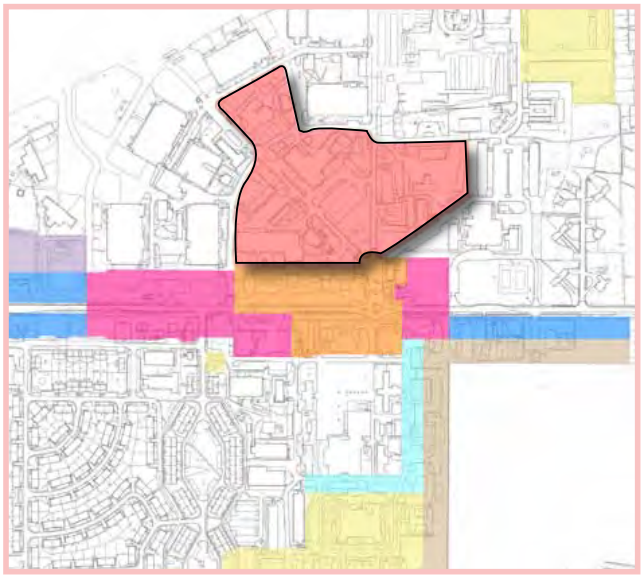
✓ The Planning Application shows buildings aligned at 45-90° replicating the original historic building alignment plus courtyard parking clusters part enclosed with up to 1m high (max) formal hedge planting.


E8 Trident Campus Frontage

Planning Layout Extracts showing E8 Trident Campus Frontage (Dwg 0521-PH8-102)

# 3.2 Character Areas

3.2.1 The following section demonstrates compliance of the Planning Application with the Design Code for CA3 - Trident Housing.



*Design Code* - Character Area 3 - Trident Housing

KEY CORNERS

NEW LANDMARK BUILDING

TRIDENT AXIS 1


*Design Code* - CA 3 Trident Housing Framework Plan

## 3.2.2 CA3 - Trident Housing

The Planning Application shows:

✓ Contemporary style houses and apartments with a campus style environment created through:

- buildings that sit within an existing and new landscape structure;

- retention of character of the Trident area in particular the existing axial road alignments;

- new build form to align with historic 45/90° building alignment.

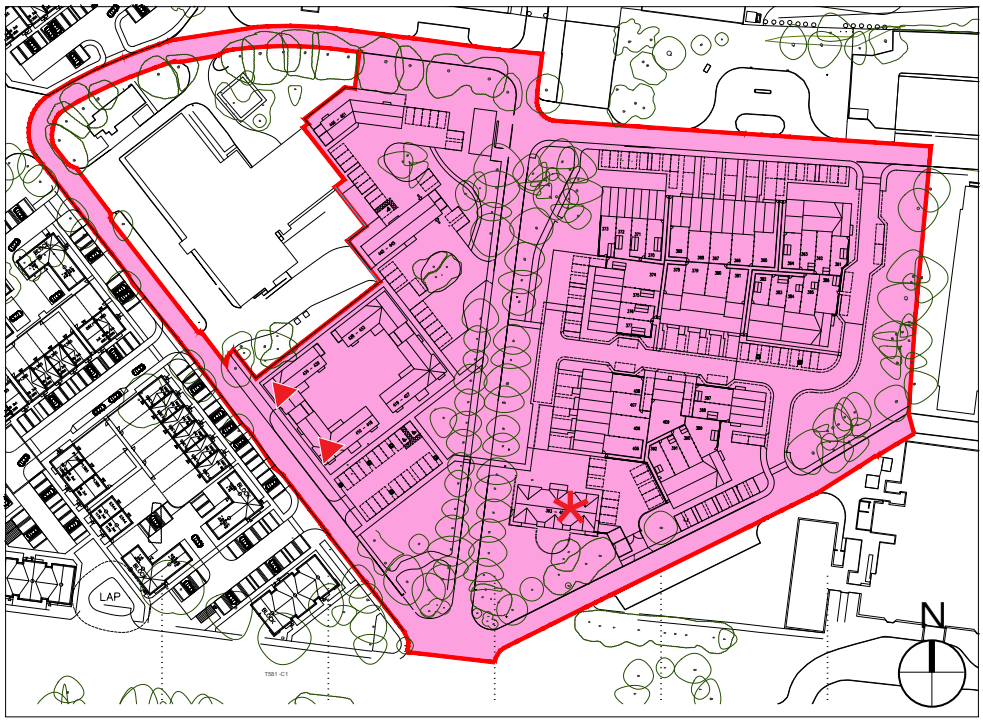
- streets defined by existing tree planting, providing a mature setting;

- development to take account of the large scale airfield buildings to the north.

CA3 - TRIDENT HOUSING

KEY CORNERS

NEW LANDMARK BUILDING




Character Area CA3 - Trident Housing

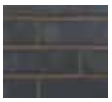
Note - Refer to para 3.1.2 regarding change of location of Landmark Building.

CA3 - TRIDENT HOUSING

| CA3 | CODE CATEGORY | DEFINITION (MANDATORY) |
|---|---|---|
| 1 | URBAN FORM | • Built form set within existing and proposed tree planting. Terraced houses and apartments in regular blocks detached from each other with gardens and landscape features between built form.<br>• The street form retains the existing radiating structure which clearly defines the development parcels.<br>• The development will form a campus style with clearly articulated buildings set in landscape dominated space.<br>• New built form to align with historic 45/90 degree building alignment. |
| 2 | BUILDING TYPOLOGY | • Bespoke building types will be required for this area to respond to the existing building facilities/barracks as well as adjacent hangar buildings.<br>• Predominantly terraces/apartments.<br>• A minimum of 4 terrace houses in a row. |
| 3 | DENSITY | • Will generally be higher than other character areas 41+ dph. |
| 4 | BUILDING LINES | • No predominant frontage with generous setback from streets to give a verdant character with buldings set amongst existing and new tree planting.<br>• Building lines will be consistent across a group of buildings.<br>• Perimeter block approach to be avoided. |
| 5 | HEIGHT / ENCLOSURE | • Predominantly 2.5/3st. Allowance for a 2.5 storey transitional unit height where change from 2–3 storey.<br>• The roofline of future proposals will need to respond to the retained buildings in this area.<br>• Development will have greater height around the apex of the site.<br>• The height of development will need to respond to the scale of the existing buildings at the northern boundary to the character area. |
| 6 | ROOFSCAPE | • Constant with regular form eave height and gable ends to animate sides and potential for contemporary roof form.<br>• A consistent eaves and ridgeline should be maintained between groups of buildings.<br>• Dormer windows where used should be well set back to break up the roof line. |
| 7 | SCALE AND PROPORTION | • Symmetrical and proportionate in scale and plot size to its surrounding context. |
| 8 | BUILDING DETAIL | • Contemporary details.<br>• Building details should be clean lines with simple details responding to adjacent context.<br>• The configuration of doors and windows will not be formally arranged, but should animate the facade and provide a clear rhythm to the area.<br>• No chimneys. |
| 9 | BUILDING MATERIALS | • Walls - Brick and render, with occasional use of contemporary cladding in silver or grey and/or stack bond brick panels to highlight doorways and entrances.<br>• Roof - Slate/Slate effect. |
| 10 | LANDSCAPE DESIGN | • Semi-formal street tree planting with frontages to be bounded by soft landscaping in blocks of mature species.<br>• Street furniture to be formal style.<br>• The apex of the site, where the Trident area meets the Village Centre is a critical area of the site and should be designed as high quality public realm, using changes in surfacing to manage vehicular movement.<br>• The existing vegetation will be retained and integrated into development proposals alongside new significant tree planting.<br>• Open frontage boundaries with the exception of parking courts where there is allowance for up to 1m high hedge planting to screen parked cars. |
| 11 | PARKING | • Parking will be configured through a variety of means and designed as an integrated part of the public realm design. |

*Design Code* - CA3 - Trident Housing - Mandatory & Desired Requirements

Brick Type 1 - predominantly Red with occasional brown tones



Brick Blue/Grey



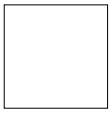
Render
Ivory or Sand Colour

Grey Cladding

ROOF MATERIALS

Slate/Slate Effect

WINDOW COLOUR



White



Warm Grey



Light Grey

## COMPLIANCY

✓ Planning application external building materials reflect Design Code. Refer to Dwg 0521-PH8-108- Materials Layout.

| COMMENTS | COMPLIANCY |
|---|---|
| - | ✓ Refer to Section 3.1.8 Edge Types. |
| See built form typology table. Apartments predominate up to 50%. | ✓ Refer to Section 3.3.6 Building Typology. |
| Higher density achieved through higher proportion of apartments. | ✓ Refer to Section 3.1.5 Building Density & Heights. |
| Subject to tree survey. | ✓ Refer to Section 3.1.1 Key Frontages & Section 3.1.8 Edge Types. |
| Views between adjoining built form parcels will be encouraged.<br>Minimum 5m gaps between development blocks promoted by edge type E8. | ✓ Refer to Section 3.1.5 Building Density & Heights. |
| Gable form to be explored to animate frontage. | ✓ Refer to 0521-PH8-HTB-Housetype Booklet-Issue1 & Dwg 0521-PH8-103 - Street Scenes. |
| Contemporary form allowance for window sizes to vary in relation to room purpose. | ✓ Refer to Dwg 0521-PH8-102 - Planning Layout, 0521-PH8-HTB-Housetype Booklet-Issue1 & Dwg 0521-PH8-103 - Street Scenes. |
| Potential for full height windows & box bay projecting window surrounds on landmark buildings.<br>'L' shaped flat top canopies to primary entrances & flat top dormers. | ✓ Refer to 0521-PH8-HTB-Housetype Booklet-Issue1. |
| Predominantly brick, occasional render and/or cladding.<br>Materials to be agreed at RMA stage. | ✓ Refer to Dwg 0521-PH8-108 - Materials Layout. |
| - | ✓ Refer to Section 4.0 Public Realm Codes. |
| One of the only places at Heyford Park where the landscaped courtyard parking will be encouraged. | ✓ Refer to Section 2.3 Parking Strategies. |

# 3.3 Building Types

### 3.3.1 Built Form Guidance - Streetscene Overview

The Planning Application shows:

✓ Creation of active street frontages through movement at building entrances and visibility through fenestration.

✓ Visible end elevations treated as part of the street scene.

✓ Dwellings will have living spaces fronting streets. No bathrooms or ancillary rooms to dominate street frontage / public realm.

### 3.3.2 Building Detail

The Planning Application shows:

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

Refer to Dwg 0521-PH8-103 Street Scenes and Dwg 0521-PH8-108 Materials Layout.

### 3.3.3 Built Form - Architectural Design

The Planning Application shows:

✓ Modulation of structural form to create varied, identifiable character. This includes:

✓ Deep eaves to provide shading and modelling on walls.

✓ Use of simple projections including window bays to provide modulation and shading.

✓ Use of deeper door and window reveals (min 65mm) to give a sense of depth to openings.

### 3.3.4 Built Form Guidance - Fenestration

The Planning Application shows:

✓ A hierarchy of parts, reflecting the relative importance of their functions. This includes:

✓ Entrances emphasised through set backs, recesses, canopies and steps.

✓ Windows of principal rooms (eg lounges and main bedrooms) expressed through larger size or greater prominence.

✓ Windows are located to allow ease of surveillance of property, especially at entrances.

✓ Scale and proportions of windows have been considered in relation to the facade composition.

### 3.3.5 Built Form - Materials

The Planning Application shows:

✓ A limited palette of materials which reflect the early 20thC Arts and Crafts architecture, and generally:

✓ Maximum 3-4 finishes in a single elevational composition.

✓ Change of materials used to express geometry of the building design rather than just for variety.

✓ Where buildings form a focus or marker, their main architectural elements such as entrances or projecting elements will be emphasised to create a feature.

## 3.3.6 Building Typology

The Planning Application complies with the Building Typology Codes as follows:

| | CA3 - TRIDENT HOUSING | COMPLIANCY |
|---|---|---|
| 2 BED |  4 IN A ROW MINIMUM<br>HEYFORD CAMPUS TERRACES | ✓ |
| 3 BED |  4 IN A ROW MINIMUM<br>HEYFORD CAMPUS HOUSES DETACHED/ TERRACED | ✓ |
| 4 BED |  4 IN A ROW MINIMUM<br>HEYFORD CAMPUS HOUSES DETACHED/ TERRACED | ✓ |
| 5 BED | N/A | n/a |
| APARTMENTS STRUCTURES |  HEYFORD CAMPUS APARTMENTS | ✓ |
| ANCILLARY STRUCTURES |  HEYFORD GARAGES/REFUSE STORAGE (REFUSE STORES MAY BE HORIZONTAL TIMBER CLAD STRUCTURES WITHOUT A ROOF TO KEEP AN OPEN CHARACTER) | ✓ |

*Design Code* - Built Form Typologies


LEGEND
ACCOMMODATION SCHEDULE
OPEN MARKET

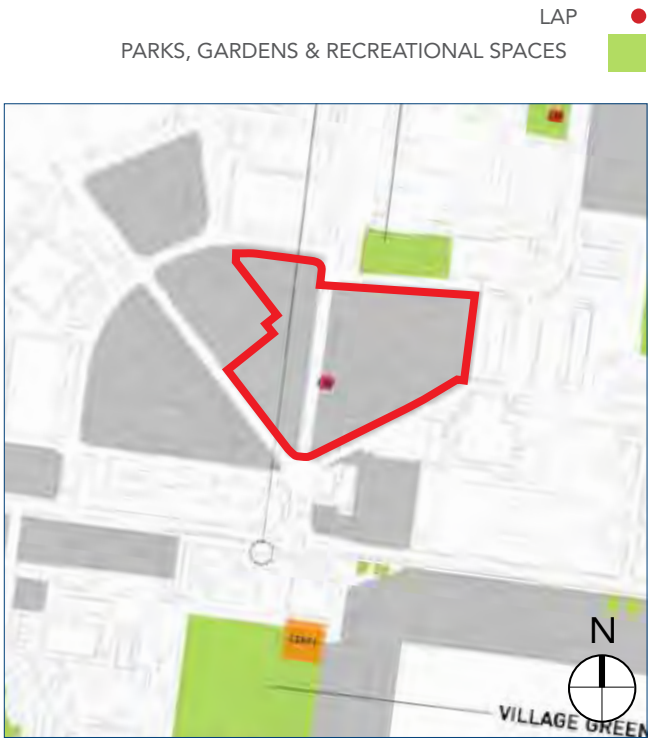

Street Scenes (Dwg 0521-PH8-103)

# 4 Public Realm Codes

# 4.1 Landscape Strategy & Placemaking

## 4.1.1 Public Realm Code

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




*Design Code* - Landscape Strategy Plan

## 4.1.2 Landscape Proposals

The landscape proposals have been designed in close association with the design team and client to help create a cohesive feel to the overall development, creating a contemporary and visually interesting setting to the new buildings.

The proposals shown on the detailed landscape reflect the need for a high quality scheme which links with the architectural style and prominence. Where space allows strategically placed trees along garden frontages and road verges will help to break up the building mass, these predominantly native tree species will link the adjacent trees and woodland areas creating 'green-corridors' through the development and beyond into the surrounding landscape.

Hard landscape treatments as described above will be designed to create interesting features and inviting exploration of the various open spaces.

Open space both within the site and surrounding environs helps to create a relatively soft setting to the scheme, the large area of open space to the village green has a relatively formal character and helps to unify the overall development proposals.

Robust yet simple landscape planting will be implemented which encapsulates a green structure of low native hedgerows, through which larger yet generally small canopied street trees will be implemented such as Tilia and Betula.

All of the retained trees which will be made safe and managed appropriately to an agreed programme of works. Generally, where space permits native shrub planting will be implemented to include species such as Holly, Dogwood & field maple to create vertical height and structure below the existing tree canopies and to help a green matrix throughout the site. It is anticipated that overall the proposals will encourage a range of birds and invertebrates typically found in gardens in the local area and to further this aim, new and existing tree species will be provided with bat and bird boxes.

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

The Local Areas for Play (LAPs) within these phases of the scheme has been designed to provide safe and secure areas for the local residents. The LAPs are individually designed to create distinct characters, specific to each phase, and thus improve orientation and enable local residents to experience a 'sense of ownership' of each space. The general palette of materials consists of self-binding gravel, benches and open areas of grass with shrub and tree planting. The planting varies between the different LAPS, but is chosen to provide seasonal variation in colour, with strong colours and fragrance to appeal to younger user groups. Feature trees and existing trees have been used to create features of visual interest, and areas of dappled shade. Taller shrubs are located around the boundaries of the spaces to buffer external road activities and noise.

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

# 4.2 Play Areas

## 4.2.1 Play Areas

The application area contains 1 LAP.

The Planning Application shows:

✓ This will be a landscaped space offering a variety of play experiences.

✓ Located to allow for surveillance in locations across the site directly accessible from pedestrian routes.

A fenced play area comprising of 1.0 m high bow top fencing or similar.

✓ The LAP will contain a minimum of 2 pieces of equipment (or one multiuse piece of equipment and / or seating).

✓ The LAP will have a buffer zone of 5m from activity zone to forward most part of dwelling.

## 4.2.2 Pocket Parks

There are no Pocket Parks within this Planning Application.

# 4.3 Boundary Treatments & Street Furniture

## 4.3.1 Boundary Treatments

Refer to Section 3.2 Character Areas.

## 4.3.2 Street Furniture

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

✓ Street furniture will be coordinated and will be of a design to reflect the architecture.

✓ Height of street lighting columns will emphasise size of space, subject to Section 38 Technical Submission.

✓ Street name signage will be attached to buildings wherever possible to minimise clutter.

# 5 Sustainable Design & Infrastructure

# 5.1 Drainage Infrastructure

## 5.1.1 On Site Drainage Strategy

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

- The proposed surface water strategy must mimic the existing situation, restricting flows to the existing rate while taking climate change into account.
- Surface water attenuation will be provided through the use of permeable paving and attenuation tanks where necessary.
- The potential for shallow infiltration will also be investigated further at the detailed design stage, to confirm whether soakage rates are favourable.
- The area known as Phase 8 falls within existing catchment area 3 which outfall to the east of the development as part of the "eastern diversion" network.

## 5.1.2 Adoption Strategy

It is envisaged that:

- All new primary drainage runs (generally located within adoptable roads) are to be adopted by the Water Company subject to a Section 104 application.
- All existing drainage downstream of the proposed drainage outfalls are to be adopted by the Water Company subject to a Section 102 application.
- All gullies serving the proposed adoptable roads are to be adopted by the County Council subject to a Section 38 application.
- All Storage tanks are to be maintained by the Water Company or management company.
- All drainage not covered by the above will be the responsibility of the homeowners or management company.

## 5.1.3 Surface water strategy overview

The proposed surface water drainage system will be separate from the foul water system.

Due to the shallow groundwater and underlying rock encountered elsewhere within the development, infiltration is unlikely to be suitable as the primary surface water discharge method for the scheme.

The proposed system has been designed using the latest version of micro drainage simulation software for storm events up to and including a 1 in 100 year return period plus a 30% allowance for climate change.

The area known as Phase 8 includes:

- Parcel D2b
- Parcel D3b

The maximum surface water storage volume estimated for each parcel is as follows:

- Parcel D2b - 179m3
- Parcel D3b - 375.5m3

The current design incorporated Hydrobrakes to restrict the speed of water passing through the system. Where water backs up due to these controls, oversized pipes and storage tanks have been utilised to ensure the water can be stored within the underground system.

In places the oversized pipes may be shown as "twin" runs. This is due to the shallow nature of the drainage system defined by the level of the outfall.

The current design contains 554.5m3 of underground storage tanks, the majority of which are 1.0m deep and are located within parking or other accessible areas.

The planning layout also requires a length of porous paving (on each parcel). This will be lined and used for additional below ground attenuation.

Extreme event flood water is to be stored within the road. The proposed site levels will be designed so that the water will be directed away from the entrances to the proposed buildings and flow along designated flood routes.

Phase 8 discharges into the existing network in 3 locations. Water in the existing network passes through a petrol interceptor before discharging to the existing watercourse.

In addition to the petrol interceptor, trapped gully pots will provide further protection against contamination from hydrocarbons.

The existing discharge rate at the outfall from the development which includes Phase 8 during a 1 in 100 year storm event has been calculated as 393.3 l/s.

The proposed discharge rate at the outfall from the development which includes Phase 8 during a 1 in 100 year storm event plus a 30% allowance for climate change has been calculated as 394.5l/s.

There is no above ground uncontrolled flooding during a 1 in 100 year event including a 30% allowance for climate change within this phase.

### 5.1.4 SUDS

The SUDS elements proposed on Phase 8 (and the downstream system) are:

- Flow control manholes
- Underground tanks
- Porous paving
- Petrol interceptor

### 5.1.5 Foul Drainage

The scheme will flow by gravity through the "eastern diversion" network into the existing Sewage Treatment Works.
-

# 5.2 Building Construction

## 5.2.1 Building Fabric to Achieve Reduction in Carbon Emissions

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

A full construction specification document has been submitted as part of the application for the approval of reserved matters.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