposals
R2, R4, R6, R8 -10a, R11-12, T1	Sport, recreation, community and tourism opportunities	Development proposals will seek the creation of a tourism facility for Heyford Park addressing the history and ongoing wildlife assets of the site. In addition, improved access to the surrounding countryside will promote healthy activity amongst the residents and workers at Heyford Park.
EN1-3, EN5-7, EN11-12, EN15-28, EN30, EN34-49, EN51	Conservation and enhancement of the environment including the Rousham Historic Park and Conservation Area	Development proposals demonstrate the importance of nature conservation both on the site and neighbouring assets within the locality.
D1-D10, D12	Spatial and Building Design	Housing development proposed at Heyford Park will be at a minimum density of 30 dwellings per hectare commensurate with National, Structure Plan and Local policy and guidance. The Design and Access Statement and masterplan detailing spatial positioning and the scale, height and massing of the new and existing structures within the new community at Heyford Park.
OAI-2, OA5	Provision of services and facilities	Development Proposals at Heyford Park provide adequate facilities and services for the provision of a mixed- use community of approximately 1,075 (see notes above) dwellings and associated employment.



Appendix B Proposed Landscape Species

Residential Areas				
Avenues				
Code	Species	Size	Use	Comments
Trees				
Cbff	Carpinus betulus 'Frans Fontaine'	18-20cm	Fastigate hornbeam avenue	3X, RB or CG. EHS. Min. 4.5m. 2 stakes
Psc	Prunus x schmittii	18-20cm	Medium cherry avenue	3X, EHS. Min. 4.5m. 2 stakes. RB
Psb	Prunus 'Sunset Boulevard'	18-20cm	Large cherry avenue	3X, EHS. RB. Min 4.5m. 2 stakes
Pc	Pyrus calleryana 'Chanticleer'	18-20cm	Medium pear avenue	3X, EHS. Min. 4.5m. 2 stakes. RB

Residential Areas				
Large Public Open Spaces				
Code	Species	Size	Use	Comments
Trees				
Bj	Betula utilis jacquemontii	18-20cm	Specimen groups multi stem	3X, EHS. Min. 4.5m. multi stem, Underground guyed. CG
Cc	Corylus colurna	18-20cm		3X, EHS. Min. 4.5m. RB. Underground guyed or 2 stakes
Jr	Juglans regia	18-20cm	Specimen single	3X, EHS. Min. 4.5m. RB. Underground guyed
Pap	Prunus avium 'Plena'	18-20cm	Groups 5 plus	3X, EHS. Min. 4.5m. Grafted. RB. Underground guyed
Tcg	Tilia cordata 'Greenspire'	18-20cm	Single	3X, EHS. Min. 4.5m. 2 stakes. Not grafted

Residential Areas				
Medium Public Open Spaces				
Code	Species	Size	Use	Comments
Trees				
Acs	Acer campestre 'Streetwise'	18-20cm	Structure	3X, EHS. Min. 4.5m. 2 stakes. RB
Mt	Malus trilobata	18-20cm	Specimen groups	3X, EHS. Min. 4.5m. Underground guying
Pp	Prunus padus 'Watereri'	18-20cm	Specimen groups or avenue	3X, EHS. Min. 4.5m. 2 stakes. RB
Sam	Sorbus aria 'Majestica'	18-20cm	Single or group	3X, EHS. 4.25-6.0m. 2 stakes. Grafted. RB
Sau	Sorbus aucuparia	18-20cm	Single or group	3X, EHS. Min. 4.5m. RB. 2 stakes or underground guyed
Sto	Sorbus torminalis	14-16cm	Single or group	2X, EHS. Min. 4.25m. 1 stake
Sauy	Sorbus aucuparia 'Upright Yellow'	18-20cm	Single or group	3X, EHS. Min. 4.5m. RB. 2 stakes or underground guyed

Residential Areas				
Small Trees for Front/Back Gardens				
Code	Species	Size	Use	Comments
Trees				
Aci	Acer capillipes	14-16cm		3X, EHS. 4.25-6.0m. 2 stakes
Ad	Acer davidii 'George Forest'	14-16cm		3X, EHS. 4.2-6.0m. 2 stakes
Cp	Crataegus prunifolia	12-14cm		3X, HS. 3.5-4.25m. 1 stake
Mj	Malus 'John Downie'	12-14cm		3X, HS. 3.5-4.25. 1 stake. Grafted
Pp	Parrotia persica	10-12cm		2X, Sel. Std. 3.0-3.5m. 1 stake
Ps	Prunus serrula	12-14cm		3X, HS. 3.5-4.25m. 1 stake
Ssu	Sorbus 'Sunshine'	12-14cm		3X, HS. 3.5-4.25m. 1 stake

Residential Areas				
Public Open Space Features				
Code	Species	Size	Use	Comments
Trees				
Fsd	Fagus sylvatica 'Dawyck'	16-18cm	Occasional special event	3X, EHS. Min. 4.5m. Underground guyed. RB or CG
Gb	Gingko biloba	16-18cm	Occasional special event	3X, EHS. Min. 4.5m. CG. Underground guyed
Lt	Liriodendron tulipifera	16-18cm	Occasional special event	3X, EHS. Min. 4.5m. RB/CG. 2 stakes or underground guyed
Rpb	Robinia pseudoacacia 'Bessoniana'	16-18cm	Occasional special event	3X, EHS. Min. 4.5m. 2 stakes. RB/CG

Strategic Planting				
Airfield Perimeter Copse Planting				
Code	Species	Size	Use	Comments
% Matrix Trees				
15	Acer campestre	8-10cm		1+1. Transplant
15	Fraxinus excelsior	1.0-1.25m		2X. Feather. 1 stake
15	Quercus robur	1.0-1.25m		1+2. Transplant
Matrix Shrubs				
20	Corylus avellana	400-600mm		1+1. BR. Cut back by half on planting
20	Crataegus monogyna	400-600mm		1+1. BR. Cut back by half on planting
5	Euonymus europaeus	400-600mm		3L
5	Ilex aquifolium	300-400mm		2L
5	Viburnum lantana	400-600mm		1+1. BR. Cut back by half on planting

Strategic Planting				
New Hedgerows				
Code	Species	Size	Use	Comments
10	Corylus avellana	600-800mm		1+2, BR. Plant in 2 staggered rows at 4/linear m or 400c's. Allow to grow by 100mm annually. Trim in February/March
60	Crataegus monogyna	600-800mm		1+1, transplant. Plant in 2 staggered rows at 4/linear m or 400c's. Allow to grow by 100mm annually. Trim between August and March
10	Ligustrum vulgaris	600-800mm		1+1, transplant. Plant in 2 staggered rows at 4/linear m or 400c's. Allow to grow by 100mm annually. Trim between August and March
10	Prunus spinosa	600-800mm		1+1, transplant. Plant in 2 staggered rows at 4/linear m or 400c's. Allow to grow by 100mm annually. Trim between August and March
10	Viburnum opulus	600-800mm		1+1, transplant. Plant in 2 staggered rows at 4/linear m or 400c's. Allow to grow by 100mm annually. Trim between August and March
Cbff	Carpinus betulus 'Frans Fontaine'	18-20cm	Medium Avenue	3X, RB or CG. EHS. Min. 4.5m. 2 stakes
Psc	Prunus x schmittii	18-20cm	Narrow Avenue	3X, EHS. Min. 4.5m. 2 stakes. RB

Street Trees				
REAL Area 1C				
Code	Species	Size	Use	Comments
Psb	Prunus 'Sunset Boulevard'	18-20cm	Narrow Avenue	3X, EHS. RB. Min 4.5m. 2 stakes
REAL Area 2A				
Code	Species	Size	Use	Comments
Pc	Pyrus calleryana 'Chanticleer'	18-20cm	Narrow Avenue	3X, EHS. Min. 4.5m. 2 stakes. RB
REAL Area 2B				
Code	Species	Size	Use	Comments
Acs	Acer campestre 'Streetwise'	16-18cm	Small Streets	3X, EHS. Min. 4.5m. 2 stakes
REAL Area 2C				
Code	Species	Size	Use	Comments
Pap	Prunus avium 'Plena'	16-18cm	Small Streets	3X, EHS. Min. 4.5m. Grafted. RB. Underground guyed

Street Trees				
REAL Area 3 and 4				
Code	Species	Size	Use	Comments
Pp	Prunus padus 'Watereri'	18-20cm	Small Streets	3X, EHS. Min. 4.5m. 2 stakes. RB
Sam	Sorbus aria 'Majestica'	18-20cm	Small Streets	3X, EHS. 4.25-6.0m. 2 stakes. Grafted. RB
Sauy	Sorbus aucuparia 'Upright Yellow'	18-20cm	Small Streets	3X, EHS. Min. 4.5m. RB. 2 stakes or underground guyed
Ac	Acer campestre	16-18cm	Settlement Edge	3X, EHS. Min. 4.5m. 2 stakes
Bp	Betula pendula	16-18cm	Settlement Edge	3X, EHS. Min. 4.5m. Underground guyed. RB or CG
Cb	Carpinus betulus	16-18cm	Settlement Edge	3X, EHS. Min. 4.5m. Underground guyed. CG
Street Trees				
Settlement Edges				
Code	Species	Size	Use	Comments
Fe	Fraxinus excelsior	16-18cm	Settlement Edge	3X, EHS. Min. 4.5m. 2 stakes
Teg	Tilia cordata 'Greenspire'	16-18cm	Settlement Edge	3X, EHS. Min. 4.5m. 2 stakes. Not grafted

