

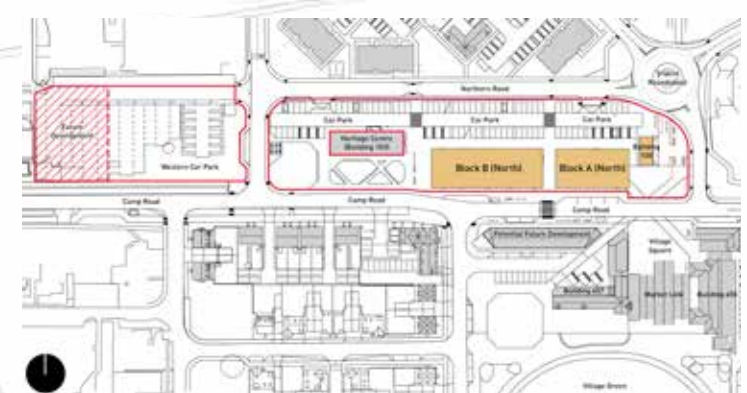
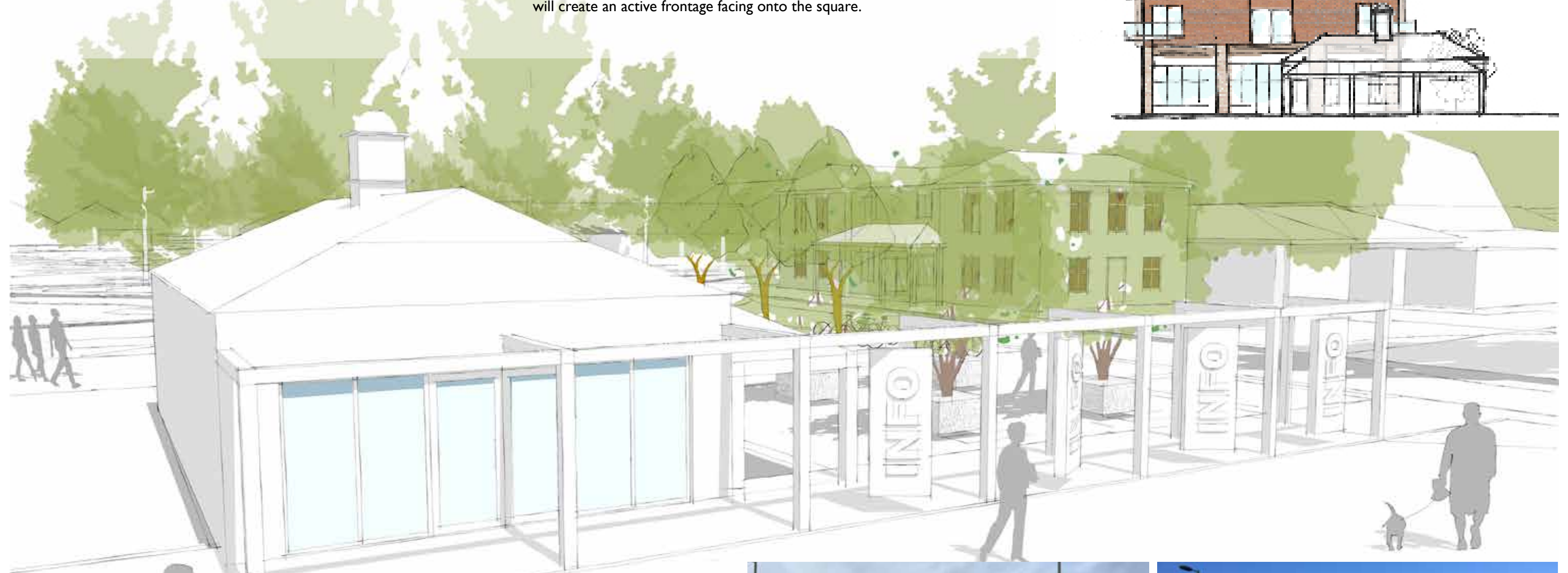
## 4.5 Building 100

### Local Significance

Building 100 has always had a sense of prominence at the heart of Upper Heyford, both in terms of its physical location at the intersection between Camp Road and Trident Approach, but also due to its historical significance as a Guard House when the site operated as an air base. In addition to being located within the wider RAF Upper Heyford Conservation Area, Building 100 has been 'locally listed' by Cherwell District Council (Building Ref. 862).

### Proposals

The proposed modifications to Building 100 aim to retain the building's prominence as part of the Village Centre development, by converting to a BI use. The building naturally establishes a strong connection to the Village Square, creating enclosure along its northern boundary. The original structure will be reinstated by demolishing the latter extensions, revealing a pavilion-like building which expresses its heritage. A new glazed opening within the southern elevation will create an active frontage facing onto the square.



Key Plan



Fig.1) Building 100 - Southern Elevation (fronting Camp Road)



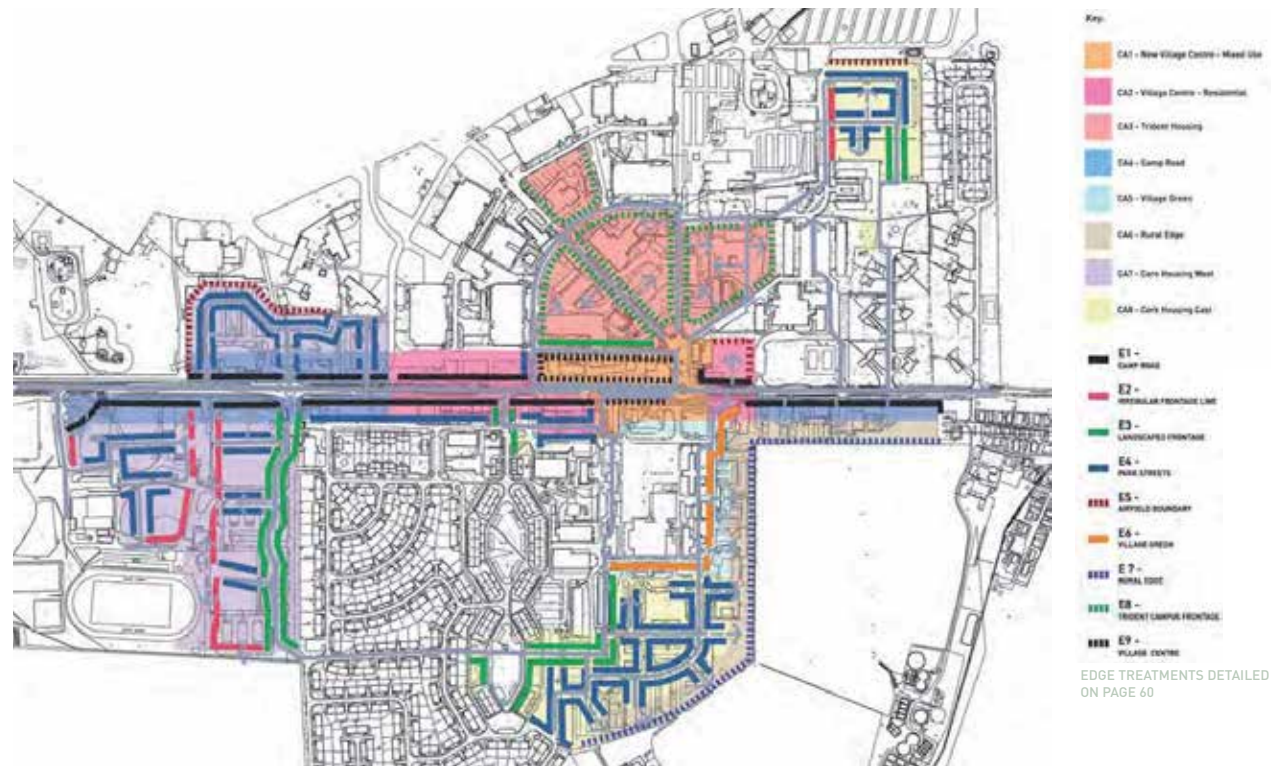
Fig.2) Building 100 - Eastern Elevation (fronting Trident Approach)

## 5.0 LANDSCAPE/ PUBLIC REALM



## 5.1 Landscape Context and Existing Features

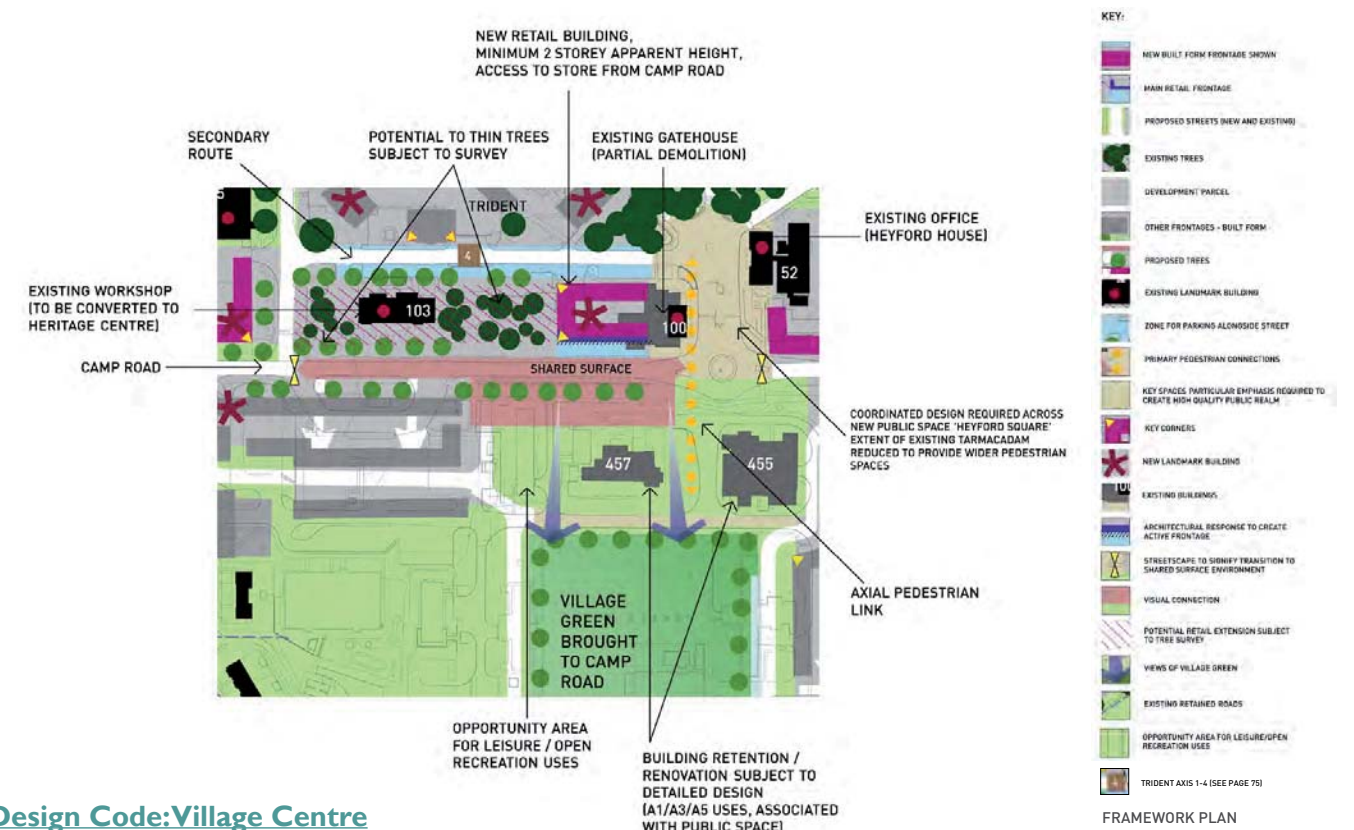
### 5.1.1 Design Code



- EXISTING TREES AT UPPER HEYFORD**
- 2.19 The mature tree structure of the site is key defining characteristic of the site, especially along Camp Road and along the Trident area.
  - 2.20 There is a wide range of tree species on the site, some native and some non native.
  - 2.21 The native species include *Fagus sylvatica* and *Pinus silvestris*, with blocks of hawthorn trees as an understorey, while non-native species include *Acer pseudoplatanus*, and 'Leylandii' trees which appear to be hedges which have matured into trees.
  - 2.22 The trees fall into a number of categories, ranging from trees worthy of retention and of significance to the site, to those which need to be removed because they are dead, diseased or dying. More detailed arboricultural work is subject to ongoing submissions in relation to outline conditions.
- RETAINED TREES**
- 2.23 The plan opposite shows the extent of trees and key groups across the site. A substantial amount of vegetation lies within areas that will be unaffected by the proposed development, there are however a number of locations (as highlighted) where tree removal will be required to prevent the development being compromised and/or where a more coherent replacement (new) tree planting strategy is proposed.

### Design Code: Development Framework

### Design Code: Tree Retention Plan



### Design Code: Public Realm Strategy

### Design Code: Village Centre



## 5.1 Landscape Context and Existing Features

### 5.1.2 Heyford Park Wider Connectivity

#### Wayfinding and Navigation to the Village Centre

Heyford Park is not a new community in many ways as it was first conceived with a utilitarian logic required by the Airforce to ensure maximum connectivity between the different parts of the base.

As a result, the underlying road and pedestrian infrastructure is incredibly efficient in connecting visitors and residences to the key public nodes along Camp Road.

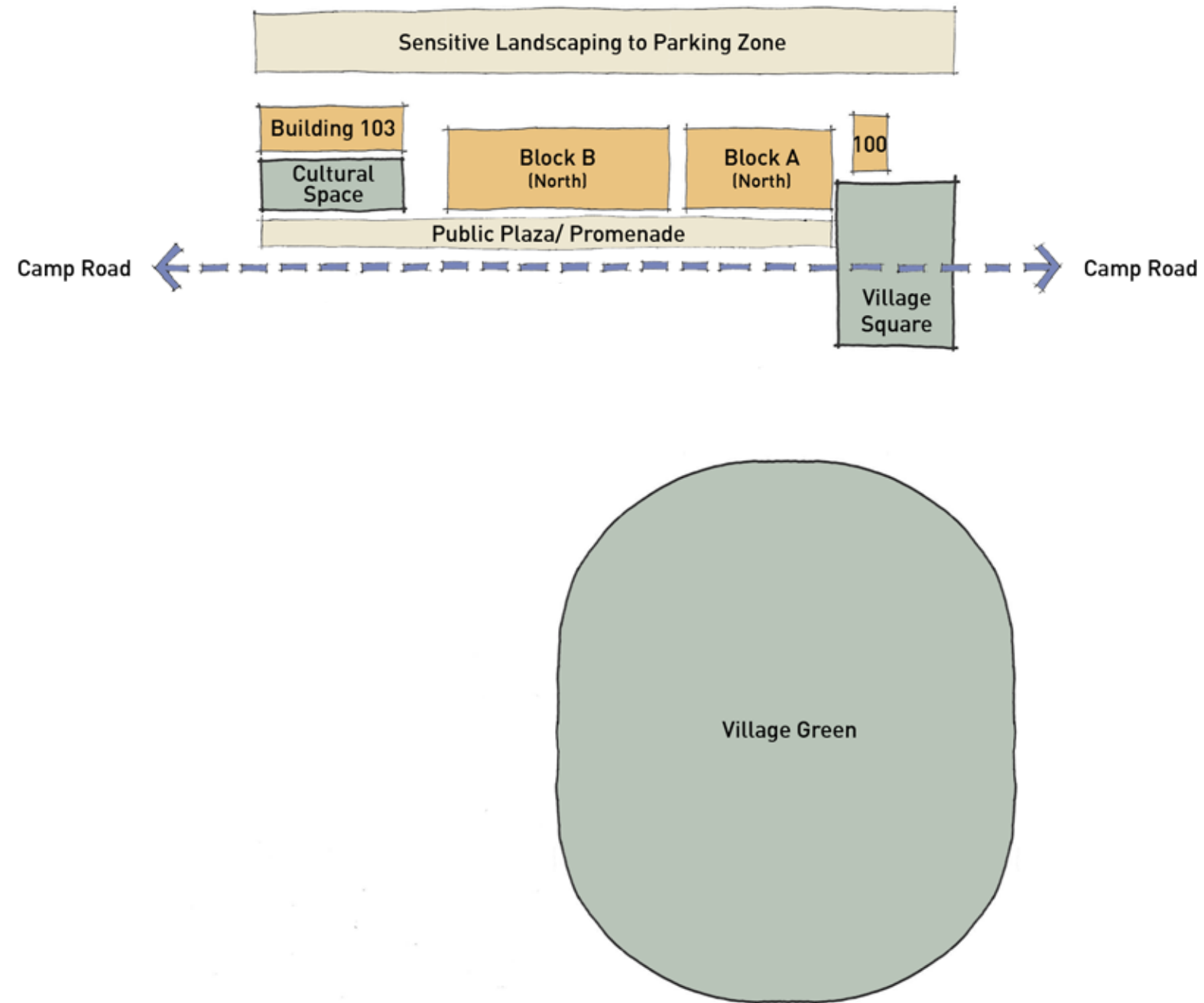
The planning of Heyford Park as a residential community has built upon this natural connectivity and established a masterplan which places a Village Centre at the heart of the development. This was further established through the introduction of traditional village public amenities like a Village Green, Market Square and Parade of local shops and businesses which would effectively serve this emerging community.

The wayfinding diagram (shown to the right) illustrates effectively the spatial arrangement of the Village Centre at the heart of the development, connected to the surrounding residential and office developments by pedestrian links. This is further amplified by the concentric distance circles which help give an understanding of the access each community has to the village centre amenities.



## 5.2 Landscape Design Concept

### 5.2.1 Landscape Design Concept



Positive Spaces for People and Natural Environment



## 5.3 Landscape Design Proposals

### 5.3.1 Design Concepts

#### Heyford Village Connectivity

The Northern Plot is the second half of the Heyford Village Centre Masterplan and as such complements and completes the vision for the village's central public spaces and amenity.

Of key importance are the pedestrian and visual connections from the Village Centre to the surrounding communities both East-West along Camp Road as well as North-South from the Trident down to the Square.

#### Spaces which Relate to the Building Function

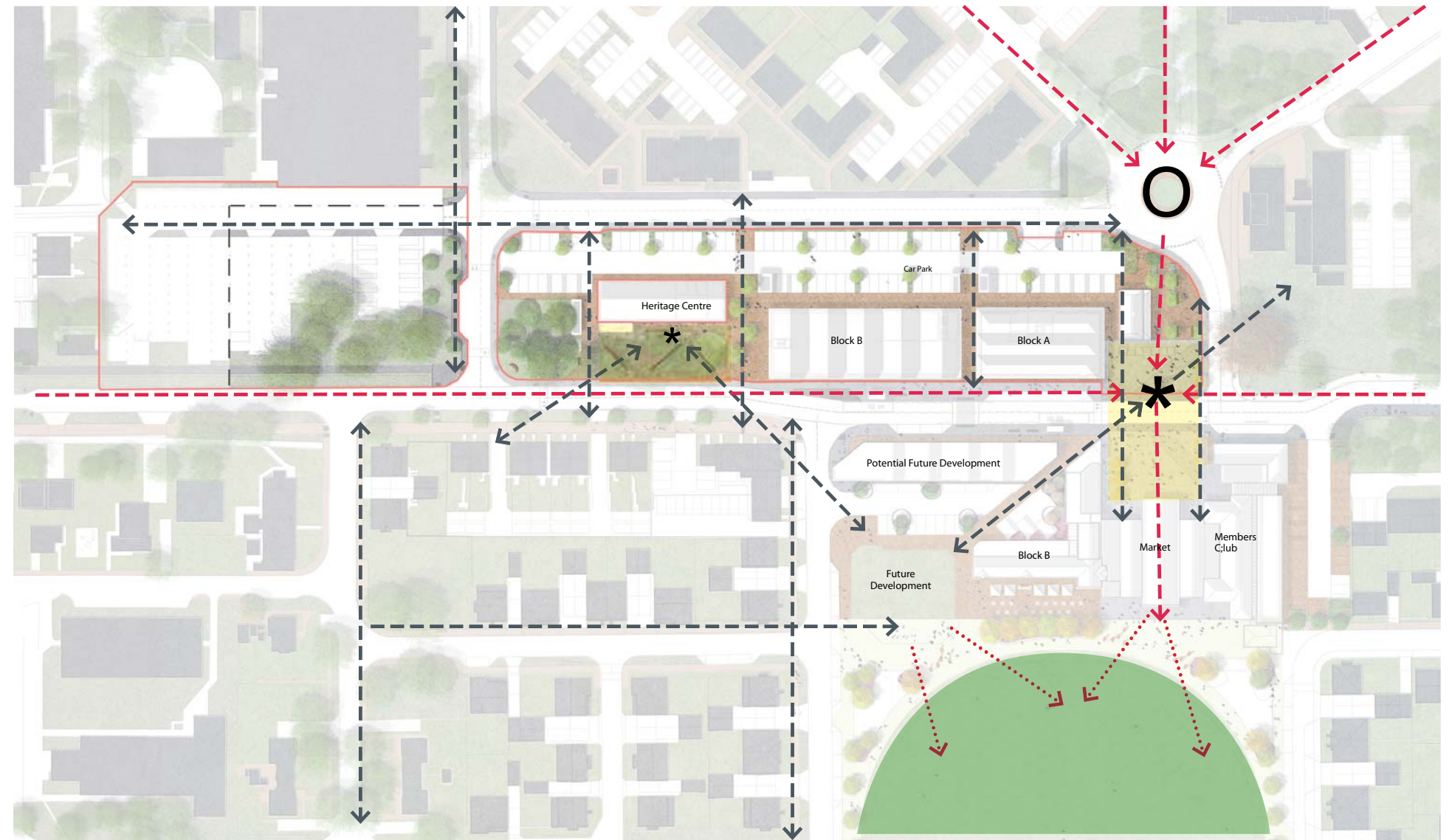
The landscape proposals for the Northern Plot draw on the character and materials established in the Southern Plot. Further to this, the external spaces have been designed in response to Cultural, Commercial, Residential and Retail uses proposed. As a result, the Northern Plot landscape is both attractive and ties in with the wider landscape character while also being purposeful and responsive to the buildings and their users.

#### A Landscape for All Seasons

The design has considered the all-season character of the landscape and how it will help animate the Village Centre providing year-round interest to visitors and residents alike. This has been primarily achieved through careful selection of tree and shrub species and in the thoughtful planning of key public spaces to showcase the planting.

#### A Functional Landscape

The site has numerous activities which it needs to provide for; as a result, the public realm layout has been designed in a functional manner. It has to be attractive for the public, easy for the residents to access their homes and functional for those delivering to the retail outlets.



Wider Connectivity Diagram

- - - - - → Sight Lines
- - - - - → Directions of movement





## 5.3 Landscape Design Proposals

### 5.3.2 Public Space Programme

#### Heritage Gardens

Located to the west of the Village Centre and directly in front of Building 103, the existing trees have been retained to create new Heritage Gardens which connect with Building 103. This space provides a low key destination on Camp Road which is connected to the Village Centre but gives pedestrians a quieter, more reflective space in contrast to the commercial activity of the Village Square.

#### Pedestrian Links

Running North-South, a number of pedestrian routes have been created which help connect residential development in the north through to the commercial and public amenities along Camp Road. These spaces are designed to be informal social spaces where residents and visitors can park their bicycle or take a break by sitting and chatting to neighbours. Where possible, trees have been retained or planted to provide interest, colour and shade for pedestrians.

#### Car Park Spaces

Distributed around the site, the car park spaces provide essential parking close to the Village Centre amenities. To the west is located a new car park which will not only serve the Village Centre North but provide important parking for the wider village centre scheme (please see planning statement for further detail of the wider parking scheme). The landscape of these spaces breaks up the large areas of hard standing by introducing tree and shrub planting to provide colour, texture and interest. It also serves to introduce natural shade and cooling to spaces which would have a lot of reflected heat during summer months.

#### Village Square

The Village Square is the central event space within the Village Centre and as such much social activity will take place here. In the Northern portion of the square, a number of elements have been placed, such as signage boards and a potential site for public sculpture, which work together to provide year-round interest to the space. As the main destination in the Village Centre, the space will be designed using robust materials which are in keeping with the quality and character of the Village Centre architecture.



Heritage Gardens



Seasonal Colour & Interest



Car Parking Spaces



Village Square



Animated Public Spaces



Tree Lined Streets

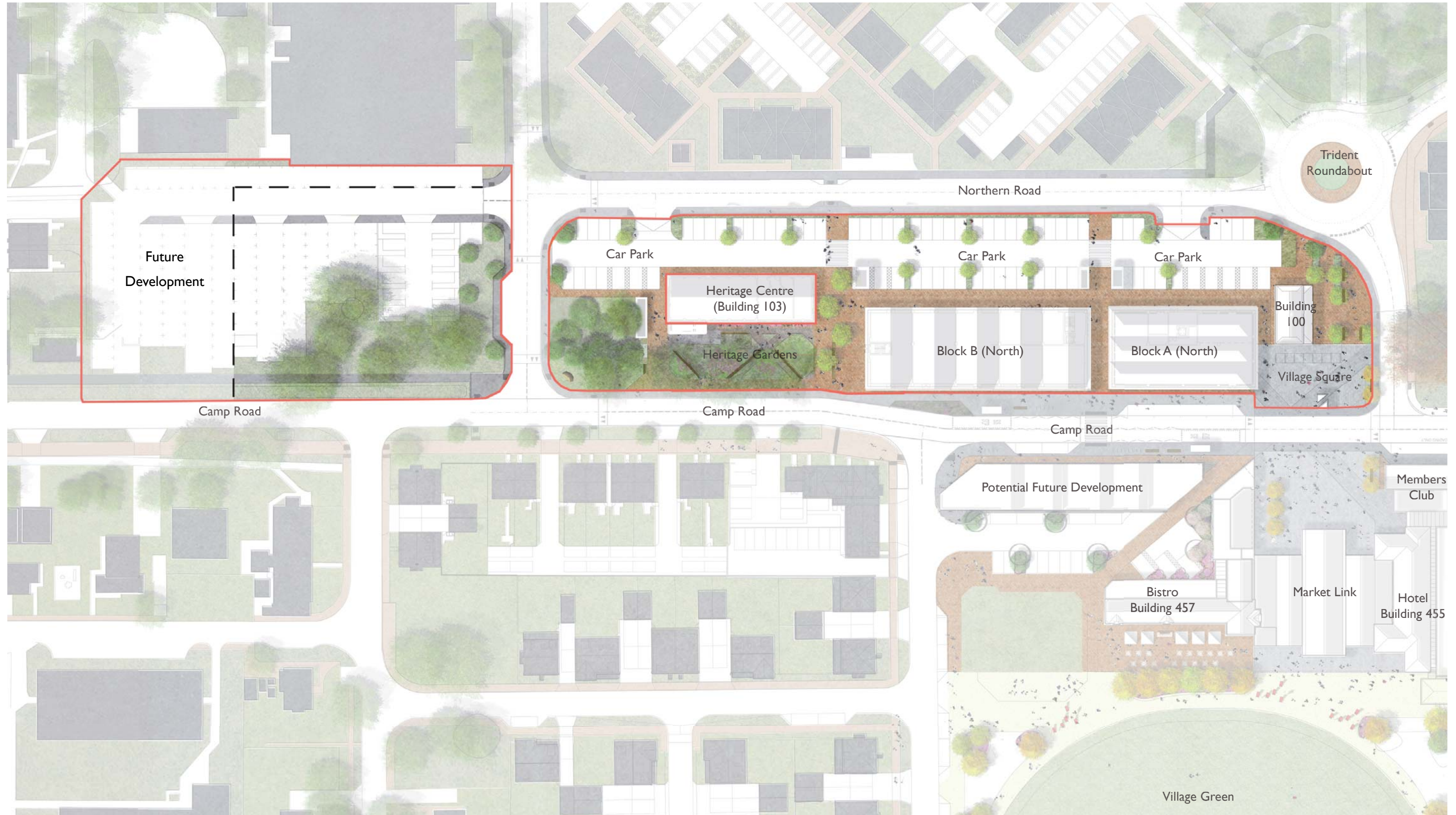


Pedestrian Friendly



### 5.3 Landscape Design Proposals

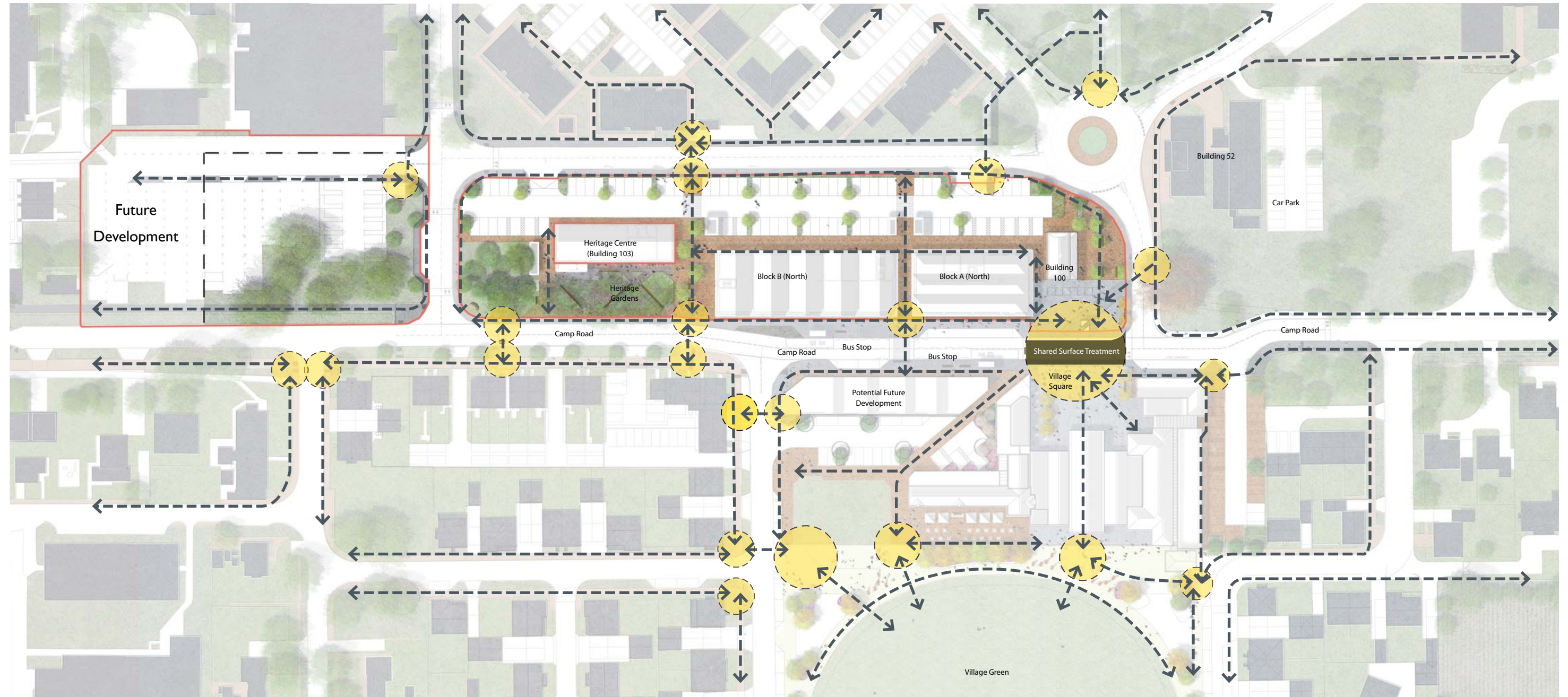
#### 5.3.3 Landscape Masterplan





## 5.3 Landscape Design Proposals

### 5.3.4 Pedestrian Movement



#### Pedestrian Movement Diagram

The central issue regarding pedestrian movement throughout the Village Centre is one of permeability. Traditional village centres are formed around a central square or market which connects all the lanes and alleys ensuring that residents can easily access public amenities and their community. Similarly, it has been one of the central aims to ensure that clear wayfinding and access are designed into the proposals.

As a result, the site picks up on the East-West axis of Camp Road and the North-South axis of the Trident to create multiple routes crossing in these directions throughout the masterplan to create a variety of different public spaces but also to ensure quick and efficient pedestrian access is designed into the structure of the plan.

One of the key outcomes of this pedestrian network is the generation of a hierarchy of public spaces. These sub-consciously guide pedestrians through the development in a logical way.

#### Key:

Pedestrian Route



Public Space / Meeting Point



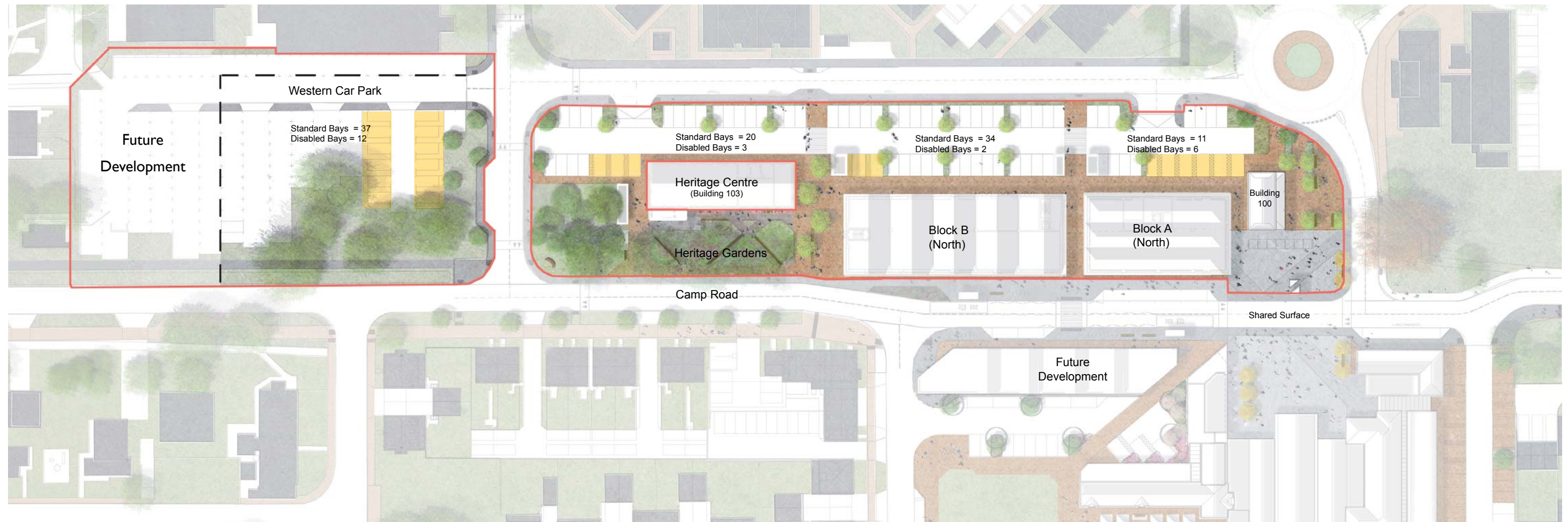
Share Surface





## 5.3 Landscape Design Proposals

### 5.3.5 Proposed Car Parking Arrangement



#### Car Parking Strategy Plan

The Car Parking Strategy for the Village Centre North has been developed in keeping with the Heyford Park Design Code as well as OCC Parking Standards to determine the appropriate number, mix and location of parking on site.

As the development is a mixture of proposed uses, parking provision will need to provide for the new residents on the site (residential) as well as the influx of visitors and shoppers accessing the new shopping (retail units) and cultural amenities (heritage centre).

Parking provision on site consists of:

|                               |            |
|-------------------------------|------------|
| Standard Car Parking Bays     | 102        |
| Disabled Car Parking Bays     | 23         |
| <b>Total Car Parking Bays</b> | <b>125</b> |

This represents a 5 to 1 ratio of standard parking to disabled parking. Further to this, disabled bays have been appropriately located with close proximity to building entrance points to facilitate easy access.

#### Heyford Park Design Code - Parking Standards

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

| NUMBER OF BEDROOMS PER DWELLING | MAXIMUM NUMBER OF ALLOCATED SPACES | TARGET NUMBER OF VISITOR SPACES WHEN MINIMUM ALLOCATED SPACE PER DWELLING IS PROVIDED | MINIMUM ALLOCATED SPACES |
|---------------------------------|------------------------------------|---|--------------------------|
| 1                               | 1.5                                | 1   | 0.25                     |
| 2                               | 2                                  | 1   | 0.25                     |
| 3                               | 3                                  | 2   | 0.25                     |
| 4+                              | 4                                  | 2   | 0.5                      |

#### OCC Car Parking Requirements

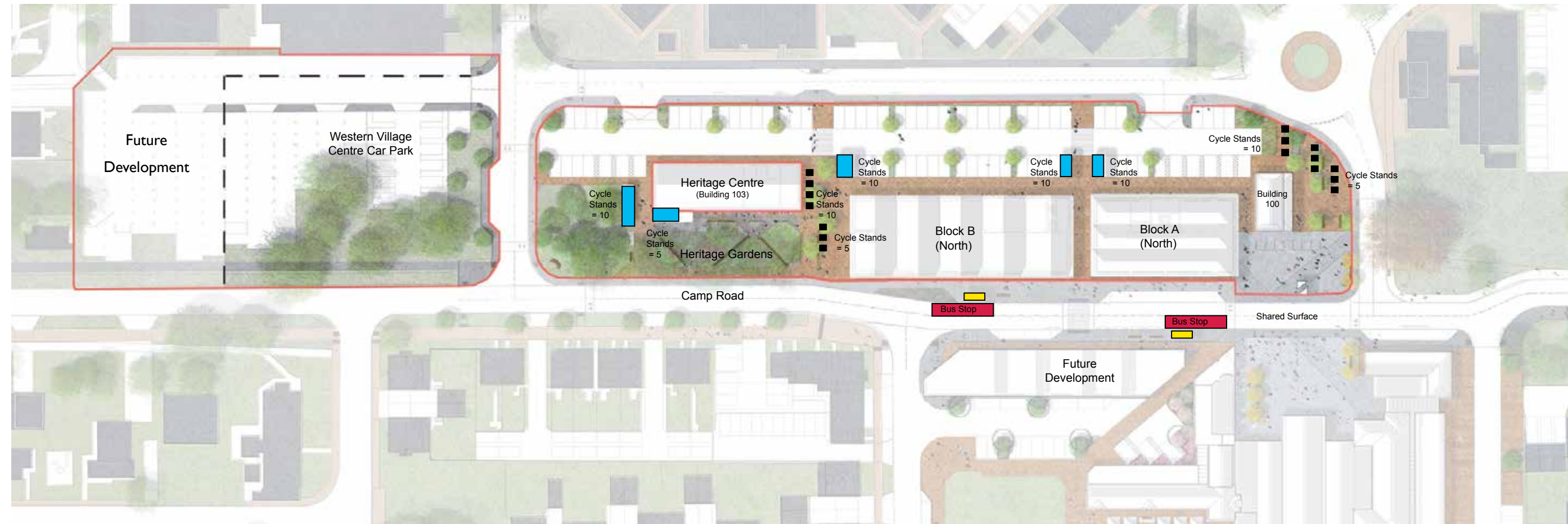
| Building         | OCC Car Parking Requirements                    |                                       |                               |                                 |                               |            | Requirement | Provision |
|------------------|---|---------------------------------------|-------------------------------|---------------------------------|-------------------------------|------------|-------------|-----------|
|                  | Residential<br>(1 space per 2 bed, 2 per 3 bed) | Visitor<br>(0.25 spaces per dwelling) | Retail<br>(1 space per 14sqm) | Cultural<br>(1 space per 22sqm) | B1 Use<br>(1 space per 30sqm) |            |             |           |
| Block A          | 12  | 3                                     | 30                            |                                 |                               | 45         | 17          |           |
| Block B          | 20  | 5                                     | 30                            |                                 |                               | 55         | 36          |           |
| Heritage Centre  |   |                                       |                               | 15                              |                               | 15         | 23          |           |
| Building 100     |   |                                       |                               |                                 | 3                             | 3          |             |           |
| Western Car Park |   |                                       |                               |                                 |                               |            | 49          |           |
|                  |   |                                       |                               |                                 |                               | <b>118</b> | <b>125</b>  |           |





## 5.3 Landscape Design Proposals

### 5.3.6 Bus and Cycle Provision



#### Bus and Cycle Strategy Plan

The connectivity throughout the development is key both for pedestrians and for vehicles. The arrangement of the buildings in relation to the car parking area has also been considered in respect to the volume of car parking and cycle parking required for the associated uses. As part of this submission, a transport assessment has been completed by Peter Brett Associates along with further technical transport layouts prepared by Woods Hardwick.

The bus provision for the site is currently provided to the south of the site on Camp Road where two bus stops with shelters are proposed. These locations are central to the development and will provide convenient access for buses going into Bicester and other surrounding towns and villages.

Secure internal cycle parking has been provided for residents, while ample external cycle storage has been provided throughout the site for the ground floor retail units and Heritage Centre.

As part of the cycle strategy for the site, clear access routes from adjacent roads have been identified where cyclists can dismount and park their bicycles before walking into the Village Centre. Further to this, secure cycle storage has been provided for staff working in the Village Centre, with open stands provided for visitors who would park bicycles for shorter periods of time and would therefore not require secure storage.

#### OCC Cycle Parking Calculations

|                       | m2            | No of staff | Staff stands | Visitor stands | Total     |
|-----------------------|---------------|-------------|--------------|----------------|-----------|
| <b>Building 103</b>   | <b>341</b>    | <b>49</b>   | <b>4</b>     | <b>17</b>      | <b>21</b> |
| D2 Assembly & Leisure |               |             |              |                |           |
| <b>Block B</b>        | <b>767.3</b>  | <b>15</b>   | <b>3</b>     | <b>4</b>       | <b>6</b>  |
| Non-Food Retail       |               |             |              |                |           |
| <b>Block A</b>        | <b>489.5</b>  | <b>10</b>   | <b>1</b>     | <b>2</b>       | <b>3</b>  |
| Food Retail           |               |             |              |                |           |
| <b>Building 100</b>   | <b>82</b>     | <b>12</b>   | <b>1</b>     | <b>4</b>       | <b>5</b>  |
| B1                    |               |             |              |                |           |
| <b>Total</b>          | <b>1669.8</b> |             |              |                | <b>36</b> |

#### Residential Secured Cycle Parking Provision

2-Bed Apartments = 56 No. cycle spaces (28 x 2 spaces)

On-Site Cycle Parking Provision as spaces (2 x 3 spaces)

Visitors = 15 No. cycle spaces (30 apartments/ 2)

TOTAL = 77 No. cycle spaces (equates to 39 Stands)

#### Key:

- Cycle Parking
- Cycle Routes
- Bus Stop Location
- Bus Shelter
- Secure Cycle Parking



#### Total onsite Cycle Parking Provision

|  |           |
|--|-----------|
| Cycle Parking Stands (Not Covered / Secured) | 30        |
| Cycle Parking Stands (Covered / Secured)     | 45        |
| <b>Total Cycle Stand Provision</b>           | <b>75</b> |
| (Total Cycle Spaces Provision)               | (150)     |



## 5.3 Landscape Design Proposals

### 5.3.7 Delivery and Refuse Collection Strategy



#### Delivery and Refuse Collection Strategy

Within the development, consideration has been given to refuse collection and delivery access to ensure that both buildings are efficiently serviced with minimum disruption to the community and commercial activities of the development.

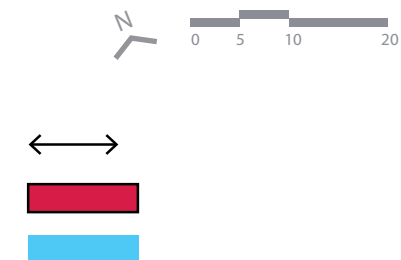
In the case of refuse collection, rubbish trucks can pull up along the road along the northern boundary which abutts the development and can arrange for kerbside access to the bin stores to enable efficient refuse collection (see diagram for reference).

For deliveries, these will be coordinated with the facilities management and the occupier to be set at designated times so that they cause minimal disruption. As part of the delivery strategy a loading bays has been identified which are close to Block A.

For Block B, at present it is not clear which tenants will be occupying the premises and what their servicing / delivery needs are. We are currently looking at how to provide a delivery strategy for these buildings which is appropriate working with facilities management, however there is an opportunity from the front loading bay or the rear.

**Key:**

- Delivery / Refuse Collection link
- Refuse Truck Stopping Point
- Delivery Bay





## 5.3 Landscape Design Proposals

### 5.3.8 Paving Strategy



#### Paving Strategy

The quality of the hard surfaces throughout the development are of key importance as they will communicate the value and importance of the Village Centre within the wider Heyford Park Development. Because of this, a selected palette of quality paving has been chosen to enhance the development and create an attractive, robust and functional landscape which the community can enjoy throughout the year.

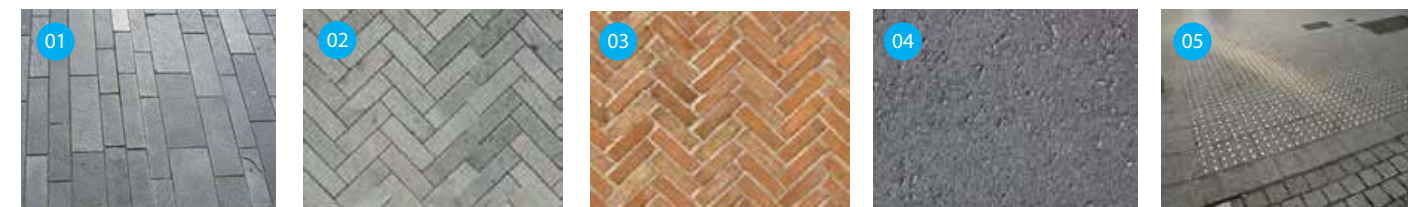
The selection of materials has also considered the new retail uses along Camp Road and the Village Square which will generate an increased footfall throughout the area. As a result, the selection of paving materials has been reviewed to ensure they are both robust and easy to maintain over time.

Use of paving has generally been broken down into 3 main types across the site to fit with the character and use intended in that location:

1. Heritage Gardens - Charcoal Brick Paviours or similar approved
2. Car Park Spaces - Red Brick Paviours or similar approved
3. Village Square - High quality paving slabs laid in linear pattern

These materials together form the character for the landscape of Heyford Park.

#### Paving Materials Palette



|  |  |   |   |  |
|--|--|---|---|--|
| 01 Blend of Medium / Dark Grey Slab Paving or similar approved | 02 Charcoal Brick Paving or similar approved | 03 Red Herringbone Brick Paving or similar approved | 04 Macadam road surface or similar approved | 05 Blister Paving (Rivets into Paving) or similar approved |
|--|--|---|---|--|



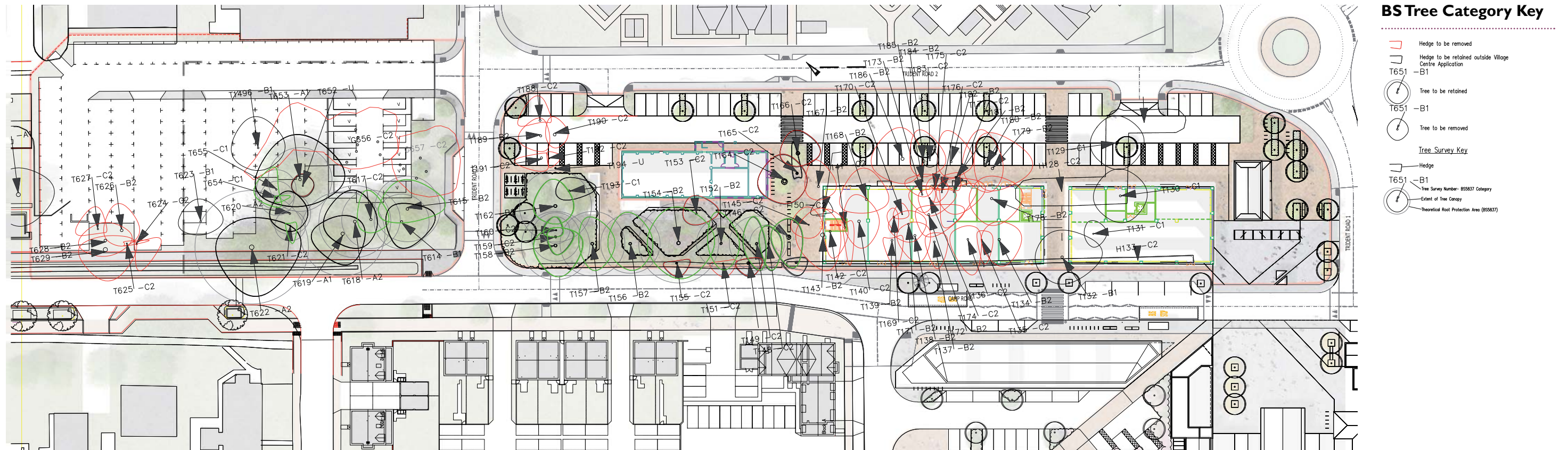
#### Landscape Design and Disabled Access

The public realm has given consideration to disabled access by managing the levels across the site to avoid step access. This has been complemented by the choice of materials which have clean and level surfaces allowing for efficient movement for wheelchair users. The design also includes tactile paving at key points adjacent to the road ways and at crossings for visually impaired visitors in keeping with Department of Transport guidelines.



## 5.3 Landscape Design Proposals

### 5.3.9 Tree Removal Strategy



#### Tree Survey Summary

(Paraphrased from AIA report submitted with this application)

The scope of the assessment was to visit the site and to re-survey relevant trees, groups and hedges in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction – recommendations.' These trees have previously been surveyed by Pegasus Group over the period from March 2015 to June 2016 and we have been provided with a copy of this tree survey. Within our tree survey we have used the same tree numbers as the earlier Pegasus Group tree survey.

The site included a total of 88 items including 79 individual trees, a group of 5 trees, 2 hedges, a group of cherry laurels and a shrub were surveyed.

The tree species are dominated by beech and sycamore which make up almost 80% of the tree resource with beech 41% and sycamore 37.5% of the tree population, with the remaining species forming only 20% of the tree stock in this area.

The tree resource consists predominantly of Category C trees which make up over 60% of the tree resource with 36% of the trees qualifying as Category B trees. There are no Category A trees and only 1 Category U tree.

#### Tree Removal Strategy

(Paraphrased from AIA report submitted with this application)

A total of 70 trees, 2 hedgerows and 1 group of cherry laurels are to be removed to allow for the Village Centre development. Of these, 13 trees could be expected to be removed as part of any tree management programme.

The trees to be removed to allow for the proposed development are 20 'B' category tree and 49 'C' category trees and 3 C' category hedgerow / shrub groups.

The trees to be removed are identified on the Tree Removals Plan (shown above) and within the Arboricultural Impact Assessment report. The principle of removing trees to allow for an appropriate layout subject to appropriate new tree planting is supported in all the relevant planning policies and in BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' which states that:

*The constraints imposed by trees, both above and below ground should inform the site layout design, although it is recognized that the competing needs of development mean that trees are only one factor requiring consideration. Certain trees are of such importance and sensitivity as to be major constraints on development or to justify its substantial modification.*

It is the opinion of the AIA report that none of the trees to be removed are considered to be of 'such importance or sensitivity to be major constraints on development or justify its substantial modification'.

#### Tree Removal / Replacement Schedule

|                                       |             |
|---------------------------------------|-------------|
| <b>Total Existing Trees on site</b>   | <b>88</b>   |
| Trees to be retained                  | + 18        |
| Trees To Be Removed                   | - 13        |
| Poor Condition (Cat C & U)            |             |
| Trees To Be Removed                   | - 57        |
| To Facilitate Development (Cat B & C) |             |
| <b>Total Trees to be Removed</b>      | <b>- 70</b> |
| <b>Proposed Tree Planting</b>         | <b>+ 34</b> |



## 5.3 Landscape Design Proposals

### 5.3.10 Tree Replacement Strategy



#### Tree Planting Strategy

Following a review of the existing trees on the site with the Council Tree Officer, it was noted that any proposal for tree loss should be made within the context of a wider tree replacement / planting strategy to establish tree cover and health for Heyford Park going forward in the longer term.

As a result, the Tree Planting Strategy has been developed to provide selected tree species which will complement the character and quality of the development as well as contribute to the overall tree health and canopy cover across the wider Heyford Park development.

Of the 70 trees proposed for removal, 13 of these trees are in poor condition leaving a loss of 57 trees. This proposal caters for the planting of 60 new trees on site to help replace this loss. Further information is provided in the AIA report to explain this justification.

The structure of the tree planting strategy has 4 main drivers which are as follows:

#### Roadside Planting

This consists of a selection of evergreen (*Pinus sylvestris*) and deciduous (*Platanus x hispanica*) species which have a good form and are suitable for street planting.

#### Car Parking Planting

Within the parking courtyards, use of *Platanus orientalis* will provide good structure, shade and seasonal colour to these spaces.

#### Village Square Feature Planting

In keeping with the southern portion of the Village Square, *Ginkgo biloba* are located on the Eastern boundary which will provide strong lime, yellow and orange seasonal colour. In contrast, the North are places a grid of 5 *Prunus serrulata* which will provide accent of pink colour during spring.

#### Specification and Planting Notes

Tree species and planting methodology will be specified to a significant size and are planted in a manner to ensure their successful establishment and health in the long term. All plants shall conform to BS 3936 and National Planting Specification standards.

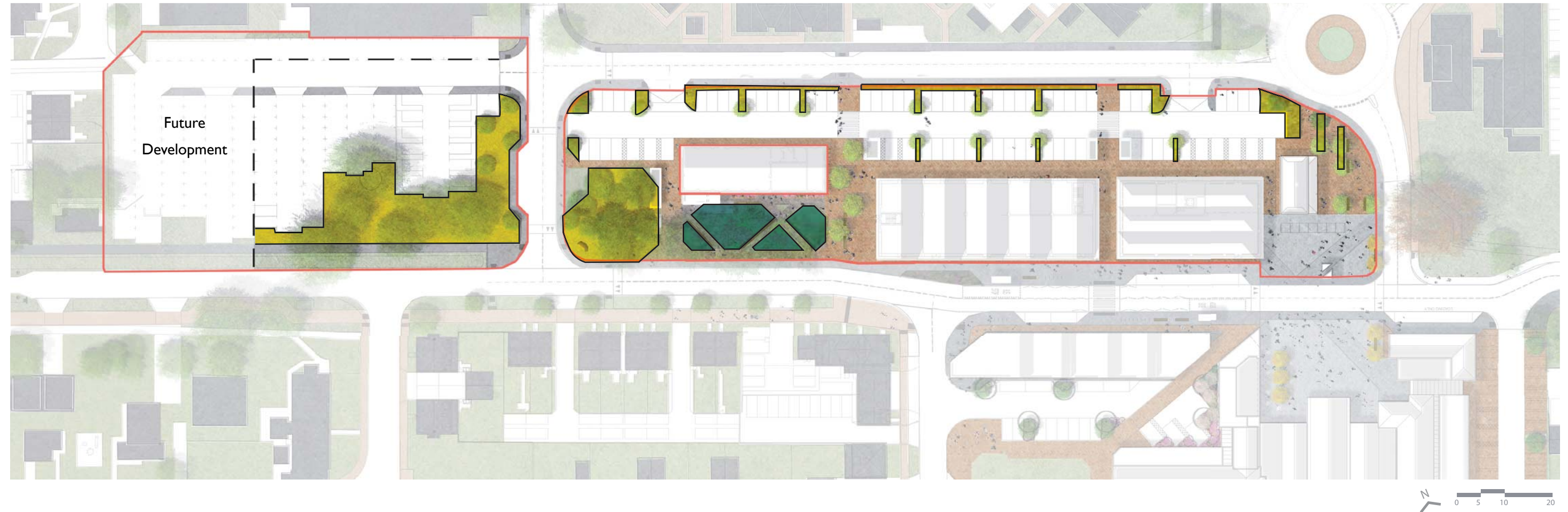
#### Proposed Tree Selection





## 5.3 Landscape Design Proposals

### 5.3.11 Planting Strategy



#### Public Realm Amenity Landscape

The landscape design of the Village Centre Northern Plot has been developed in keeping with the previous planting strategy proposed and approved on the Village Centre Southern Plot application.

The Northern Plot is made up of several landscape character areas including the Village Square, Car Parking Spaces, Roadside Planting & Heritage Gardens which are an essential to the social life of the Village Centre. These spaces will have a high level of access and use by visitors and residents alike as they will be used daily throughout the year.

The shrub planting strategy for these spaces focuses on developing an amenity shrub planting mix which mixes seasonal flowering shrubs, grasses and herb planting with more structural shrubs to create a planting mix which creates a strong character and identity for the Village Centre.

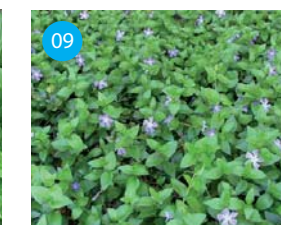
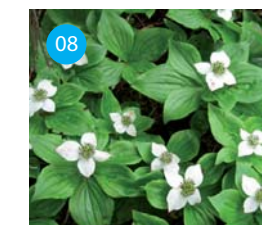
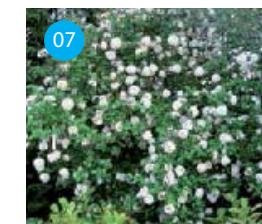
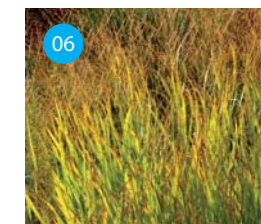
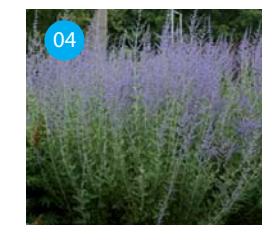
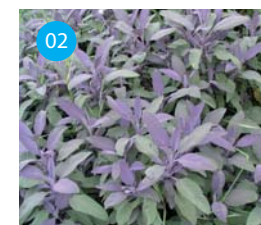
One particular area of interest will be the Heritage Gardens associated with the Heritage Centre (Building 103). This area is located under mature beech trees and requires particular attention in selecting plants which are shade tolerant while also supporting and enhancing the garden experience.

The shrub planting has also been selected based on hardiness, ease of maintenance as well as low water consumption in keeping with sustainable water use.

#### Amenity Shrub Planting Mix



Shrub Planting Palette



01 Hebe rakaiensis

02 Salvia officinalis purpurea

03 Santolina chamaecyparissus

04 Perovskia 'Blue Spire'

05 Sarrococca hooeriana

06 Calamagrostis x acutifolia 'Rubrum'

07 Viburnum burkwoodii

08 Cornus canadensis

09 Vinca major

10 Vinca minor

11 Liriope muscari

#### Building 103 Gardens



## 5.3 Landscape Design Proposals

### 5.3.12 Street Furniture Plan



#### External Furniture Strategy

A public furniture strategy for the Village Centre has been developed to create a consistent character to the public realm and also to assist the management in maintaining the products.

An important aspect of the street furniture is that it draws on architectural elements like steel, stone, and timber as they are part of the overall design aesthetic of the Village Centre.

Further to this, consideration has been given to the durability and robustness of the products as well as their comfort for use. This is an important aspect, as if seating is not comfortable, it will not be fully utilised and reduce willingness of community to socialise in these spaces. The location of furniture within the development is a critical factor in encouraging its use.

Finally, it is worth noting that elements like signage within the scheme will draw upon the wider Heyford Park signage strategy so that this proposal is integrated into the overall wayfinding strategy.

In regards to the proposed bus shelters located on Camp Road, the specification for the shelters will be coordinated with Cherwell & Oxfordshire County Council to ensure that the shelters are consistent with the wider bus shelter character and strategy.

In addition, the design, manufacture, installation, maintenance and operation of all street furniture products will comply with British Standards, relevant Codes of Practice and Construction Design Management regulations.

#### Structure shrub planting



01 Steel Frame with Hardwood Timber Facing or similar approved



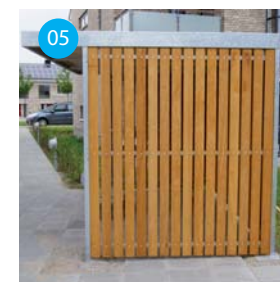
02 Sheffield Cycle Stands or similar approved



03 Basic Tree Grate - Concept Urban or similar approved



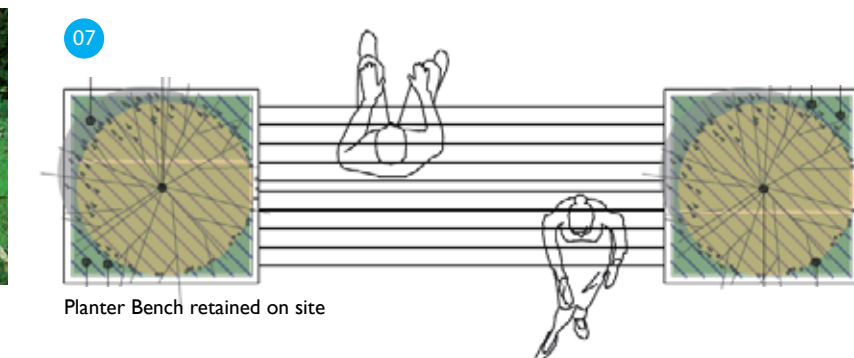
04 Powder coated 80L Rubbish Bin or similar approved



05 Falcozan Powder coated Steel & Timber Cycle Shelter



06 Existing RAF Memorial Retained on site but relocated.



07 Planter Bench retained on site



6.0 ACCESS



## 6.1 Access

### 6.1.1 Site Access

#### Vehicles and Parking

Car parking has been located close to public amenities throughout the Village Centre. Parking spaces have been provided to the North of Blocks A & B (North). A separate parking area is located to the west providing additional spaces. Further parking is provided to the South of Camp Road and to the East of Building 455. A controlled delivery/ loading bay is located in front of the Block A (North)

#### Pedestrians and Cyclists

The Village Centre North has been designed to encourage pedestrian activity and provide an active frontage along Camp Road extending towards the Village Square. Pedestrian routes run north-south across the site connecting the residential zones with the commercial and public amenities. External cycle storage has been provided to serve the commercial/ retail units and Heritage Centre, whilst secure cycle storage has been provided for Village Centre residents.

### 6.1.2 Inclusive Access

#### Main Entrances

- » Residential entrances will be located under canopies to provide protection from inclement weather.
- » The proposed development will include level thresholds to all principal entrance doors with all necessary operational equipment for automatic opening and closing. Level thresholds are also included to all fire exits.
- » The main entrance doors will be provided with PIR/ motion-activated automatic opening with power-assisted openers. The doors will be fully interfaced with the fire alarm/ detection system to include 'fail safe' opening when activated.

#### Horizontal Circulation

- » Internal accommodation across each floor will be fully accessible to all building users regardless of impaired/ reduced mobility.
- » Corridors, doors, lobbies and escape routes have been designed to incorporate current best practice and to meet the requirements of the Approved Document Part M of the Building Regulations.

#### Vertical Circulation

- » Vertical circulation for able-bodied/ ambulant disabled building users will be provided between the ground and upper floors via internal stairs. The staircores are positioned to be easily accessible from principal circulation routes. The stairs are designed to be fully compliant with Part M and/or BS 8300.
- » Wheelchair refuges are provided at each floor including emergency voice communication systems designed to be used by physically disabled persons.
- » Vertical circulation for ambulant disabled/ wheelchair users will be provided between the ground and upper floors via passenger lifts located adjacent to the staircores. These single entry lifts will meet the requirements of Part M and BS 8300.

#### Internal Doors

- » Internal doors will achieve the minimum clear opening widths in accordance with the requirements of Table 2 of Approved Document M.
- » Door closers (to comply with Approved Document B) are to create the least resistance possible when opening against smoke/ draught seals, and with opening forces in accordance with Clause 2.13 of Approved Document M.
- » Vision panels in accordance with Section 10/ Diagram 10.1 of Approved Document K will be provided to all cross corridor doors, doors into communal rooms and doors on access routes, but not to doors where privacy or security is required.
- » Ironmongery will be installed in accordance with the requirements described in BS 8300.

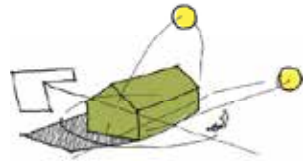


# 7.0 SUSTAINABILITY



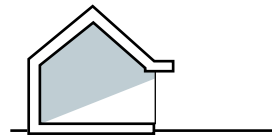
## 7.1 Sustainability

### 7.1.1 Key Considerations



#### ORIENTATION

Blocks A+B (North) are orientated along an east-west axis which is widely regarded as the most suitable orientation for passive environmental approaches



#### DAYLIGHT

Apartment layouts have been designed to utilise natural daylighting within each habitable space; Along the southern elevation balconies project from the facade to the intermediate floors and have been partially recessed at upper floor reduce the risk of summer overheating



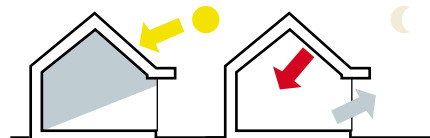
#### VENTILATION

Apartments shall be naturally ventilated via manually operated opening windows; Excessive room depths are avoided to assist with the natural ventilation strategy where single-aspect apartment layouts are provided



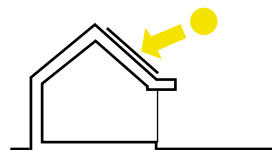
#### THERMAL ENVELOPE

Floor plates are maximised whilst minimising external envelope, thus reducing the risk consequential thermal loss/ gain; The proposed development will adopt a 'fabric first' approach whereby the external envelope achieves thermal performance levels which exceed current Building Regulations requirements



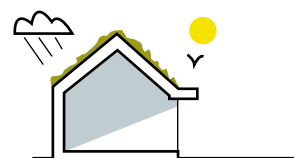
#### THERMAL MASS

Dependent on site conditions and the preferred structural approach, it may be deemed viable to enhance the building's thermal mass which will help regulate the internal environment throughout the year



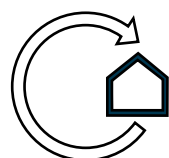
#### ENERGY GENERATION

On-site energy generation from renewable resources is dependent upon the Local Planning Authority's requirements; The current design allows sufficient flexibility to accommodate the inclusion of photovoltaic electricity generation (PVs) or low temperature hot water derived from air-source heat pumps



#### GREEN INFRASTRUCTURE

The quality of the surrounding environment is not only an important ecological consideration, but critically important to the health and wellbeing of the wider community; The proposed development will seek to enhance the existing green infrastructure as part of the wider landscaping approach



#### RESOURCE EFFICIENCY

Resource efficiency is an important consideration during the initial construction phase, but also throughout the development's ongoing life cycle. The imposed energy demand will be minimised wherever possible, whilst optimising the potential for using low and zero carbon technologies (LZCT). Technologies will only be adopted if they demonstrate long-term benefits in terms of total energy demand and ongoing costs, as opposed to those which only achieve current statutory requirements