Urban&Civic

T2 C10

Alconbury Weald Make|Grow

TIER 2

Key Phase 1 Framework

Application to Discharge Outline Condition 10

FILE 2

Design Code

Contents:

- Key Phase 1 Framework Document Design Code

February 2015

TIER	CONDITION		
T1	C7	Framework Travel Plan	
	C8	Site Wide Strategies	
T2	C9	Key Phase 1 Definition	
	C10	Key Phase 1 Framework	✓
T3	RM	Key Phase 1 Reserved Matters Applications	

Alconbury Weald
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KEY PHASE 1 Design Code

Tier 2:
Key Phase 1 Framework application to discharge Outline Condition 10

Design Code

This Design Code has been prepared in response to Condition 10 of the Alconbury Weald Outline Planning Permission (application reference 12/1158/OUT).

The Design Code is to be read with reference to the Alconbury Weald Outline Planning Permission Design and Access Statement.

This document has been prepared by David Lock Associates, John Thompson & Partners, Gillespies and Peter Brett Associates on behalf of Urban&Civic.

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FEBRUARY 2015

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Preface

Outline Planning Permission was granted in 2014 under Ref No 12/1158/OUT for a mixed use development at Alconbury Weald, comprising the redevelopment of this circa 580 hectare (approx 1,400 acre) site which proposes to regenerate previously-developed land and connect this area with Huntingdon to create a development of up to 290,000 sq m of B1/B2 employment floorspace providing 8,000 jobs, up to 5,000 residential dwellings and accompanying open space and community facilities.

Due to the strategic nature of Alconbury Weald and the scale and complexity of the development, the site will be developed in a series of 'Key Phases'. This will ensure that implementation can respond to market demand and the practicalities of development. The conditions attached to the Outline Planning Permission require a three tiered approvals process to control the design and delivery of the development from outline, to Key Phase, to detailed site level. This approach is set out below.

Tier 1: Outline Planning Permission

The Outline Planning Permission (OPP) approved the broad quantum and disposition of land uses as defined by the Development Specification, Parameter Plan and the general design principles within the Design and Access Statement. Submission and approval of a set of site wide strategies in relation to specific topics is required by outline condition 8, prior to the commencement of development or approval of any reserved matters applications. The site wide strategies will supplement the parameters set by the outline permission.

Tier 2: Key Phase

Outline conditions 9 and 10 require approval of detailed documentation to set the definition of and provide a framework for each Key Phase. At this tier a greater level of detail is provided. The required technical information informs and establishes a base against which reserved matters applications within the Key Phase area can be assessed:

- → Condition 9: Key Phase Definition – to define and justify the extent of that Key Phase.
- → Condition 10: Key Phase Framework – following the definition of each Key Phase, a Framework including a Design Code, Delivery Plan and other Key Phase specific documents including any relevant supplements to the Tier 1 site wide strategies, that establish the design and delivery framework for that Key Phase, will be submitted for approval. These documents ensure that the Council can exert control over subsequent reserved matters applications and the implementation of development in that Key Phase.

Tier 3: Reserved Matters

Once Key Phase conditions have been discharged, reserved matters applications can be approved for individual parcels or infrastructure within that Key Phase. These reserved matters applications will provide a implementable level of detailed design in accordance with the Framework for that Key Phase, including the Design Code and the requirements of outline conditions 18-30 (reserved matters applications).

KEY PHASE 1 (KP1)

Urban&Civic are committed to the early delivery of Alconbury Weald and are now seeking to facilitate a start on site through the submission of the necessary material to allow KP1 to progress and the first elements of infrastructure to be implemented. This requires the approval of KP1 documentation in accordance with the tiered approach outlined above. To this end information is being submitted to Huntingdon District Council (HDC) for approval to facilitate the commencement of KP1. This Design Code for KP1 forms part of the Tier 2 application to discharge outline condition 10 Key Phase 1 Framework. The KP1 Design Code area is circa 107.6 hectares (266 acres).

Figure 0.1: Alconbury Weald Site & KP1 Boundary

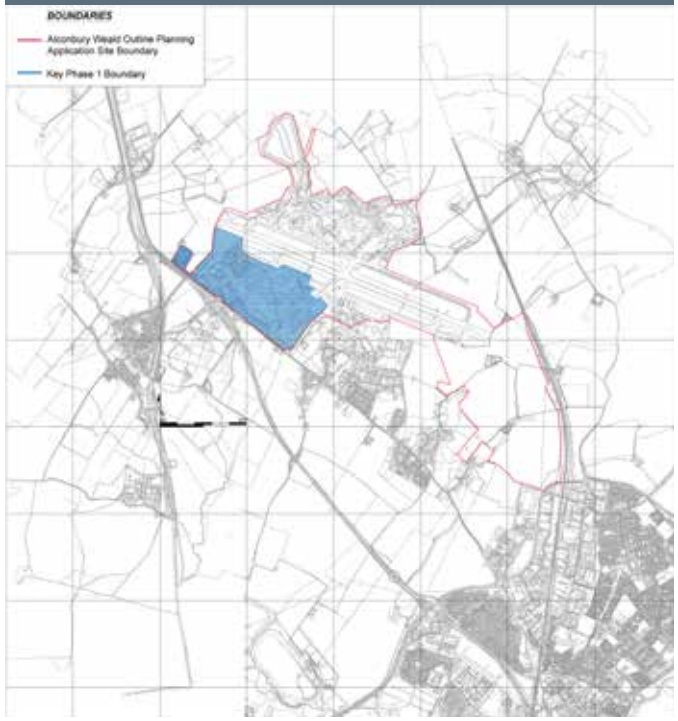

Figure 0.2: Alconbury Weald Aerial Photograph with OPP and KP1 boundaries

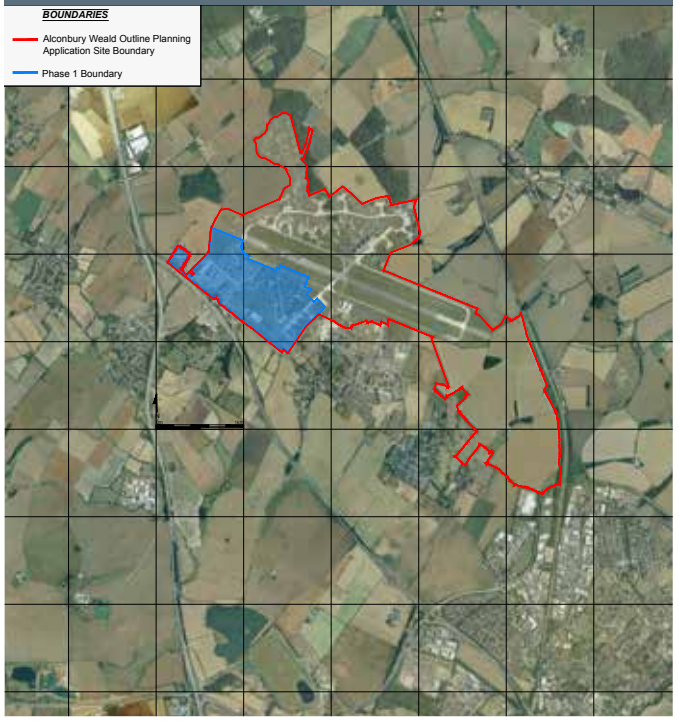

Figure 0.3: KP1 facing north east

Figure 0.4: KP1 facing east

Overview of the Design Code Contents

The Design Code has been structured as follows:
→ Part A: Background
→ Part B: Spatial
→ Part C: Detailing the Place
→ Part D: Technical

Part A: Background, introduces the Design Code and provides an overview of the context for the KP1 Design Code in geographic, planning and design terms.

Part B: Spatial, presents design coding information that establishes the spatial fixes for KP1 by establishing design guidance for:
→ Green Infrastructure;
→ Movement & Access;
→ Commercial Built Form;
→ Residential Built Form; and
→ Community Uses Built Form.

Part C: Detailing the Place, provides design guidance on matters of detail design for commercial, development, residential development and public realm including - materials palettes, boundary treatment, street furniture and lighting.

Part D: Technical, provides additional information on specific technical details that future detailed development proposals must take account of.

Appendices: Associated KP1 information including:
→ Appendix 1: Compliance Checklist;
→ Appendix 2: KP1 Illustrative Master Plan; and
→ Appendix 3: List of Figures.

Overview of Alconbury Weald KP1 Design Code Structure:

	PART A: BACKGROUND	
	Explains and appraises the context of the KP1 development area and the proposed development.	
	Chapter 1	Introduction
	Chapter 2	Context
	PART B: SPATIAL	
	Establishes a comprehensive framework for development for the KP1 area under chapter headings as follows:	
	Chapter 3	Green Infrastructure
	Chapter 4	Movement & Access
	Chapter 5	Commercial Built Form
	Chapter 6	Residential Built Form
	Chapter 7	Community Uses Built Form
	PART C: DETAILING THE PLACE	
	To be addressed for residential development, commercial development and the public realm.	
	Chapter 8	Detailing the Place
	PART D: TECHNICAL	
	Provides additional detailed information to inform future development proposals within KP1.	
	Chapter 9	Technical Details

PART A

Background

Alconbury Weald

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CHAPTER 1
Introduction

Alconbury Weald
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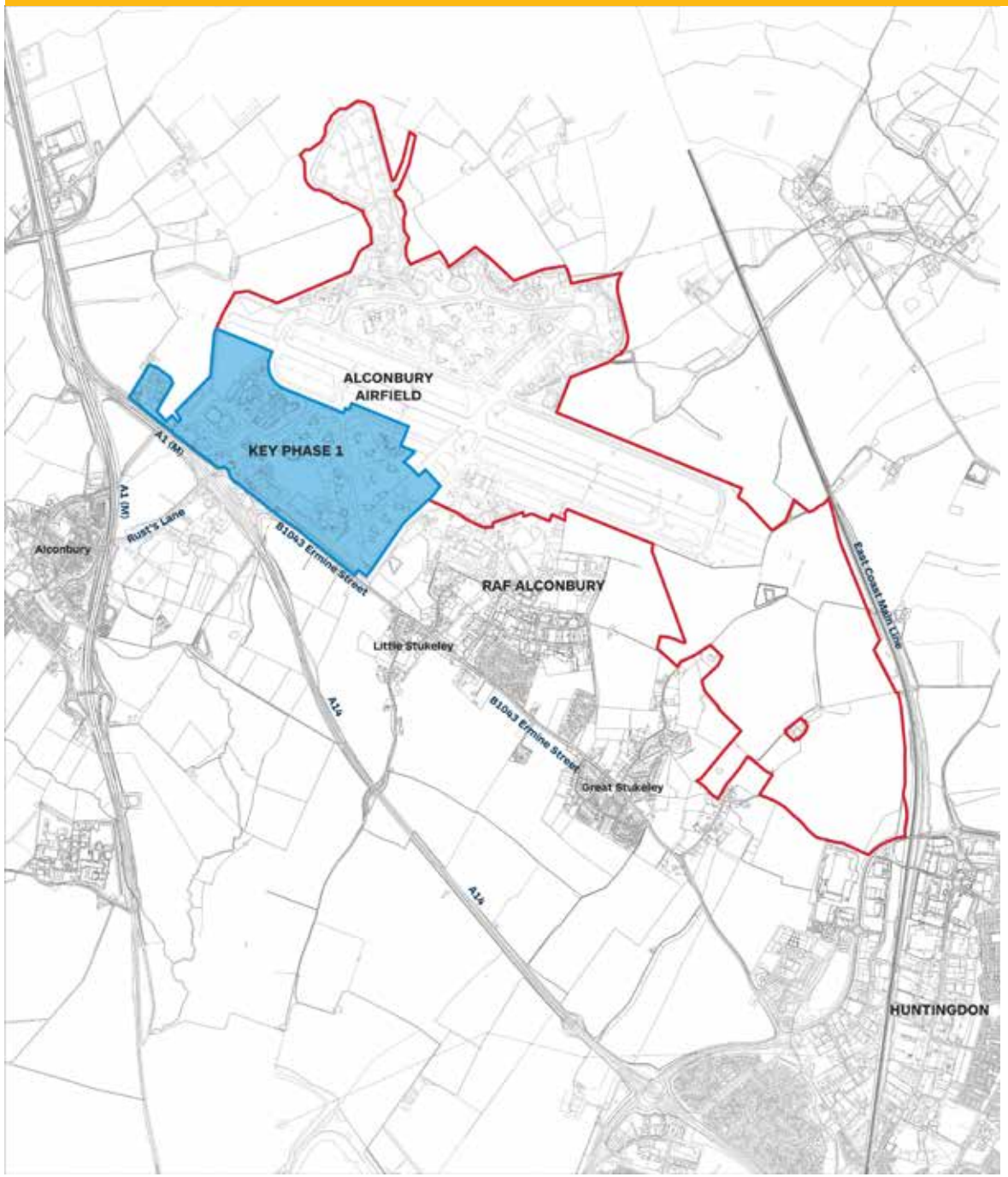
Figure 1a: Alconbury Weald Outline Planning Permission Area and KP1 Design Code Boundary



Outline Planning Permission Boundary

Key Phase 1 (KP1) Design Code Boundary

1.1 Purpose of the Design Code

This Alconbury Weald Key Phase 1 Design Code has been submitted as part of a package of documents known as the Key Phase 1 Framework documents. These documents are required by Huntingdon District Council to discharge condition 10 of the Outline Planning Permission (ref: 12/1158/OUT) in respect of Key Phase 1.

The purpose of this Design Code is to provide design guidance for the development of Key Phase 1 of Alconbury Weald against which subsequent Reserved Matters Applications within that phase will be considered.

It has been prepared to ensure that the highest standard of design is delivered when preparing and considering reserved matters applications that are submitted pursuant to the Key Phase 1 of the Outline Planning Permission for the site.

In so doing, the Design Code carries forward the design ethos as set out in the Design and Access Statement and translates this into the first Key Phase of the development.

The Design Code will be the first in a series of such Codes that will be prepared for Alconbury Weald as further Phases of the development are progressed.

Terminology:

- → Hereafter the Alconbury Weald Key Phase 1 Design Code will be referred to as the **Design Code**;
- → Huntingdon District Council will be referred to as **HDC**;
- → The Outline Planning Permission will be referred to as **OPP**; and
- → Key Phase 1 will be referred to as **KP1.**

1.2 Status of the Design Code

The Design Code has been prepared pursuant to condition 10 of the OPP Consent for Alconbury Weald. As such, the Design Code is consistent with, and provides an enhanced level of detail to the approved Tier 1 documents for the wider site, namely the Parameter Plan, Development Specification, the Design & Access Statement, Environmental Impact Assessment and submitted Site Wide Strategies and should therefore be read in conjunction with these documents.

The Design Code is specific to KP1. However it draws upon national and local best practice urban design guidance including By Design: Urban Design in the Planning System (2000), The Urban Design Compendium 1 & 2 (2000, 2007); Manual For Streets 1 & 2 (2007, 2010), Building for Life 12 (BfL12) (2012). The Design Code also considers and responds to local design guidance including the HDC Design Guide.

The Design Code will be a material consideration in the determination of subsequent Reserved Matters Applications in KP1.

1.3 Design Fixes and Design Guidance

The Design Code includes:

a. **Mandatory design fixes** - elements within the Design Code that must be adhered to.

b. **Supporting design guidance** - illustrative content that shows how development may be configured to comply with mandatory design fixes.

Figure 1b, provides an example of the relationship between design fixes and design guidance and illustrates how they are identified.

How design fixes are presented in the Design Code:

→ Design Fixes are identified in summary lists at the start of chapters.

→ Further detail regarding design fixes and supporting design guidance is then provided within the chapter, with fixes identifed in colour box outlines, as illustrated in Figure 1b.

→ Design Fix headlines from all chapters are listed together in the Compliance Checklist provided in Appendix 1, see 1.7 for further detail on the purpose of the checklist.

Figure 1b: Example page layout of design fixes and design guidance

1.4 Using the Design Code

The Regulatory Plan forms the overriding design control tool and informs the structure of the Design Code.

The Design Code document must be read alongside the accompanying Regulatory Plan. A full size version of the Regulatory Plan (1:2,000 scale at A0) is provided in the inside sleeve of paper copies of this Design Code.

The following pages explain how the reader should use the Design Code and Regulatory Plan.

Figure 1c, opposite, gives an overview of the relationship between the Regulatory Plan and Design Code document: the Regulatory Plan is the most important Design Code plan and its content is explained in more detail in chapters within the document that relate to the Regulatory Plan's key. Chapters within Part B of the document expand upon the spatial framework for development, covered under the five topic areas listed. More detailed matters of design are covered in Part C Detailing the Place and Part D Technical Details.

Figure 1d, over page, presents a flow chart diagram of 'How to Use the Design Code', showing how the chapters build up explaining layers of Regulatory Plan and associated material.

Figure 1c: Design Code Structure

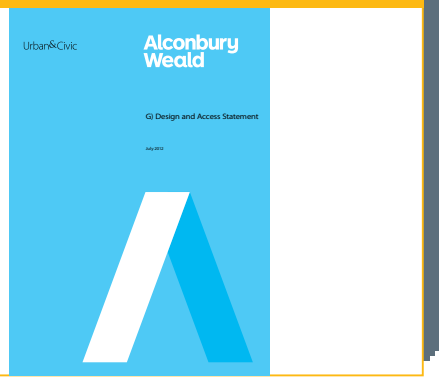
Figure 1d: How to use the Design Code

The Design & Access Statement (DAS) for the OPP sets the overall design context for the wider scheme. The Design Code for KP1 should be read alongside the DAS.

The main principles contained within the DAS, together with the OPP Parameter Plans, provide the framework for the **Design Code** and Regulatory Plan.

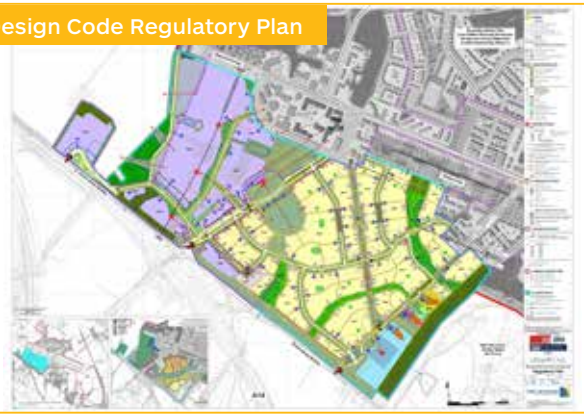
The **Regulatory Plan** establishes the precise framework for development of KP1. Each layer of the Regulatory Plan relates to a specific chapter of the Design Code as explained below in the following flow chart:

Design & Access Statement



Design Code Report

Design Code Regulatory Plan



PART A: Background
Chapter 1 Introduction

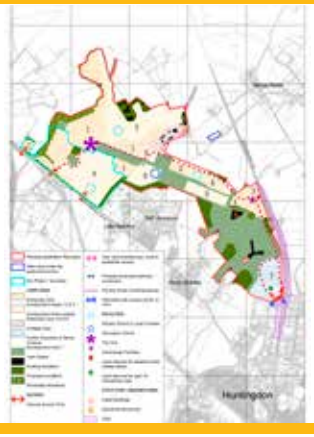
Sets out the purpose, status and how to use the Design Code. OPP and KP1 boundaries are shown on the Regulatory Plan.

Alconbury Weald OPP and KP1 Boundaries

PART A: Background
Chapter 2 Context

Design fixes including existing site features to be retained and key elements of the Parameter Plan.

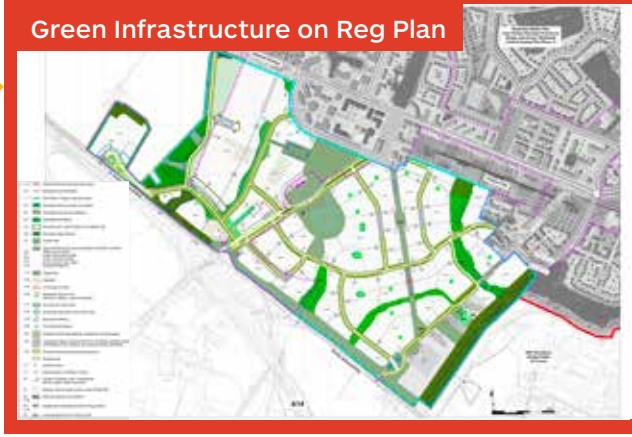
OPP DFP



PART B: Spatial
Chapter 3 Green Infrastructure

The Regulatory Plan defines the interconnected landscape features, individual green infrastructure components and key open spaces.

Green Infrastructure on Reg Plan



PART B: Spatial
Chapter 4 Movement and Access

The Regulatory Plan defines the street network together with points of access, street hierarchy, pedestrian and cycle routes.

Movement & Access

PART B: Spatial
Chapter 5 Commercial Built Form

Commercial development parcels. Further design fixes and design guidance is set out in this chapter including building orientation, parking, servicing and landscaping.

Commercial Area

PART B: Spatial
Chapter 6 Residential Built Form

The Regulatory Plan defines the key design fixes for the residential parcels. Additional design fixes for edge conditions, dwelling typologies, parking & boundaries are all set out in tabular form.

Residential Area

PART B: Spatial
Chapter 7 Community Uses

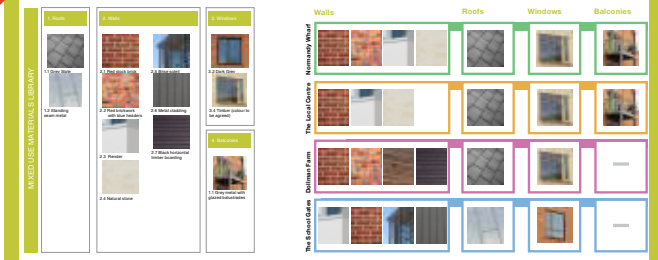
The Regulatory Plan defines the location of mixed use areas. More detailed design fixes are set out in the document.

Community Uses

PART C: Detailing the Place
Chapter 8 Detailing the Place

Further detailed design considerations for built form to supplement the Regulatory Plan including design fixes for architectural principles, building features, material palettes, and design of public realm.

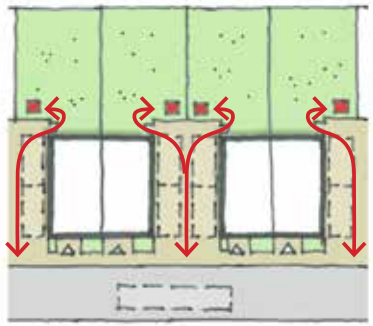
Material Palette Example



PART D: Technical
Chapter 9 Technical Standards

Specific technical considerations and design fixes noted on the Regulatory Plan are expanded upon in this chapter with details on other technical issues too including parking standards, utilities, play provision.

Technical Details Example



1.5 The Regulatory Plan

The Regulatory Plan is the main Design Code control tool. It sets the framework for development in KP1.

The Regulatory Plan is in compliance with the Outline Planning Permission approved Parameter Plan, Development Specification and Design & Access Statement Principles. The Regulatory Plan broadly reflects the Illustrative Master Plan from the Outline Planning Permission.

Regulatory Plan Fixes

The Regulatory Plan sets the design fixes for the develoment of KP1 at Alconbury Weald, including:

→ Strategic elements of green infrastructure;
→ Strategic streets / road infrastructure; and
→ Individual development parcels (for commercial, residential, mixed use and community uses) that are positioned within the network of green infrastrucutre and streets.

Whilst the Regulatory Plan sets an overall framework for development it is acknowledged that a degree of flexibility will be required in the design of detailed proposals, for example:

→ Although street corridors are fixed in scale the detail design of streets will need to be explored in greater detail in parallel to the consideration of the access requirements for adjacent parcels.

→ Likewise, whilst the location of green infrastructure is fixed the exact design of these spaces, including their boundaries is subject to detail design that will need to be considered in line with adjacent development parcels and streets.

Regulatory Plan Key

The Regulatory Plan shows the design fixes for KP1 that are further explained in the related chapters of the Design Code document. The key to the Regulatory Plan cross references chapters of the Design Code, with particular emphasis on chapters 3-7 in Part B of the Design Code, comprising:

→ Green Infrastructure;
→ Movement & Access;
→ Commercial Built Form;
→ Residential Built Form; and
→ Community Uses Built Form.

Technical Details

The Regulatory Plan is also supported by some technical details that are expanded upon further either within the Green Infrastructure chapter of the Code or within the Technical Details section. These items include locations for play areas, and indicative parking areas for community facilities.

Regulatory Plan Inset Plans

The Regulatory Plan includes two inset plans in the bottom left hand corner of the sheet, these show::

→ Location Plan: showing KP1 relative to the wider OPP site; and

→ Employment Typology Areas and Residential Character Areas: this plan shows the three areas of employment typologies within the Commercial Area and the disposition of Residential Character Areas. Further reference is made to these classifications in the Commercial and Residential chapters of the Design Code – see chapters 5 and 6.

Parcel references:

The Regulatory Plan includes parcel references for development parcels. Parcel references are noted as letters in the centre of development parcels: Parcels A to Z. These parcel reference letters are not cross referenced in the Design Code, but are provided for ease of reference for future Reserved Matters applications. These parcel references do not represent a phasing sequence.

The Regulatory Plan is not a Parcelisation Plan but it does provide a framework that could be used as a base plan to inform the development of more detailed phasing, or parcel release plans.

Further Regulatory Plan reference:

→ An extract of the Regulatory Plan is presented in Figure 1e, opposite.

→ For a full scale print version of the Regulatory Plan please refer to the A0 copy located in the inside sleeve of the Design Code.

The Illustrative Master Plan (see Appendix 2) presents one way in which the Regulatory Plan may be interpreted.

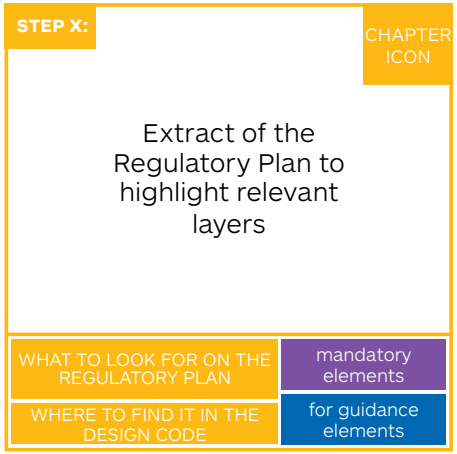
How to use the Regulatory Plan:

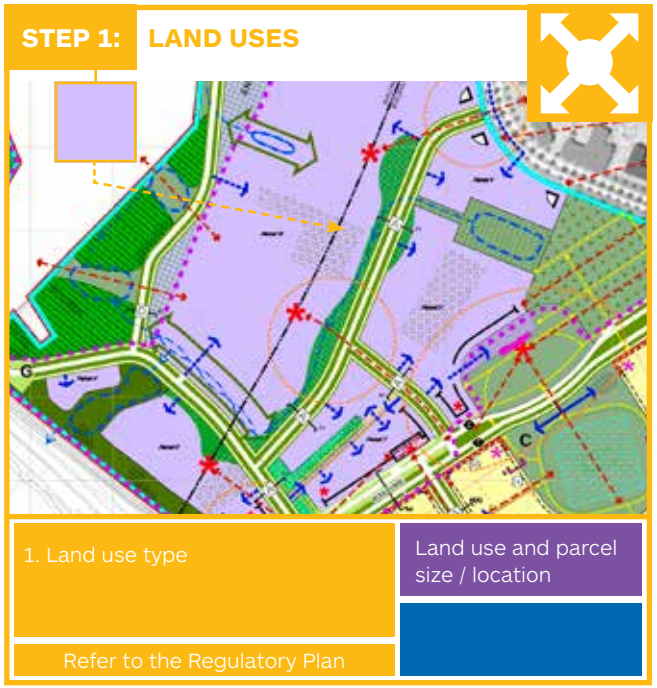
→ Figure 1f presents an illustrated guide of how to use the Regulatory Plan, see pages 20-21.

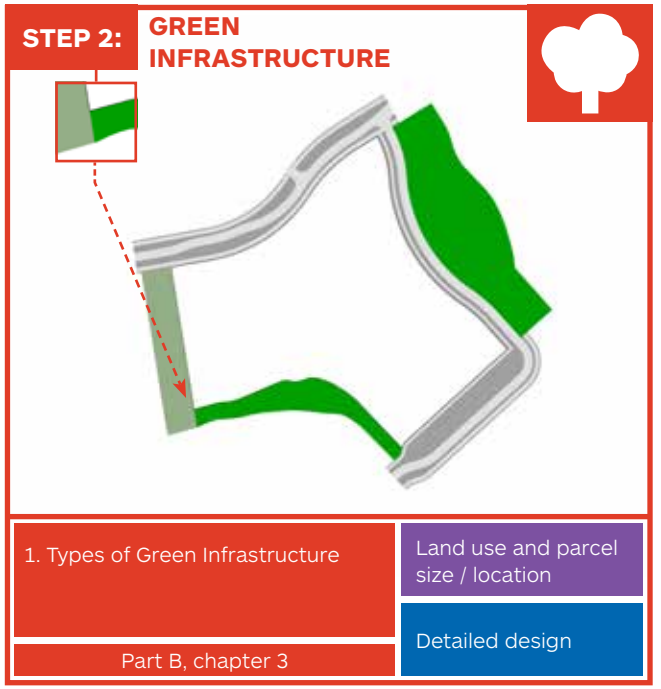
Figure 1e: Extract of KP1 Design Code Regulatory Plan (Please refer to full size A0 plan in inside sleeve of report)

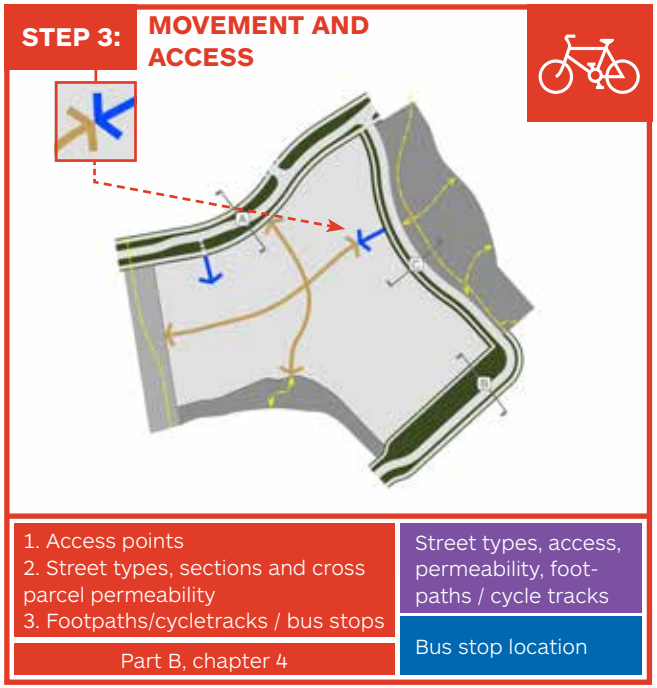
Figure 1f: How to use the Regulatory Plan

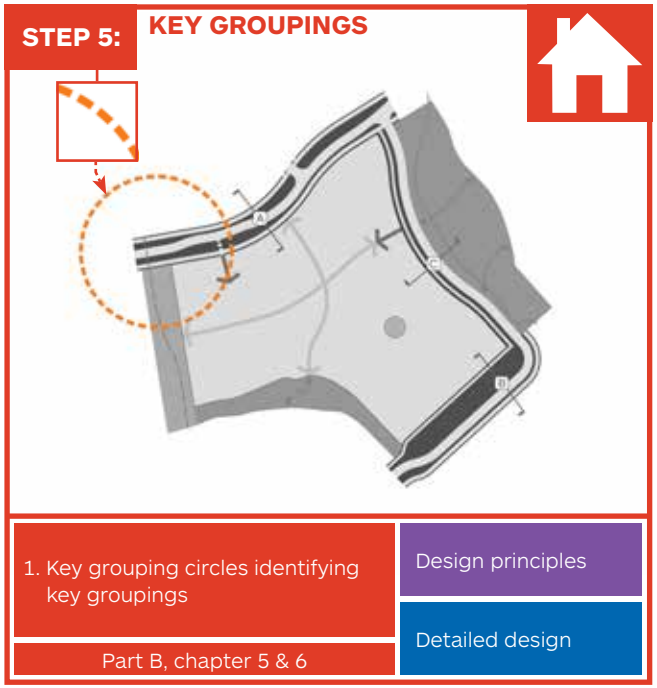
This diagram provides a series of steps which explain the process through which development parcels are to be designed using the Regulatory Plan and the Design Code. Each step is set out as follows:

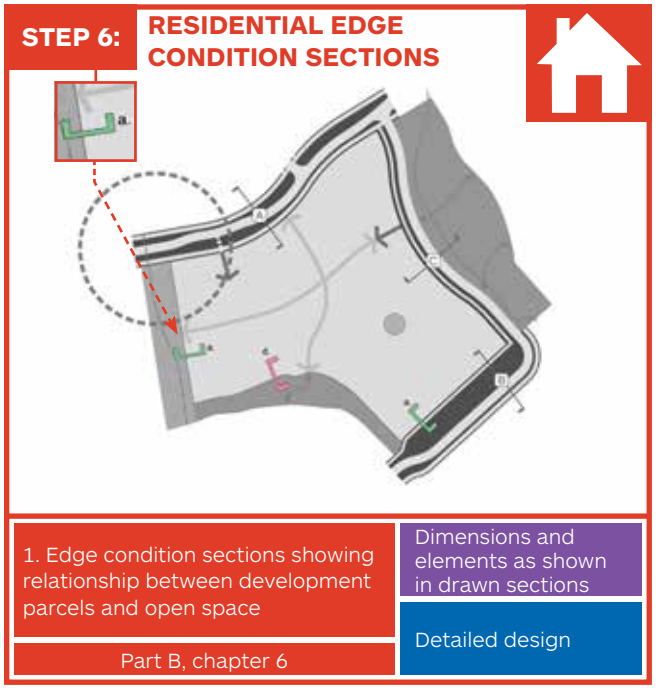




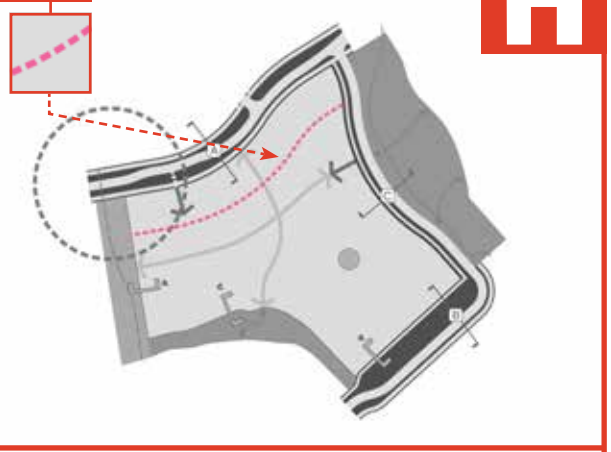






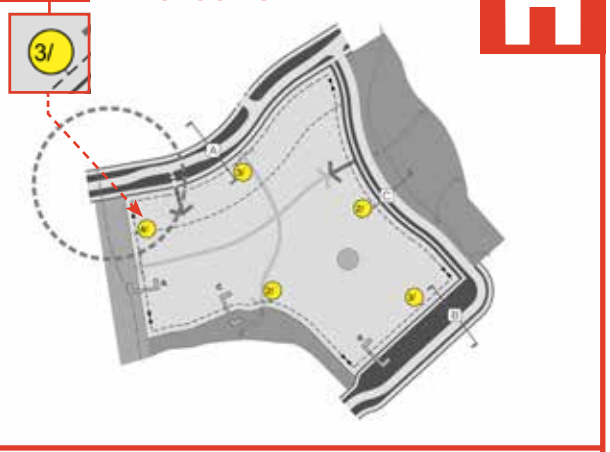


STEP 7: RESIDENTIAL CHARACTER AREAS



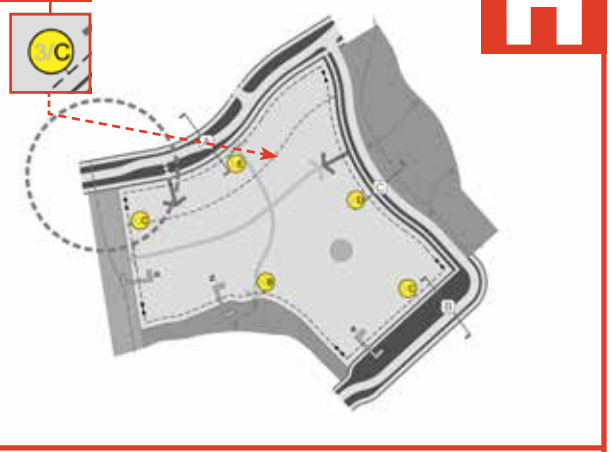
1. Character area boundaries (descriptions of character areas set out in detail in the Design Code)	Location/description of character area (refer also to plot layout rules)
Part B, chapter 6	Detailed design

STEP 8: RESIDENTIAL FRONTAGE TYPOLOGIES



1. Circle labelling the edges of residential parcels. Number denotes the relevant frontage type	Frontage typology (refer also to plot layout rules)
Part B, chapter 6	Development not fronting parcel edge

STEP 9: RESIDENTIAL TYPOLOGY MATRICES

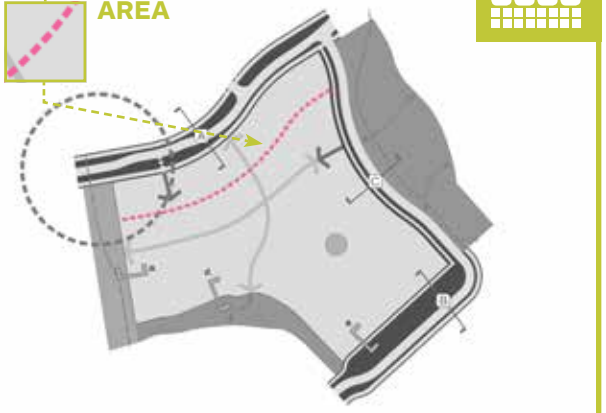


1. Circle labelling the edges of residential parcels. Letter denotes the relevant typology matrix	Typology matrices (refer also to plot layout rules)
Part B, chapter 6	Development not fronting parcel edge

STEP 10: COMMERCIAL AND COMMUNITY USES

1. Location of commercial area and community uses identified. 2. Design fixes noted on plan, with further details in chapters.	Refer to chapters 5 & 7
Part B, chapters 5 and 7	Detailed design

STEP 11: MATERIALS BY RESIDENTIAL CHARACTER AREA



1. Character area boundaries (these relate to residential material palettes)	Materials palettes & materials principles
Part C, chapter 8	Detailed design

STEP 12: TECHNICAL DETAILS E.G. ATTENUATION FEATURES

1. Parking zones 2. Attenuation features 3. Play areas	Set out in more detail in Part D
Part D, Chapter 9	Detailed design

1.6 KP1 Context

Development proposals must have regard to the surrounding context around the KP1 area. Whilst this Design Code has been prepared for the KP1 area it has been prepared with recognition to what is happening beyond the Key Phase boundary, both in terms of the existing context outside of the Alconbury Weald site, and the longer term future development proposals within the OPP area. The Regulatory Plan provides the detail for KP1 and is a section of the wider Alconbury Weald site.

Figure 1g illustrates an extract of the Regulatory Plan showing how KP1 sits within the context of the OPP Illustrative Master Plan which shows the OPP proposals for adjacent development areas.

The Regulatory Plan shows both existing context and future development context adjacent to KP1:

Existing context, (outside of the Alconbury Weald site) including:

- → Access connections including Ermine Street, A14 and A1;
- → RAF Alconbury (US Airforce) immediately to the east of KP1; and
- → Open agricultural land to the north west of KP1 and south of Ermine Street.

The existing context is illustrated in the oblique aerial photos presented in Figures 0.3 & 0.4, with key features annotated for reference and orientation.

Future development context

The OPP Illustrative Master Plan illustrates the layout of proposed land uses and main access routes, beyond KP1, predominantly to the north. Specific considerations include:

- → The Hub, concentration of mixed uses and community facilities immediately to the north of KP1;
- → Campus Park, primary public space located to the north of KP1 providing an attractive civic open space that KP1 residential uses will address;
- → Residential, parcels for future phases of residential development located to the east of KP1; and
- → Open space including elements of retained runway located to the north of the KP1 commercial area.

Please refer to Chapter 2, Context for further details regarding the existing development context and future development context.

Figure 1g: Regulatory Plan set in context of existing and future conditions

1.7 Design Code Compliance Checklist

Reserved matters planning applications must be accompanied by a completed Compliance Checklist showing how proposals reflect the requirements of the Design Code. Any substantive differences from the fixes within the Design Code should be identified and justified.

The Compliance Checklist (see Appendix 1) lists the mandatory elements from the Design Code.

Figure 1h: Design Code Compliance Checklist, see Appendix 1

1.8 Code Breakers

If development proposals do not comply with design fixes it is the responsibility of the team proposing the scheme (the developers and their design team) to explain why any mandatory elements are not met and demonstrate that the proposals do not conflict with the overall aim of the Design Code and Regulatory Plan.

Departures from the Design Code will only be acceptable when a rationale for not complying with mandatory design fixes can be clearly demonstrated as a positive intervention that has place making benefits, or responds appropriately to changing legislation, circumstances and technological advancement. It may be necessary to depart from some aspects of the Design Code in light of unforeseen site conditions or ground investigations (see 1.9). Any such non-compliance will be subject to the agreement of the master developer (Urban&Civic) and / or the local authority (HDC).

1.9 Ground Investigations

The Design Code has been prepared without the benefit of detailed ground conditions surveys that comprehensively cover the whole of the KP1 area (including below ground considerations such as archaeology and utilities) so there may need to be some flexibility in the detailed design of some elements as detailed proposals are prepared and specific future investigations are undertaken.

1.10 Design Code Review

In the future a review of the Design Code may be required to reflect changing and unforeseen circumstances, including updates to national and local polices and the results of site and ground investigations. It is anticipated that any review would be undertaken by mutual agreement between the master developer and HDC.

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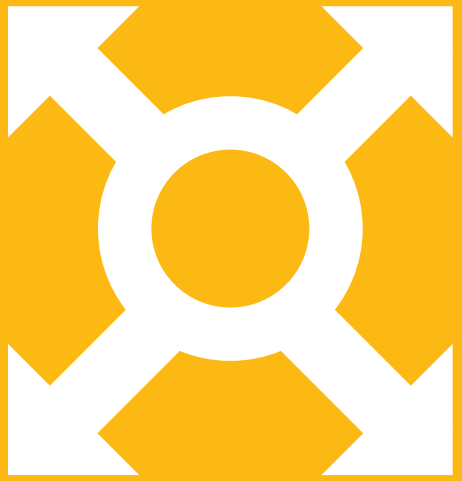
CHAPTER 2
Context



2.1 Introduction

To create a sense of identity and place, it is vital to understand and appreciate the context for the Design Code and the KP1 area that it covers. Critically, this needs to reflect not just the existing surroundings of the area but also how the KP1 Design Code fits within the wider vision and aspirations that have been established for the Alconbury Weald site as a whole. This section of the Design Code therefore considers the context in terms of the following:

2.2 Current Site Context
- Location, The Wider Area
- Enterprise Campus
- Landscape Features
- Surrounding settlements
- Local history
- KP1 Features
- New build on site

2.3 Future Planning Context
- Alconbury Weald OPP
- Creating Safe Places: Secure Design & Community Safety

Figure 2a: Alconbury Weald Location

2.2 Current Site Context

Location

Alconbury Weald benefits from a strategically significant location on a central spine of the UK. The position of the site provides immediate access to major road and rail connections, linking Alconbury Weald with the business and financial centre of London to the south, and also with the manufacturing centre of Peterborough and the industry of the Midlands to the north. It's location at the heart of eastern England within the Cambridge Sub-Region also means that it has close links with the global innovation hub of Cambridge. See Figure 2a.

Alconbury Weald is situated with immediate access to the A14, a strategic east – west connection, and adjacent to the A1 (M), the north-south spine of the UK. Such a position provides excellent local and regional transport links, as well as easy access to the major transport infrastructure hubs of the east coast port at Felixstowe and Stansted International Airport.

Alconbury Weald is broadly equidistant to the three major urban centres of Cambridge, Peterborough and Bedford, all of which are connected to Alconbury Weald via strategic highway links.

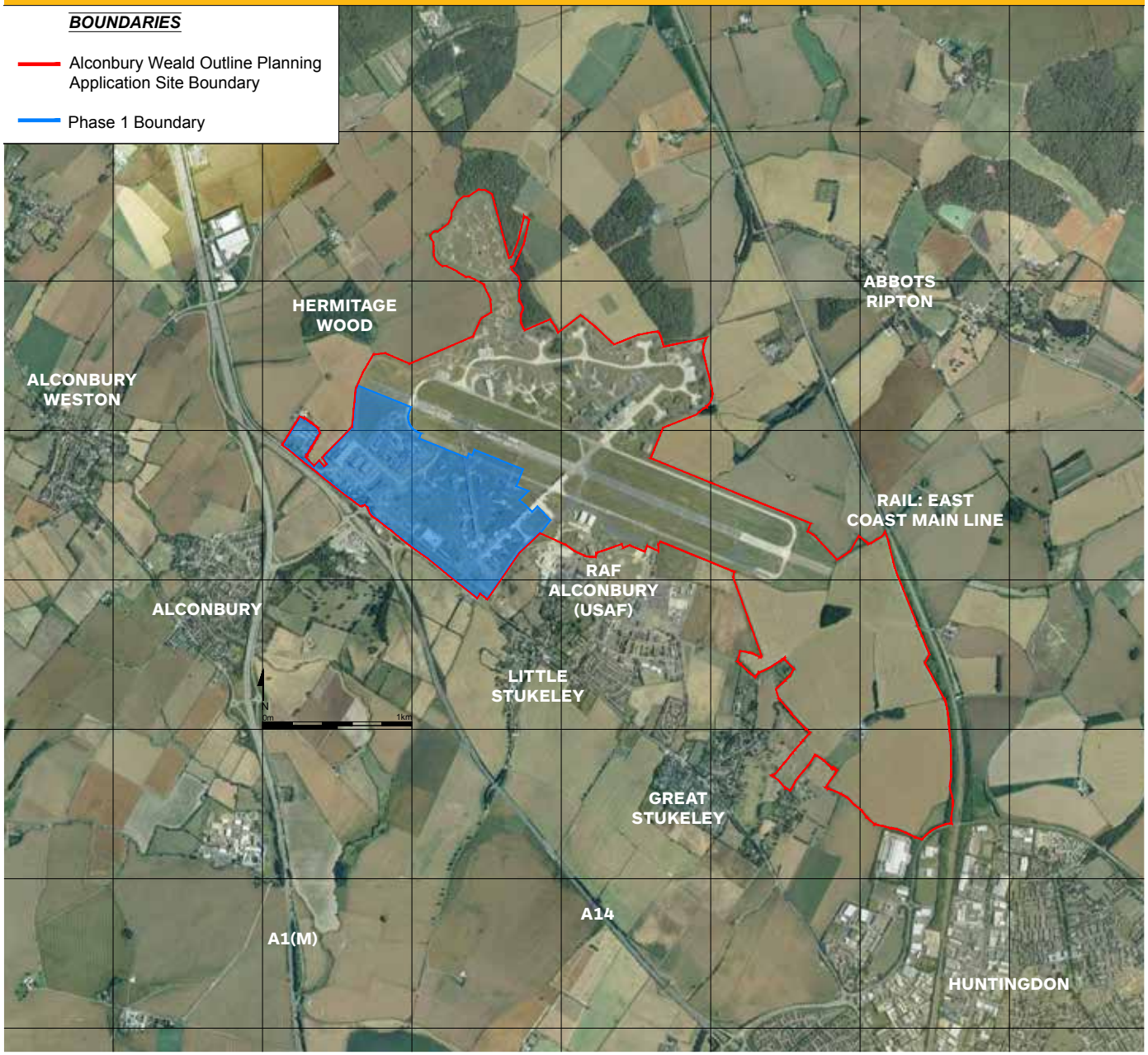
The Wider Area

Alconbury Weald is located in a position that sees the intersection of a number of landscape characters (see Figure 2a, 2b and 2k): To the south of Huntingdon the landscape is characterised by a considerable number of watercourses and water features that form part of the Grafham Water and River Ouse Corridor which connects through to Bedford and Milton Keynes to the west and the Fens to the east. To the north of the site agricultural land interspersed with tree belts and woodlands provide a more rich and diverse backdrop before the topography drops down to the fenland areas of north eastern Cambridgeshire, characterised by a low lying flat landscape.

The former airfield occupies an elevated plateau and is largely level. This topographical feature is one of the most defining characteristics of the site as it sets Alconbury Weald apart from its wider surroundings where the topography falls away and is reflected by a more undulating landscape.

Adjoining the former Airfield to the south is RAF Alconbury, a USAF operational base which itself has residential elements. Other neighbouring land uses include the villages of Little and Great Stukeley (referred to collectively as The Stukeleys) and Top Farm. To the north, the site directly abuts a number of woodland areas. Further afield a number of sporadic isolated farmsteads and dwellings are located within the surrounding countryside.

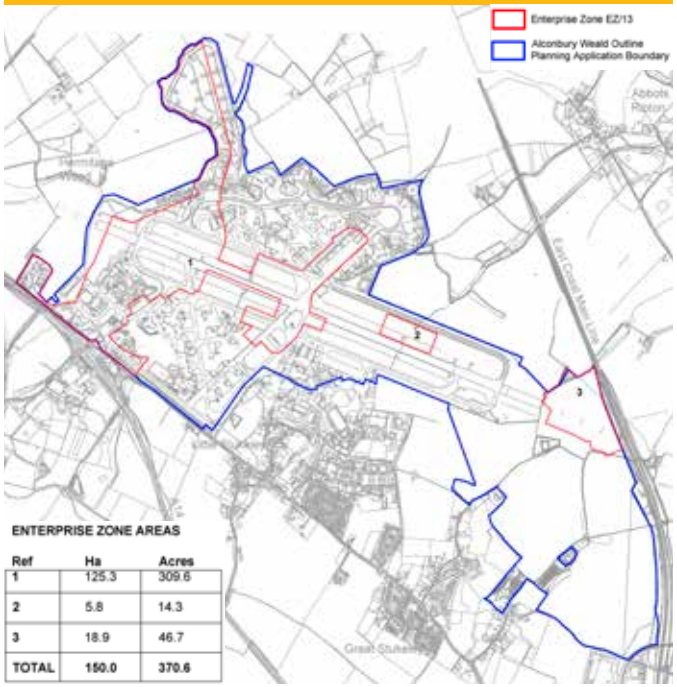
Figure 2b: Aerial photograph, Alconbury Weald and KP1



Enterprise Campus

Since 2011, some 150ha of the Alconbury Weald site has been designated as an Enterprise Zone. This area, known as Alconbury Enterprise Campus (see Figure 2c), demonstrates that the Government has recognised the significance of Alconbury Weald in stimulating and delivering economic investment and development for the wider area, and the UK. This designation followed a nomination by the Greater Cambridge and Greater Peterborough Local Enterprise Partnership (LEP) which was supported by Huntingdon District Council and Cambridgeshire County Council together with a range of key stakeholders from across the functional economic area.

Figure 2c: Enterprise Campus plan



Surrounding Settlements

Alconbury Weald is situated in close proximity to a number of settlements that each have varying characters due to the historical evolution of the area (see photos in Figure 2d).

The closest to the main body of the site are the Stukeleys. These historic villages have developed along Ermine Street and are home to heritage assets including Stukeley Hall and Manor Farm. Little Stukeley has a Conservation Area which is home to a concentration of listed buildings. The Stukeleys adjoin RAF Alconbury (US Airforce - USAF) which lies between the site and Ermine Street.

Also nearby to the site is the village of Alconbury which lies to the west of the site beyond the A14 and the A1(M). Abbots Ripton is a small historic village to the east of the application site and separated from it by the East Coast Mainline railway line. This picturesque village contains a number of listed buildings within a Conservation Area.

At the top of the local settlement hierarchy is Huntingdon itself, which is situated immediately to the south east of the application site beyond the A141. Being the historic county town of Huntingdonshire it is also the administrative centre for the area and provides a good range of facilities and services. Huntingdon is contained by the River Ouse corridor to the south and also the A14 to the south and west. Alconbury Weald looks to Huntingdon as a key service centre and will seek to support, not detract, from Huntingdon Town Centre.

Figure 2d: Surrounding Settlements Local Context photographs

Huntingdon

Cromwell Walk

End of High Street

George Hotel

High Street - Ambery Road South

Market square (north)

Market square

USAF

Alconbury Village

Great Stukeley




Little Stukeley




Abbots Ripton






Alconbury Weston





Alconbury Weald Landscape Features

The surrounding landscape is mainly gently undulating arable farmland with large scale field patterns punctuated by major transport infrastructure in the form of the strategic road network and the East Coast Main Line. The landscape context of the site is described in detail in the Landscape and Visual Impact Chapter of the Environmental Statement that accompanied the OPP.

Due to its former use as an airfield the majority of Alconbury Weald (some 71%) is previously developed land mainly characterised by hardstanding. Large swathes of grassland, which are associated with the former runways and taxiways, are a strong characteristic feature of the site's history and an important landscape feature.

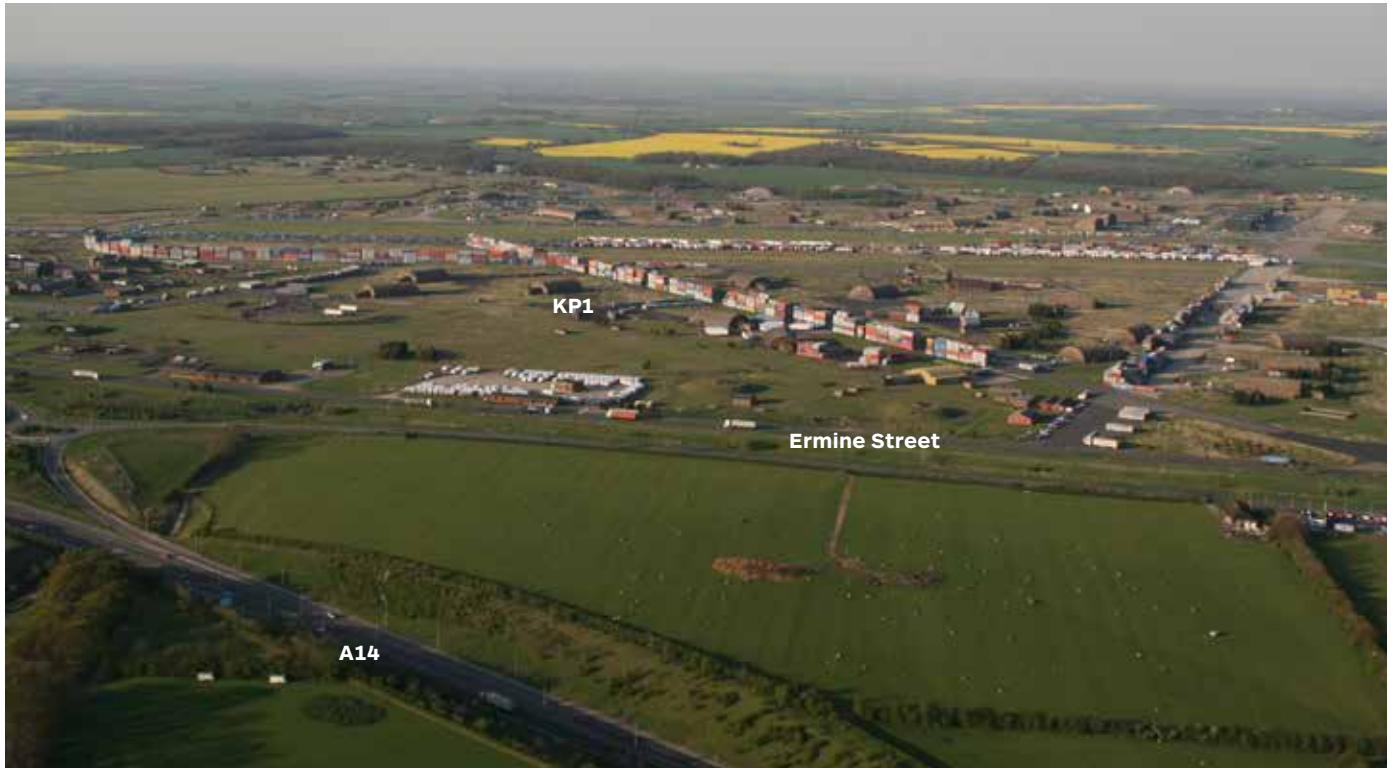
Woodland is also a key defining characteristic of the locale. The south eastern part of the Alconbury Weald site benefits from rich wooded landscape assets. This part of the site includes Prestley Wood, designated as a Scheduled Ancient Monument, and other wooded areas. To the north and west of Alconbury Weald the wider landscape has pockets of woodland areas with Monks Wood, Hermitage Wood, Hill Wood and Bevills Wood, providing important green links from the site into the surrounding countryside. Long Coppice and Little Less Wood adjacent to the north boundary are designated as County Wildlife Sites. Related small pockets of woodland exist within the north part of the Site.

See Figures 2e and 2i for photographs of landscape features in Alconbury Weald and KP1.

Figure 2e: Landscape Features Local Context

Woodland north of Alconbury Weald site

Existing trees near Incubator and Boulevard



Flat open landscape, A14 and Ermine Street in foreground, KP1 and OPP site in mid ground with blocks of woodland and open agricultural land to the north

Local History

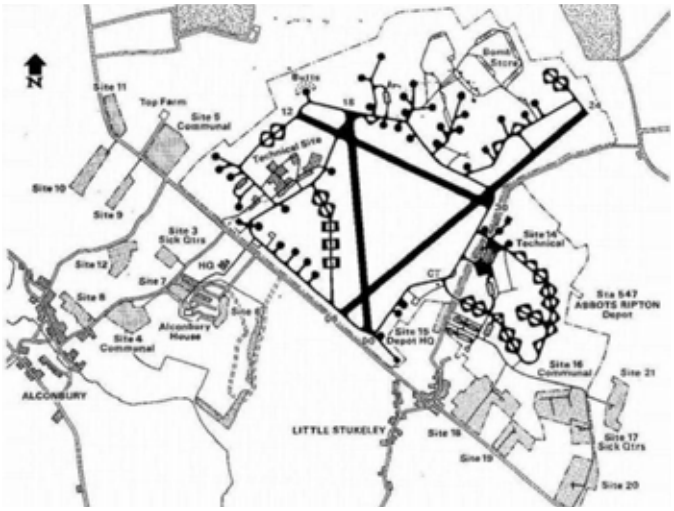
Prior to the military role of Alconbury Weald, the site was a rural landscape characterised by agricultural fields and hedgerows, dissected by public rights of way connecting the smaller settlements located north west of Huntingdon. Public rights of way used to connect the Stukeleys with Abbots Ripton but were severed by the arrival of the airfield site.

Between 1938 and 1995 the site was occupied as a military site and the former airfield evolved over this period from its original use during World War II by the RAF and then the USAF as a bomber base, to its subsequent use in the post-war Cold War period mainly for reconnaissance purposes.

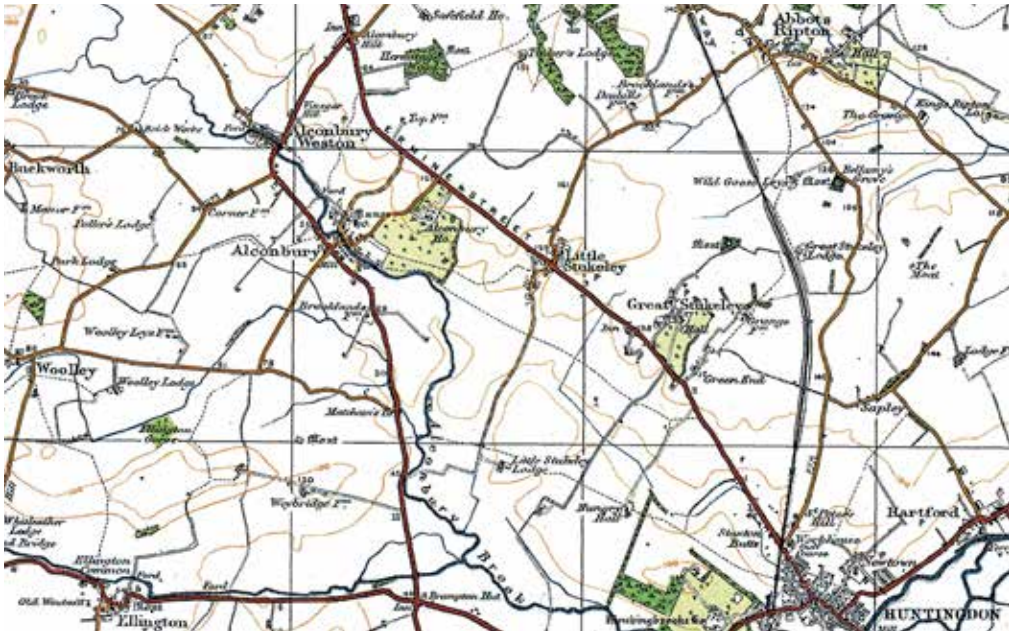
The Airfield was also used in the Gulf War in 1990 but flying ceased in March 1995 and the site was subsequently decommissioned. Across the military use of the airfield a number of servicemen lost their lives during active service at the Airfield. The adjoining RAF Alconbury remains in military use for support functions.

Historic maps presenting an overview of the morphological evolution of Alconbury Weald and the locality are presented in Figure 2f.

Figure 2f: Historic Mapping



Plan of Alconbury Airfield produced by USAF in 1945



1919/1920 map (Source: Ordnance Survey Old Series Maps)

RAF Alconbury as completed in 1946

KP1 Area Features

The KP1 area comprises circa 107.6 ha (266 acres) of the former Alconbury Airfield adjoining Ermine Street (B1043) with direct links to the A14 and A1(M). It forms part of the Alconbury Enterprise Zone and the wider Alconbury Weald. The KP1 Area is defined by:

- → the B1043 (also known as Ermine Street) to the south & west;
- → the former airfield runway to the north;
- → the adjacent RAF Alconbury, USAF Airbase to the south and east; and
- → agricultural land to the west.

The historical Roman road Ermine Street, forms the western boundary of the site. A number of settlements including Huntingdon and Godmanchester formed along this route, creating a string of villages and towns. Ermine Street runs along the south west boundary and at present a 3m bund softens the noise and shelters the site in this location.

The KP1 area itself is flat and comprises a series of built structures (including the listed Watch Tower building), hard standings, former secondary runways and grassed areas along with the main site access road into the site, and the recently constructed HCV access to the north. See figures 2g and 2h. In order to safeguard the security of the site and existing businesses, access is restricted by a gatehouse and barriers as well as perimeter fencing around the site.

The use of the site as a military airbase ceased in 1995. A range of buildings remain on site and some of the buildings as well as some outdoor areas are currently temporarily occupied for industrial and commercial purposes (B1, B2 and B8 uses as well as storage) of particular note is the Grade II Listed Watch Tower.

Figure 2g: KP1 Site Features

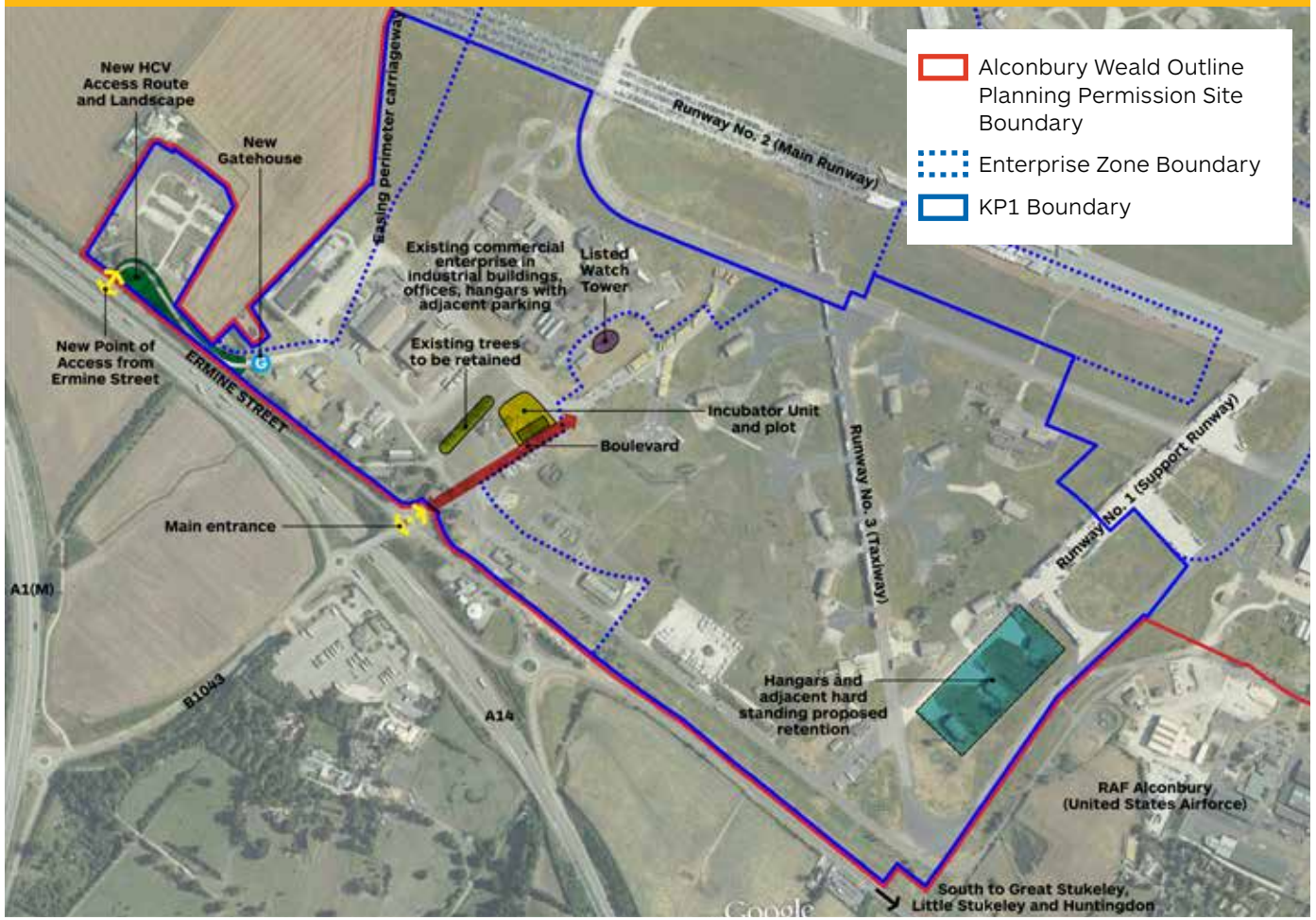


Figure 2h: Existing Buildings

Aircraft Hangar within Alconbury Weald

Listed Watch Tower Building

There are a number of trees of good quality along the site boundary and within the airfield. As part of the Enterprise Zone Enabling Works, additional tree planting has been undertaken along the Ermine Street frontage working closely with local communities.

The area also includes extensive areas of amenity, semi natural and semi improved grassland.

In terms of ecology the KP1 Area is dominated by low value habitats. The grassed areas are of little ecological value. There are several bat foraging corridors along tree lines and there are identified and potential bat roosts within some of the buildings on site. In addition, there are Great Crested Newts within 500m of eastern parts of the site.

The remainder of the airfield contains a number of existing buildings that are being utilised for industrial and commercial uses and parts of the runway are used for storage of cars and containers. Some 800 people are currently employed across Alconbury Airfield in a range of temporary activities.

Figure 2i: Existing Landscape Features

Ermine street landscape embankment

Existing trees within KP1 Commercial Area

Open grass and hardstanding

Woodland setting beyond site

New Build on Site

As a result of Alconbury Weald's designation as an Enterprise Zone (Alconbury Enterprise Campus), development has already commenced within the KP1 area. New build includes:

→ The Incubator: the first commercial building on the site is the business incubator unit now open and housing Urban&Civic's site office;

→ New site access from Ermine Street;

→ Boulevard route between the new site access and the Incubator;

→ HCV access route;

→ Gatehouses – a gatehouse on the HCV access route, and a gatehouse on the Boulevard / main site entrance.

Figure 2j: New Build

New main entrance and gatehouse

Boulevard between main entrance and Incubator building

Incubator building and boulevard

Incubator Building entrance

New HCV access route

HCV access and gatehouse

2.3 Future Context – Alconbury Weald

Notwithstanding the importance of the local context as it currently exists, it must be recognised that the KP1 Design Code only exists within the context of the wider proposals for Alconbury Weald as a whole. This will set the future context for the area and, ensuring that the approach to KP1 is entirely cognisant of the wider design aspirations, is of vital importance.

From the acquisition of the site, Urban&Civic have sought to develop plans for its future with the direct input and engagement of the local communities and key partners. Urban&Civic set out four guiding principles for the site, all of which influence the approach to KP1. These principles are illustrated in Figure 2l.

Outline Planning Permission was granted for Alconbury Weald in 2014 by Huntingdonshire District Council. The Outline Planning Permission approved the broad quantum and disposition of land uses for the site. Condition 4 of the outline permission specifies all of the formally approved plans and documents including:

→ the Parameter Plan;
→ the Development Specification; and
→ the Design & Access Statement Principles

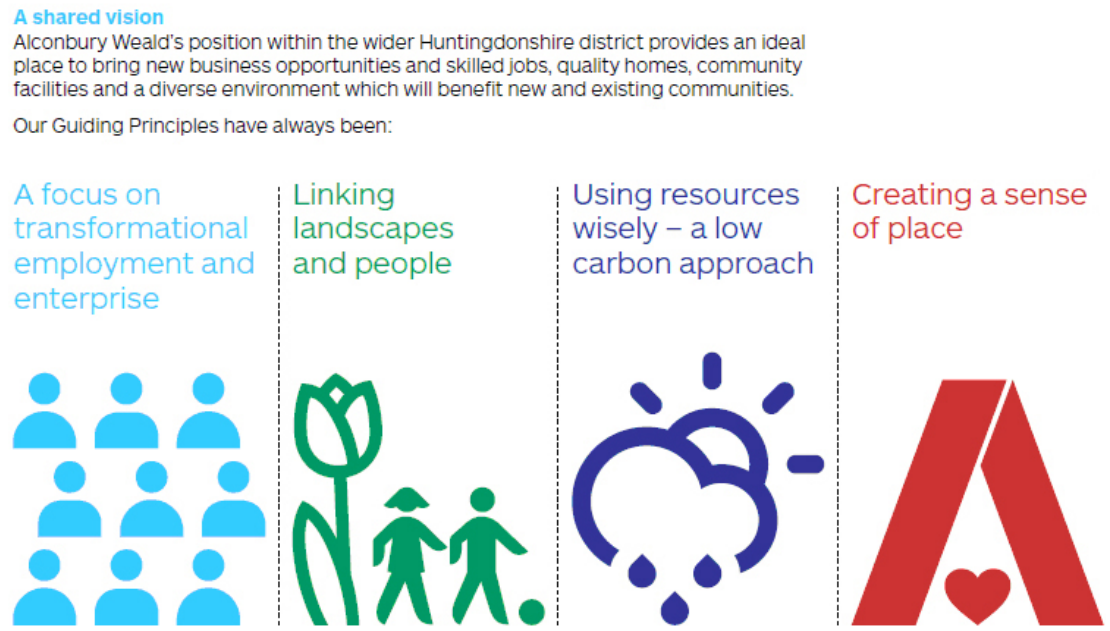
Together these provide the Development Framework for the site and under Condition 4, the development must be substantially in accordance with this framework.

This Development Framework, which has been subject to Environmental Assessment, establishes the key design fixes and mitigation measures with which KP1 must be consistent and seek to incorporate as part of its design approach. Future context considerations for KP1 include the following OPP elements, each of which is set out in the sections that follow:

→ **The Parameter Plan** that establishes the spatial framework for the approved Outline Planning Permission.
→ **Development Specification** identifying the scale of development and the spatial principles.
→ **Design Principles** as established in the Design & Access Statement.
→ **Environmental Mitigation Measures** - compliance with the Environmental Statement.
→ **Illustrative Plans** showing how the development might be brought forward providing guidance for detailed development.

Figure 2k: Alconbury Weald Design Concept Plan (OPP)

Figure 2l: Alconbury Weald: A Shared Vision



Parameter Plan

The consented OPP Parameter Plan fixes the strategic land uses, and spatial parameters of the development of Alconbury Weald. Within KP1 the land uses and fixes include:

Residential

The KP1 Regulatory Plan and Design Code is in compliance with the assumed quantum of residential development for this area as established by the Developer Specification in the OPP.

Employment

An area of dedicated employment use is located to the west of the main access into the site from Ermine Street. This covers a range of employment uses including B1, B2 and ancillary B8.

Primary School

A primary school will be delivered in the south eastern quadrant of the KP1 area. This will be an important early community facility and will serve the needs of the KP1 population. The school will be designed to come forward in a phased manner to deliver 3 forms of entry.

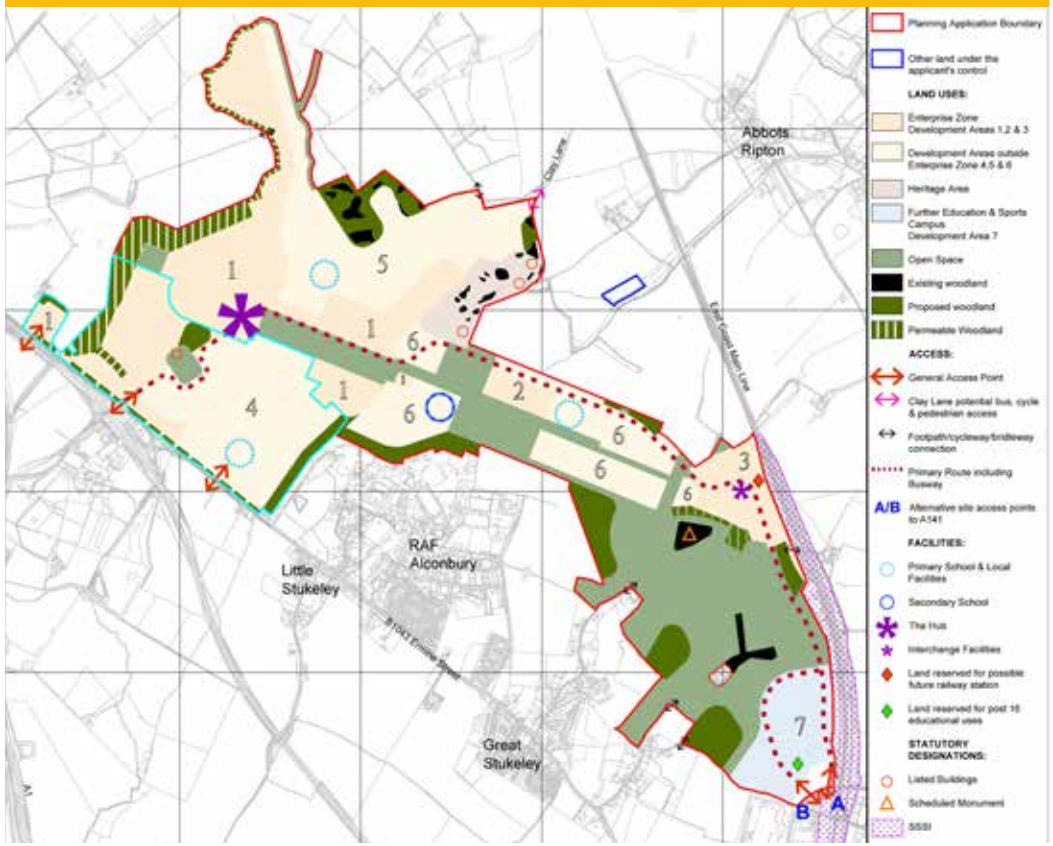
Access

KP1 will be accesses from three junctions off Ermine Street. The principal gateway boulevard to the site has already been partially constructed and the HCV access to serve the northern part of the employment area has been completed. A further third access to the south to serve the first residents and primary school is also shown. The site will connect internally via a hierarchy of streets.

Green Infrastructure

KP1 accommodates a range of green infrastructure. The Parameter Plan identifies strategic green spaces in terms of boundary treatments to the eastern and western edges of the KP1 site to include woodland planting and grassland. Also identified are two areas of more formal open space centrally within the site in the form of a Cricket Park and Poplar Park.

Figure 2m: Extract of OPP Parameter Plan with KP1 highlighted

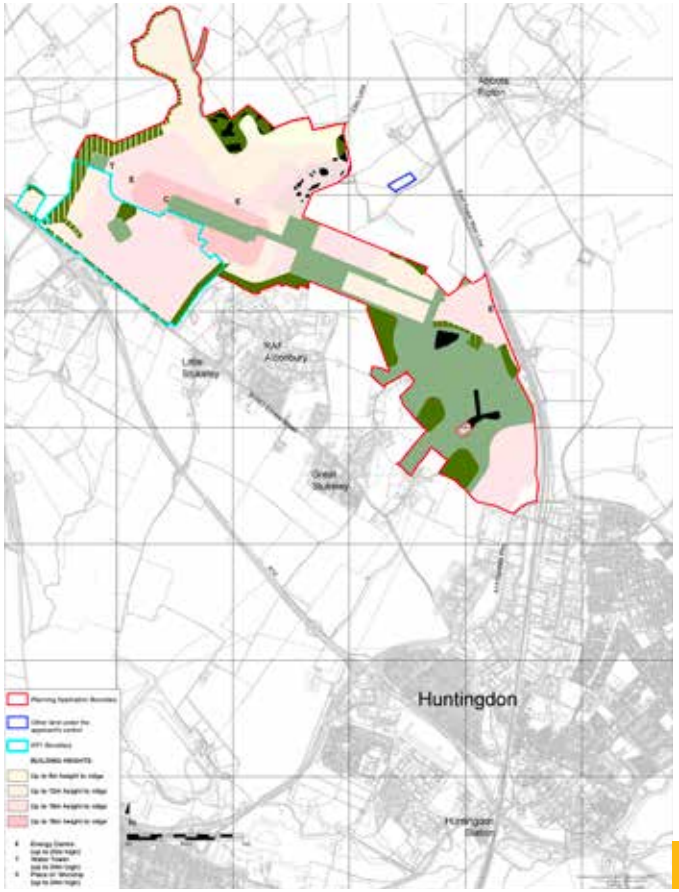


‹ Figure 2n: Extract from Alconbury Weald OPP Parameter Plan, with enlarged focus on KP1 area

Building Heights

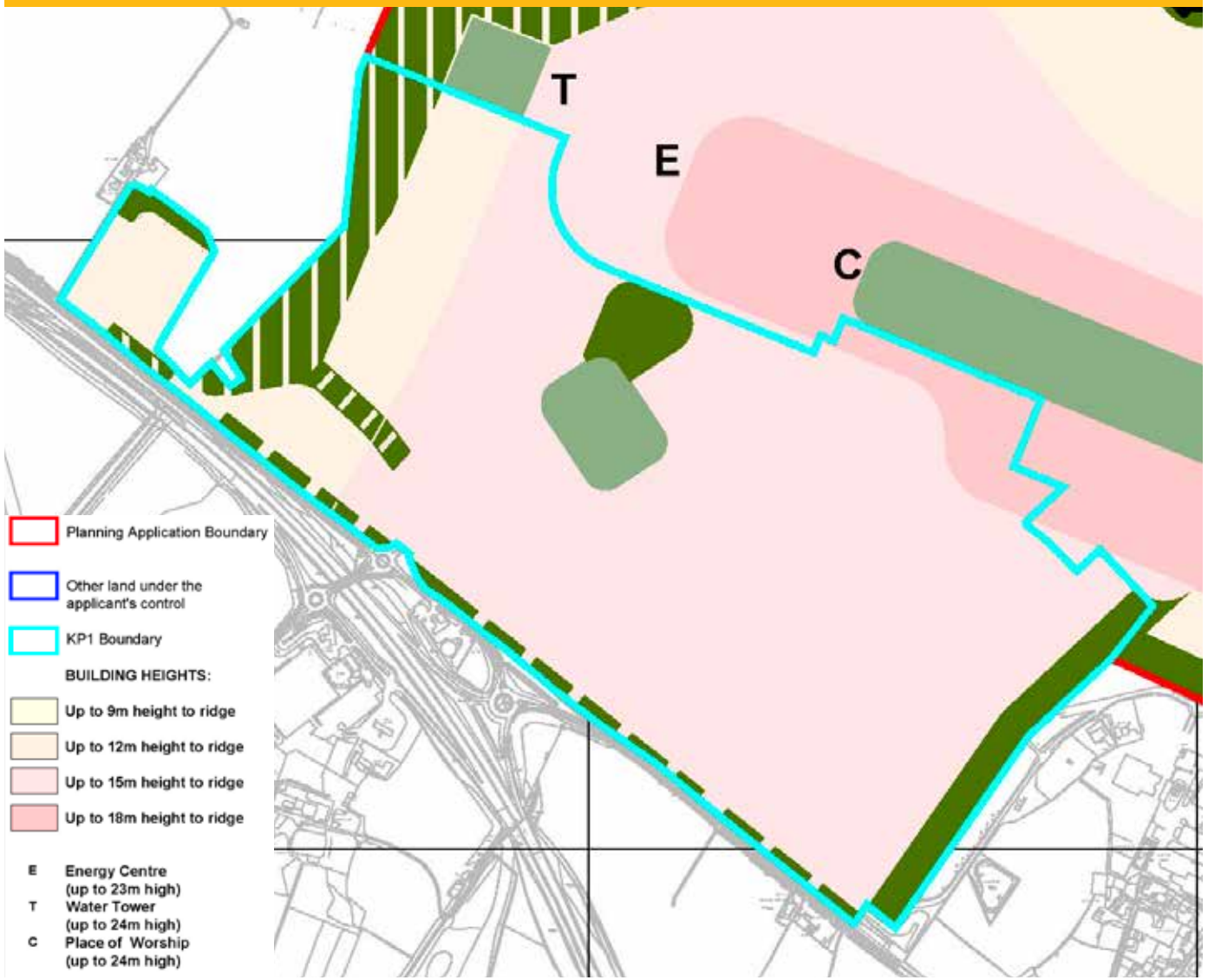
An inset plan on the OPP Parameter Plan identifies building heights for Alconbury Weald and therefore sets building heights that will apply within the KP1 area. Building Heights parameters within KP1 include:

→ up to 15m in the majority of the KP1 site, with changes of:
→ up to 18m on the northern edge of the residential area, to allow taller buildings next to the Campus Park; and
→ up to 12m on the western boundary reflecting the greater sensitivity in this location.



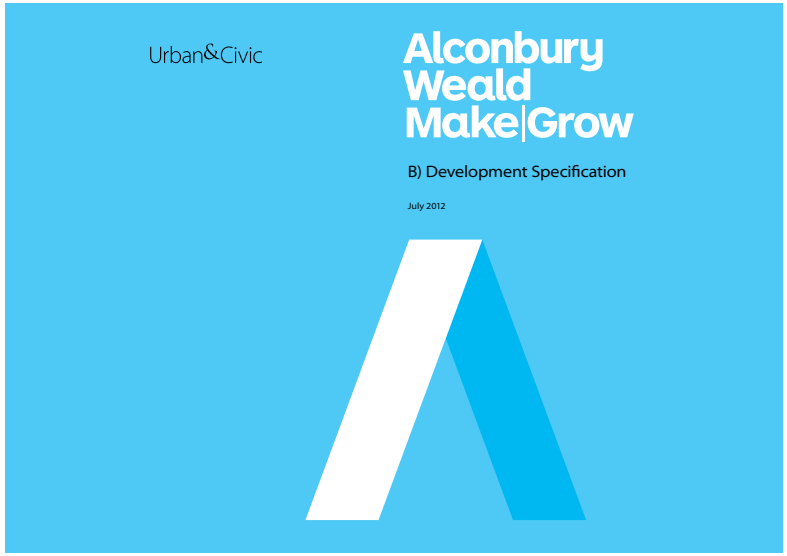
‹ Figure 2o: Building Heights Plan from OPP Parameter Plan

Figure 2p: Extract from Building Heights Plan of the KP1 area



Development Specification

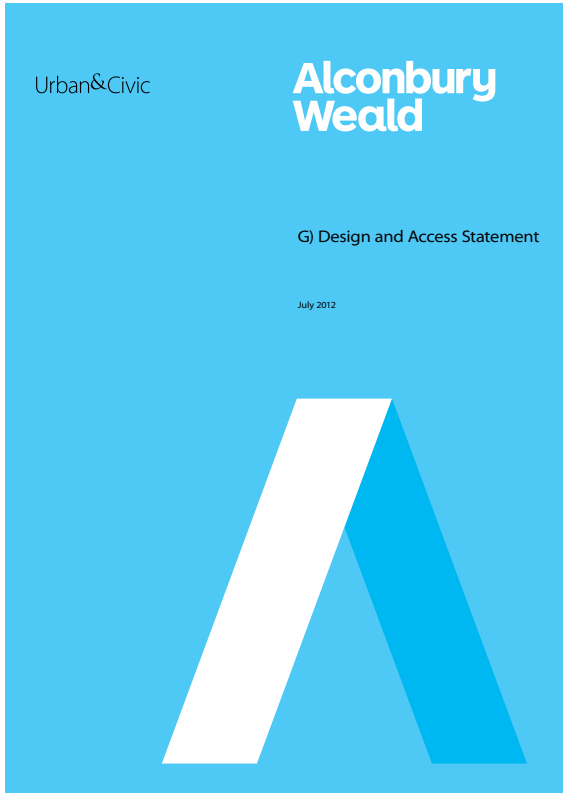
The OPP Development Specification sets out the amount of development, allocates this to the development areas on the Parameter Plan (see above) and establishes a series of spatial principles that will apply to all development at Alconbury Weald. These are also reflected in the Design and Access Principles (see below).



Design & Access Statement Principles

In addition to the Parameter Plan and the Development Specification, the OPP Design & Access Statement conveys the design intentions for the development of the full Alconbury Weald site including principles, concepts, strategic design and the intended character of the proposals. The KP1 Design Code builds on these site wide intentions and should be read in conjunction with the Design & Access Statement.

The Design and Access Statement includes a set of key design principles that underpin the development framework and Outline Planning Permission. These Principles have been carried forward into the KP1 Design Code as set out in the table on the next two pages.



Reference table listing where Design Principles (from the OPP Design & Access Statement) are taken forward in the KP1 Design Code:

OPP Design & Access Statement (DAS) - Design Principles		*OPP DAS Design Principles in the KP1 Design Code*	
Reference	*Principle*	*Design Code Chapter ref.*	*Design Code Chapter Title*
DAS Chapter 5	*Amount & Use*		
	Mixed use development areas	5/6	Commercial Built Form, Residential Built Form
	Starter Offices	5	Commercial Built Form
	Mix of residential house types	6	Residential Built Form
	Appropriate level of retail	7	Community Uses Built Form
	Other supporting uses: re-use of existing buildings.	7	Community Uses Built Form
	Shared space of community uses	7	Community Uses Built Form
DAS Chapter 6	*Layout*		
	Community Facilities	7	Community Uses Built Form
	Community Centres	7	Community Uses Built Form
	Heritage	2/7	Context/Community Uses Built Form
	Public Transport	4	Movement & Access
	Walkable Neighbourhoods	4 7	Movement & Access Community Uses Built Form
	Waste – Community Bring Site	9	Technical
	Noise & Air Quality	9	Technical
	Energy	9	Technical
	Appreciation of site landscape assets & topography	2 3	Context Green Infrastructure
	Integration of woodland	3	Green Infrastructure
DAS Chapter 7	*Scale*		
	Building Heights	2/5/6	Context, Commercial Built Form, Residential Built Form
	Landmarks	3/5/6	Green Infrastructure/Commercial/Residential Built Form
	Density	6	Residential Built Form
	Employment Forms / Typologies	5	Commercial Built Form

Table continued on next page... ›

Reference table listing where Design Principles (from the OPP Design & Access Statement) are taken forward in the KP1 Design Code:
(continued from previous page)

OPP Design & Access Statement (DAS) - Design Principles		*OPP DAS Design Principles in the KP1 Design Code*	
Reference	*Principle*	*Design Code Chapter ref.*	*Design Code Chapter Title*
DAS Chapter 8	*Landscape*		
	Boulevards & Avenues	4	Movement & Access
	Public Squares	3/8	Green Infrastructure/ Detailing the Place
	Sports Provision	9	Technical Detail
	Retained runway	3	Green Infrastructure
	Views	3/5/6	Green Infrastructure/Commercial/Residential Built Form
	Tree Planting	3	Green Infrastructure
	Amount of Green Space	3/9	Green Infrastructure /Technical
	Maintenance	3/9	Green Infrastructure /Technical
DAS Chapter 9	*Appearance*		
	Buildings of time and place	5/6	Commercial/Residential Built Form
	Distinctive & Consistent Approach	8	Detailing the Place
	Frontage Continuity	5/6	Commercial/Residential Built Form
	Boundary Treatment	5/6/8	Commercial/Residential Built Form/Detailing the Place
	Car Parking	5/6/9	Commercial/Residential Built Form/Technical
	Detailed Design Considerations	8	Detailing the Place
	Lighting	8	Detailing the Place
DAS Chapter 10	*Access*		
	Permeable Network	4	Movement
	Street Hierarchy	4	Movement
	HCV approach	4	Movement
	Key Streetscape components	4	Movement
	Car Parking	5/6/9	Commercial/Residential Built Form/Technical

Environmental Statement Compliance

This section provides a review of the KP1 design and layout, as depicted in the Design Code and Regulatory Plan, against the Environmental Impact Assessment that informed the Outline Planning Permission (OPP). It also verifies the incorporation of, and compliance with, the wider schemes in-built mitigation and additional necessary mitigation measures.

A comprehensive Environmental Statement was submitted with the Outline Planning Application (OPA), this comprised the original Environmental Statement (ES) submitted in 2012 and the ES Addendum submitted in August 2013. The ES provided an assessment of the proposed development and set out the requirement for specific mitigation measures.

The Proposals

The Outline Planning Permission, granted in 2014, was based on a Parameter Plan and a Development Specification which set out the quantum of development for each land use. It is these documents that were tested as part of the Environmental Statement and against which the review of the KP1 Design Code is made.

The KP1 Regulatory Plan is in general conformity with the wider Alconbury Weald Parameter Plan and accommodates a quantum of development for each land use that is within the limits of the Development Specification.

Design and Layout

Residential
The KP1 Regulatory Plan and Design Code is in compliance with the assumed quantum of residential development for this area as established by the Development Specification in the OPP. The distribution of residential uses through KP1 is in accordance with the Parameter Plan.

Education
A primary school is located in the south eastern quadrant of the KP1 area, this is consistent with broad location identified on the Parameter Plan of the OPP. The primary school has moved closer to the south-eastern boundary of KP1 in order to ensure that it can form an effective component of the first residential development but also to respond to the historic layout of the site and to form an important visual connection to the wider site. The location of the KP1 primary school still meets the spatial principles as identified and the assessment carried out in the Environmental Assessment.

Employment
Employment uses are focused to the west of the KP1 Area consistent with the Parameter Plan and Transport Assessment that has informed the OPP.

Community Uses
Community Uses are distributed through the KP1 area, focusing on hubs around the Primary School and the Listed Watch Tower. The level of use is in accordance with the Development Specification.

Access and Movement
The Movement Network for KP1 has been informed by the Outline Permission. The points of access from Ermine Street are consistent with the locations identified on the Parameter Plan and assessed through the Transport Assessment.

The internal street network is generally in accordance within the Parameter Plan and the illustrative movement framework plan from the Design & Access Statement, however it has been further informed by the detailed design work undertaken at Key Phase level. It has subsequently been refined to ensure that the street character and highway alignments and are consistent with the scale and type of development proposed.

Green Infrastructure
The green infrastructure network has been refined as part of the detailed design of KP1. Importantly, the location and nature of provision is consistent with the Parameter Plan as assessed. In addition, the KP1 internal Green infrastructures Network follows the illustrative landscape framework plan from the Design & Access Statement.

The position of the areas of formal open space is in accordance with the Outline Parameter Plan.

Environmental Mitigation Measures
The KP1 layout has not only been designed in accordance with the design parameters established as part of the outline application but has incorporated as required the mitigation measures that were set out in the Environmental Statement and its subsequent Addendum.

Illustrative Plans

As part of the Design and Access Statement for the Outline Planning Permission a series of plans were set out that illustrate one way in which the approach to the development of the wider site could come forward. These are drawn together in the site wide Illustrative Master Plan. Whilst these plans do not form part of the Development Framework for the Outline Planning Permission as defined, they do, however provide some context for the KP1 Design Code. They are as follows:

→ **Illustrative Residential Density Plan** (Figure 2q) identifying potential density ranges and locations for Alconbury Weald.

→ **Illustrative Landscape Framework Plan** (Figure 2r) expanding on the features on the Parameter Plan to illustrate a greater level of detail indicative of the rich variety of landscape uses that can be accommodated on site.

→ **Illustrative Movement Plan** (Figure 2s) presenting a possible approach to strategic access and movement including public transport, street hierarchy public spaces and walking/cycling.

→ **Illustrative Master Plan** (Figure 2t & 2u) setting out one way in which the disposition of land uses, movement network and landscape framework all combine.

Figure 2q: Illustrative Residential Density Plan

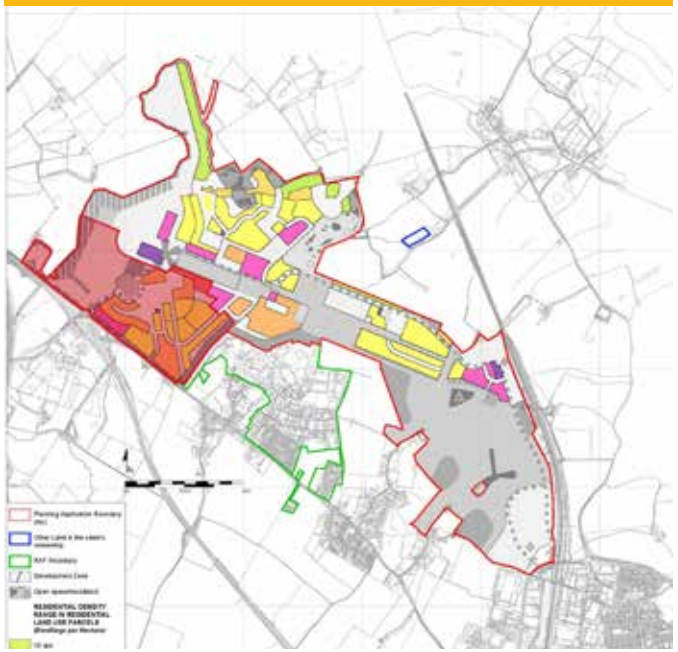


Figure 2r: Illustrative Landscape Framework Plan

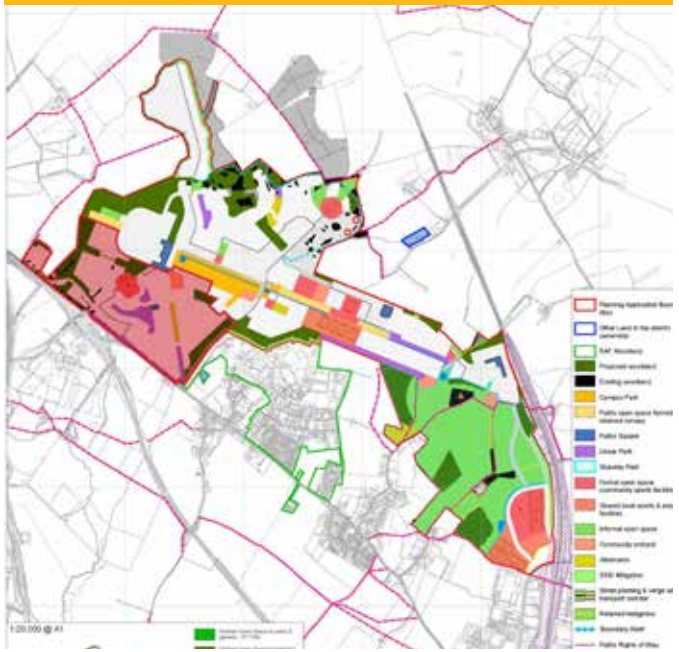


Figure 2s: Illustrative Movement Plan

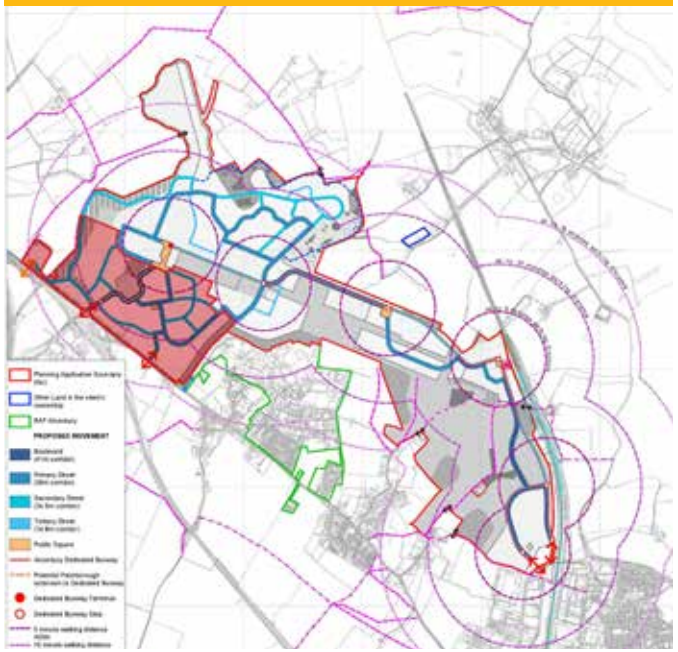


Figure 2t: OPP Illustrative Master Plan

Figure 2u: Extract from Alconbury Weald Illustrative Master Plan of KP1 area

Creating Safe Places: Secure Design & Community Safety

The principles of good place-making and urban design that underpin the development of Alconbury Weald incorporate a design approach that aims to create a secure and safe environment. This approach seeks to reduce the potential for crime and to reduce fear of crime or anti-social behaviour.

The Alconbury Weald Design & Access Statement (as per the Outline Planning Permission) includes multiple references to design and crime prevention, including paragraphs 0.36, 2.111, Para. 6.6 (Crime Prevention & Good Place Making), Para. 6.20, Para. 13.7, Table 4: Sustainable Development Principles including *16. Reducing and preventing crime, anti-social behaviour and fear of crime*.

The proposals seek to create a place that reduces opportunities for crime and anti-social behaviour. The proposals will adopt a layout which encourages an increased level of activity and reduces opportunities for crime. The built form will be legible and coherent, thus improving safety and security. The approach for KP1 integrates principles of designing for secure places include the following points:

- → ***Active frontages*** – buildings to provide 'active' frontages to address streets and spaces;
- → ***Perimeter blocks structure*** - used to ensure development, built form and active design addresses public realm;
- → ***Fronts & backs*** – arranged correctly to provide active frontages to streets and spaces, with backs of properties secure within blocks;
- → ***Secure car parking*** – residential, commercial and community parking to be positioned securely with appropriate access and surveillance from adjacent built form;
- → ***Open spaces and play areas*** - over looked by development blocks, particularly homes to provide 'natural surveillance' over public space; and
- → ***Appropriate lighting*** of streets, public spaces and car parks.

The Design Code provides further guidance with regard to good place making that will create the safer places, including the following:

- → The Design Code Regulatory Plan establishes a network of streets and spaces that are addressed by development frontages:
  - o further details on the design of the spaces are provided in Chapter 3 Green Infrastructure, and
  - o the design of streets in Chapter 4 Movement & Access;

- → Chapter 5 provides guidance for Commercial Built Form, notably section 5.5 Employment Typologies and 5.7 Key Groupings which establish guidance for secure design including orientation of buildings to address streets and spaces; *and*

- → With regard to Residential Built Form, section 6.2 Residential Plot Layout Principles including Building orientation will relate to routes and spaces, routes and spaces will be addressed by active frontage and corners and plot sides will be positively solved.

Further reference:

Detail design proposals should make reference to best practice guidance on this theme including:

- → The *National Planning Policy Framework (NPPF),* which includes definition of the Government's expectations for sustainable developments. NPPF clause 7 *"Requiring Good Design"*, of which one of the criteria is - *create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion;*

- → *Secured by Design* (which includes advice on 'New Homes', and other considerations including New Schools, Youth Shelters and Sports Systems.
  - o *'Secured by Design Principles' (2004)* and
  - o *Secured by Design - New Homes (2010)* principles and give consideration to
  - o *'Safer Places: the Planning System and Crime Prevention'* (ODPM, 2004).

- → *Safer Parking Scheme:* Where large areas of car parking are proposed, be it public or allied to commercial premises the Safer Parking Scheme should also be referred to. The Safer Parking Scheme is an initiative of the Association of Chief Police Officers aimed at reducing crime and the fear of crime in parking facilities.

PART B

Spatial

Alconbury Weald

Make|Grow

PART B Spatial

Part B presents design coding information in support of the content of the Regulatory Plan. Layers of the Regulatory Plan are explained in more detail with identification of design fixes under each spatial topic area, supported by design guidance including indicative illustrations.

The spatial development framework for KP1, as illustrated on the Regulatory Plan is set out in the following spatial design chapters:

3. Green Infrastructure;

4. Movement & Access;

5. Commercial Built Form;

6. Residential Built Form; and

7. Community Uses Built Form.

The design fixes for each spatial element are summarised at the start of each chapter. All design fixes are cumulatively brought together in the Compliance Checklist in Appendix 1.

Figure B1: KP1 Design Code Regulatory Plan (Please refer to full size A0 plan in inside sleeve of report)

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CHAPTER 3
Green Infrastructure

CHAPTER 3: GREEN INFRASTRUCTURE, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and shown on the Regulatory Plan.
The Compliance Checklist in Appendix 1 presents a complete list of design fix headings from the whole Design Code.

→ **Location of green infrastructure components** as illustrated in the Regulatory Plan and highlighted in Figure 3a.

→ Function, size / scale, location and features for each of the following Green Infrastructure Components:

→ **3.3 Woodland Blocks**

→ **3.4 Permeable Woodland**

→ **3.5 Woodland Links**

→ **3.6 Boundary Edge Planting**

→ **3.7 Cricket Park**

→ **3.8 Watch Tower Green**

→ **3.9 Linear Park (north – south)**

→ **3.10 Linear Park (east – west)**

→ **3.11 Ermine Street Linear Park**

→ **3.12 Grassland Meadows**

→ **3.13 Poplar Park**

→ **3.14 Allotments**

→ **3.15 Community Orchards**

→ **3.16 Residential Pocket Parks**

→ **3.17 Commercial Pocket Park**

→ **3.18 Landscape between Community Infrastructure**

→ **3.19 Boulevard Gateway**

→ **3.20 Residential Gateway**

3.1 Introduction

The design guidance for Green Infrastructure draws directly on the Green Infrastructure Statement prepared in support of the Alconbury Weald OPP. It is further defined by the OPP Design & Access Statement, in particular Section 8 – Landscape (page 141-160 of the OPP DAS).

This is reflected in terms of the scale, typology, location and connectivity of Green Infrastructure provision.

In line with the Alconbury Weald Estate Management Strategy it is assumed that all green infrastructure identified in this Design Code will be managed via an on-site estate management company.

Figure 3a: Green Infrastructure highlighted on the Alconbury Weald KP1 Regulatory Plan

3.2 Green Infrastructure Components

Figure 3b presents the KP1 Green Infrastructure components, as follows:

- **3.3 Woodland blocks:** dense blocks of woodland to define parcels and boundary edges.

- **3.4 Permeable woodland**: woodland with breaks to permit views through. The open breaks between woodland have the potential to accommodate grassland.

- **3.5 Wooded links:** blocks of woodland to link through the commercial area. Exact location to be determined, in order to permit flexibility in the design and layout of commercial proposals.

- **3.6 Boundary Edge Planting:** mixture of woodland and grassland with no provision for public access.

- **3.7 Cricket Park:** centre piece formal public open space setting for KP1 residential development adjacent to the Boulevard Park Route. Important relationship with Watch Tower Green on the opposite side of Boulevard Park Route. The combination of Cricket Park and Watch Tower Green create a central landscape feature for both the residential and commercial areas of KP1.

- **3.8 Watch Tower Green:** public open space setting for the listed Watch Tower building. Open space that has the potential to accommodate public events and gatherings. Includes parking and servicing area to the rear of the Watch Tower building. Important relationship with Cricket Park on the opposite side of the Boulevard Park Route and the adjacent Poplar Park.

- **3.9, 3.10, 3.11 Linear Parks:** multifunctional spaces that follow important alignments including:
  - **3.9 Linear Park (North - South)** on the alignment of a former runway (Taxiway), with the Hub terminating the northern end and the Primary School bookending the southern end;
  - **3.10 Linear Park (East - West)** on the alignment of the former airport taxiway; and
  - **3.11 Ermine Street Linear Park** between Ermine Street and the KP1 residential area.

- **3.12 Grassland Meadow:** species rich grassland, link between Cricket Park and woodland blocks.

- **3.13 Poplar Park:** woodland plantation of poplar trees planted on an orthogonal grid aligned with the Boulevard. Leisure routes through the Poplar Park provide public access between the Hub, Watch Tower Green & Boulevard. Views through the grid of trees, visual connection to the Hub.

- **3.14 Allotments:** important community asset integrated within green infrastructure areas including Linear Parks. Centrally located for ease of public access.

- **3.15 Community Orchards:** in common with allotments, orchards are an important community asset, integrated within green infrastructure areas including;
  - Linear Parks;
  - Woodland blocks;
  - As transition between boundary edge planting and landscape between community uses on the south eastern side of KP1.

- **Pocket Parks:** important local level provision of public open space, providing setting for development both within residential and commercial areas.
  - **3.16 Residential pocket parks:** the size of each residential pocket park is noted on the Regulatory Plan, although the exact location is to be determined.
  - **3.17 Commercial pocket park**: location identified on the Regulatory Plan, to provide definition between commercial plots and orientated to incorporate stands of existing established trees.

- **3.18 Landscape between Community Uses:** green infrastructure around the primary school and adjacent to proposed retained hangars, all on the south/eastern edge of KP1.
  - May incorporate elements of retained hardstand adjacent to the retained hangars ('Hangar Threshold' area: that has potential for reuse for access, servicing and parking).

- **3.19 Boulevard Gateway:** important landscape features at the main entrance to the site from Ermine Street to the Boulevard. Landscape scheme to be consistent across both sides of the boulevard.

- **3.20 Residential Gateway:** landscape setting to the new entrance gateway from Ermine Street, providing access to residential area and community facilities including KP1 primary school. To incorporate water features.

Most green infrastrucutre features have the potential to accommodate Sustainable Urban Drainage Systems (SuDS) features as part of the surface water management strategy (see Part D/Chapter 9 for further details on SuDS).

Figure 3b: KP1 Green Infrastructure Components

3.3 Woodland Blocks

Character and Form

The proposed woodland blocks are split into two categories related to their function and location. Within the commercial area the woodland block is proposed for 'plot definition' to provide screening and separation between plots. As such the aim is to establish a dense and impenetrable woodland block, varied in age and structure. Within the residential area the aim is to establish a more open, varied and dynamic habitat mosaic consisting of roughly 2/3 native woodland and 1/3 open grassland glades for use as amenity green space and stormwater attenuation (where required).

Function

- → Woodland screening of phased (residential) development;
- → Woodland screening between plots (commercial area);
- → Green infrastructure connectivity;
- → Landscape and ecological corridors;
- → Stormwater attenuation;
- → Environmental capital with wildlife habitats;
- → Surplus site subsoil and topsoil used to create informal mounding;
- → Recreation and amenity resource (residential area) .

Size/Scale

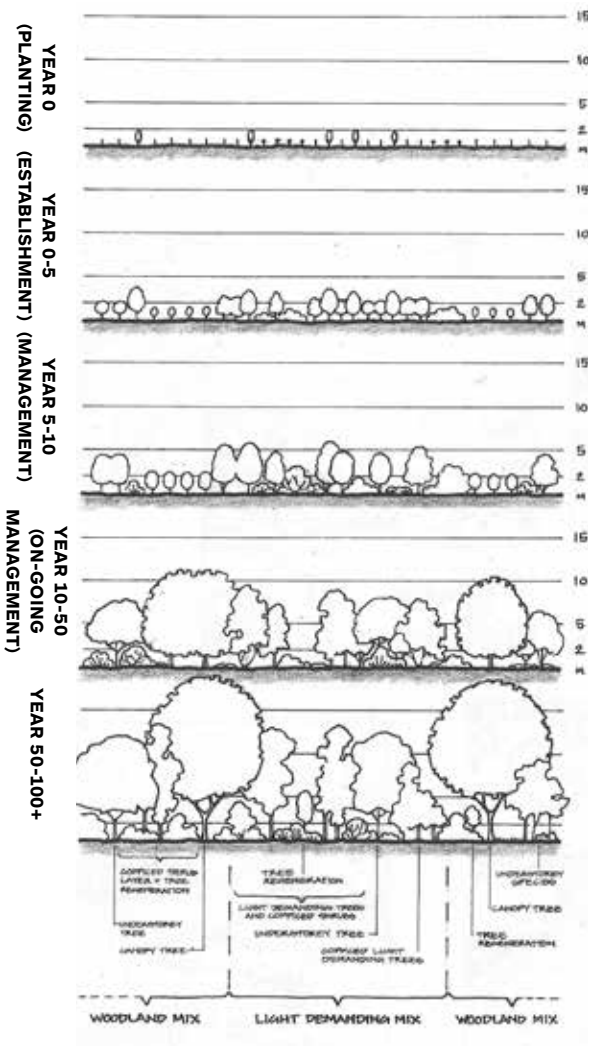
- → Minimum 10m in the narrowest point;
- → Width varies up to 60m.

Locations

- → In between commercial plots and between phased construction plots in the residential area;
- → See inset location plan in Figure 3c.

Features *(in addition to woodland)* (residential areas only)

- → Sports - trim trails, walking/ running circuits;
- → Play facilities - LEAPs and LAPs focussed on natural play;
- → Other - community orchards, connecting footpaths and cycle tracks, landscape and ecological features;
- → Visual screening will be created in both instances through a combination of earth mounding and native woodland structure planting.



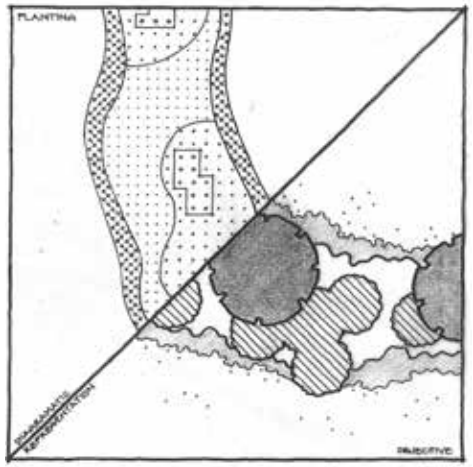
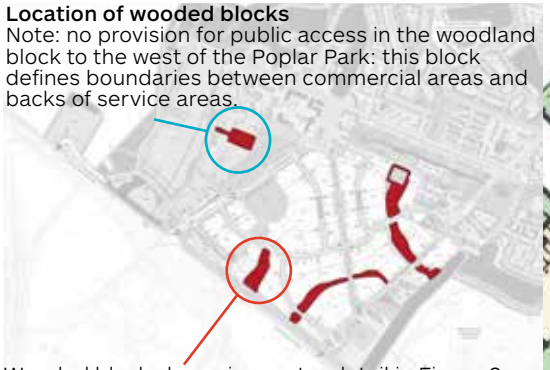


Figure 3c: Wooded Blocks Illustration

Location of wooded blocks
Note: no provision for public access in the woodland block to the west of the Poplar Park: this block defines boundaries between commercial areas and backs of service areas.



Wooded block shown in greater detail in Figure 3c.

3.4 Permeable Woodland

Character and Form

The permeable woodland is located along the western boundary of the commercial area and it shares many characteristics with the woodland blocks within the residential area. The aim is to establish blocks of native woodland with open grassland glades allowing visual permeability. The incorporation of stormwater attenuation provides opportunities for natural breaks in the tree canopy to allow intervisibility along the boundary.

Function

- → To provide a wooded edge along the western boundary;
- → Green infrastructure connectivity;
- → Ecological corridor;
- → Stormwater attenuation;
- → Surplus site won subsoil and topsoil used to create informal mounding.

Size/Scale

- → c. 2.7Ha.

Location

- → Along the western edge of the commercial area.

Location of Permeable Woodland

See Figure 3d: Permeable Woodland Illustration.

- → Note: no provision for public access through this woodland (no leisure routes): public access for vehicles, pedestrians and cyclists provided via the adjacent Type D: Service Route that runs parallel to the permeable woodland.

Features

- → No provision for public access;
- → Informal mounding shall be incorporated to give variation in the landform and focus views;
- → Existing tree belts are to be retained where feasible and incorporated into the woodland block;
- → Woodland edge planting along this boundary will consist of a low edge mix to establish a dense thicket of shrub species. The internal facing edge will comprise a more open, tall edge mix with glades of species rich grassland. A native hedge incorporating hedgerow trees will form a neat boundary along the Type D Service Route footpath and help to control access along this edge.

3.5 Wooded Links

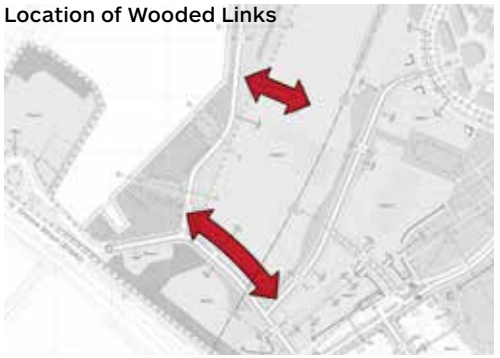
Character and Form

Wooded Links comprise blocks of woodland to link through the commercial area. Their location is flexible depending on the layout of commercial plots, yet they share many of the characteristics of the commercial area Woodland Blocks. Their primary function is to establish 'plot definition' to provide screening and separation between plots. As such the aim is to establish a dense and impenetrable woodland block, varied in age and structure.

Function

- → Screening between plots within the commercial area;
- → Green infrastructure connectivity;
- → Ecological corridor;
- → Stormwater attenuation;
- → Surplus site won subsoil and topsoil used to create informal mounding.

Location of Wooded Links



Size/Scale

- → Minimum 10m wide.

Locations

- → Exact locations to be determined, in order to permit flexibility in the design and layout of commercial proposals.

Features

- → No provision for public access;
- → Surplus site won subsoil and topsoil used to establish a varied landform and screen ancillary functions such as car parking and service areas;
- → The inclusion of a percentage of evergreen species (e.g. Pinus sp, Ligustrum vulgare, Ilex aquifolium) would be appropriate in these locations to provide winter interest and screening.

Figure 3d: Permeable Woodland Illustration

Precedent of SuDS and woodland

Note: no provision for public access through this woodland (no leisure routes): public access for vehicles, pedestrians and cyclist provided via the adjacent Type D: Service Route that runs parallel to the permeable woodland.

3.6 Boundary Edge Planting

Character and Form

The aim is to establish a predominantly oak native woodland, diverse in age and structure.

Function

- → To provide a woodland buffer between the neighbouring RAF Alconbury and new community;
- → Green infrastructure connectivity;
- → Ecological corridor;
- → Stormwater attenuation;
- → Surplus site won subsoil and topsoil used to create informal mounding.

Size/Scale

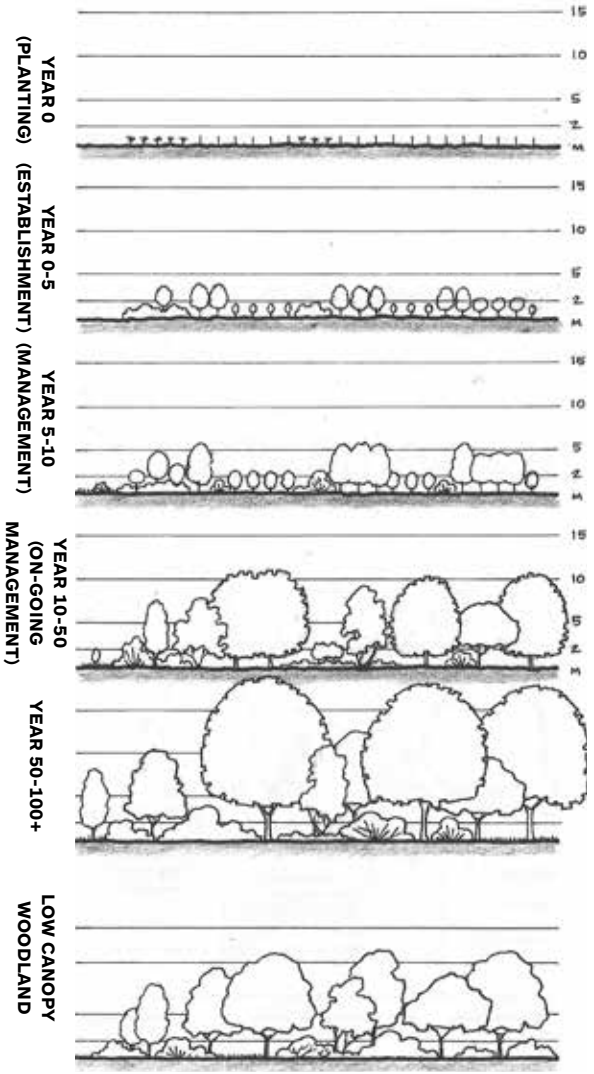
- → Minimum 60m in width on boundary with RAF Alconbury (USAF);
- → Minimum 2m open to RAF Alconbury (USAF) boundary.

Locations

- → Along south eastern KP1 boundary with the existing RAF Alconbury;
- → Commercial area edges;
- → See inset plan in Figure 3e.

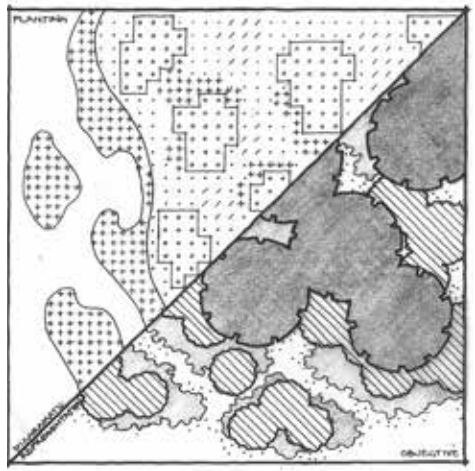
Features

- → No provision for public access (with the exception of a leisure route provided on the edge of the boundary edge planting behind the community facilities, see Regulatory Plan);
- → A more or less closed canopy (formed by species that may include oak, wild cherry, rowen and birch), while sub-climax and shrub species form the understorey;
- → A lower canopy woodland mix shall be used where the boundary woodland adjoins residential areas to reduce over shading of properties and gardens;
- → The boundary planting should comprise a mix of native woodland and open grassland glades for habitat diversity and/or stormwater attenuation;
- → The densest woodland structure should be located along the community edge with stormwater attenuation and areas of grassland located along the south facing external edge. This orientation will allow maximum sunlight into grassland areas and stormwater attenuation channels to facilitate species diversity;
- → Woodland edge planting will be low and dense to the community side and tall and open to the outside edge;
- → Informal earth mounding shall be employed to provide variations in height and allow for disposal of surplus site won subsoil and topsoil.



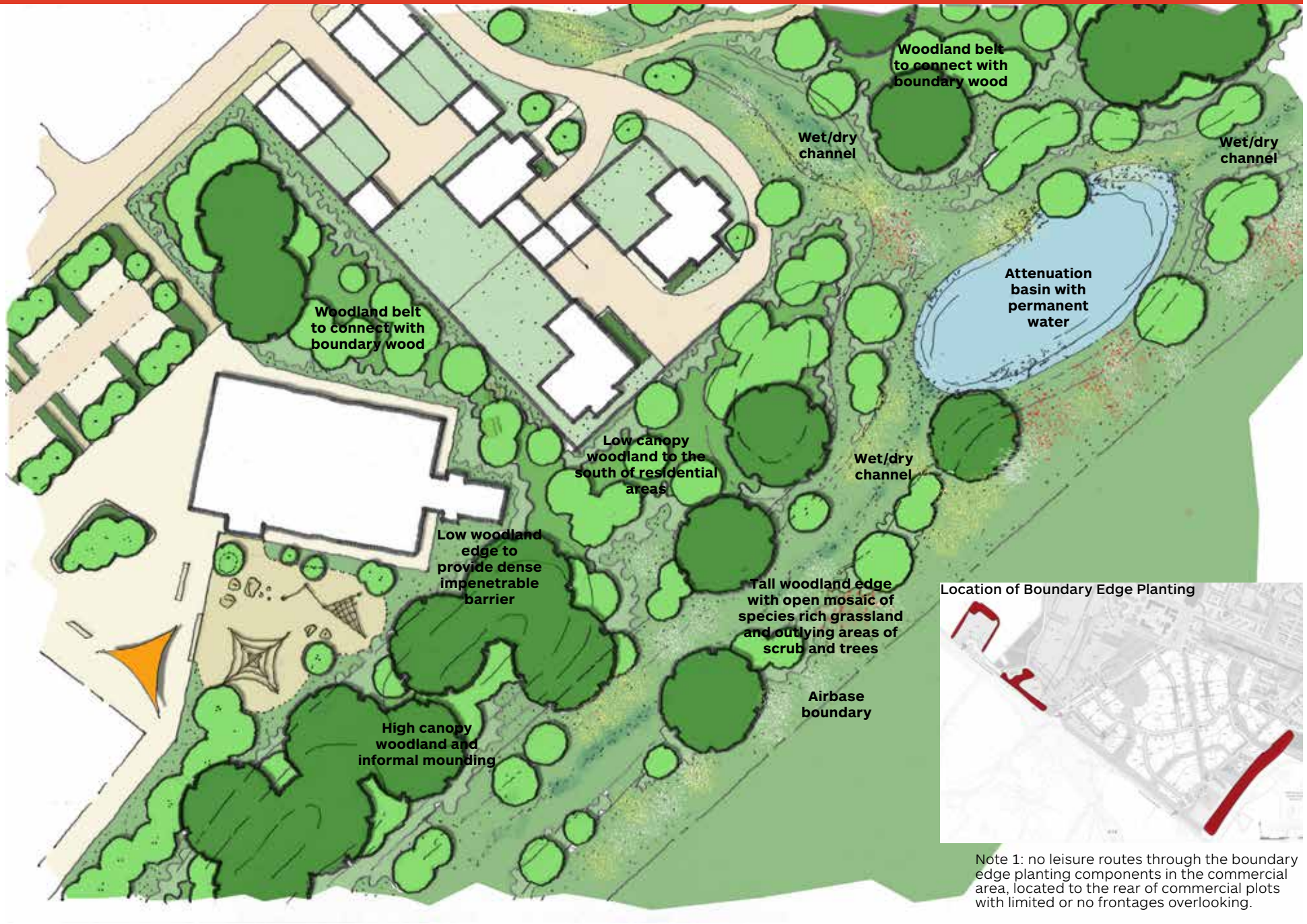
Low edge mix

Tall edge mix



Cross section illustrating potential for raised earthform / bund on boundary between KP1 and USAF

Figure 3e: Boundary Edge Illustration



Note 1: no leisure routes through the boundary edge planting components in the commercial area, located to the rear of commercial plots with limited or no frontages overlooking.

3.7 Cricket Park

Character and Form

Cricket Park provides a formal green space for recreation and sport. It's primary function shall be as the local community cricket pitch with associated facilities. The green will therefore be open in aspect with closely mown grass, featuring a central cricket square. The outfield will be available for informal recreation and sports while the central square shall be roped off to offer protection from damage.

Function

- → Formal green open space for sport and informal recreation;
- → Community focus;
- → Green infrastructure connectivity;
- → Stormwater attenuation.

Size/Scale

- → In accordance with Sport England Design Guidance.

Location

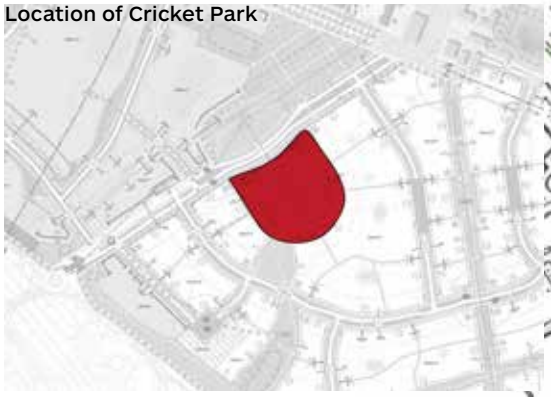
- → To the south east of Watch Tower Green.

Features

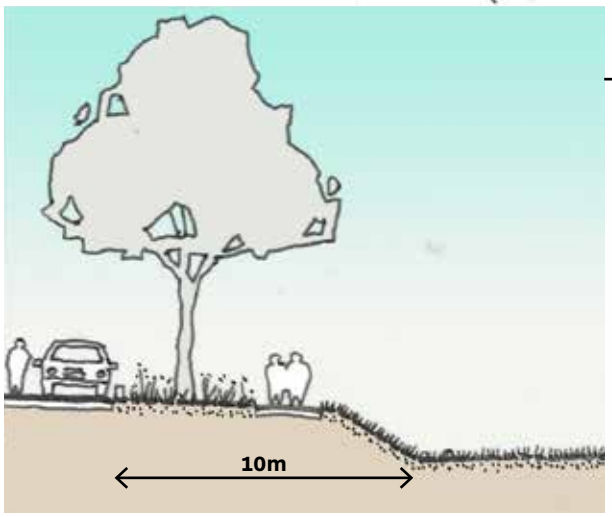
- → Sports - cricket, other informal sports and recreation activities in the outfield;
- → Play facilities - LAPs;
- → A pavilion for cricket and community events, associated parking with access from boulevard (park route);
- → Possibility to raise the pavilion above the level of the pitch if required to improve views of play;
- → Design of the pavilion should reference 'Pavilions and Clubhouses' (ECB guidance, 2009)
- → The area of the outfield shall be lowered to around 1-1.5m below surrounding ground level to provide stormwater capacity for extreme weather events. The resulting perimeter embankment will help to define the outfield boundaries while providing a natural bowl for spectator viewing;
- → An avenue of broadleaf trees shall be planted around the top of the embankment to provide a formal, green backdrop to the space;
- → Incidental play shall also be incorporated as part of the LAP provision for the development;
- → Provision for safe crossing of the Boulevard (Park Route) to be made to allow for pedestrians and cyclists to cross between Cricket Park and Watch Tower Green;
- → Water and electrical points should be included in infrastructure for events and community use (e.g. associated with Cricket Pavilion building);
- → SuDS: whilst storage volumes for SuDS facilities are fixed the location and nature of storage will be subject to detail design. For further information regarding SuDS see section 9.7 of this document (9.7 Water Management: Drainage approach & SuDS) and the supporting document *Supplementary Water Management Strategy* (SWMS).

Figure 3f: Cricket Park Illustration

Location of Cricket Park



Example Section A-A



3.8 Watch Tower Green

Character and Form

Watch Tower Green is intended as a green open space which provides an appropriate setting for the listed Watch Tower building. The space holds a strategic position within KP1, located along the main approach boulevard at the interface between the commercial and residential areas.

Opportunities exist to continue the broadleaf tree avenue proposed around the Cricket Park to provide visual continuity between the two spaces and reinforce connections.

The building itself could perform a number of community functions with complimentary uses serving both the residential and commercial areas, see Chapter 7 Community Uses Built Form. As such, the Green offers opportunities to establish a flexible, open space, functioning as a setting for the building and an open lawn space to compliment the building's day-to-day uses, while also catering for potential community events such as local fetes / fairs, farmer's markets, etc.

Function

- → Appropriate setting for the Listed Watch Tower building;
- → Community focus;
- → Open space serving the commercial area.

Size/Scale

- → Defined by the building to the north, approach avenue to the south and links to the Cricket Park to the east and west (c.0.8Ha)

Location

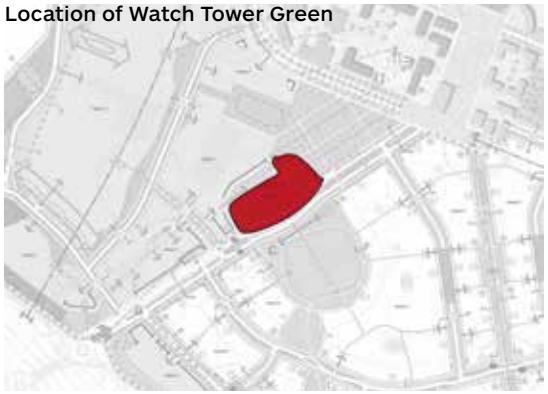
- → South of the existing Watch Tower building.

Features

- → Leisure - community uses and events;
- → Recreation - connecting footpath links, seating;
- → Heritage - historic interpretation, public art;
- → Good quality pedestrian links should be realised to connect the Green with commercial areas to the north, residential areas (via the Cricket Park) to the south and through to The Hub in the east (via the Poplar Park);
- → The Green should have an ordered yet restrained character. A formal lawn to the south of the building will maintain views to the listed structure from the approach avenue and provide a flexible, south facing open space;
- → Servicing and parking should be located on the northern side of the building with structure planting helping to screen commercial areas and provide a green backdrop to the building;
- → Provision for safe crossing of the Boulevard (Park Route) to be made to allow for pedestrians and cyclists to cross between Cricket Park and Watch Tower Green;
- → Water and Electrical points should be included in Infrastructure for events and community use (e.g. associated with Watch Tower building);
- → Potential opportunity to integrate public art.

Figure 3g: Watch Tower Green Illustration

Location of Watch Tower Green



3.9 Linear Park (North-South)

Character and Form

A generous, linear green space running along the alignment of the former airfield runway taxiway. The Linear Park shall act as a high quality green link connecting the proposed primary school with The Hub. A formality of layout, character and appearance will establish a distinctive space.

Function

- → Informal amenity green space;
- → Recreation and play;
- → Community food production;
- → Localised SuDS;
- → Pedestrian and cyclist priority route;
- → Green infrastructure connectivity;
- → Landscape and ecological corridor.

Size/Scale

- → Continuous in length, broken only by access roads and connecting footpaths;
- → Minimum 35m width from building line to building line;
- → Minimum 20-25m wide, central green space with shared pedestrian/cyclist/vehicle access routes on either side.

Location

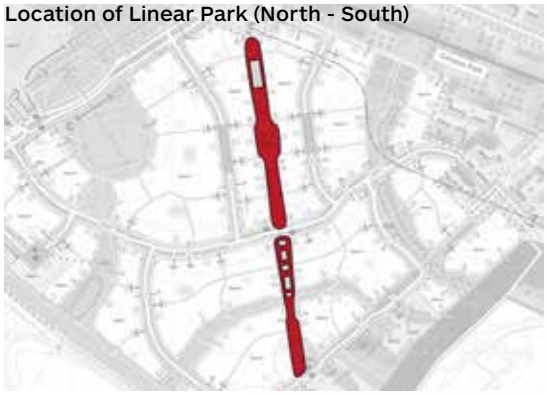
- → North-south alignment along route of former taxiway.

Features

- → The central green space shall accommodate multifunctional uses including informal amenity space, play, local integrated SuDS and community food production;
- → Play facilities - LEAPs and LAPs/ doorstep play;
- → Allotments, landscape and ecological features;
- → Safe pedestrian and cyclist priority route. Limited vehicle access for residents;
- → Linear hedges, rows of trees and planting will help define the space and enhance the sense of a linear park;
- → A high level of permeability and visibility into the green space shall be designed to create a safe and accessible environment;
- → LEAP is subject to buffer zones between the play provision and neighbouring residential property, in line with Fields in Trust standards.

Figure 3h: Linear Park (North - South) Illustration

Location of Linear Park (North - South)



3.10 Linear Park (East-West)

Character and Form

A generous, linear green space running along the alignment of the former airfield runway taxiway. The corridor shall act as a high quality green link from the primary school to the residential development and other community facilities to the North East of KP1. Opportunities to develop a more informal character in contrast to the north-south Linear Park.

Function

- → Informal amenity green space;
- → Vehicular access;
- → Community food production;
- → Localised SuDS;
- → Pedestrian and cycle routes;
- → Green infrastructure connectivity;
- → Landscape and ecological corridor.

Size/Scale

- → Continuous in length, broken only by access roads and connecting footpaths;
- → Minimum 30m width from building line to building line.

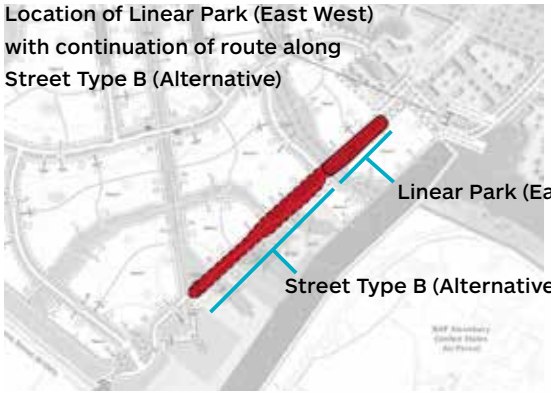
Location

- → See inset plan on next page.
- → This linear park and alternative Street Type B are positioned on the east-west alignment along route of former taxiway;
- → The alternative Street Type B adjacent to the Primary School and community facilities has a wide character with generous landscape verges, continuing the landscape quality of the linear park along the alignment of the former taxiway.
- → See Chapter 4 for further details on alternative Street Type B.

Features

- → The linear green space shall be multifunctional and incorporate informal green space, integrated localised SuDS, playable landscape features, ecological features and community allotments;
- → Vehicle access will be fully integrated in the overall layout of the linear space and incorporate the character of low speed tertiary streets and/or shared surface lanes. Potential to accomodate play facilities within the linear park, close proximity to the NEAP.

Figure 3i: Linear Park (East - West) Illustration



3.11 Ermine Street Linear Park

Character and Form

A linear green space running along the Ermine Street site boundary incorporating the existing earth bund and recently implemented planting along this edge.

The space forms a buffer between the residential development and Ermine Street and also functions as a leisure route for local residents.

Function

- → Informal amenity green space;
- → Pedestrian leisure route;
- → Green infrastructure connectivity;
- → Landscape and ecological corridor.

Size/Scale

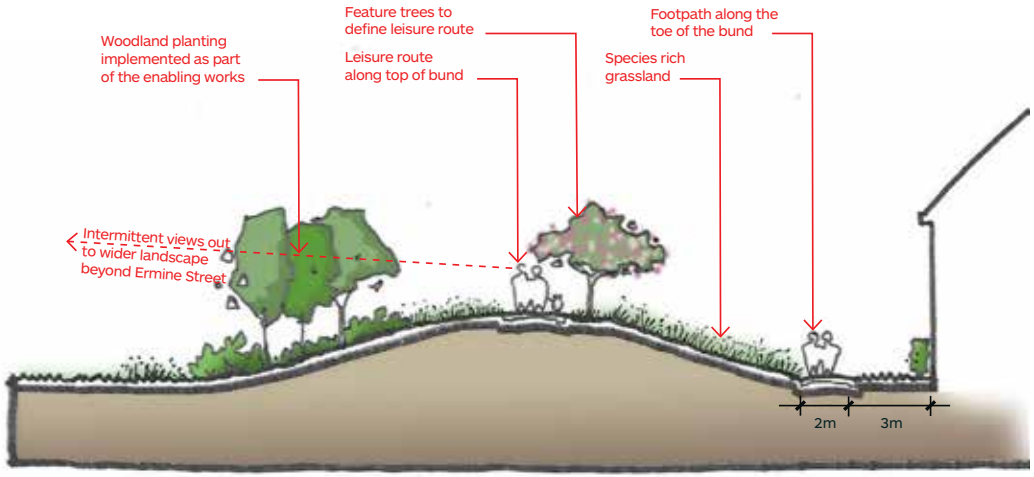
- → Continuous in length, between the residential entrance road and the Boulevard;
- → Variable width between the outside edge of the bund and the edge of development, bund and footpaths may meander along route of linear park

Location

- → Aligned with Ermine Street along the south west boundary.

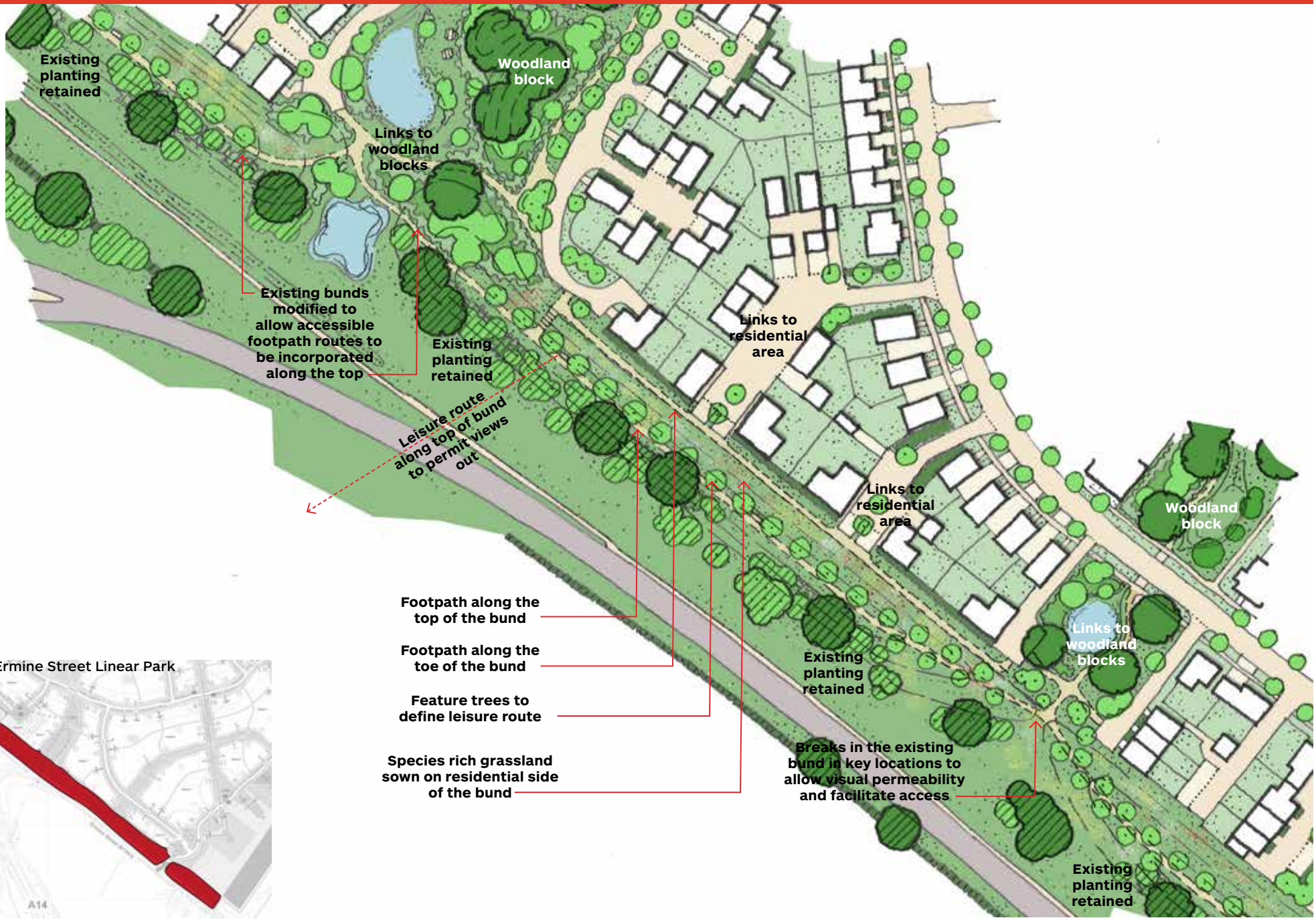
Features

- → Sport and recreation - part of wider walking/running circuits;
- → The leisure routes can be incorporated along the toe of the bund on the residential side and/ or on the top of the bund affording views out to the surrounding landscape.
- → Existing planting should be retained on the Ermine Street side of the bund.
- → Tree planting along the residential side of the bund should be carefully considered to avoid overshadowing adjacent properties.
- → Species rich grassland along the north side of the bund to present a rich and colourful aspect for properties facing onto the linear park. Regularly spaced ornamental or flowering native trees may be introduced to define leisure routes.
- → Privacy of adjacent homes should be considered in the design of leisure routes and planting on the bund: views should be focused out of the site over the surrounding landscape.

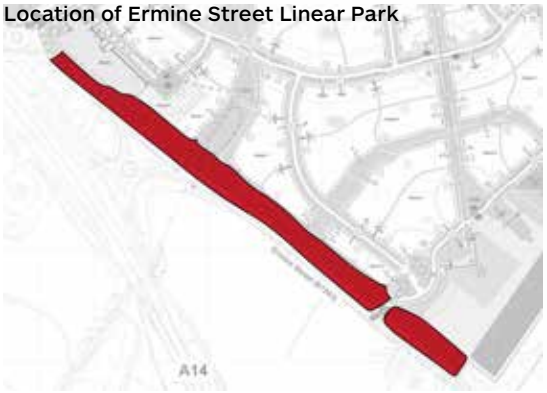


Typical Section

Figure 3j: Ermine Street Linear Park Illustration



Location of Ermine Street Linear Park



3.12 Grassland Meadows

Character and Form

The area of grassland meadow provides a 'stepping stone' between the naturalistic and visually enclosed woodland block and the more open, formal and manicured landscape of the Cricket Park. Thickets of scrub and individual trees establish a vegetated frame around the open, central space and provides additional habitat for nesting birds.

Function

- → To provide a species rich grassland meadow;
- → Green infrastructure connectivity;
- → Ecological corridor with wildlife habitats.

Size/Scale

- → c. 0.23 Ha.

Location

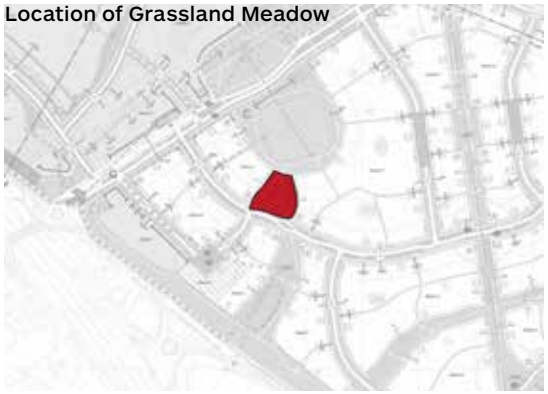
- → South of the Cricket Park.

Features

- → Sport and recreation - part of wider trim trails, walking/running circuits;
- → Play facilities - provision of a LAP/ integrated doorstep play focussed on natural play;
- → Education - nature trail/ interpretation;
- → Other - connecting footpaths and cycle tracks, landscape and ecological features, picnicking facilities;
- → The majority of the area will be sown and maintained as species rich grassland utilising species of local provenance where possible.

Figure 3k: Grassland Meadows Illustration

Location of Grassland Meadow



3.13 Poplar Park

Character and Form

Consisting of a grid of regularly spaced poplar trees, Poplar Park will quickly form a recognisable feature providing height and aiding orientation in the otherwise flat landscape.

Function

- → Establish an early visual marker within the landscape;
- → Distinctive landscape feature as part of the wider green infrastructure;
- → Connecting space between The Hub and commercial / residential areas;
- → Poplar Park is intended to be an open park with trees within it with strong eye level visual links between The Hub and KP1;
- → It will include surfaced footways, cycle tracks and seating / picnic areas.
- → Planting will include a stock of different varieties, ages and sizes to give diversity and additional longevity, alongside future management such as pollarding;
- → Much woodland, etc to be delivered elsewhere on site for pure biodiversity value within KP1 and wider OPP.

Size/Scale

- → c. 1.9 Ha.

Location

- → East of Watch Tower Green.

Features

- → Sport and recreation - part of wider trim trails, walking/running circuits;
- → Other - connecting footpaths and cycleways, landscape and ecological features;
- → Hybrid poplars should be selected on the basis of their resistance to rust and their consistent and distinctive form.
- → Trees should be planted on a grid aligned parallel to the approach avenue, with trees spaced to compliment the spacing established by the avenue tree planting, but typically spacing would be between 5 and 10m centres.
- → An understorey of species rich grassland will be established to provide habitat and create an informal 'carpet' of colour in contrast to the austere formality of the trees.
- → Footpath routes through the plantation shall be established to link The Hub to commercial and residential areas. These may be a combination of permanent footpaths and informal, temporary footpaths established through varied management of the grassland;
- → Potential opportunity to integrate public art.

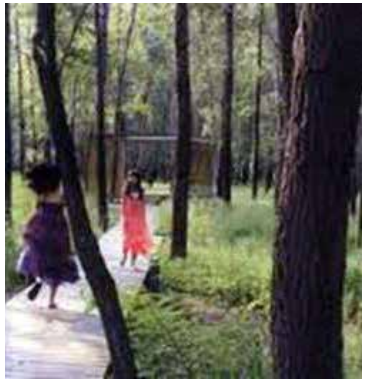
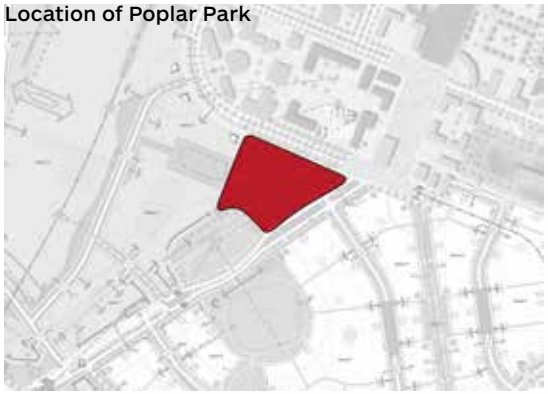


Figure 3l: Poplar Park Illustration



3.14 Allotments

Character and Form

Smaller allotment sites integrated within the green infrastructure areas and distributed across the development should be sought rather than, for example, one large site on the edge of the development. A grid layout of allotments would offer the most efficient use of space, allowing a range of plot sizes to be provided from a 250sqm standard plot through to smaller half plots and quarter plots to provide flexibility.

Function

- → Community food production;
- → Recreation and amenity resource;
- → Green infrastructure connectivity;
- → Landscape and ecological corridors.

Size/Scale

- → A combined 1.04 hectares of allotments and community orchards are to be provided.

Locations

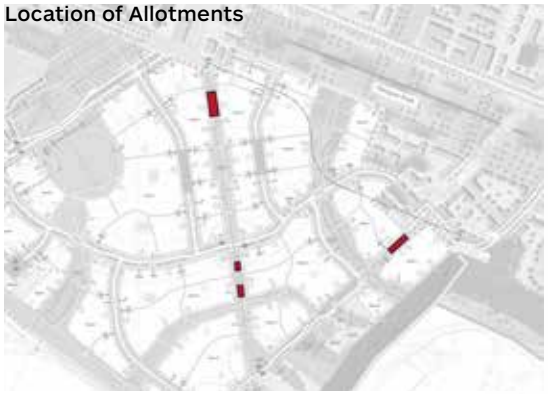
- → Woodland blocks and linear parks.

Features

- → Allotment plots for community food production;
- → Paths between plots;
- → Water supply (potential to use recycled water from surrounding roofs and hard surfaces);
- → Parking: provision for a small number of spaces close to the entrance to allotments;
- → Servicing and vehicle delivery should be considered in locating the allotments, as well as areas for storage and communal use;
- → Boundary treatments should contain and define each area of allotments;
- → Boundary treatments should use a consistent specification;
- → Opportunities should be explored for making the boundary fence functional in terms of food production, e.g. wire fencing with trained fruit trees and fruiting bushes;
- → Defined boundaries should be given for the communal storage area;
- → Potential to consider provision of sheds for storage of tools for plots;
- → Opportunity to lower ground level of allotments in linear park to enhance views across and vista along linear park;
- → Lockable, gated access;
- → Notice boards for community use; and
- → Plot maintenance is an important consideration to ensure that allotments are positive features in the public realm.

Figure 3m: Allotments Illustration

Location of Allotments



3.15 Community Orchards

Character and Form

Community orchards should be integrated both as part of the allotment provision in the form of trained fruit bearing trees and bushes and as a single identifiable area within the woodland block green infrastructure.

Function

- → Community food production;
- → Recreation and amenity resource;
- → Green infrastructure connectivity;
- → Landscape and ecological corridors with wildlife habitats.

Size/Scale

- → A combined 1.04 hectares of allotments and community orchards are to be provided.

Locations

- → Woodland blocks and linear parks.

Features

- → Leisure - community food production
- → Recreation - connecting footpath links;
- → Other - water supply, maintenance vehicle access, bee hives;
- → Large standard fruiting trees on rootstock suitable for their species and application should be planted in rows no closer than 6m apart to enable canopies to develop such that they provide a visual 'extension' of the adjacent woodland blocks;
- → Grassland areas within the orchard should be maintained to ensure establishment and sustained growth of the fruit trees while providing longer, meadow grass areas for ecological benefits.

Figure 3n: Community Orchards Illustration

3.16 Residential Pocket Parks

Character and Form

The Residential Pocket Parks provide an important local community provision. Their location will be determined by the layout of the residential areas, but they should form a focal point for the immediate neighbourhood with good natural surveillance from surrounding properties.

Function

- → Focal point within each neighbourhood;
- → Social meeting place;
- → Leisure, play and informal recreation;
- → Landscape setting for residential areas with a strong identity and distinctiveness to the neighbourhood.

Size/Scale

- → As shown on the Regulatory Plan.

Locations

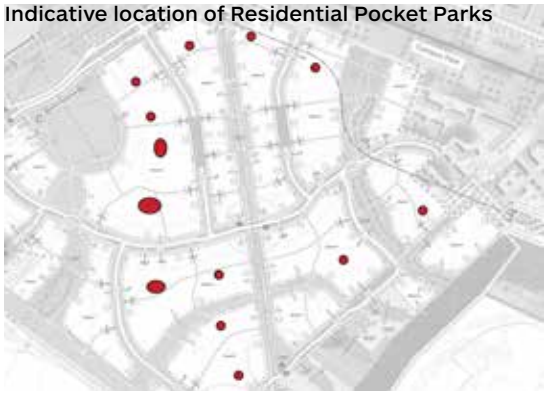
- → To be determined by the residential layout: indicative locations shown of the Regulatory Plan;
- → See key location plan with figure 3o.

Features

- → Must be interesting and imaginative in design;
- → Amenity - social meeting place and seating;
- → Play - LAP/doorstep play;
- → Each pocket park should be a minimum 100sqm area (unless stated otherwise on the Regulatory Plan). Each pocket park should have common landscape elements such as:
  - › tree and shrub planting,
  - › green open space,
  - › integrated doorstep play,
  - › seating,
  - › lighting,
  - › each pocket park should have its own individual identity to reinforce local distinctiveness and assist in way finding.
- → Car parking (residents and visitors) shall be integrated into the space, with planting employed to screen and separate bays. As a principle, no more than 4 spaces should be provided in a single row with at least a 2.5m planted buffer between one row and the next.
- → The boundary to the pocket park should be clearly defined but would not necessarily need to be fenced. It may be defined by planting, a level change or low walls/seating edges;
- → Adjacent vehicle zones shall be pedestrian priority shared spaces.

Figure 3o: Residential Pocket Parks Illustration

Indicative location of Residential Pocket Parks



3.17 Commercial Pocket Park

Character and Form

The Commercial Pocket Park provides an opportunity to retain and incorporate a stand of existing trees within a green open space, close to the proposed offices and commercial plots. This space will function as part of the site wide green infrastructure and as a setting for the commercial plots while offering a space for use by the local workforce.

Opportunities for improvement to an existing pond within this location offers the potential to create a natural focal point for the space.

In addition to the Commercial Pocket Park KP1 provides significant green infrastructure including Watch Tower Green, Poplar Park and Cricket Park all of which are within short walking distance of the commercial area.

Commercial plots will include landscape elements on plot.

Function

→ Green open space for use by commercial area workforce;
→ Commercial plot separation.

Size/Scale

→ As shown on the Regulatory Plan.

Location

→ Determined by the commercial plot layout;
→ See Regulatory Plan.

Features

→ Amenity - social meeting place and seating;
→ Pond edges should be regraded to provide a range of habitats and landscaped features including shelves for marginal planting and shallow sloping shingle banks;
→ Incorporation of existing trees.

Figure 3p: Commercial Pocket Parks Illustration

3.18 Landscape between Community Infrastructure

Character and Form

The existing, retained hangars and adjacent landscape has the potential to incorporate a range of community uses as part of the formal sports and play provision. Additionally, less active recreational uses may also be considered such as community allotments and orchards to encourage cross-generational uses in close proximity.

Function

- → Leisure, sport, play and informal recreation;
- → Social meeting place;
- → Landscape buffer between community uses and residential areas.

Size/Scale

- → As shown on the Regulatory Plan.

Location

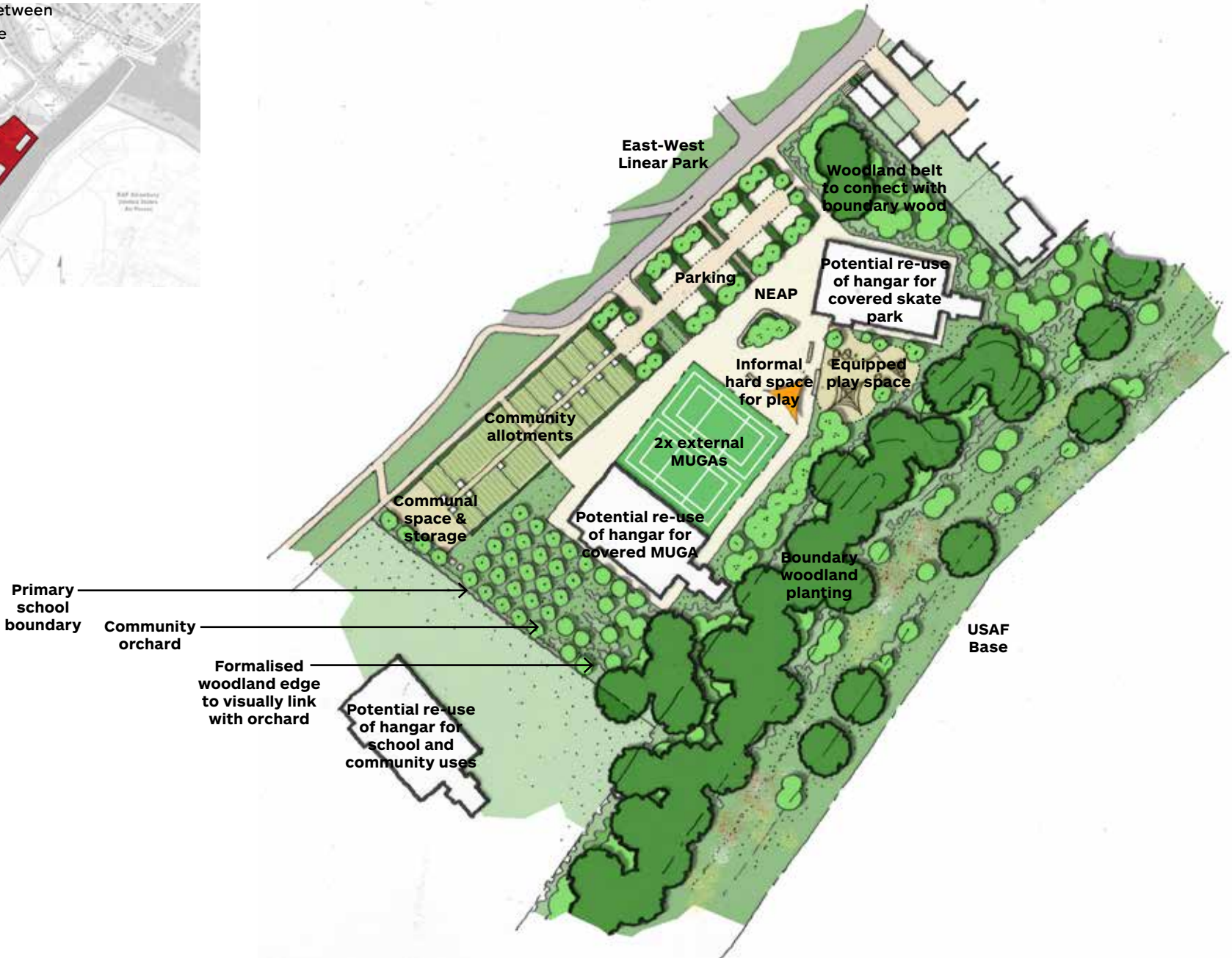
- → Adjacent to the existing, retained hangars and around the primary school.

Features

- → Play - Neighbourhood Equipped Area of Play (NEAP);
- → Sport - Mixed Use Games Area (MUGA), wheeled sport facilities;
- → Leisure - community food production;
- → Other - water supply, maintenance vehicle access, bee hives, car parking;
- → Provision of a high quality NEAP for older children including the potential re-use of the northern most hangar to provide a covered wheeled sports/skate park.
- → External equipped play spaces should allow for a combination of naturally landscaped play areas and hard surfaced areas to provide a range of play experiences;
- → Within the middle hangar a range of sport courts could be accommodated. Adjacent, and connected, to the hangar there would be sufficient space to incorporate a double MUGA;
- → Low canopy woodland planting (as a green finger extending from the boundary woodland) should be incorporated as a buffer between the existing hangars and new residential areas;
- → Woodland planting along the primary school boundary should become more formalised as it extends towards residential areas. Opportunities exist here for community orchards and allotments.

Figure 3q: Landscape between Community Infrastructure Illustration

Location of Landscape between Community Infrastructure



3.19 Boulevard Gateway

Character and Form

The boulevard gateway acts as the principal entrance to the Alconbury Weald development from Ermine Street. Opportunities for a formal arrangement of the landscape utilising avenue trees, clipped hedges and the introduction of more ornamental planting will help define the entrance as a punctuation point within the more naturalistic planting implemented as part of the enabling works along the Ermine Street boundary. In addition, the interplay between the strong formality of the boulevard and the linearity of Ermine Street offers opportunities to express the two geometries within the elongated entrance roundabout, in order to create a distinctive and recognisable gateway language.

Function

→ Principle gateway entrance;
→ Vehicular and pedestrian access off Ermine Street.

Size/Scale

→ As shown on the Regulatory Plan.

Location

→ As shown on the Regulatory Plan.

Features

→ Recreation - integration of the proposed leisure footpath route along the Ermine Street boundary;
→ Other - artwork, water feature;
→ Key development frontages to the north of the entrance roundabout should present a positive face to this gateway.
→ Opportunities for a water feature and south facing amenity terrace area as part of the development plot landscape should also be explored.
→ Integrated artwork or features (potentially linked to historical uses of the site) should be considered as visual markers within the gateway zone.

Figure 3r: Boulevard Gateway Illustration

3.20 Residential Gateway

Character and Form
- → Key space in the setting of the residential entrance;
- → Form and character of the traditional village pond;
- → Opportunity to use ponds to enhance the drama and legibility of the gateway;
- → Aquatic and marginal planting to enhance bio-diversity;
- → Distinctive waterside tree planting.

Function
- → Secondary entrance of Ermine Street;
- → Vehicular and pedestrian access to KP1 residential scheme.

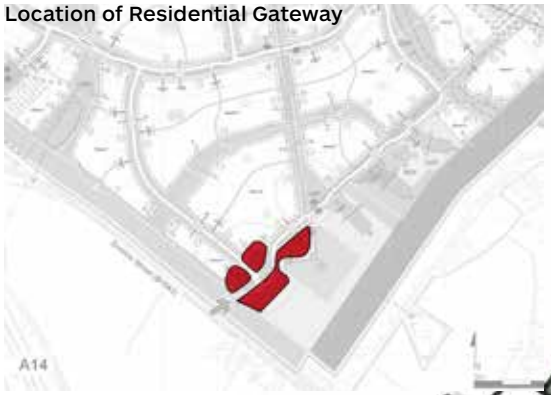
Size/Scale
- → As shown on the Regulatory Plan.

Location
- → As shown on the Regulatory Plan.

Type of Facilities
- → Water features
- → Amenity - social meeting place and seating

Figure 3s: Residential Gateway Illustration

Location of Residential Gateway



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CHAPTER 4
Movement & Access

CHAPTER 4: MOVEMENT & ACCESS, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and shown on the Regulatory Plan.
The Compliance Checklist in Appendix 1 presents a complete list of design fix headings from the whole Design Code.

→ **Location of access components** as illustrated in the Regulatory Plan.

→ **4.2 Site Access Points:** locations as shown on the Regulatory Plan and highlighted in Figure 4b.

→ **4.3 Street Hierarchy:** locations and types of streets as shown on the Regulatory Plan and highlighted in Figure 4c Street Hierarchy Plan.

→ **Design of Streets:** to accord with the street type tables and street type sections presented in Chapter 4.

→ **4.4 Tertiary Streets as Spaces** design principles.

→ **4.5 Access to Minor Routes and Plots:** as shown on the Regulatory Plan and highlighted in Figure 4r.

→ **4.6 Design of Crossroads.**

→ **4.7 Service Access & Parking for Community Facilities:** as shown on the Regulatory Plan and highlighted in Figure 4u.

→ **4.9 Cycle & Pedestrian Network:** leisure routes for walking and cycling as shown on the Regulatory Plan and highlighted in Figure 4w.

→ **4.10 Access for all.**

Figure 4a: Movement and Access highlighted on the Alconbury Weald KP1 Regulatory Plan

4.1 Introduction

The Design Guidance for matters of Access, is fully reflective of the Alconbury Weald Outline Planning Permission 'fixes'. In particular, in the Design and Access Statement Principles outlined within Chapter 10 - Access.

These have been reflected in the location of site access points, layout of internal roads, street hierarchy and non-vehicular movement.

In providing design guidance for access the following elements are covered:

- → Site access points;
- → Street hierarchy;
- → Design of streets;
- → Tertiary streets as spaces;
- → Access to minor routes and plots;
- → Design of crossroads;
- → Service access and parking for community facilities;
- → Indicative bus services;
- → Cycle and pedestrian network; and
- → Access for All.

4.2 Site Access Points

KP1 has three points of access that provide connection between the site and the existing road network (Ermine Street) outside of the site boundaries. These are shown on the Regulatory Plan and are as follows:

HCV Access (Commercial Area): Recently implemented improvements to this point of access with new entrance and HCV access route. This route is reserved for heavy commercial vehicles. This separate point of access helps to ensure the larger vehicles are kept away from the main access and Boulevard.

Main Site Entrance (Residential & Commercial): Access between the existing Ermine Street (B1043) and the Boulevard. This is the main point of access for non HCVs, providing access to the Boulevard spine into KP1, with onward connection to commercial and residential areas.

Residential Access: Access to the residential area direct from Ermine Street. This point of access will provide access to the first phase of residential development, and associated community facilities including the primary school which will be directly served by this access point.

Figure 4b: Site Access Points

4.3 Street Hierarchy

Streets, in combination with green infrastructure, provide the framework for development parcels within the KP1 Design Code area. The streets are arranged to facilitate ease of movement and access into development plots and parcels and these streets are ordered in the following street hierarchy, as illustrated in Figure 4c, The Street Hierarchy Plan.

- → Boulevard *(including Boulevard Park Route)*
- → Street Type A
- → Street Type B
- → Street Type C
- → Street Type D
- → Street Type E & F: *Minor Streets: Cross Parcel Permeability*
- → HCV Access Route
- → Pedestrian and Cycle Routes

Design guidance for each street type is provided with tables that provides design details and technical requirements, and accompanying street section drawings that illustrate the form of the street.

Boulevard

The boulevard is the main street into and through the KP1 area. It is the highest order street with greatest width to accommodate street trees in both the central median and in the landscape verges on either side of the street. The design of the boulevard is consistent with the Outline Planning Permission Design and Access Statement.

Boulevard Park Route

A central section of the boulevard narrows in width to improve connections between Watch Tower Green and Cricket Park. This route has a central crossing point and its alignment has a gentle curve to help slow passing traffic, creating a sense of place between two important open spaces.

Street Type A

Main distributor routes linking from the boulevard through the residential and commercial areas. The Type A routes within the commercial area maintain the same design as the Secondary Street design street section as presented in the Outline Planning Permission Design & Access Statement. Type A routes within the residential area maintain the same central corridor with additional driveways for residential plots that run parallel to the main corridor. The Type A route within the residential area changes character at the intersection with green corridors, in these locations the central median widens to create a landscape feature.

Street Type B

Residential streets that provide links between the main residential Type A Route spine through the wider residential area.

Street Type C

A residential street type of similar scale to the Type B Route, but a single sided street with development on one side, and open space opposite.

Street Type D: Service Route

The service route is set on the path of existing hard stand and carriageway on the western edge of the commercial area. Subject to detailed design the intention is to reuse existing hard stand and carriageway where possible, to be supplemented with adjacent landscaping features, verges and street trees. This route is intended primarily to serve the larger footprint commercial plots that are located on the western side of the commercial area.

Street Type E & F and Tertiary Streets and Spaces: Cross Parcel Permeability

Individual development parcels will provide cross parcel permeability through a network of tertiary streets and pedestrian / cycle routes. The cross parcel permeability routes identified on the Regulatory Plan and in Figure 4c (Street Hierarchy Plan) will be delivered as part of this network. Additional tertiary streets will be provided to serve dwellings and other uses within KP1. This chapter provides design guidance on two examples of minor streets, further guidance to the layout of streets within residential parcels is provided in sub chapter 6.5. Typically, tertiary streets will only be used by people living or visiting that area, and will therefore be narrower and less formal in character than secondary streets. Longer tertiary streets will be tree lined on one side and could contain areas of on-street parking. Shorter streets will include street trees, informally arranged. They must contain a variety of traffic calming measures to increase safety for pedestrians and cyclists. Short tertiary streets may have a dropped kerb line and no road markings to reduce speeds and allow for pedestrian priority.

HCV Access Route

Recently implemented access route for heavy commercial vehicles, as illustrated in the Regulatory plan and Figure 4c.

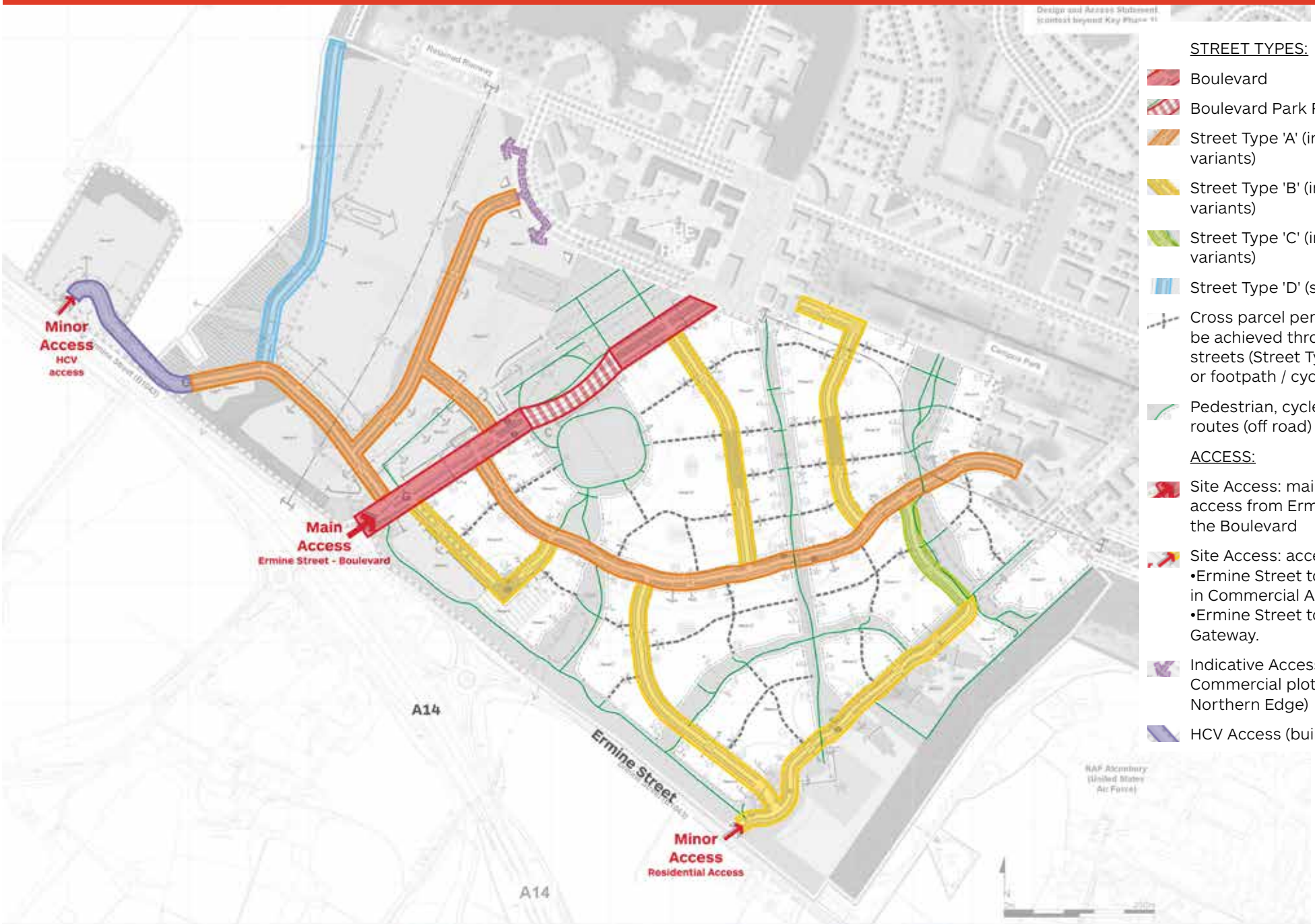
Shared foot/cycleways

Effective width of 4m, comprising 3m actual hardstand width 0.5m either side in adjacent landscape verges.

Pedestrian and Cycle Routes (off-road)

In addition to provision for walking and cycling on street a network of off road footpaths, cycle tracks and leisure routes provide access for pedestrians and cyclists through green infrastructure.

Figure 4c: Street Hierarchy Plan



BOULEVARD STREET TYPE

GENERAL INFORMATION	
Street Type	Boulevard
Location	Main access route into the site from Ermine Street.
Character	Formal in character, the widest street corridor, forming the spine, establishing a sense of quality at the main site entrance.
STREET DESIGN	
Total Corridor Width	41m
Footpaths	3m wide shared use footway / cycle track on both sides of the carriageway.
Cycle track	As above, signage of this facility to comply with principles LTN 1/12 –'Shared Use Routes for Pedestrians and Cyclists' as well as TRL 01/13 – 'Reducing Sign Clutter'.
Carriageway	6.5m wide dual carriageway with 12m wide central reserve.
Public Transport Route	Yes – Bus route accommodated by carriageway.
Traffic Calming	→ Overall environment of the Boulevard; → Semi mature tree planting provided along each side of both carriageways. This will offer what is known as 'tree friction' that helps reduce traffic speeds; → Frontage development; → Side accesses to serve development parcels; → Pedestrian crossing points; → Use of wide top kerbs with channel blocks; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under shared use footway / cycle track where practicable.
Surface Finishes	See 8.4.1 Street design materials palette.
Kerbs	See 8.4.1 Street design materials palette.
Street Furniture	Traffic signs, bus stops.
Street Lighting	→ Formal street lighting appropriate for the main access into the site; → 8m lighting columns; → Regular placing of lighting columns.

TECHNICAL DETAILS	
Target Speed	30mph (60kph Design Speed (based on DMRB principles). Posted Speed limit 30mph.
Road markings	Primarily to demarcate priority at junctions and carriageway running lanes.
Junction Spacing (centreline-centreline)	30m minimum, 150m maximum.
Junction radii	6m to 10m.
Forward visibility	90m (60kph Design Speed (based on DMRB principles)).
Visibility Splays	'x' = 2.4m, 'y' = 90m.
Centreline radii	R100m.

STREET LANDSCAPING	
Verge width	See street section Figure 4d
Street Trees	Planted within the 4m wide verges and central reserve (See 8.4.5).
Verges	See 8.4.5.
INTERACTION WITH HOMES	
Direct Access to homes?	No.

Location of Boulevard Street Type

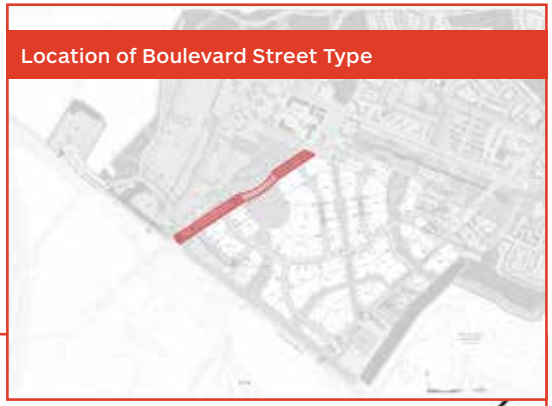
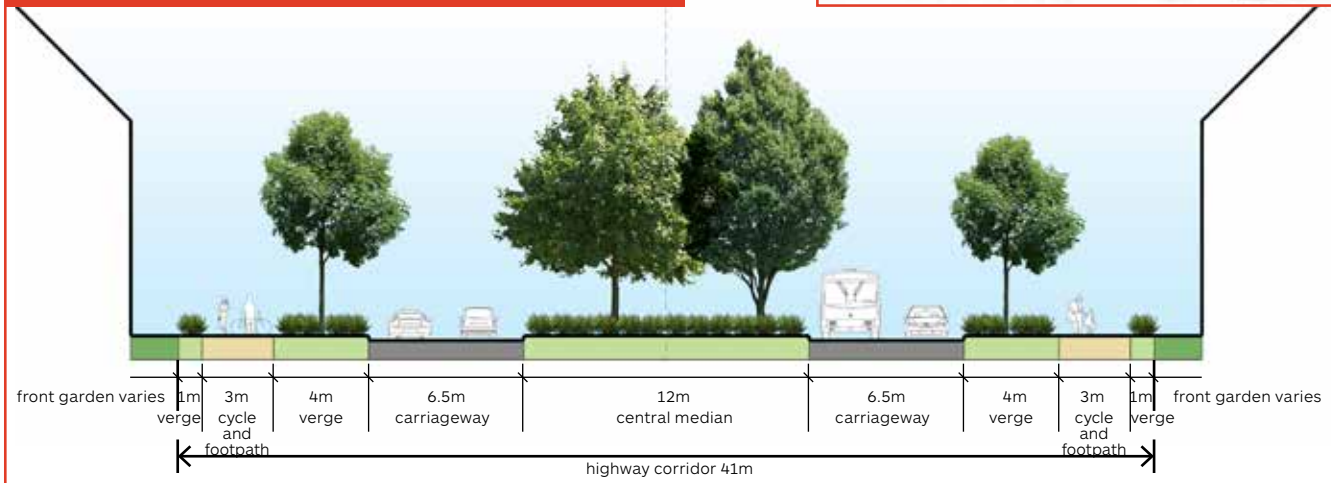


Figure 4d: Boulevard Street Section



BOULEVARD PARK ROUTE:
The boulevard narrows for a short section between Watch Tower Green and Cricket Park to enhance access between the two spaces. The Regulatory Plan illustrates the change in dimensions in this location.

STREET TYPE A

GENERAL INFORMATION	
Street Type	Type A (Primary Street)
Location	Main road through residential and commercial area.
Character	Less formal than the boulevard, provides access from the boulevard to and through the residential areas, connecting internal secondary streets.

STREET DESIGN	
Total Corridor Width	24.1m - 24.5m.
Footpaths	3m wide shared use footway / cycle track on both sides of the carriageway.
Cycle tracks	As above, signage of this facility to comply with principles LTN 1/12 –'Shared Use Routes for Pedestrians and Cyclists' as well as TRL 01/13 – 'Reducing Sign Clutter'.
Carriageway	6.1m - 6.5m.
Public Transport Route	Yes – Bus route accommodated by carriageway width based on single deck bus.
Traffic Calming	→ Traffic calming intervention 50m to 70m; → Overall environment of the Primary Street layout; → Semi mature tree planting provided along each side of the carriageway. This will offer what is known as 'tree friction' that helps reduce traffic speeds; → Alterations of the carriageway position within the highway corridor; → Side accesses to serve development parcels; → Raised tables at junctions; → Pedestrian crossing points; → Use of wide top kerbs with channel blocks; → Junction radii designed to encourage lower speeds; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under shared use footway / cycle track where practicable. Strategic foul water and surface water sewers to be located within the carriageway.
Surface Finishes	→ See 8.4.1 Street design materials palette.
Kerbs	→ See 8.4.1 Street design materials palette.
Street Furniture	→ Traffic Signs; → Bus stop shelters at suitable locations along the road (400m approx. in either direction).
Street Lighting	→ Formal street lighting appropriate for residential area; → 8m lighting columns; → Regular placing of lighting column.

TECHNICAL DETAILS	
Target Speed	25mph (30mph posted speed limit).
Road markings	Primarily to demarcate priority at junctions and centreline of carriageway where necessary for highway safety purposes.
Junction Spacing (centreline-centreline)	30m minimum, 90m maximum.
Junction radii	→ 3m to 8m (for Residential Street Type A). → 10m to 15m subject to vehicle swept path (for Commercial Street Types).
Forward visibility	43m (Manual for Streets 1 & 2).
Visibility Splays	'x' = 2.4m, 'y' = 43m (Manual for Streets 1 & 2).
Centreline radii	R100m.
STREET LANDSCAPING	
Verge width	See street sections, Figure 4e and Figure 4f.
Street Trees	Planted within the verges (see 8.4.5).
Planting Palette	See 8.4.5
INTERACTION WITH HOMES	
Direct Access to homes?	Yes: through access principles demonstrated in Figure 4g.

Locations of Street Type A

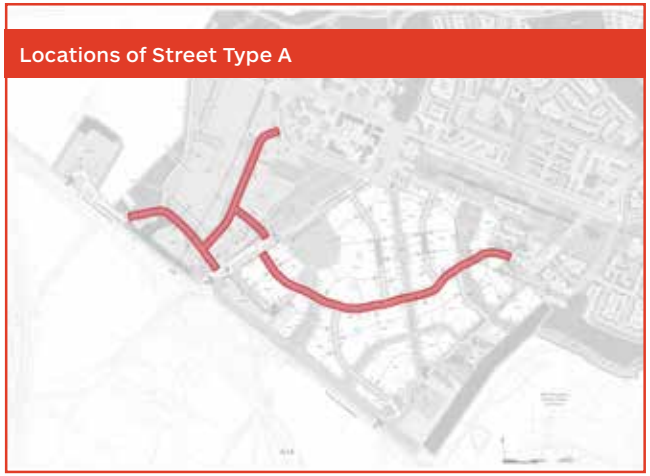
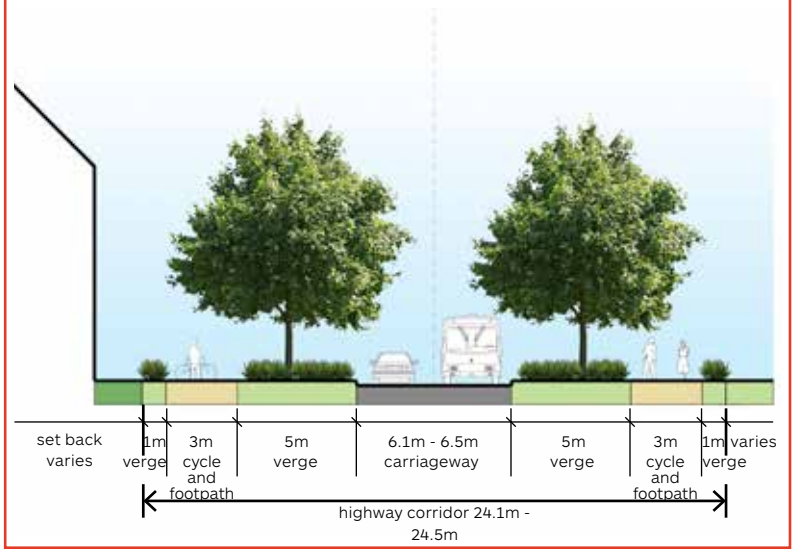


Figure 4e: Street type A: Street Sections (Commercial Area)



Locations of Street Type A

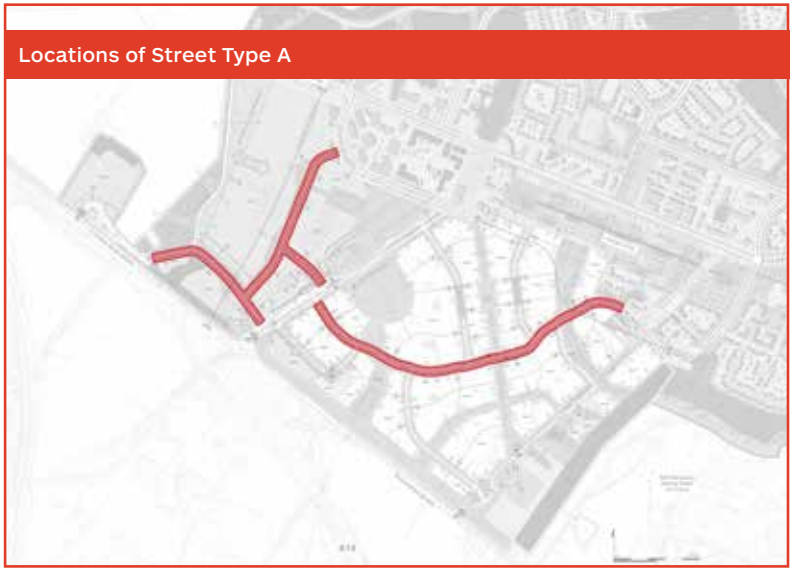
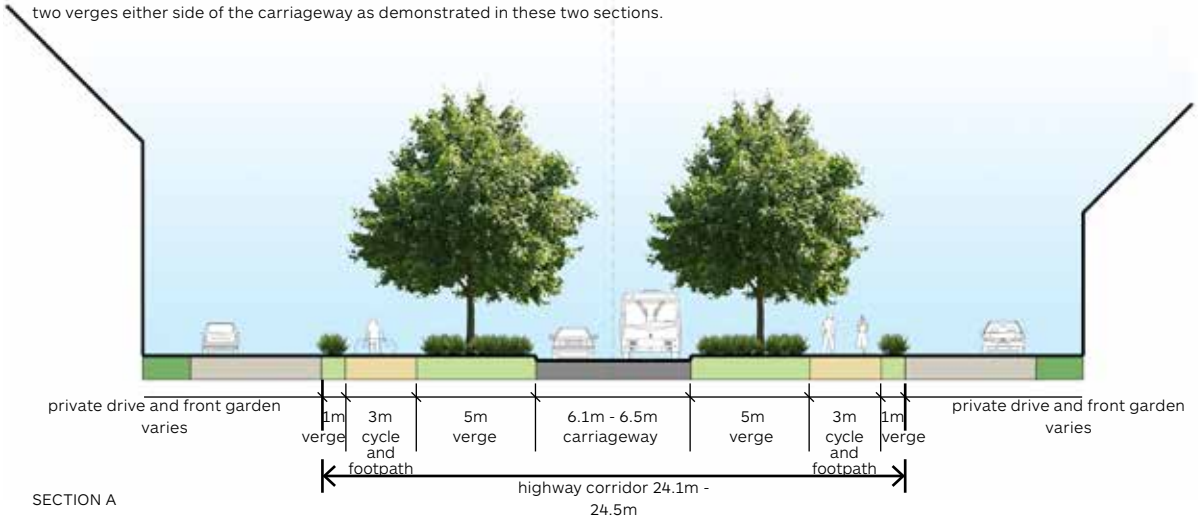
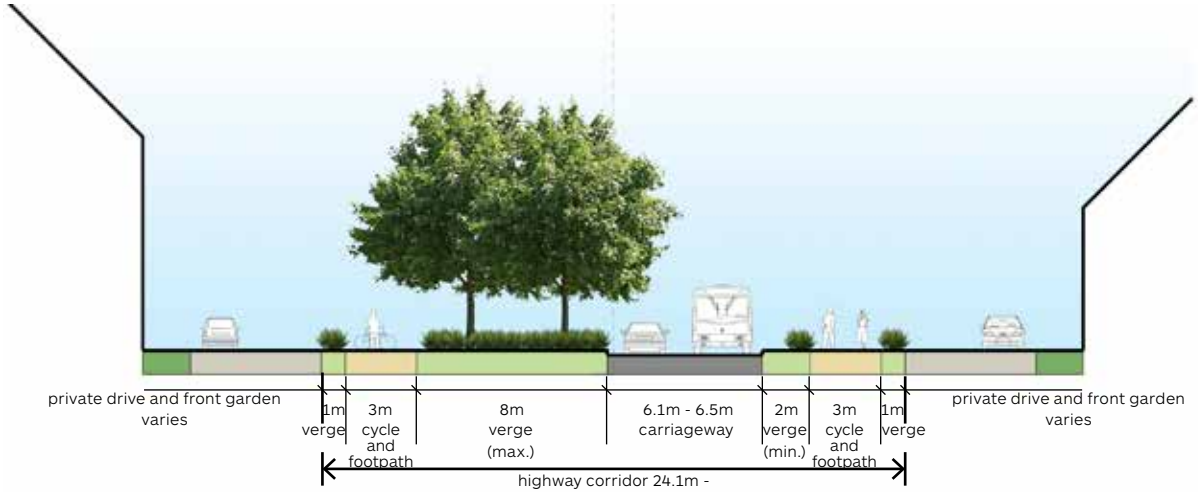


Figure 4f: Street Type A: Street Section (Residential Area)

The section along the A-route varies due to the meandering nature of the carriageway. This results in a variation of the two verges either side of the carriageway as demonstrated in these two sections.



SECTION A



SECTION B

Figure 4g: Street Type A: (Residential Area Illustration)

Access principles for dwellings fronting Street Type A (Residential):

1. Private shared driveways will be used to access dwellings which front the sides of the A-route with wide verges (verges of approximately 4-8m in width). Private shared driveways will serve no more than eight dwellings. Driveways serving up to eight dwellings should be 5m wide.
2. Paired driveways will be used to access dwellings which front the sides of the A-route with narrow verges (verges of approximately 2-4m in width). Driveways will allow vehicles to enter the A-route in a forward direction. Driveways serving two dwellings should be 4.5m wide.
3. Rear access driveways will be used to access dwellings which side on to B and C routes.

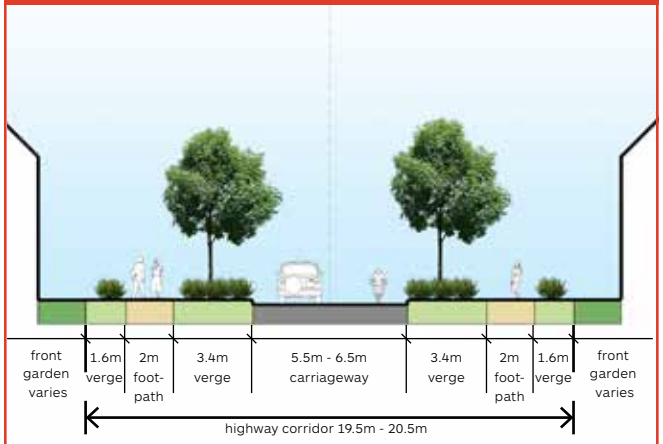
A combination of the above access principles will be used along the length of the A-route to maximise the area of green space for tree planting.

STREET TYPE B

GENERAL INFORMATION	
Street Type	Type B (Secondary Street).
Location	See inset plan.
Character	Less formal than the Primary Street, provides access from the Primary Street to the residential areas, connecting to internal tertiary streets.
STREET DESIGN	
Total Corridor Width	→ 19.5 - 20.5m for standard street type B (Figure 4h) → Alternate street type B (Figure 4i) has a varying corridor adjacent school and community facilities - see Regulatory Plan.
Footpaths	→ Standard street type B (Figure 4h) 2m footway on both sides of the carriageway. → Alternate street type B (Figure 4i) 2m footway on one side of the carriageway and 3m cycle track/footway adjacent school and community facilities.
Cycle tracks	Cycling on carriageway with exception of Street Type B adjacent school and hangars, where a 3m wide shared foot/cycle track applies (see Figure 4i). Signage of this facility to comply with principles LTN 1/12 –'Shared Use Routes for Pedestrians and Cyclists' as well as TRL 01/13 – 'Reducing Sign Clutter'.
Carriageway	5.5m - 6.5m
Public Transport Route	Yes – Bus route accommodated by carriageway width based on single deck bus.
Traffic Calming	→ Traffic calming intervention 40m to 60m; → Overall environment of the Primary Street layout; → Semi mature tree planting provided along each side of the carriageway. This will offer what is known as 'tree friction' that helps reduce traffic speeds; → Side accesses to serve development parcels; → Raised tables at junctions; → Pedestrian crossing points; → On street parking; → Junction radii designed to encourage lower speeds; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under shared use footway / cycle track where practicable. Strategic foul water and surface water sewers to be located within the carriageway.

Surface Finishes	See 8.4.1 Street design materials palette.
Kerbs	See 8.4.1 Street design materials palette.
Street Furniture	→ Traffic Signs; → Bus stop shelters at suitable locations along the road (400m approx. in either direction).
Street Lighting	→ Formal street lighting appropriate for residential area; → 8m lighting columns; → Regular placing of lighting columns.
On street parking	→ On street car parking bays (e.g. for visitor spaces) could be accommodated within landscape verge (where verge widths are greater than or equal to 3.4m wide) at intervals between street trees.
TECHNICAL DETAILS	
Target Speed	20mph (30mph posted speed limit).
Road markings	Primarily to demarcate priority at junctions.
Junction Spacing (centreline-centreline)	30m minimum, 70m maximum.
Junction radii	3m - 8m.
Forward visibility	25m (Manual for Streets 1 & 2).
Visibility Splays	'x' = 2.4m, 'y' = 25m (Manual for Streets 1 & 2).

Figure 4h: Street Type B Street Section



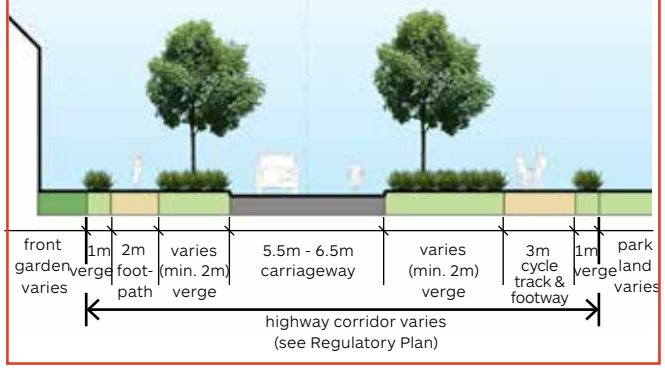
Centreline radii	R50m.
STREET LANDSCAPING	
Verge width	See street sections (Figure 4h and Figure 4i).
Street Trees	Planted within the 3m wide verges (see 8.4.5).
Planting Palette	See 8.4.5.
INTERACTION WITH HOMES	
Direct Access to homes?	Yes.

Locations of Street Type B

Figure 4i: Street Type B Alternative Street Section

For route along taxiway adjacent to the school and hangars

The carriageway meanders along the length of the taxiway and therefore the verges either side of the carriageway vary. The horizontal alignment is illustrated on the Regulatory Plan.



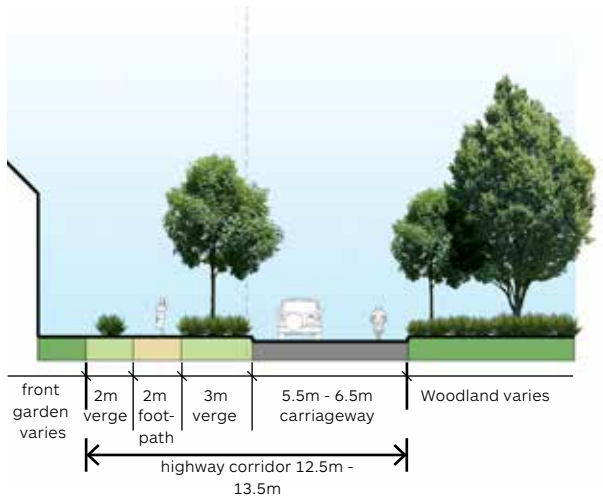
STREET TYPE C

GENERAL INFORMATION	
Street Type	Type C (Tertiary Street)
Location	See inset plan.
Character	Less formal than the Secondary Street (Type B) – provides access to the residential areas.
STREET DESIGN	
Total Corridor Width	12.5 - 13.5m.
Footpaths	2m wide footway on one side of the carriageway.
Cycle tracks	Cyclist ride within the main carriageway.
Carriageway	5.5m - 6.5m
Public Transport Route	Yes – Bus route accommodated by carriageway width based on single deck bus.
Traffic Calming	→ Traffic calming intervention 40m to 60m; → Semi mature tree planting provided along each side of the carriageway. This will offer what is known as 'tree friction' that helps reduce traffic speeds; → Side accesses to serve development parcels; → Raised tables at junctions; → Pedestrian crossing points; → On street parking; → Junction radii designed to encourage lower speeds; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under the footway where practicable. Strategic foul water and surface water sewers to be located within the carriageway.
Surface Finishes	See 8.4.1 Street design materials palette.
Kerbs	See 8.4.1 Street design materials palette.
Street Furniture	→ Traffic Signs; → Bus stop shelters at suitable locations along the road (400m approx. in either direction).
Street Lighting	→ Formal street lighting appropriate for residential area; → 8m lighting columns; → Regular placing of lighting columns.

TECHNICAL DETAILS	
Target Speed	20mph (30mph posted speed limit).
Road markings	Primarily to demarcate priority at junctions.
Junction Spacing (centreline-centreline)	30m minimum, 70m maximum.
Junction radii	3m to 8m.
Forward visibility	25m (Manual for Streets 1 & 2).
Visibility Splays	'x' = 2.4m, 'y' = 25m (Manual for Streets 1 & 2).
Centreline radii	R50m.

STREET LANDSCAPING	
Verge width	See street section Figure 4j.
Street Trees	Semi mature trees planted within the 3m wide verge (see 8.4.5).
Planting Palette	See 8.4.5.
INTERACTION WITH HOMES	
Direct Access to homes?	Yes.

Figure 4j: Street Type C Street Section



Location of Street Type C

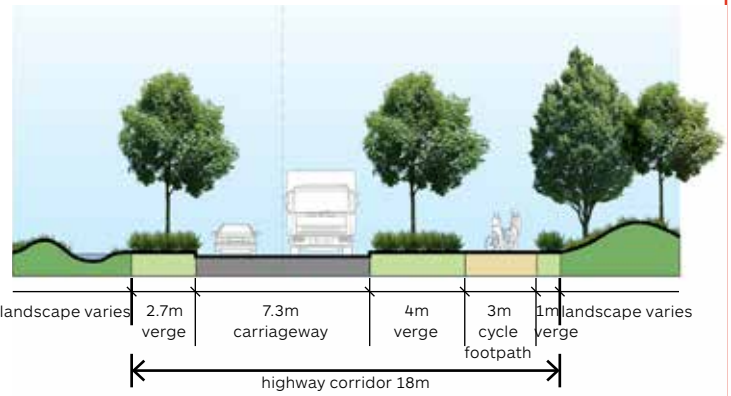
STREET TYPE D: SERVICE ROUTE (COMMERCIAL AREA)

GENERAL INFORMATION	
Street Type	Street Type D (Commercial Service Route).
Location	See inset plan.
Character	Less formal than the Type A, provides access from Type A route to Commercial plots.
STREET DESIGN	
Total Corridor Width	18m Minimum.
Footpaths	3m wide shared use footway / cycle track on one side of the carriageway.
Cycle tracks	As above, signage of this facility to comply with principles LTN 1/12 – 'Shared Use Routes for Pedestrians and Cyclists' as well as TRL 01/13 – 'Reducing Sign Clutter'.
Carriageway	Width 7.3m.
Public Transport Route	No.
Traffic Calming	→ Traffic calming intervention 40m to 50m; → Semi mature tree planting provided along each side of the carriageway. This will offer what is known as 'tree friction' that helps reduce traffic speeds; → Site accesses to development parcels; → On street parking; → Junction radii designed to encourage lower speeds; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under shared use footway / cycle track where practicable. Strategic foul water and surface water sewers to be located within the carriageway.
Surface Finishes	See 8.4.1 Street design materials palette.
Kerbs	See 8.4.1 Street design materials palette.
Street Furniture	→ Traffic signs; → Bus stop shelters at suitable locations along the road (400m approx. in either direction).
Street Lighting	→ Formal street lighting appropriate for commercial area. → 8m lighting columns; → Regular placing of lighting columns.

TECHNICAL DETAILS	
Target Speed	20mph (30mph posted speed limit).
Road markings	Primarily to demarcate priority at junctions and centreline of carriageway.
Junction Spacing (centreline-centreline)	30m minimum, 70m maximum.
Junction radii	3m to 10m.
Forward visibility	33m (Manual for Streets 1 & 2).
Visibility Splays	'x' = 2.4m, 'y' = 33m (Manual for Streets 1 & 2).
Centreline radii	R50m

STREET LANDSCAPING	
Verge width	See street section Figure 4k.
Street Trees	Semi mature trees planted within the verge on both sides of the carriageway (see 8.4.5).
Planting Palette	See 8.4.5.
INTERACTION WITH HOMES	
Direct Access to homes?	N/A Commercial Area only

Figure 4k: Street Type D Street Section



Location of Street Type D

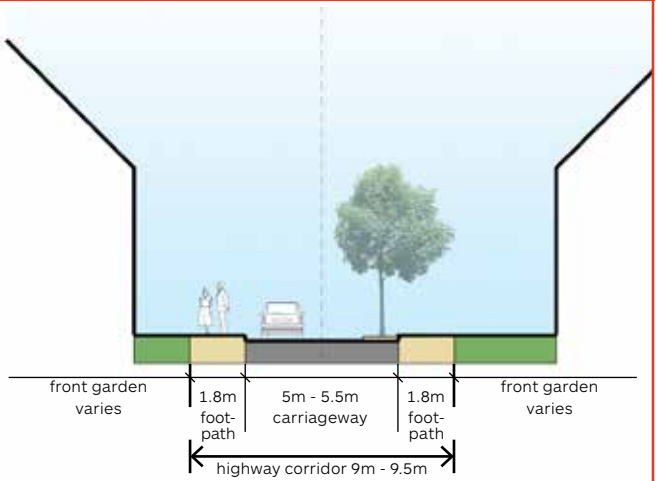
STREET TYPE E: MINOR ROUTES (RESIDENTIAL)

GENERAL INFORMATION	
Street Type	Type E: Minor Routes (Residential)
Location	Potential locations on inset plan.
Character	Less formal than the Tertiary Streets (Type C) – provides access to the residential areas.
STREET DESIGN	
Total Corridor Width	9m - 9.5m.
Footpaths	1.8m wide footway on both sides of the carriageway.
Cycle tracks	Cyclists ride within the main carriageway.
Carriageway	Width 5m - 5.5m.
Public Transport Route	No – Bus route not accommodated by carriageway.
Traffic Calming	→ Traffic calming intervention 30m to 40m; → Site accesses to development parcels; → On street parking; → Junction radii designed to encourage lower speeds; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under the footways where practicable. Strategic foul water and surface water sewers to be located within the carriageway.
Surface Finishes	See 8.4.1 Street design materials palette.
Kerbs	See 8.4.1 Street design materials palette.
Street Furniture	Traffic Signs.
Street Lighting	→ Formal street lighting appropriate for residential area; → 6m lighting columns; → Regular placing of lighting columns.
Through Access	→ Minor routes that are vehicular cul-de-sacs (with only one point of vehicular access) must have additional pedestrian / cycle connections / access
On Street Parking	Carriageway widths could have localised widening where appropriate to allow for on-street car parking

TECHNICAL DETAILS	
Target Speed	15mph (20mph posted speed limit).
Road markings	Occasional and where necessary.
Junction Spacing (centreline-centreline)	30m minimum, 50m maximum.
Junction radii	3m to 8m.
Forward visibility	17m (Manual for Streets 1 & 2).
Visibility Splays	'x' = 2.4m, 'y' = 17m (Manual for Streets 1 & 2).
Centreline radii	Not applicable.

STREET LANDSCAPING	
Verge width	See street section 4l.
Street Trees	Yes (see 8.4.5). Trees may be located in the public realm (subject to detail design), in addition to trees and landscape features in private realm front gardens.
Planting Palette	See 8.4.5.
INTERACTION WITH HOMES	
Direct Access to homes?	Yes.

Figure 4l: Street Type E Street Section



Trees: trees may be located in the public realm (subject to detail design), in addition to trees and landscape features in private realm front gardens.

Potential location of Street Type E: Minor routes

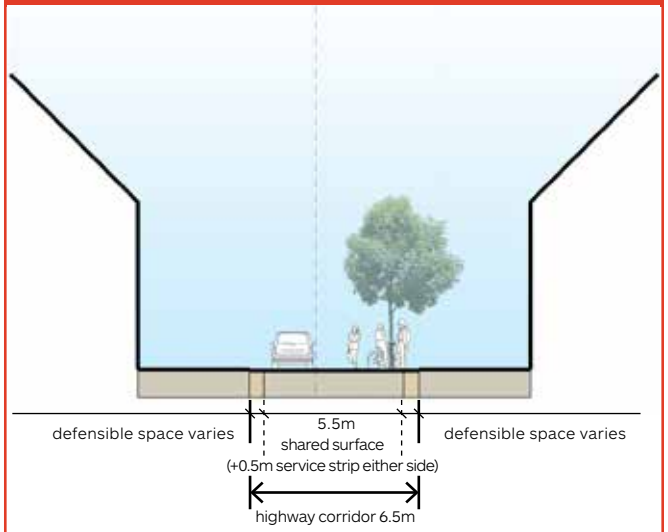
STREET TYPE F: MINOR ROUTES SHARED SURFACE (RESIDENTIAL)

GENERAL INFORMATION	
Street Type	Type F: Minor routes shared surface (residential)
Location	Within residential parcels, to be confirmed in detail design of reserved matters.
Character	Less formal than the Tertiary Street (Type E) – provides access to the residential areas.
STREET DESIGN	
Total Corridor Width	5.5m wide with 0.5m maintenance strips either side: 6.5m total corridor.
Footpaths	Pedestrians walk on shared surface.
Cycle tracks	Cyclists ride within shared surface.
Carriageway	5.5m wide with 0.5m maintenance strips either side: 6.5m total corridor.
Public Transport Route	No – Bus route not accommodated by carriageway.
Traffic Calming	→ Traffic calming intervention 30m to 40m; → Site accesses to development parcels; → On street parking; → Junction radii designed to encourage lower speeds; → Appropriate road markings; → All in accordance with the principles and philosophies as detailed within Manual for Streets.
Utilities corridor	Under the footways where practicable. Strategic foul water and surface water sewers to be located within the carriageway.
Surface Finishes	See 8.4.1 Street design materials palette.
Kerbs	See 8.4.1 Street design materials palette.
Street Furniture	Traffic Signs.
Street Lighting	→ Formal street lighting appropriate for residential area; → 6m lighting columns; → Regular placing of lighting columns.
Through Access	→ Minor routes that are vehicular cul-de-sacs (with only one point of vehicular access) must have additional pedestrian / cycle connections / access
On Street Parking	Carriageway widths could have localised widening where appropriate to allow for on-street car parking.

TECHNICAL DETAILS	
Target Speed	15mph (20mph posted speed limit).
Road markings	Occasional and where necessary.
Junction Spacing (centreline-centreline)	30m minimum, 50m maximum.
Junction radii	3m to 8m
Forward visibility	17m (Manual for Streets 1 & 2).
Visibility Splays	'x' = 2.4m, 'y' = 17m (Manual for Streets 1 & 2).
Centreline radii	R50m.

STREET LANDSCAPING	
Verge width	Defensible space variable, see Figure 4m.
Street Trees	Use similar palette to Street type E as listed in 8.4.5. Trees may be located in the public realm (subject to detail design), in addition to trees and landscape features in private realm front gardens.
Planting Palette	Use similar palette to Street type E as listed in 8.4.5.
INTERACTION WITH HOMES	
Direct Access to homes?	Yes.

Figure 4m: Street Type F: Minor Routes Shared Surface (Residential)



Trees: trees may be located in the public realm (subject to detail design), in addition to trees and landscape features in private realm front gardens.

4.4. Tertiary Streets as Spaces

Tertiary streets will be designed as spaces within which vehicles, pedestrians and cyclists share priority. This form of tertiary street is appropriate for streets which provide access to dwellings within the centre of development parcels, i.e. away from the primary movement network of KP1.

Where tertiary streets as spaces are provided, the following design principles will be followed, as demonstrated in the illustrative examples on the following page.

See section 8.4.1 Street Design Material Palette: Tertiary Streets as Spaces for a table of appropriate materials.

Design Principles:	
a.	Parking areas will be demarcated in a low key manner, for example, with granite sets.
b.	Where street parking is provided, the number of spaces will not exceed four in a row.
c.	Parking areas will be defined by landscaping such as trees, hedges and planted verges.
d.	Buildings surrounding the space will create enclosure through the appropriate use of boundary walls and dwelling frontages.
e.	Central drainage channels will be provided to drain surface run off within spaces, whilst also acting as a traffic calming measure.
f.	High quality surface materials will be used to create an attractive environment for pedestrians, cyclists and vehicles (see sub chapter 8.4 for details on materials).
g.	A minimum of 5m will be provided for vehicles moving through the space. The carriageway does not require definition through materials and should merge with the surrounding spaces.
h.	A minimum of 6m clear width will be provided adjacent to perpendicular parking spaces to allow for sufficient reverse space.
i.	Street furniture, such as benches and cycle parking, will be provided as necessary to encourage informal use by residents to encourage activity within spaces.

Examples of streets as spaces and appropriate use of materials, Upton, Northamptonshire

ILLUSTRATIVE EXAMPLES:

Figure 4n: Example plan A of tertiary street as space

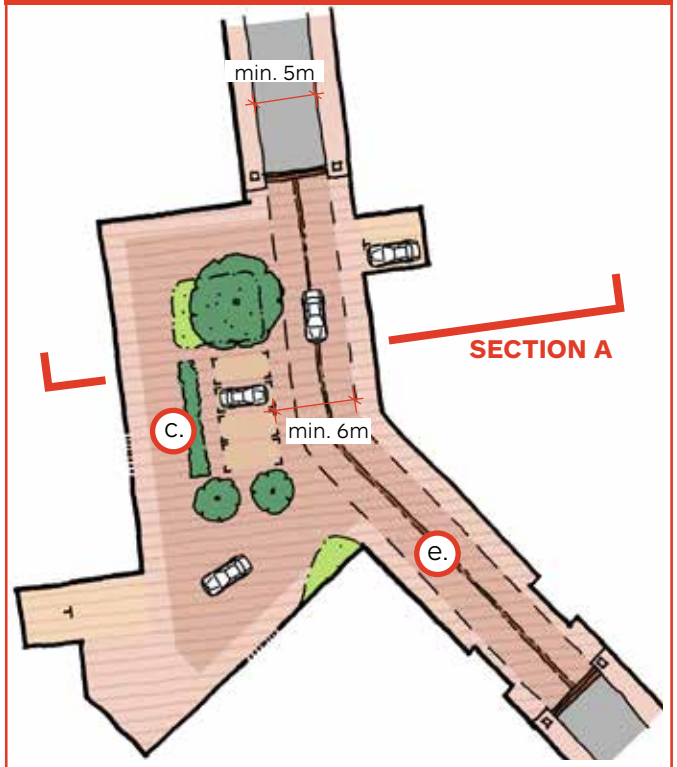


Figure 4o: Example plan B of tertiary street as space

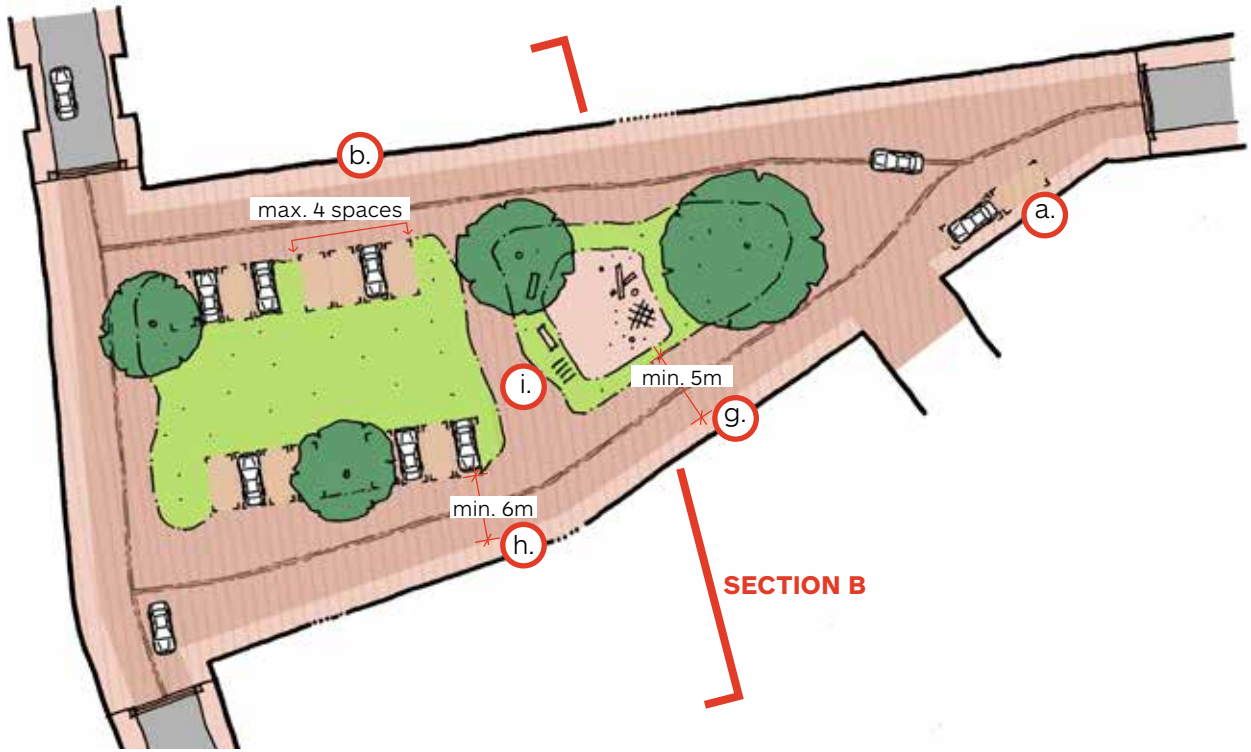


Figure 4p: Street section A through plan A

Figure 4q: Street section B through plan B

Key:

- 1-2m defensible space
- shared surface
- parking area
- drainage channel

4.5 Access to Minor Routes and Plots

The Regulatory Plan illustrates points of access from main streets (street types A, B, C, D, as per the Street Hierarchy Plan) into minor routes and development plots.

The points of access are highlighted on Figure 4r: Access to Minor Routes and Plots. Access points are indicated in two groups:
→ *Fixed location for access; and*
→ *Indicative locations for access.*

The exact position of these points of access will be determined at a later stage as detailed design proposals are prepared for each development parcel, with due consideration to proximity to junctions and other highway design issues.

Figure 4r: Access to Minor Routes and Plots

4.6 Design of Crossroads

In a small number of cases, minor routes will cross B-routes to create crossroads, as prescribed in the Regulatory Plan. The primary purpose of the crossroad arrangement is to provide east-west connectivity across the master plan for pedestrians and cyclists. The minor routes will only serve a small number of dwellings in the immediate area and will not provide vehicular connectivity in an east-west direction across green infrastructure and the wider KP1 master plan. See illustrations in Figures 4s and 4t.

The minor arms of the crossroads (paired T-junctions) will serve a finite number of dwellings in distinct neighbourhoods and not be used as principal routes through the wider development. They will in no instance be the only route by which these neighbourhoods could be reached, i.e. single points of access. The minor arms of these crossroads would typically directly serve no more than 40-50 dwellings. In the 'Formal Urban' areas this number may be in the range of 50-100 dwellings where the roads lead to apartment blocks as well as houses.

Figure 4s: Extract of Illustrative master plan (see Appendix 2) showing crossing arrangement and movements of vehicles, pedestrians & cyclists

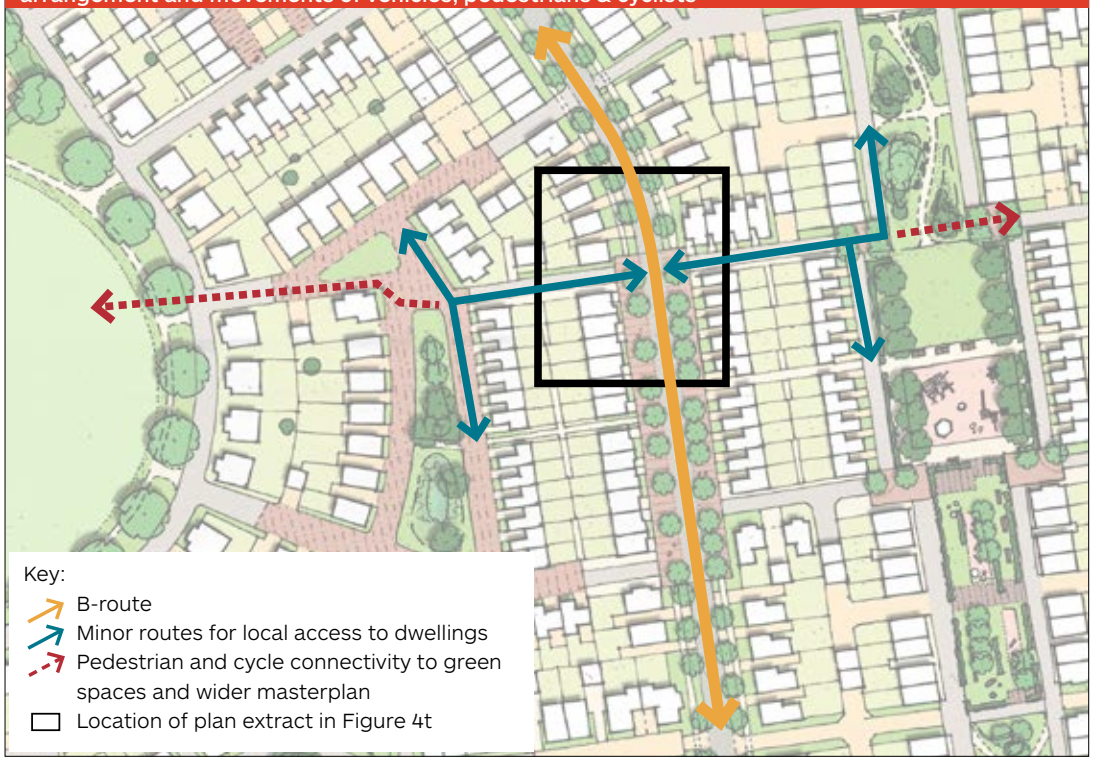


Figure 4t: Illustrative plan showing crossing arrangement

Key:

1. B-route running in a north south direction between the Boulevard and the A-route within KP1.
2. Minor routes in a crossroad arrangement to provide pedestrian and cyclist connectivity.

4.7 Service Access and Parking for Community Facilities

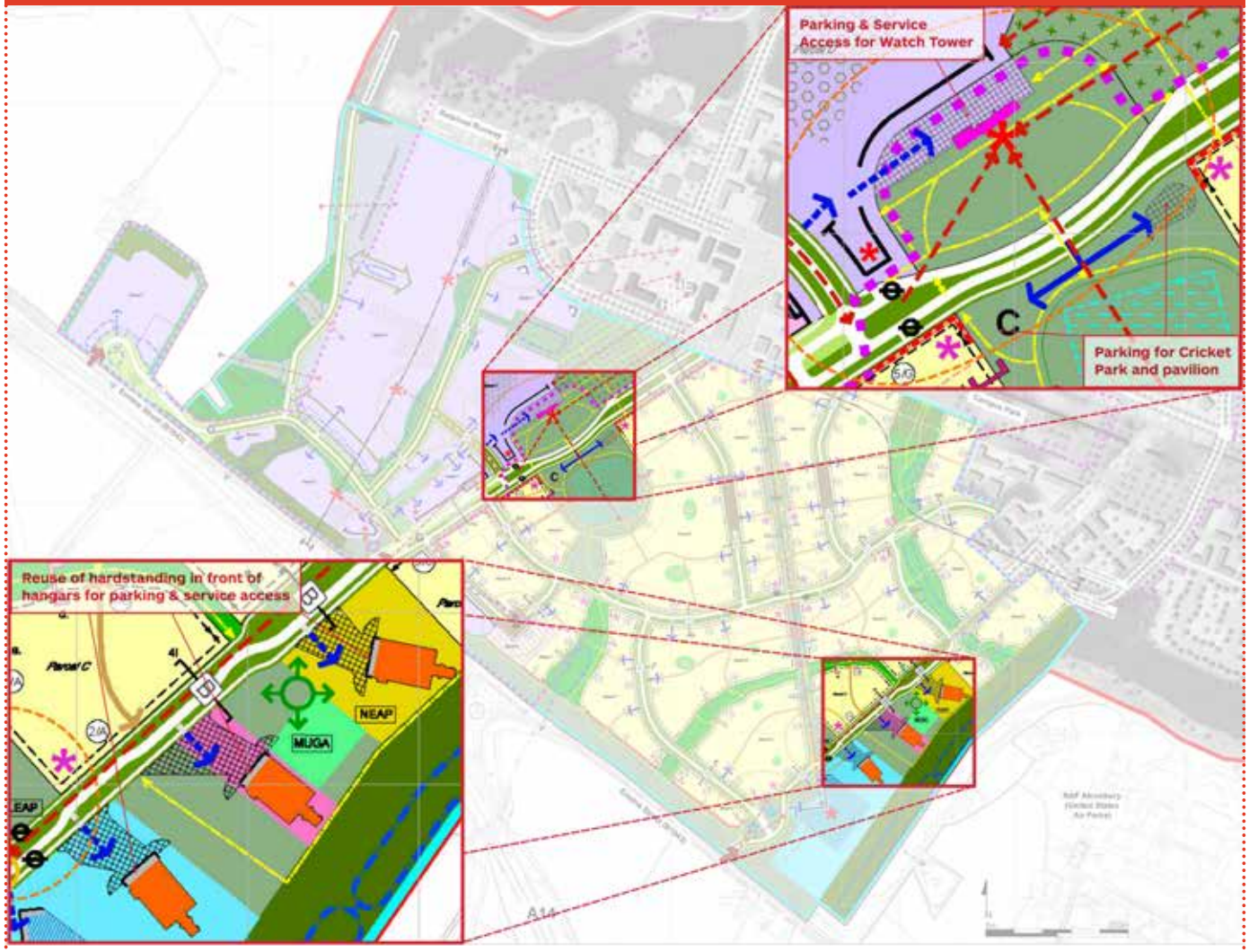
The Regulatory Plan identifies areas for service access and parking to serve community facilities. These areas are highlighted in Figure 4u: Service Access and Parking for Community Facilities. These areas relate to community facilities as follows:

- → **Listed Watch Tower Building** – service access and parking to be provided to the side and rear of the building, accessed from adjacent street. Parking required to be adjacent to the building to facilitate community use, but important to locate to the rear to ensure Watch Tower Green is reserved as open to the front of the Watch Tower.

- → **Cricket Park & Pavilion** – service and access to be provided to serve the Cricket Park and pavilion with access from the Boulevard Park Route. Location to be in corner of Cricket Park, opposite the pavilion.

- → **Hangars north of primary school** – potential to reuse existing hardstanding in front of the hangars for service, access and parking.

Figure 4u: Service Access and Parking for Community Facilities



4.8 Indicative Bus Service

The Regulatory Plan has the potential to accommodate public transport provision with bus services. Suggested locations for bus stops are illustrated on the Regulatory Plan and highlighted in Figure 4v Indicative Bus Service Plan. The potential bus stop locations relate to key points of activity within the site including:

1. Boulevard, central location to serve both the commercial area and residential area, immediately north of the Incubator Unit, and a short walk from the community facilities at Watch Tower Green and Cricket Park;

2. Mixed use area, central location within the proposed public square;

3. Residential area, central location on the spine route through the residential area (Type A Route);

4. Community Facilities within residential area, located adjacent the Primary School and Community Facilities, at the southern end of the Linear Park.

The indicative bus stop locations are evenly distributed throughout the KP1 area to facilitate accessibility. Figure 4v illustrates 400m walking distances (approximately 5 minutes walk) around each of the proposed bus stops, showing how the majority of KP1 is within 5 minutes walking distance of a bus stop in accordance with the Alconbury Weald Spatial Principles.

The exact route for bus services will be subject to negotiation with service operators.

Figure 4v: Indicative Bus Service plan

Indicative bus stop locations:

- **1** Boulevard, to serve commercial and residential
- **2** Mixed use area, within urban square
- **3** Street type A, central within residential area
- **4** Primary school, public space, entrance to residential early phases

400m, 5 minute walking distance

Points of access (entry and exit for bus service)

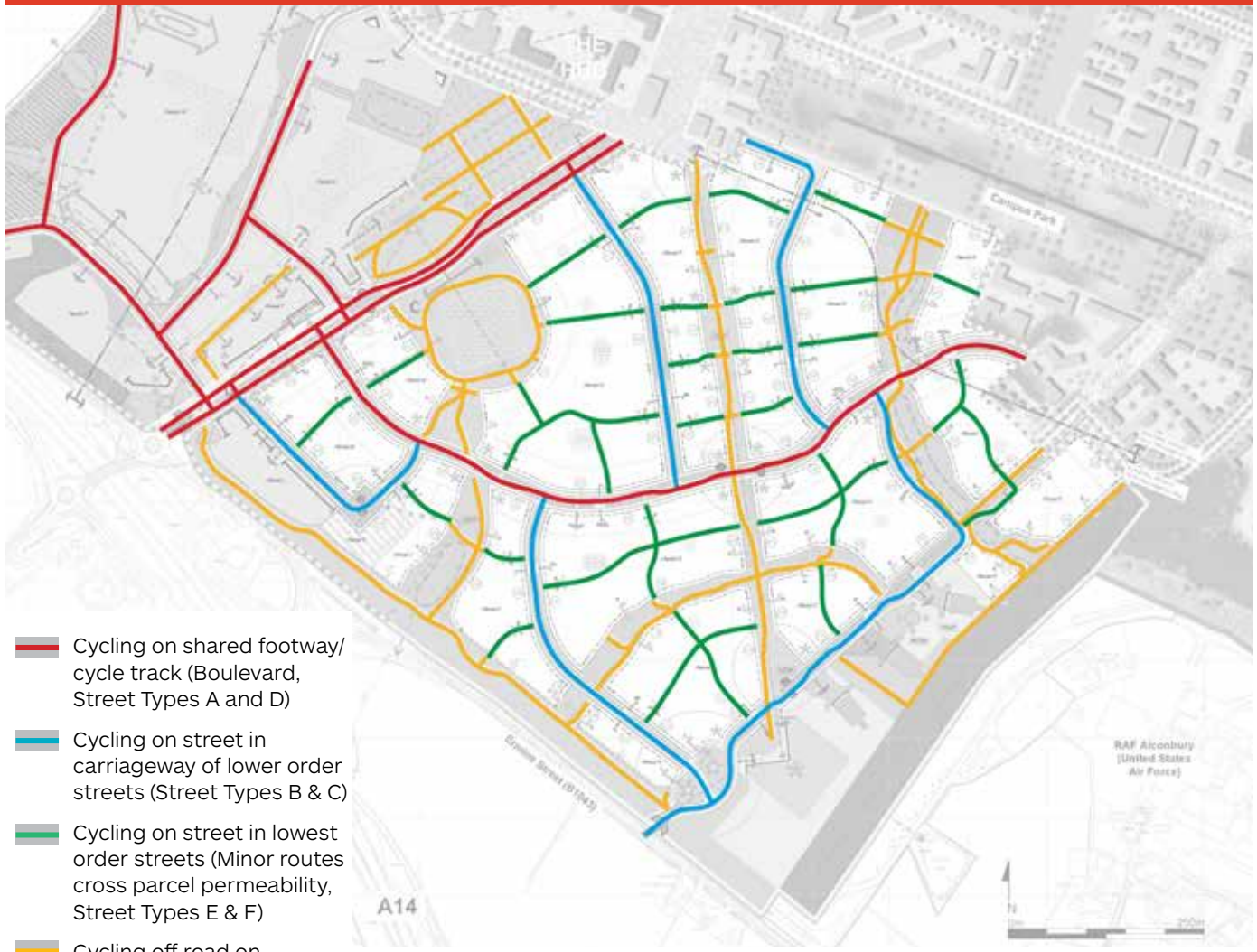
- **A** Residential, early phases
- **B** Boulevard main entrance

4.9 Cycle and Pedestrian Network

A comprehensive network of routes for pedestrians and cyclists must be provided to facilitate ease of movement by walking and cycling. The Regulatory Plan illustrates suggested routes for leisure paths for walking and cycling through the network of green infrastructure. These off-road leisure routes connect with the comprehensive network of connected streets which make provision for walking and cycling. Streets will have footways and either dedicated footway/cycle tracks to accommodate cycling or street carriageways that have sufficient width to accommodate vehicles and cycles.

The combination of off-road leisure routes and streets are illustrated in Figure 4w: Indicative Walking and Cycling Network.

Figure 4w: Indicative Walking and Cycling Network



Leisure Routes:
Pedestrian and Cycle Routes (off road)

In addition to provision for walking and cycling within street corridors a network of leisure routes (footpaths, cycle tracks) provide access for pedestrians and cyclists through green infrastructure, as illustrated on Regulatory Plan and Figure 4w.

Subject to detail design, and agreement with local planning authorities, detail design considerations for leisure routes include:

→ Surface: bitumous surface, bonded gravel or self binding gravel.
→ Edging: Concrete or timber edging
→ Width: subject to detail design but minimum of 3m if shared cycletrack/footway.

4.10 Access for all

The design and layout of all public space, especially the pedestrian and cycle routes, parks, and the key groupings in residential areas (Section 6.5) need to ensure that those who are less mobile are able to easily move around the development. The needs of those who are less mobile must be considered, measures should include:

- → Ensuring footpaths are level (as soon as they are established) for ease of movement especially those with wheelchairs or buggies.
- → Tactile paving for the sensory impaired (at junctions/crossing points).
- → Positioning of street furniture so it does not impede movement.
- → Where cycle and footpaths are shared ensure that there is adequate space without being hindered by street furniture, or shops signs etc so that those who may use wheel chairs or who require the use of a guide dog, for example, have enough room to move and not be restricted if a bicycle is also using the path at the same time.
- → Distinctive features within public realm design to promote wayfinding and ease of movement will assist all in understanding how to move around, this can be particularly important for the elderly or those suffering from illness such as dementia.

CHAPTER 5
Commercial Built Form

CHAPTER 5: COMMERCIAL BUILT FORM, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and shown on the Regulatory Plan.
The Compliance Checklist in Appendix 1 presents a complete list of design fix headings from the whole Design Code.

→ **Location of commercial development parcels** as shown on the Regulatory Plan.

→ **5.3 Extent and Rules.**

→ **5.5.1 Framing the Street (Employment Typology)** design fixes listed in table and illustrated by indicative figures.

→ **5.5.2 Reinforcing (Employment Typology)** design fixes listed in table and illustrated by indicative figures.

→ **5.5.3 Set in the Landscape (Employment Typology)** design fixes listed in table and illustrated by indicative figures.

→ **5.6 Commercial Area Common Parts Infrastructure**.

Figure 5a: Commercial Built Form: Highlighted on KP1 Regulatory Plan

5.1 Introduction

This section provides design guidance for the Commercial Area of Alconbury Weald KP1 as illustrated in Figure 5a: Commercial Area Regulatory Plan. Design guidance for commercial development includes:

Enterprise Campus

The Commercial Area located is positioned in the area of KP1 within the Enterprise Zone (EZ). The EZ boundary line is shown on the Regulatory Plan and Figure 5a. Known as the Enterprise Campus this area is part of the broader site-wide Enterprise Zone. The KP1 Commercial area represents the first phase of development within the EZ, with the Incubator the first building constructed within it.

The KP1 Location and Setting

The Commercial Area has a prominent position addressing the western side of the main Boulevard providing access into KP1 and onward towards future development phases including the central Hub of community activity. This edge is the 'front door' to the employment area of KP1 and built form must be orientated to frame the street (*see 5.5.1 Framing the Street*).

Facing east the Commercial Area addresses the KP1 residential area on the opposite side of the Boulevard; this relationship is important and design guidance requires a formal response on both sides of the boulevard with a higher degree of uniformity in frontage lines, building set backs and building heights.

The Commercial Area must manage the transition from employment to a more mixed land use environment in the Hub (to the north of KP1) by ensuring the edge opposite the Hub is designed appropriately. (*see 5.5.2 Reinforcing Hubs).*

West of the Commercial Area is predominately open agricultural land outside of the site boundary, although Hermitage Wood (located outside of the site boundary, north west of the Commercial Area) provides an important landscape feature and design cue that informs the proposal to establish more woodland on the western edge of the site. (*see 5.5.3 Set in the Landscape*). Ermine Street (the B1043) provides the boundary edge to the south-west of the Commercial Area.

5.2 Development Specification

In scoping the location and scale of employment uses, the Design & Access Statement Principles further define the design approach, particularly in terms of Amount (Chapter 5), Scale, and employment character. The approach to commercial design draws directly on the Alconbury Weald Outline Planning Permission Parameter Plan.

5.3 KP1 Commercial Area: Extent and Rules

Commercial Area: Extents
The Commercial Area, highlighted on the Regulatory Plan, is illustrated in Figure 5a.

The KP1 Commercial Area to the north west of the Boulevard covers an area of approximately 38 hectares (circa. 94 acres) up to the edges of KP1 (see fig. 5b, right) Within this area are strategic landscape features that frame development parcels, and streets that provide access to development plots.

Mixed Use:
Opposite the core KP1 commercial area, on the south east side of the Boulevard, is an area for employment and mixed use development that is within the Enterprise Zone boundary. The Regulatory Plan shows how this area on the opposite side of the Boulevard can accommodate a mixture of land uses, progressing from employment uses in the parcel immediately adjacent the Boulevard, to a parcel of mixed uses further along the street, finally blending into residential land uses consistent with the wider KP1 area for residential development.
The employment and mixed use areas south/east of the boulevard comprise the following, as illustrated in Figure 5b:

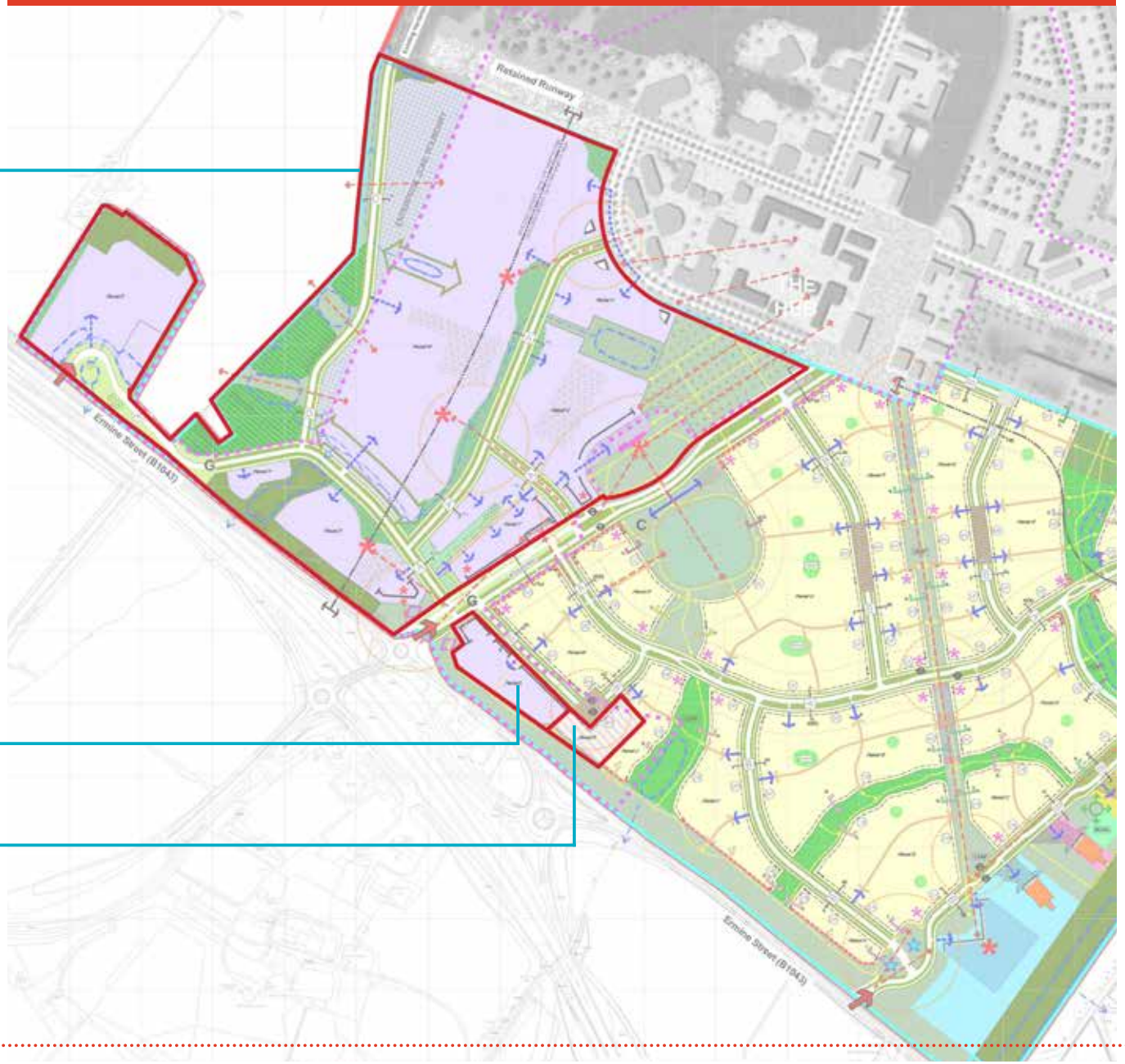
→ Employment land use to the south/east of the boulevard (circa. 1 hectare). This is noted on the Regulatory Plan as Parcel L (also see Fig 5b, right)

→ An area of mixed, residential and employment, land use (circa. 0.5 hectare). This is noted on the Regulatory Plan as Parcel K (also see Fig 5b, right)

→ Progressing into pure residential land use to the east, noted on the Regulatory Plan as Parcel J.

Note: Further design guidance for mixed use is provided in Chapter 6, including 6.5.2.A: 'Mixed Use Square Key Grouping'.

Figure 5b: Commercial and Mixed Use Areas, illustrative extract from KP1 Regulatory Plan



Commercial Area: Rules

The Alconbury Weald OPP has established the following important rules for the Commercial Area. These site constraints are illustrated on the Regulatory Plan.

→ **Outline Planning Permission Boundary:**
This provides the edges of the KP1 Commercial Area to the west and south.

→ **Enterprise Zone Boundary:**
This identifies the area within which employment built form can be developed (and receive the benefits of being located within the Alconbury Weald Enterprise Zone).

→ **Access:**
The Commercial Area benefits from two direct points of access from Ermine Street;

› The Boulevard main site access from Ermine Street, providing the major route into the Alconbury Weald site, providing a direct route to the Hub, passing through the KP1 commercial and residential areas;
› The HCV access route at the far north west end of the site.

→ **Building Heights:**
In line with the building heights established on the Parameter Plan (Outline Planning Permission). Two zones of appropriate building heights exist within the Commercial Area:

› Up to 15m height to ridge from the Boulevard towards the centre of the Commercial Area;
› Up to 12m height to ridge from the centre of the Commercial Area to the western site boundary.

→ **Appropriate Land Uses:**
The Commercial Area will accommodate employment uses consistent with the land use classes stated in the Alconbury Weald Outline Planning Permission. These land uses comprise:

› **B1 Business, including:**
- B1a Office
- B1b Research & Development
- B1c Light Industrial

› **B2 General Industry;**

› **+ Ancillary B8 Storage or Distribution / Sui Generis**

→ **Landscape:**
The Parameter Plan sets location for strategic landscape features including Boundary Edge Planting, Poplar Park Watch Tower Green.

→ **Listed Watch Tower Building:**
The listed Watch Tower building will be retained and refurbished for reuse, accommodating facilities that can serve both the employment area and the residential community. Potential new uses for the Watch Tower building include:

› A3 Food and Drink, a restaurant or café;
› D1 Non-residential institutions, for instance a crèche or day nursery; or
› An alternative D1 use for example could be an archive for storage of public records, linked to the Huntingdon town library and the Cambridgeshire County Council library service.

5.4 Commercial Area Design Principles

The Alconbury Weald Outline Planning Permission Design and Access Statement (DAS) established the three employment scenarios, extract as follows:

Employment Typologies

a. Framing a Street

b. Reinforcing Hubs

c. Set in the Landscape

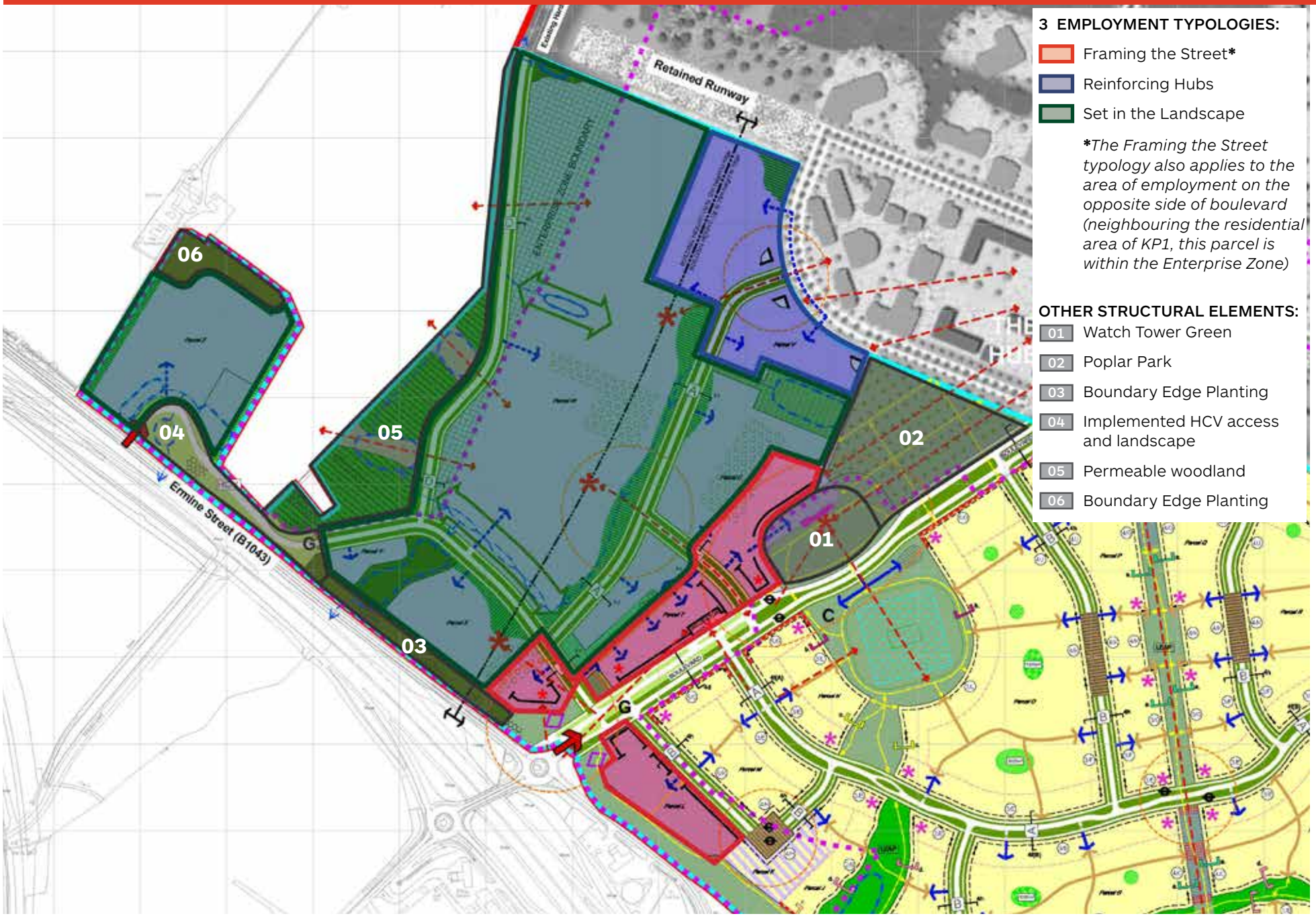
The different employment typologies will cover a range of plot ratios, ranging from assumed plot ratios of 0.42 for lower intensity uses 'set in the landscape', through to assumed plot ratios of 0.52 for higher intensity employment uses such as offices. The employment developments that use the lower plot ratios (for instance, down to 0.42) will have areas for parking, landscaping and servicing set around the built form. Employment developments designed at the higher plot ratios (for instance, up to 0.52) will generally have taller buildings with multiple floor levels, with a relatively higher proportion of the site left 'open' for parking, landscaping and services.

The three employment typologies are reflected in the KP1 Regulatory Plan. The location of the three employment typologies are highlighted in Figure 5c: Commercial Area Employment Typologies, and the conditions for each are set out in this section of the Design Code.

Commercial Key Groupings

In addition to the Employment Typologies, the Regulatory Plan identifies a number of commercial key groupings. These locations require specific design guidance as they play an important role in the placemaking of KP1. See 5.7 Commercial Area Key Groupings.

Figure 5c: Commercial Area Employment Typologies



5.5 Employment Typologies

Specific design fixes for each of the three employment typologies are outlined as follows, and should be read with reference to the Regulatory Plan. All proposals for development within the Commercial Area should address the following issues in the manner as appropriate for the designated employment typology:

→ General Character;
→ Location;
→ Streets;
→ Landscape Design Character;
→ Strategic Landscape Features;
→ Building Heights;
→ Building Design;
→ Building Types;
→ Frontage amenity depth;
→ Boundary treatment; and
→ Parking arrangements / form.

Design fixes are presented for each employment typology under the above listed categories, see 5.5.1, 5.5.2 and 5.5.3 on following pages.

Precedent photographs are presented to accompany each typology illustrating examples of similar design approaches, with annotations to note key features.

Location of Framing the Street Employment Typology:

5.5.1 FRAMING THE STREET (EMPLOYMENT TYPOLOGY)

General Character	*This employment typology explores the importance of using employment built form to frame and respond directly to the streetscape, especially on important routes. The key principle is for employment uses to be accommodated in buildings that directly address streets, with building frontage lines reflecting the geometry of the streets they address.* Extract from OPP DAS (2012)
Location	- Most prominent location addressing the main site entrance at the Boulevard Gateway, also addressing the Boulevard street and Watch Tower Green. - Important relationship with residential development opposite.
Streets	- Boulevard (including narrowing between Watch Tower Green & Cricket Park) to enhance connectivity between open spaces, residential & commercial areas. - Street Type A entering the Commercial Area from the Boulevard. - Mixed use and commercial parcels front a Street Type B on the south/east side of the Boulevard.
Landscape Design Character	- Most formal landscape character.- Formal structured landscape design responding to the formal landscape design of the Boulevard, Watch Tower Green and Poplar Park. - Boulevard Gateway: formal landscape planting at the entrance to the site from Ermine Street. Tree planting, signage and potential for landmark features.
Strategic Landscape Features	- The Boulevard: the major route into the site, tree lined with wide planted verges and central median. - Watch Tower Green: formally landscaped public open space that creates setting for the listed Watch Tower building. Important relationship with Cricket Park on opposite side of the Boulevard. - Poplar Park: formal woodland plantation of poplar trees set on orthogonal grid with leisure routes through for pedestrians and cyclists. - Woodland Blocks: set within commercial development parcels, incorporating SuDS, and leisure routes where public access is appropriate.
Building Heights	Up to 15m to ridge, as set in the OPP.

Building Types	- Bias towards B1 Business uses including:
	  - Offices; and
	  - Research and development premises.
	
	- Opportunity for B1 Light Industrial: any industrial process that can be carried out adjacent to a residential area without causing detriment to the amenity of the area.
	- Offices (and office elements of R&D and light industrial units) to be located in most prominent locations addressing the street frontage and Watch Tower Green (open space).

Building Design	- Buildings must be aligned to run parallel to the boulevard not set at angles. - Buildings in plots adjacent the boulevard must follow the massing set by the Incubator with long edge facing the boulevard to present maximum active frontage to the boulevard, short edge running perpendicular to the boulevard. - Buildings in plots adjacent the Watch Tower Green must provide active frontage addressing the open space. - Buildings should be dual-aspect to both front and back overlooking public realm to front and overlooking parking, servicing and private space to rear.
Frontage amenity depth	- A consistent depth of frontage between street and building frontage will be kept within plots. - Opportunity for variation between plots – some building frontages to edge of street, other buildings to accommodate short depth of landscaping between street edge and front building elevation.

Boundary treatment	- Where frontage landscape strips exist boundary treatments will be formal in character including:
	  - Clipped evergreen hedging;
	  - Low brick walls.

Parking arrangements / form	- Car parking to be provided to the rear of plot, behind buildings that address the boulevard and public realm frontage. - Cycle parking for staff to be secure, covered and located to rear of buildings, with smaller number of cycle stands to front of plot for visitors.

Figure 5d: Employment Typology Precedents: FRAMING THE STREET

Cambourne Business Park, Cambridge

Central Park, Manchester

Incubator Unit & Boulevard, Alconbury Weald

Milton Park, Oxfordshire

5.5.2 REINFORCING HUBS (EMPLOYMENT TYPOLOGY)

General Character	*This employment development typology is focussed on the important role that employment buildings will play in creating a strong sense of place around strategic hubs and centres of development. In these 'busy' locations activity is more concentrated and as such employment uses will be accommodated at higher densities, in taller buildings, in mixed use development blocks.* Extract from OPP DAS (2012)
Location	- Focused on the relationship between the Commercial Area and the Hub, this area must present high quality frontage of buildings and plots addressing the Hub. - Northern edge of the commercial area, removed from the primary frontage to the Boulevard. - Primary relationship is with the proposed Hub and mixed use development area opposite (to north / east). - Important relationship with Poplar Park to the east.
Streets	- Type A routes providing access to and through.
Landscape Design Character	- Emphasis on high quality public realm, hard landscape spaces and soft landscaping treatments to set a standard that can be followed on the blocks opposite within the central Hub and mixed use development area. - Predominantly formal landscape character. - Hard landscape bias for civic spaces addressing the mixed use areas and Hub opposite (to north/east). - Formal landscape planting to front of plot where frontage depth exists between building and street edge. - Richly landscaped car parks. - Some softer landscape with undulating landscape edge addressing the Type A route.
Strategic Landscape Features	- Poplar Park: formal woodland plantation of poplar trees set on orthogonal grid with leisure routes through for pedestrians and cyclists. - Woodland blocks: set within commercial development parcels, incorporating SuDS, and leisure routes where public access is appropriate. - Undulating landscape edge aligning to the route of the Type A Street. Landscape features to include: - SuDS to assist water management with streams and swales; and - Landscape bunds to screen servicing and car parking areas; - Rich landscape planting.
Building Heights	- This typology location is at the point of transition of a key building heights boundary informed by the Outline Planning Permission (see Regulatory Plan). - Up to 15m to ridge for the majority of the condition, particularly where facing the Hub / Mixed Use area. - Up to 12m to ridge to the west of this typology condition (see Regulatory Plan).
Building Types	Bias towards B1 and B2 with office components. B1 Business uses including: - Offices; and - Research and development premises. Opportunity for B1 Light Industrial: - Any industrial process which can be carried out adjacent to a residential area without causing detriment to the amenity of the area. Office buildings (and office elements of R&D, light industrial and general industrial units) to be located in most prominent locations addressing the street frontage.
Building Design	- Buildings will be located to address the Hub and the Type A Route; - Entrances, offices and office elements of buildings must directly address the Hub and / or the Type A Route; - Buildings should be dual-aspect with both front and back overlooking public realm to front and overlooking parking, servicing and private space to rear.
Frontage amenity depth	- A consistent depth of frontage between street and building frontage will be kept within plots. - Opportunity for variation between plots – some building frontages to edge of street, other buildings to accommodate short depth of landscaping between street edge and front building elevation.
Boundary treatment	- Where frontage landscape strips exist, boundary treatments will be formal in character including: - Clipped evergreen hedging; - Low brick walls.
Parking arrangements / form	- Car parking to be provided to the rear of plot, behind buildings that address the boulevard and public realm frontage. - Cycle parking for staff to be secure, covered and located to rear of buildings, with smaller number of cycle stands to front of plot for visitors.

Location of Reinforcing Hubs Employment Typology:

Figure 5e: Employment Typology Precedents: REINFORCING HUBS

Central Park, Manchester

Chiswick Park, London

Milton Park, Oxfordshire

Milton Park, Oxfordshire

5.5.3 SET IN THE LANDSCAPE (EMPLOYMENT TYPOLOGY)

General Character	*This employment typology explores a lower density form, with greater emphasis given to landscaping than in the other scenarios. This model of employment development promotes high quality pavilion form employment buildings set in the rich green landscapes.* *Plot size will generally be larger, with buildings set back from access roads allowing space for public and private landscaping, and adequate on plot parking.* Extract from OPP DAS (2012)
Location	- The majority of employment land set back within the Commercial Area. - The northern and eastern edges of the Commercial Area are defined by the *Fronting the Street* and *Reinforcing Hubs* character, leaving the larger plots within the Commercial Area for the *Set in the Landscape* character.
Streets	- Type A routes through Commercial Area.. - Recently implemented HCV access route. - Type D service route on the western boundary edge.
Landscape Design Character;	- Landscape design is the defining feature of this condition. - Generously landscaped edges to larger plots, within which a range of building forms can accommodated. - Greater depth to open plot between building and street, providing greater opportunity for landscape design including trees, bunds, hedges etc. - Richly landscaped car parks.
Strategic Landscape Features	- Undulating landscape edge aligning to the route of the Type A Street. Landscape features to include: - SuDS to assist water management with channels and swales; and - Landscape bunds to screen servicing and car parking areas; - Generous landscape planting. - Wooded links / woodland block: set within commercial development parcels, incorporating SuDS, and leisure routes where public access is appropriate. - Additional landscape treatments to the western edge of commercial plots where no built form can be developed as the area is outside of the Enterprise Zone; - Recently implemented landscape features associated with the HCV route.

Building Heights	- Predominately up to 12m to ridge (see Regulatory Plan). - This typology location is at the point of transition between a key building heights boundary informed by the Outline Planning Permission (see Regulatory Plan). - Up to 15m to ridge for the eastern area of this condition.
Building Types;	*All employment types with bias towards the larger footprint uses and B2 General Industrial Uses which will be separated from sensitive receptors such as homes.* *Retaining potential for more unusual and unexpected employment forms attracted to the uniqueness of Alconbury Weald.* *Extract from OPP DAS (2012).* - Office buildings (and office elements of R&D and industrial units) to be located in most prominent locations addressing the street frontage. - Greater opportunity for variety in alignment of buildings, which do not have to be perpendicular or parallel to street edges to plots. - Buildings can be arranged in asymmetrical form, less orthogonal structure, to maximise efficient use of plot to accommodate built form, parking and servicing areas.
Frontage amenity depth;	- Variable frontage depth between streets and building edges to allow for wider plots and larger areas for parking and servicing. - Wider plot depths between buildings and streets must be richly landscaped to create a green setting for the commercial area, screening larger commercial buildings.

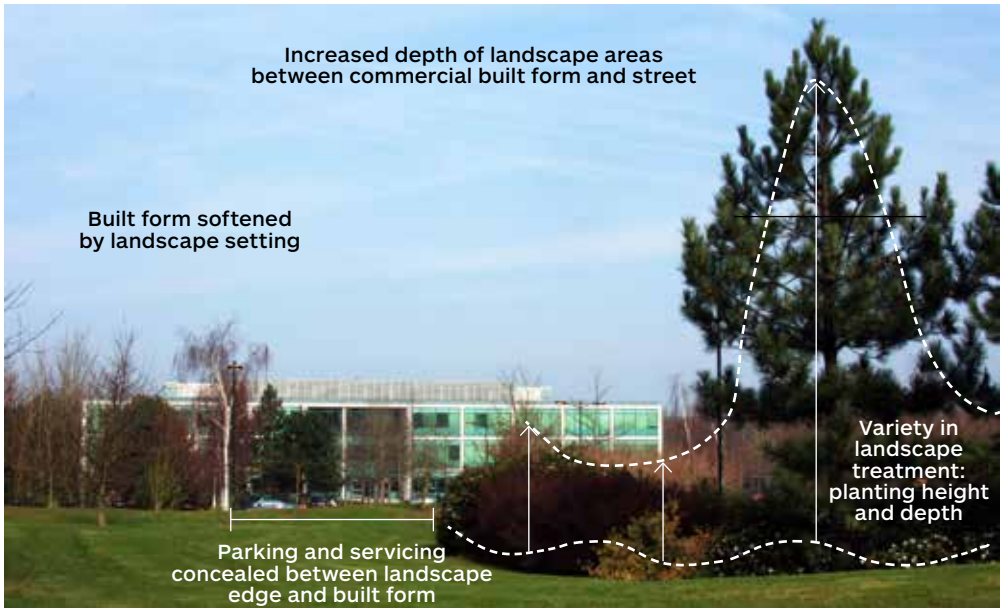
Boundary treatment;	- More naturalistic, informal style of planting.
	- Where frontage landscape strips exist boundary treatments can be more informal in character including:
	- More naturalistic design approach and species choice, less ornamental variety than Framing the Street;
	- Boundaries shall be demarcated by:
	  - Lines of trees;
	  - Clipped hedging
	  - Low brick walls.

Side of plot enclosure;	- Consistent treatment to side of plots with formal landscape planting and - Walls to demarcate edge of plots that address public realm.
Refuse;	- Waste and recycling storage and facilities must be well concealed, accommodated within the plot, not visible from the public realm. - Service access for refuse should be from side streets through to the back of plot, via car parks / service areas.
Parking arrangements / form;	- Wide plots allow for variation in parking provision. - Car parking areas to be created between buildings and landscape perimeter edges of plots of varying depth related to building size and occupier needs. - Cycle parking for staff to be secure, covered and located to rear of buildings, with smaller number of cycle stands to front of plot, adjacent to main entrance for visitors.
Servicing	- HCV access catered for by the recently implemented HCV route; - HCV access focussed away from core (Boulevard) routes. - Supplemented by the proposed Type D Service Route along the western site boundary. - Access points from these routes directly into commercial plots.

Location of Set in the Landscape Employment Typology:

Figure 5f: Employment Typology Precedents: SET IN THE LANDSCAPE

Cambourne Business Park, Cambridgeshire



King's Hill Business Park, Kent

Milton Park, Oxfordshire

Kings Hill Business Park, Kent

5.6 Commercial Area common parts Infrastructure Design Guidance

Strategic Landscape Features

Strategic landscape features that define the structure of the commercial area include the following which are presented in more detail in Chapter 3, Green Infrastructure:

→ 3.3 - Woodland blocks

→ 3.4 Permeable Woodland

→ 3.5 Wooded Links

→ 3.6 Boundary Edge Planting

→ 3.8 - Watch Tower Green;

→ 3.13 - Poplar Park;

→ 3.17 - Commercial Pocket Park

→ 3.19 - Boulevard Gateway;

→ Boulevard (tree lined street, see chapter 4);

Additional landscape features within the commercial area include the following:

Undulating landscape edges

Design features of the undulating landscape edges include:

→ Undulating landscape edges aligning to the route of the Type A Street. Landscape features to include:
  › SuDS to assist water management with streams and swales;
  › Landscape bunds to screen servicing and car parking areas; and
  › Rich landscape planting.

Landscape edge to commercial plots

Design features of the landscape edge to commercial plots include:

→ The area of commercial plots that are outside of the Enterprise Zone (see boundary on Regulatory Plan) which cannot accommodate built form (but can accommodate associated features including landscape, access, parking and servicing;
→ Landscape and servicing features may be accommodated in these areas including parking, service access for vehicles, and landscape treatments (trees, woodland, lower level planting, bunds, SuDS).

Recently implemented landscape features

Recently implemented landscape features include:

→ SuDS, tree planting, bunding and grass seeding adjacent to the HCV access route;
→ Black polyester powder-coated metal security fencing defines the edges of this area and this specification should be continued where fencing is required in future development plots;
→ Timber knee rail to define plot boundaries.

Common design guidance for specific public realm and built form features

Some aspects of development within the commercial area should be consistent across all three employment conditions, regardless of the designated typology. For instance street furniture should be consistently specified to create a uniform appearance to ensure continuity of appearance in the public realm.

A common design approach should be applied to the following issues:

→ Street design;
→ Signage & Branding;
→ Street Lighting;
→ Other street furniture;
→ Architectural Character;
→ Point Features;
→ Entrance Details;
→ Fenestration;
→ Roofscape;
→ Side of plot enclosure;
→ Refuse;
→ Servicing;
→ Parking: Specification of materials.

Design Guidance for the above listed common parts design issues is summarised in the following table (over).

Some of the issues are also expanded upon in Part D: Technical Details, notably under section 8.4 Public Realm Palette.

Tabulated overview of common design fixes for commercial areas:

Street design	- The design of streets to be consistent throughout the commercial area; - See Chapter 4, Movement and Access.
Signage & Branding	- Consistent approach throughout the whole commercial area, including; - Information Signage – welcome signage at entrance gateways, signage for individual plots to all be of same design family; - Street name signage (see 8.4.3 & 8.4.6).
Street lighting	- Consistent specification of street lighting, stands/columns and luminaires. - See 8.4 Public Realm palette for further details.
Other street furniture	Consistent palette of all other street furniture including: - seating; - bus shelters; - bollards; - cycle stands; - See 8.4. Public Realm palette for further details.
Architectural character	- The highest standard of architectural design must be applied to built form addressing the public realm of the Boulevard, Watch Tower Green and Poplar Park. - Highly visible plots that must deliver high standards of design to present an attractive vision of the development. - Contemporary form of architecture emphasising use of natural light with large fenestration. - Energy and water efficient building design required in all built form.
Point features	Accentuation of building height (up to 15m) to be used to mark important features including: - Framing gateways; - Important corners; - Building entrances; and - Termination of views and vistas. Key locations for built form emphasis identified by red star icons on the Regulatory Plan: these locations are centred on the change in building height (heights defined by OPP consent and parameter plan) and aligned to terminate views from adjacent streets and spaces.

Entrance details	- Front doors and entrances to buildings to be orientated to face the main streets and public spaces. - Entrances to be emphasised with architectural accentuation (colour, change in form, massing, materials). - Footpaths to connect directly from the boulevard footway to building entrances.
Fenestration	- Active building frontages required on building elevations that address the public realm, streets and key spaces. - Windows and front doors to primarily be orientated to address the public realm of the streets and public spaces. - Windows to be large to enhance natural light penetration into buildings and maximise inter-visibility. - Windows to both sides of corners, maximising frontage and providing duel aspect fenestration details.
Roofscape	- Predominantly consistent roofline for elevations addressing the boulevard; - Opportunity for some variation to accentuate point features (see above); - Opportunity for green and brown roofs to provide natural habitat and aid water management.
Side of plot enclosure	- Consistent treatment to side of plots with formal landscape planting; and - Walls to demarcate edge of plots that address public realm.
Refuse	- Waste and recycling storage and facilities must be accommodated to the rear of plot, away from the public realm. - Service access for refuse should be from side streets through to the back of plot, via car parks / service areas.
Servicing	- HCV access generally to side / rear of buildings. - Service access for deliveries, larger vehicles etc should be accommodated to the rear of the plot, via communal shared parking and service areas.
Parking: specification of materials	- Permeable surface material must be specified for all parking areas; - Consistent specification of materials could include webbed / mesh concrete paviours with grass sown between.

5.7 Commercial Area Key Groupings

In addition to the Development Typologies, the Regulatory Plan identifies four commercial Key Groupings. Commercial area key groupings are locations which require additional design guidance as they play an important role in the placemaking of KP1. The four key groupings for the commercial areas should adhere to the illustrations as guidance for detailed design. The Key Groupings are as follows:

1 The Boulevard

2 Watch Tower Green

3 Central Commercial Junction

4 The Hub Edge

Location of key groupings shown in Figure 5g. Guidance for each key grouping presented over the following pages in Figures 5h - 5k.

Figure 5g: Regulatory Plan Extract showing location of commercial key groupings

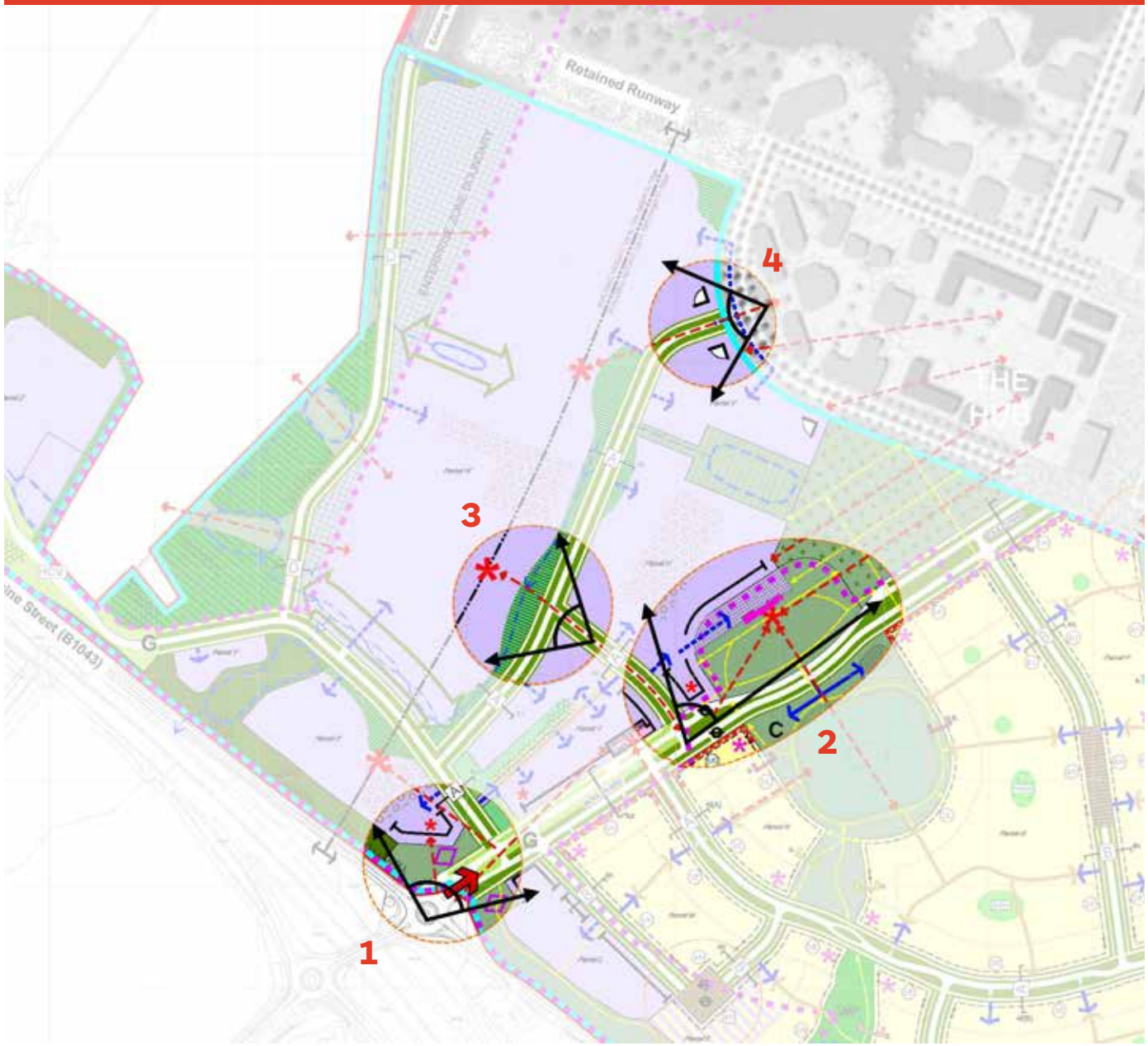


Figure 5h: COMMERCIAL AREA KEY GROUPING 1: The Boulevard

Key Grouping Location Plan

PLOT ACCESS, SERVICING AND PARKING TO REAR OF PLOT

ACCESS, PARKING AND SERVICING CONCEALED TO REAR OF PLOT IN TREE LINED SETTING

HIGHEST ARCHITECTURAL QUALITY ACTIVE FRONTAGE TO BOULEVARD

CONSISTENT BUILDING LINE

INCUBATOR

To the Hub

Tree Lined Boulevard

MIXED USE AND RESIDENTIAL FRONTING BOULEVARD

IMPORTANT CORNER FRONTAGE TO ENTRANCE GATEWAY AND BOULEVARD

LANDSCAPE EDGE: BUNDS, TREES, LEISURE ROUTES

OPPORTUNITIES FOR ENTRANCE FEATURES (SIGNANGE, PUBLIC ART)

LEISURE ROUTES

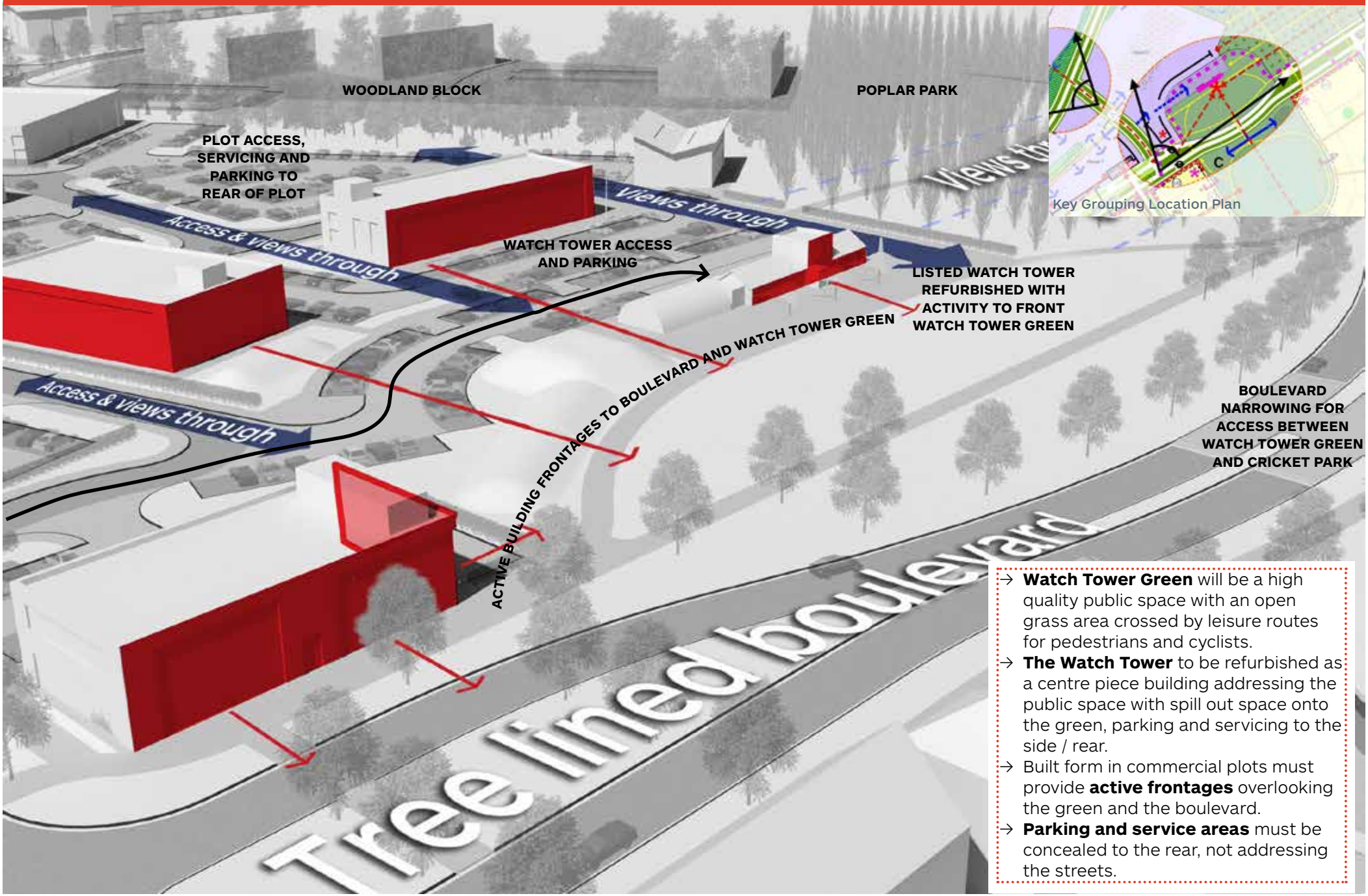
LANDSCAPE EDGE: BUNDS, TREES, LEISURE ROUTES

New Entrance Roundabout

Ermine Street Access Improvements

- → Built form in the commercial plot adjacent the main entrance must address the Boulevard and the Type A through-street. The building will be a **landmark** and must make a strong architectural contribution on this important gateway corner.
- → **High quality landscape design** for the gateway.
- → **Active frontages** with a consistent building line must address the boulevard.
- → **Parking and service areas** must be concealed to the rear, not addressing the streets.

Figure 5i: COMMERCIAL KEY GROUPING 2: Watch Tower Green



→ **Watch Tower Green** will be a high quality public space with an open grass area crossed by leisure routes for pedestrians and cyclists.
→ **The Watch Tower** to be refurbished as a centre piece building addressing the public space with spill out space onto the green, parking and servicing to the side / rear.
→ Built form in commercial plots must provide **active frontages** overlooking the green and the boulevard.
→ **Parking and service areas** must be concealed to the rear, not addressing the streets.

Figure 5j: COMMERCIAL KEY GROUPING 3: Central Commercial Junction

- → **High quality area of public realm** at the junction between Type A streets.
- → The termination of the A route from the Boulevard should be marked by high quality public realm and landscape.
- → Commercial buildings to position **active frontages** / office elements to address the corners of the junction, with parking and servicing located to the rear.
- → **Undulating landscape features** along the central A route with opportunity for SuDS and landscape bunds to provide landscape interest in addition to the tree-lined street.

BUILDING HEIGHT: UP TO 12M HEIGHT TO RIDGE

BUILT FORM EMPHASIS TO TERMINATE VISTA FROM BOULEVARD

Key frontage facing junction

PARKING & SERVICING SET WITHIN BLOCK

BUILDING HEIGHT: UP TO 12M HEIGHT TO RIDGE FACING STREET

Tree lined street

HIGH QUALITY PUBLIC REALM BETWEEN BUILDING FRONTAGES

TREE LINED STREET

UNDULATING DEPTH OF LANDSCAPE EDGE

IMPORTANT CORNER ADDRESSING STREET

PARKING & SERVICING SET WITHIN BLOCK

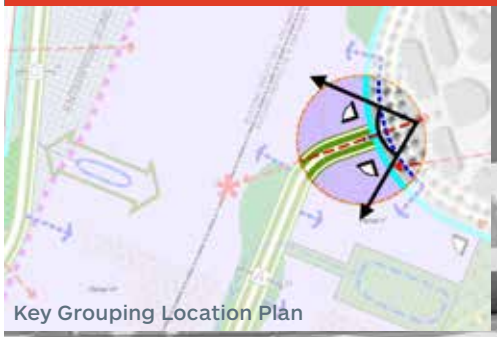
IMPORTANT CORNER: BUILT FORM ORIENTATED TO ADDRESS STREETS

View from boulevard

Tree lined street

PARKING & SERVICING SET WITHIN BLOCK

Figure 5k: COMMERCIAL KEY GROUPING 4: Hub Edge



- → **High quality area of public realm** at the junction opposite the Hub.
- → Commercial buildings to position **active frontages** / office elements to address the corners of the junction, with parking and servicing located to the rear.
- → Opportunity for **accentuation of corners** of buildings providing 'bookends' either side of the street on the street corner addressing the Hub.
- → **Undulating landscape features** along the central A route with opportunity for SuDS and landscape bunds to provide landscape interest.

WOODLAND EDGE WITH GLIMPSED VIEWS THROUGH

Tree Lined Street

ACCENTUATE ARCHITECTURE AT IMPORTANT CORNERS

ACCESS, SERVICING AND PARKING TO REAR OF PLOT

ACCESS, PARKING AND SERVICING TO REAR OF PLOT

VIEW TO / FROM THE HUB

ACTIVE FRONTAGES ADDRESSING THE STREET, JUNCTION, AND THE HUB

ACTIVE FRONTAGE TO HUB OPPOSITE

AREA OF HIGH QUALITY PUBLIC REALM ADDRESSING THE STREET AND THE HUB

5.8 Commercial Area Building Design

The commercial building design philosophy seeks to:

→ provide high quality innovative designs and maximise flexibility for occupiers' activities which may change over time;

→ establish a visible balance between variety and unity throughout the development, whilst maintaining a coherent and logical philosophy that will unify the overall site massing;

→ positioning and juxtaposition of built elements to create view corridors from the site to its surroundings to ensure visual legibility and permeability;

→ use of materials of different textures and colours to enhance the architectural composition of each individual building, whilst maintaining a coherent approach to help unify the overall site massing; and

→ improve the environmental performance of the buildings and overall site, incorporating commercially viable environmental features to reduce the 'carbon footprint' and carbon emissions from the site.

Further information

For the further information on Commercial Area design issues refer to:

Chapter 8: Detailing the Place:

→ 8.2.1 Architectural Principles for Commercial Built Form

→ 8.2.2 Building Features for Commercial Built Form

→ 8.2.3 Materials Palette for Commercial Built Form

Chapter 9: Technical Details:

→ 9.3 Parking Standards

→ 9.5 Site Wide Utilities Accommodation

→ 9.7 Water Management, drainage & SuDS

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CHAPTER 6
Residential Built Form

CHAPTER 6: RESIDENTIAL BUILT FORM, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and are shown on the Regulatory Plan.
The Compliance Checklist in Appendix 1 presents a complete list of design fix headings from the Design Code.

→ **Location of residential development parcels** as shown on the Regulatory Plan.

→ **6.2 Plot Layout Rules:** fixed design principles for the layout of residential plots, as per the tables presented in section 6.2.

→ **6.5 Residential Layout Design:** including fixed locations of access points and key groupings. Design principles for key groupings.

  → **6.5.1 Minor Streets and Informal Green Spaces**.

  → **6.5.2 Key groupings.**

  → **6.5.3 Edge Condition Sections**

→ **6.5.4 Residential Character Areas:** fixed definition of character areas that inform the choice of material palettes (see Chapter 8, Detailing the Place for more specific guidance).

→ **6.5.5 Frontage Character:** locations for where specific residential building designs are required on the edges of parcels are as per the locations and annotations on the Regulatory Plan.

→ **6.5.6 Residential plot components**

→ **6.6 Residential Components Library,** including:

  → **6.6.1 Dwelling Typologies** – matrix listing acceptable dwelling types, including identification of where certain types are not permitted.

  → **6.6.2 Parking Typologies** – matrix listing acceptable residential parking solutions.

  → **6.6.3 Boundary Typologies** – identification of acceptable boundary treatments for residential plots.

→ **6.7 Typology Matrices:** overview of acceptable residential building typologies, height, set back, parking and boundary treatment. Matrices are labelled A to H corresponding with locations marked on the Regulatory Plan.

Figure 6a: Residential Built Form highlighted on Alconbury Weald KP1 Regulatory Plan

6.1 Introduction

This chapter prescribes the design of the residential development within Key Phase 1 and builds upon the principles set out in the Outline Planning Permission. The residential development will provide a permeable network of streets and spaces, enclosed and defined by a range of dwelling typologies. The selection of typologies and the way in which dwellings are grouped together is crucial to achieving the appropriate character for Key Phase 1.

This chapter of the Design Code relates closely to the Regulatory Plan; the contents of the chapter are summarised in the following flow diagram:

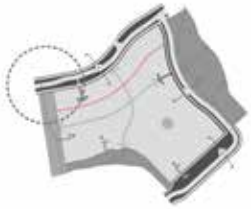
Contents of Chapter 6: Residential Built Form

RESIDENTIAL PLOT LAYOUT PRINCIPLES (refer to sub-chapter 6.2)

Rules which ensure good urban design principles are applied to residential development

UNDERSTANDING THE REGULATORY PLAN (refer to sub-chapters 6.3-6.4)

An explanation of relevant layers on the Regulatory Plan relating to residential layout design and how to use these layers.



RESIDENTIAL LAYOUT DESIGN (refer to sub-chapters 6.5-6.7)

Using the layers of the Regulatory Plan to prescribe residential layout design through the following steps:

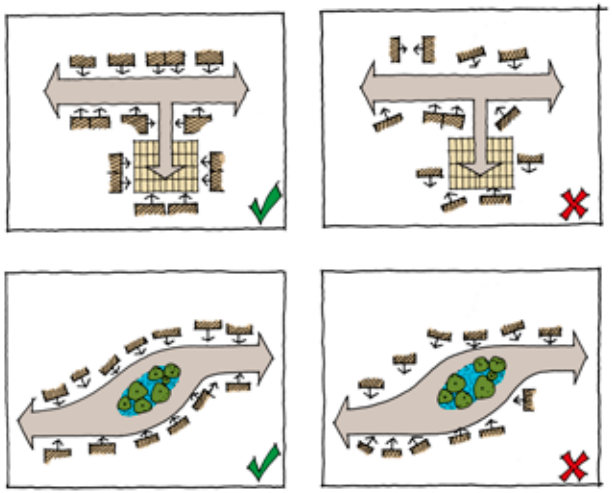
- → key groupings
- → edge conditions
- → residential character
- → frontage character
- → residential plot components
- → typology matrices

6.2 Residential plot layout principles

The eleven principles set out on the following pages will be adhered to in all Reserved Matter Applications. These principles are set out to ensure designs provide a coherent framework of well-designed streets and spaces, defined by appropriate building typologies.

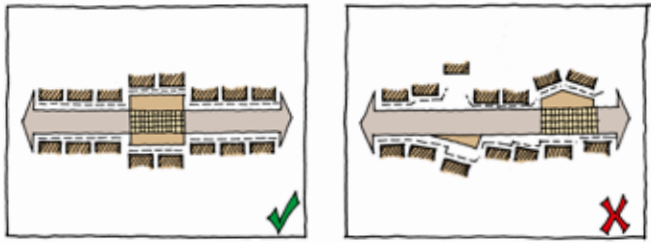
RESIDENTIAL PLOT LAYOUT PRINCIPLES

6.2.1. BUILDING ORIENTATION WILL RELATE TO ROUTES AND SPACES



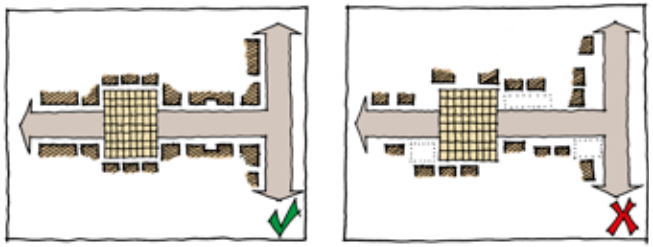
- → Buildings must directly face routes and spaces such that their primary frontage is parallel to the edge of that route or space
- → Buildings should not be positioned at an angle to the back-of-footpath line, or to the defined edge of a shared surface
- → For informal arrangements the dwelling must still align to the immediate edge of the route or space it faces
- → Primary entrances to buildings, or to entrance courtyards serving buildings, must be visible from the public realm

6.2.2. BUILDING ALIGNMENT WILL BE COHERENT



- → Building frontages must establish a common building line where they face routes or linear spaces (except in areas of lowest density, such as Ermine Village and Informal Suburban character areas, where some departure from this principle is permitted)
- → Set-backs from an established building line will be in accordance with the permitted dimensions stated in the Typology Matrices (see section 6.7)
- → Rear and flank walls of garages and outbuildings may be considered as components in establishing a common building line
- → Except in instances where a fundamentally different design approach is proposed and justified, the distance between building frontage and back of footpath should be minimised (but a buffer privacy strip of minimum 1m, including landscaping, maintained)

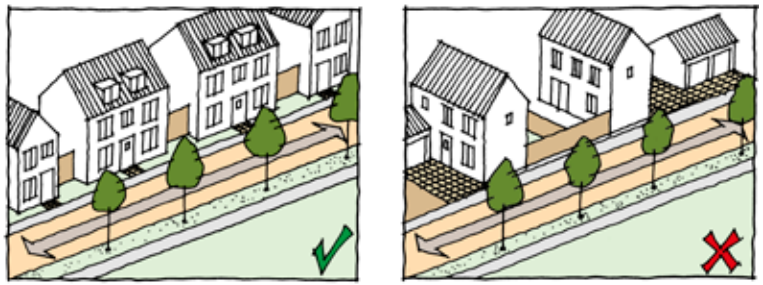
6.2.3. CONTINUITY AND ENCLOSURE WILL BE ACHIEVED



- → All frontages along streets and spaces must be designed to create clear definition through legible continuity of building form, linkage and positioning
- → Public and private space must be clearly distinguished through continuity of frontage
- → 'Semi-public' space arising from lack of continuity or enclosure must be avoided
- → Detached dwellings must nonetheless be clearly detached, with a minimum of 2.0 metres clear between flank walls

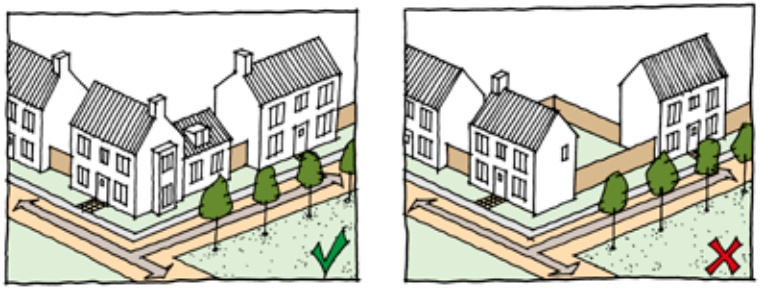
RESIDENTIAL PLOT LAYOUT PRINCIPLES

6.2.4. ROUTES AND SPACES WILL BE ADDRESSED BY ACTIVE FRONTAGE



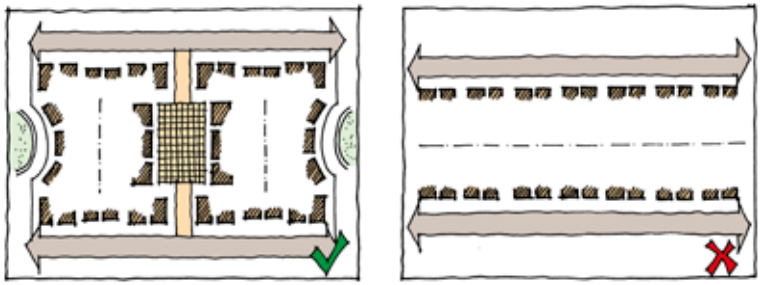
- → Routes and spaces must be overlooked by windows to habitable rooms at ground and first floor levels, facilitating natural surveillance.
- → Blank elevations largely devoid of windows must be avoided where they face – or are clearly visible from – the public realm.
- → Active frontage should be enhanced through the use of balconies at first floor level, glazing within or alongside primary entrances, and full height projecting bays on flank elevations where appropriate (see 6.2.5 Corners and Plot Sides).

6.2.5. CORNERS AND PLOT SIDES WILL BE POSITIVELY SOLVED



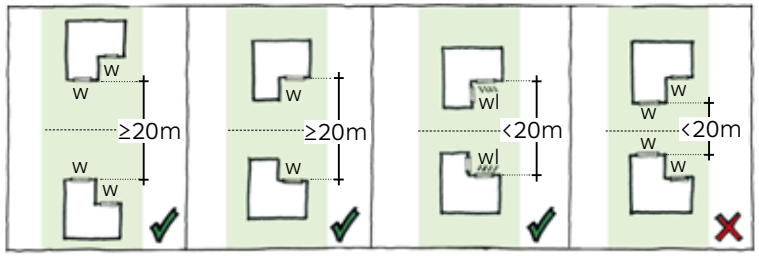
- → All buildings located on identifiable corners (where two routes, two spaces, or a route and a space meet) must positively address both directions through positioning of entrances, generous windows to habitable rooms, glazed bays /projections and upper level balconies where appropriate.
- → Building form will respond to defined corner locations through the tallest or largest element of the building mass being located directly on that corner.
- → Buildings L-shaped in plan should be positioned on defined corner locations.
- → Where a corner plot forms the end of a row of street-facing dwellings, the dwelling on that corner plot will have its primary entrance positioned on its flank elevation.

6.2.6. GROUPINGS WILL FORM COMPONENTS OF THE LAYOUT



- → Opportunities within development parcels to configure dwellings in identifiable groupings that define spaces of a certain character / function must be identified and taken.
- → Groupings will be discernible either as ‘clusters’ of buildings around a shared space, or configurations that face and define a particular space to their front.
- → Groupings will generally occur in areas of lower density or centrally within development parcels (i.e. away from primary routes and spaces where greater continuity of frontage is expected).

6.2.7. PRIVACY WILL BE MAINTAINED

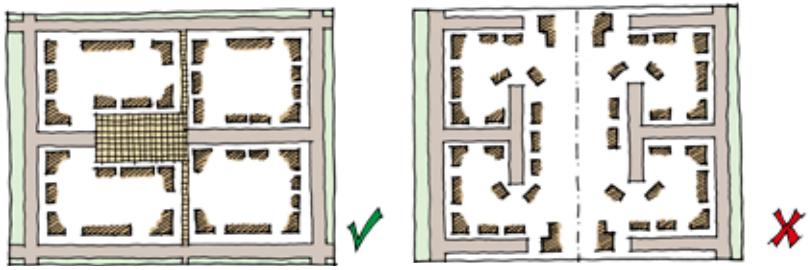


w = window, wl = window with privacy louvres or opaque glass

- → Direct views from dwellings into dwellings through windows on their rear and flank elevations will be avoided, either by separation of >20 metres (properties back-to-back) or through detailed design measures.
- → Appropriate design measures in higher density areas, such as Formal Urban, Formal Suburban and Mixed Use character areas, include use of opaque glazing or louvres, the angling or positioning of windows to avoid direct sightlines, and the use of full height screening to courtyards or terraces.
- → No habitable room will be served only by windows comprising opaque glass.

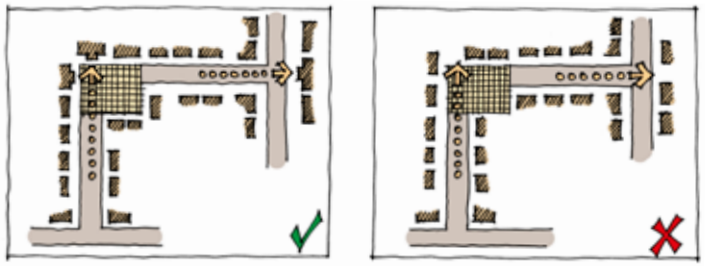
RESIDENTIAL PLOT LAYOUT PRINCIPLES

6.2.8. CONNECTIONS AND PERMEABILITY WILL BE INTEGRATED THROUGHOUT THE LAYOUT



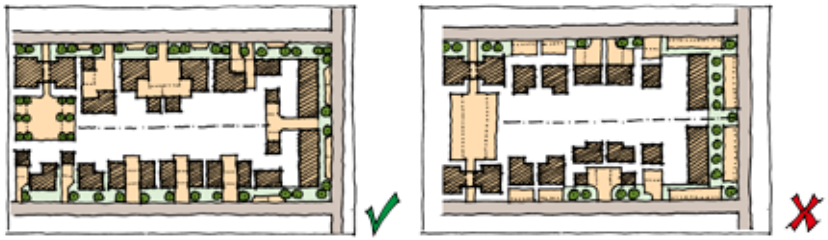
→ Pedestrian and cycle routes must be interconnected and not lead to dead-ends
→ Where vehicular routes reach a terminating space pedestrian routes must continue beyond that space and connect to the nearest public route or space
→ Rigid 'hammerhead' road arrangements must be avoided
→ Parking courts serving two or more dwellings must either be gated or offer a clear through-route to pedestrians

6.2.9. VISUAL STOPS WILL BE ESTABLISHED



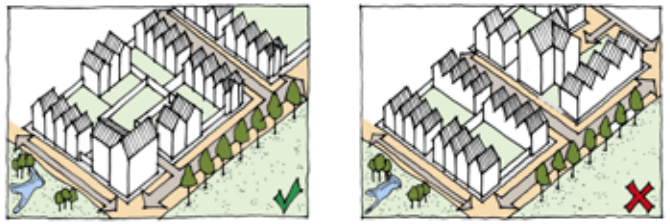
→ Where linear spaces or routes establish a vista, that vista will either end in a defined public open space or be terminated by a 'visual stop'
→ A 'visual stop' may be a carefully positioned marker building or landmark, or a prominent landscape feature
→ Vistas must not terminate in a view of, for example, a private driveway or garage door, or the side boundary wall to a plot.

6.2.10. CAR PARKING WILL HAVE MINIMAL VISUAL IMPACT



→ All development parcels must utilise a variety of parking solutions and not rely on just one or two methods of accommodating cars
→ On-plot parking must be positioned such that parked cars do not sit forward of the common building line where a layout has established street continuity (in lower density areas with larger plots it may be acceptable for on-plot parking to be positioned forward of the dwelling frontage)
→ All private parking spaces must be located with easy access to the dwellings they serve
→ In no instance shall a group of more than four parking spaces be proposed without sub-division by a landscape strip of minimum 1.5m
→ Further guidance on parking courts is set out in section 6.6.2
→ On-street parking, parallel to the carriageway, shall be laid out such that no more than two spaces are joined without sub-division by an area of landscape and sufficient space for planting of at least one street-tree.

6.2.11. APARTMENT BLOCKS OF 3 OR MORE STOREYS WILL BE LOCATED ON PARCEL EDGES / CORNERS



→ Apartment blocks of 3 or more storeys will be positioned to address primary routes on the edges of any given parcel, with the exception of where key spaces are contained within a parcel.
→ Development parcels will not display 2 storey edges to routes or spaces and 3 storey apartments within the body of the parcel.

6.3 Regulatory Plan - Residential Area

The information contained within the Regulatory Plan which is specific to the coding of residential development is highlighted in Figure 6b. The coding of residential parcels emphasises the importance of dwellings addressing the primary streets and green spaces within Key Phase 1. Figures 6c to 6h on the following pages provide a step by step guide to using the Regulatory Plan for designing residential layouts.

The land uses highlighted in Figure 6b of the Regulatory Plan will include the following:

→ **Residential** (C3 dwelling houses): there will be a range of housing provided across the master plan, to provide for a range of occupants. This will include accommodation for the elderly in appropriate locations.

→ **Mixed use** (B1 business): there will be an element of mixed uses in appropriate locations as shown on the Regulatory Plan. This will be in the form of small scale offices and light industry, alongside or below residential dwellings.

→ **Affordable housing**, where provided, will be distributed in small clusters across the master plan and designed to be tenure blind.

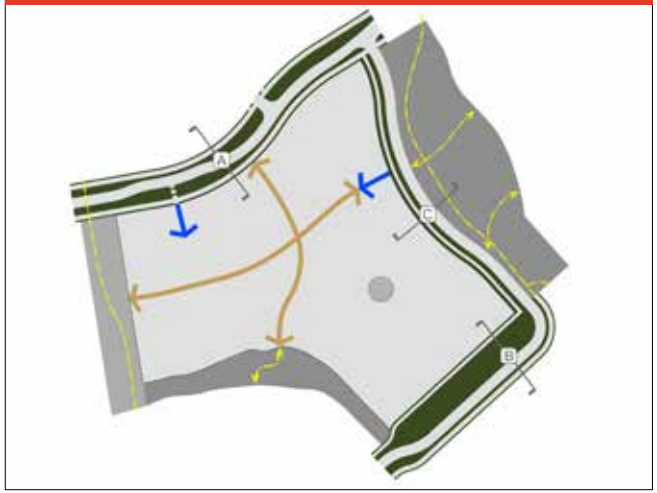
→ **Self-build plots** and **extra care facilities** will be acceptable within residential parcels. The location and design of these types of accommodation will be subject to further discussions with HDC.

Figure 6b: Alconbury Weald Key Phase 1 Regulatory Plan - Residential Area

6.4 Understanding and using the Regulatory Plan

The following sequence demonstrates how to use the Regulatory Plan for residential development:

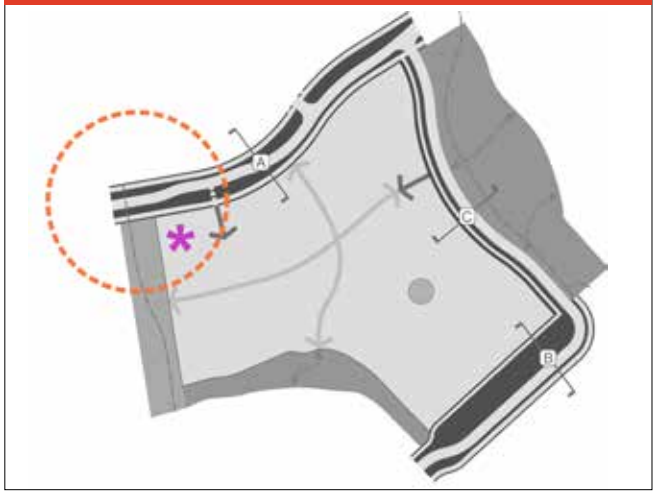
FIGURE 6C MINOR STREETS & INFORMAL SPACES

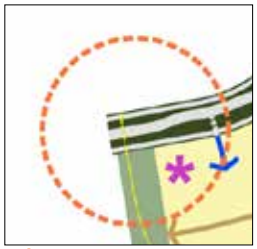


A network of minor streets and informal green spaces will be provided, linking residential development to the wider network of green spaces and streets, and ensuring permeability across all parcels.

- Fixed Vehicular Access point
- Minor street or route for pedestrians and cyclists achieving cross parcel permeability
- Informal green space

FIGURE 6D IDENTIFIED KEY GROUPINGS





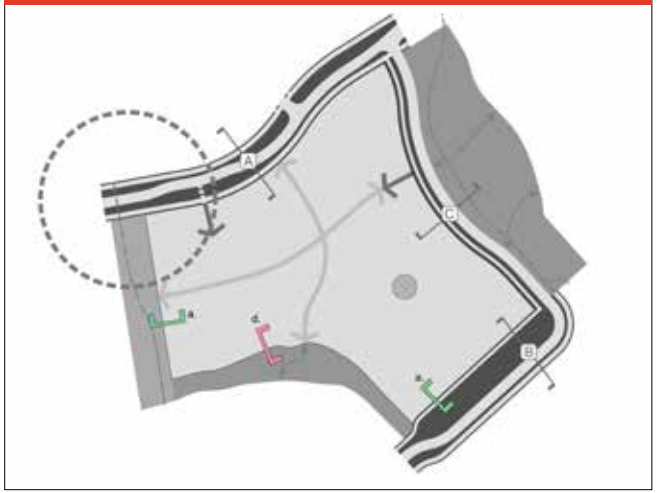
Key Groupings are areas of importance within Key Phase 1 which require special design consideration. Residential development which relates to a key grouping will follow the principles set out in sub-chapter 6.5.2.

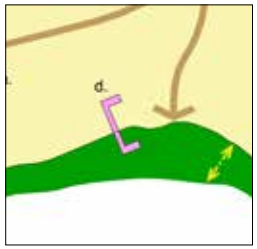
- Key grouping area
- Marker Building

Marker Buildings

Marker buildings are buildings in visually prominent locations or on corners, addressing key routes and spaces. The positioning and architectural expression of these buildings will therefore be given particular consideration at the design stage of reserved matters applications to ensure appropriate treatment is achieved. Proposals should demonstrate how marker buildings have been designed to reflect their prominence and status: they will demonstrate qualities over and above neighbouring buildings such as distinct architectural form, increased height, increased expanses of glazing, and additional external structure or features.

FIGURE 6E EDGE CONDITION SECTIONS

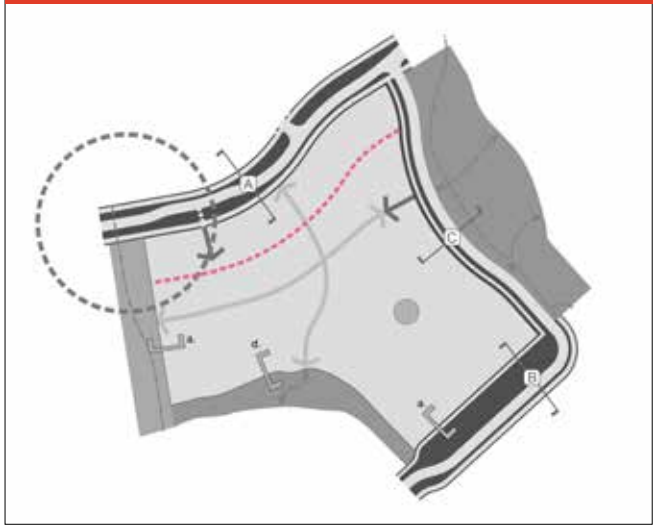


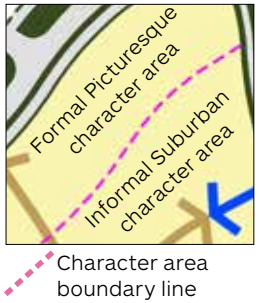


Edge condition sections illustrate the relationship between residential development and open space. Residential development will adhere to the principles set out within each relevant section in sub-chapter 6.5.3 to ensure the appropriate character and definition is achieved between buildings and primary open spaces.

- edge condition section

FIGURE 6F CHARACTER AREAS

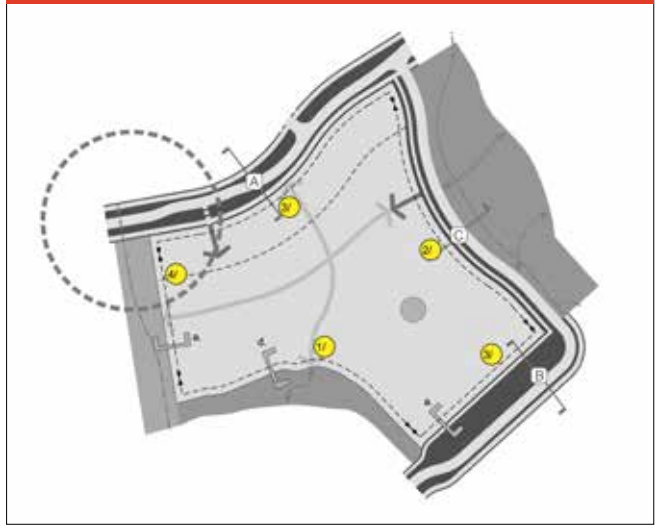


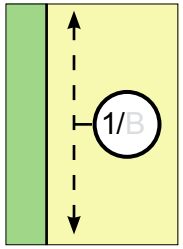


Character area boundary line

Character areas differentiate between the various forms of residential development and layout across Key Phase 1. There is a transition from informal to formal as the development progresses towards the Hub. Residential development will adhere to the description of relevant character areas in sub chapter 6.5.4 and adhere to the use of appropriate typologies, as set out in sub-chapter 6.7.

FIGURE 6G FRONTAGE CHARACTER

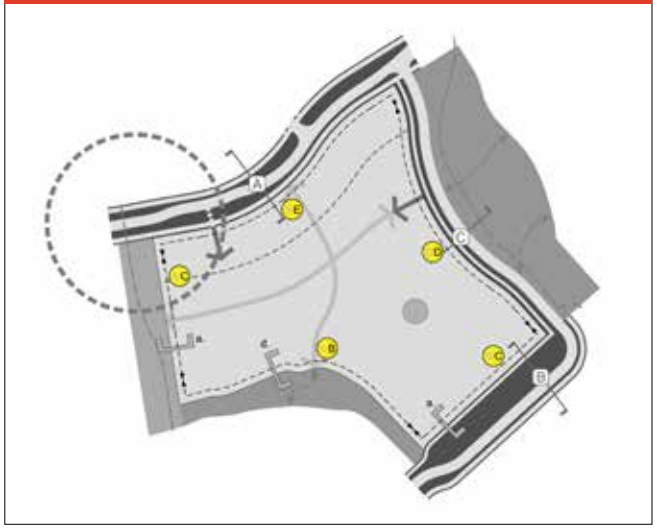


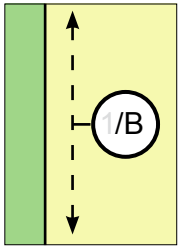


Frontage Character label (numbers 1-5)

The frontage character prescribes the type of dwellings appropriate along a specific frontage, and the broad principles of how these typologies will be arranged. This is annotated on the Regulatory Plan by a number 1-5 within the circle labelling each edge. Residential development will adhere to the relevant frontage character as specified on the Regulatory Plan and described in sub-chapter 6.5.5.

FIGURE 6H RESIDENTIAL PLOT COMPONENTS





Typology Matrix label (letters A-L)

Typology matrices stipulate the appropriate dwelling types, parking types, boundary treatments along a specific development edge. The heights of dwellings and their set back are also specified. The matrix relevant for a specific edge is annotated on the Regulatory Plan by a letter A-L within the circle labelling each edge. Residential development will adhere to the relevant typology matrix as specified on the Regulatory Plan and in sub chapter 6.5.6.

6.5 Residential layout design

6.5.1 MINOR STREETS AND INFORMAL SPACES

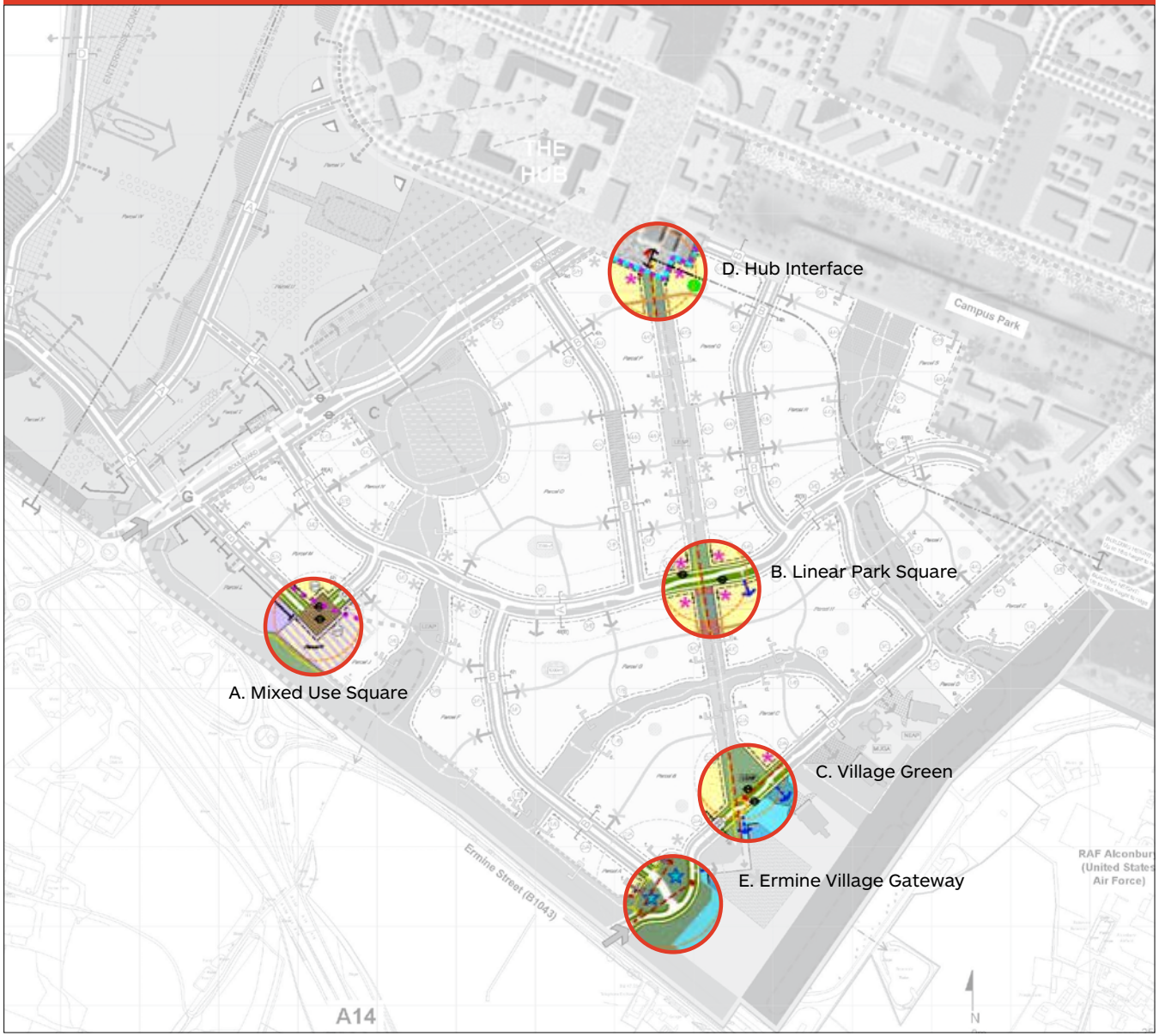
Individual development parcels will provide cross parcel permeability through a network of tertiary streets and pedestrian / cycle routes. The cross parcel permeability routes identified on the Regulatory Plan and in Figure 6b will be delivered as part of this network. Additional tertiary streets will be provided to serve dwellings and other uses within KP1.

The location and layout of the tertiary street network will follow the Plot Layout Rules set out in sub chapter 6.2 and the design of these streets will refer to chapter 4. Informal green spaces will be provided where indicated on the Regulatory Plan. These spaces will follow the guidance set out in chapter 3.

6.5.2 KEY GROUPINGS

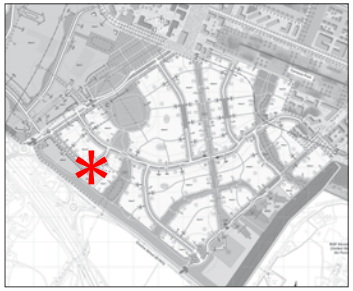
Key Groupings are areas which require special design guidance as they play an important role in the placemaking of Key Phase 1. The five Key Groupings identified in the residential area of Key Phase 1 will adhere to the design principles set out in this sub chapter, using the illustrations as guidance for detailed design. The locations of these key groupings are shown in Figure. 6i.

Figure 6i: Regulatory plan extract showing location of identified Key Groupings



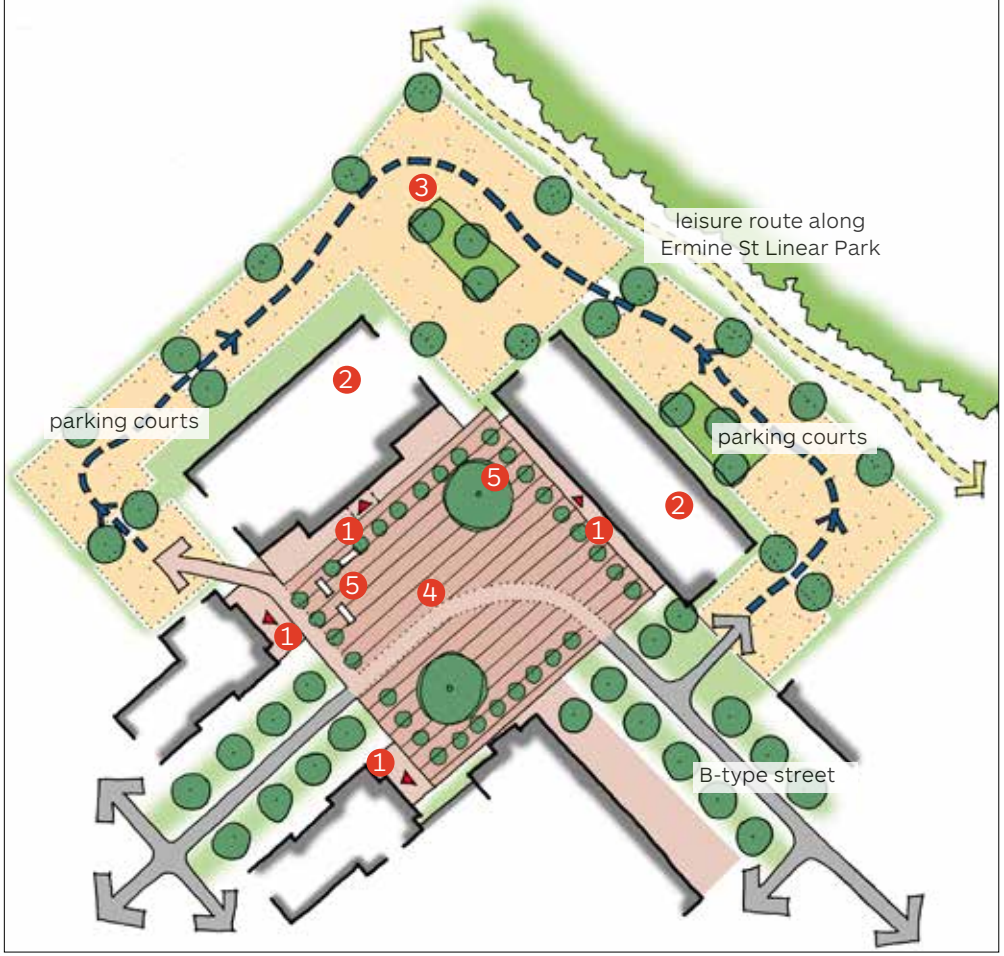
6.5.2.A MIXED USE SQUARE

The mixed use square will be a shared surface space, enclosed by buildings including apartments, small offices and other local facilities for people living and working in the area. The square will act as an interface and a transition between the residential and commercial uses within Key Phase 1.



Mixed Use Square location plan

Figure 6j: Mixed Use Square Design Principles



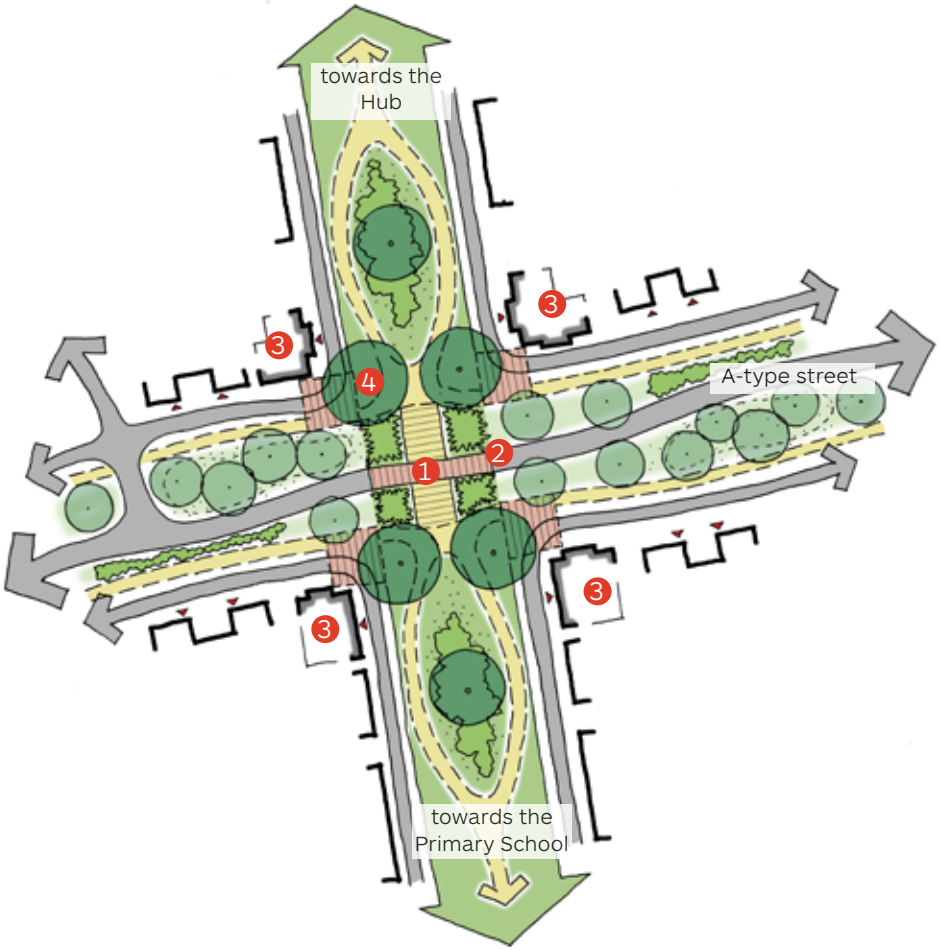
1. Entrances to buildings will be accessed directly from the square
2. Mixed uses will be provided on the ground floor, apartments and/or offices on upper floors
3. Parking will be provided to the rear of buildings with areas of landscaping to break up hard space
4. The square will be a shared surface with parking areas and trafficked routes subtly demarcated
5. Landscaping and street furniture will be provided to create places to meet and dwell within the square

6.5.2.B LINEAR PARK SQUARE

The Linear Park Square marks the meeting point of the north south Linear park and the A Type street at the centre of Key Phase 1. The square will be defined by dwellings on four corners and provide a safe crossing point for pedestrians through the use of landscaping and change of surface materials.

Linear Park Square location plan

Figure 6k: Linear Park Square Design Principles



1. Raised tables will create a pedestrian and cycle crossing point at grade, designed to give priority to pedestrians and cyclists
2. A change in the surface material at the crossing point will help to slow traffic
3. Dwellings on all corners will address both the street and the linear park through openings and entrances
4. Landscaping such as large trees and low level planting will mark the crossing point

6.5.2.C VILLAGE GREEN

The Village Green marks the crossing point of the two historic taxiways which form a vital part of the structure of Key Phase 1. The space will be defined by a variety of dwellings, opening onto the green, with the school terminating the north south vista on the southern edge. A LEAP will be provided as part of an informal meeting place for residents and school children.

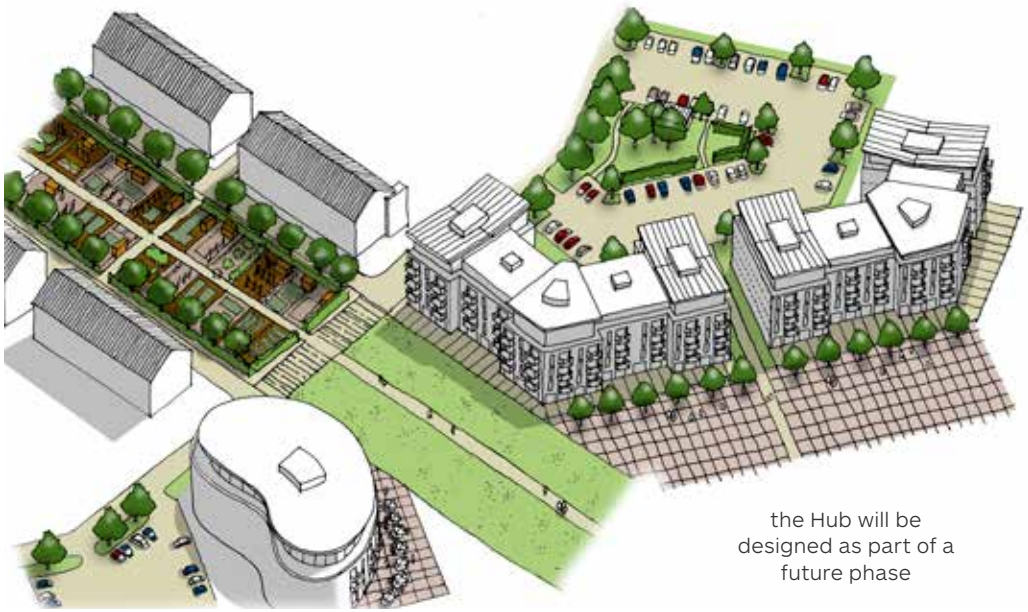
Village Green location plan

Figure 6l: Village Green Design Principles

1. Crossing points on desire lines will provide safe routes to the school from the Linear Park
2. Dwellings will address the space, with marker buildings at corners
3. Raised tables or similar traffic calming features will be provided at junctions to slow traffic
4. The LEAP will include naturally landscaped play areas to integrate with the surrounding parkland
5. School grounds will be screened by landscaping to create a natural southern edge to the green

6.5.2.D HUB INTERFACE

The frontage to the Hub will provide a high level of enclosure to the future central Hub at Alconbury Weald. This interface will connect pedestrian, cycle and vehicular routes to the Hub to create a highly accessible centre for all.



the Hub will be designed as part of a future phase

Hub Interface location plan

Figure 6m: Hub Interface Design Principles Plan

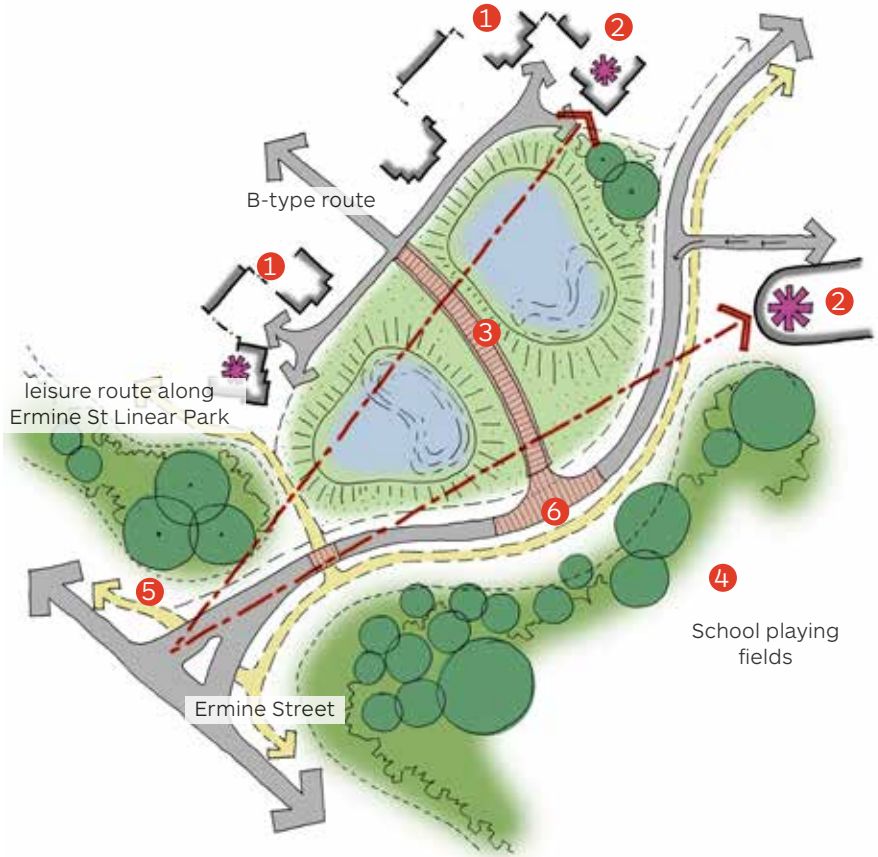
1. Four to five storey apartments will define the edges of residential development and overlook the Hub; the elevations of these buildings will demonstrate a high quality architectural response to this prominent elevation
2. Parking will be provided in rear courts and below decks with landscaping to break up the hard space
3. Pedestrian entrances to apartment blocks will be provided along the Hub Interface side
4. A landmark building will be provided to the east of the Linear Park as a gateway to Key Phase 1
5. Vehicular routes will not be provided along the Hub interface: associated car parking will be accessed from the rear

6.5.2.E ERMINE VILLAGE GATEWAY

This Key Grouping defines the first entrance to the residential area of Key Phase 1 in the early stages of this development. It will therefore set the benchmark for quality for the rest of Key Phase 1 and future phases. Dwellings will enclose a mature landscape setting of an informal nature. The entrance route gently curves out and back onto the vista along the east –west taxiway.

Ermine Village location plan

Figure 6n: Ermine Village Gateway Design Principles Plan



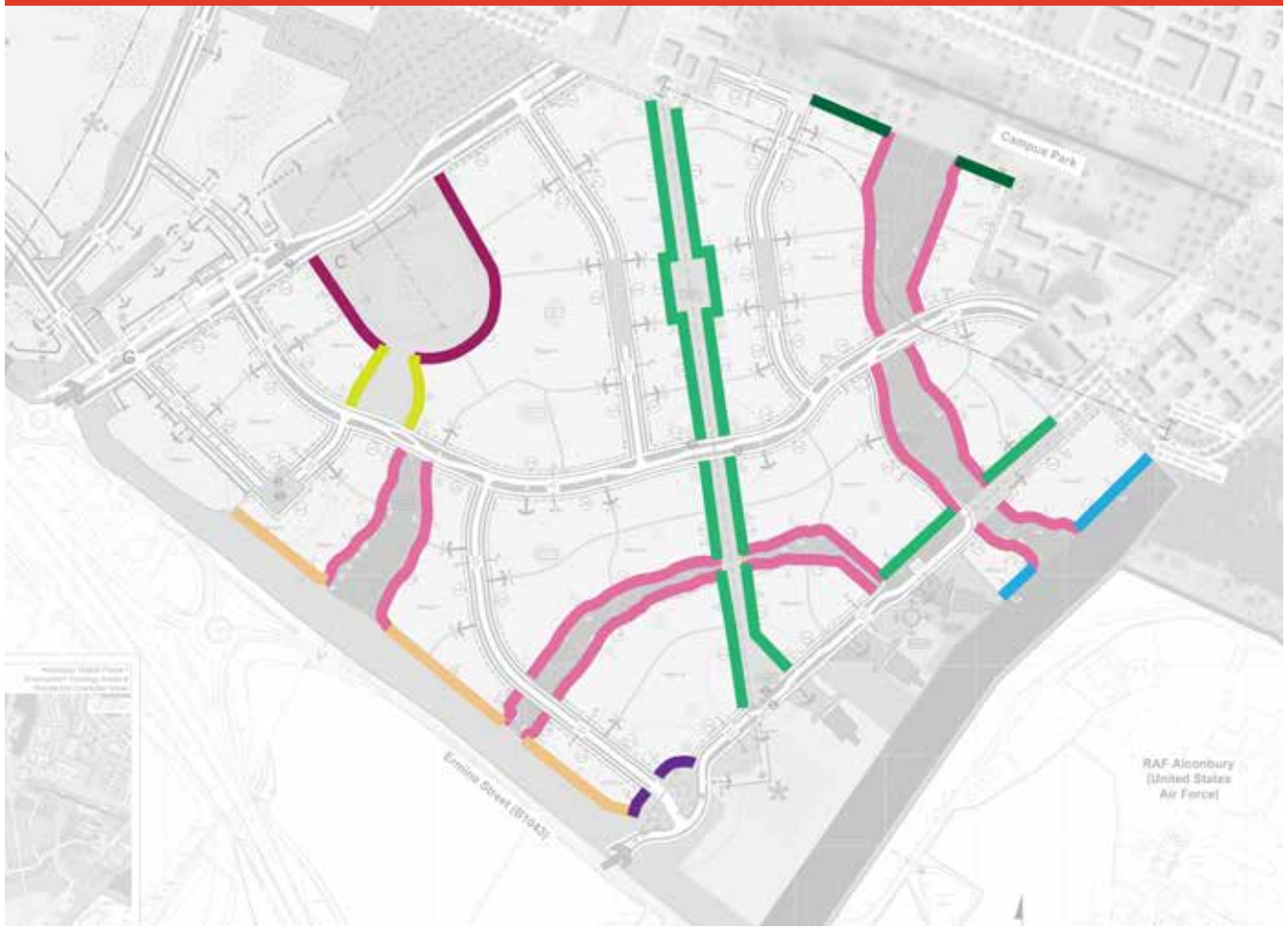
1. A mix of dwellings will create a varied frontage, with the use of garden walls and garages to help enclose the space
2. A marker dwelling and the school building will form a gateway to the start of the taxiway
3. A low scale bridge or 'causeway' will provide access between the ponds to the western areas of residential development
4. The school playing fields will be screened by mature and sculptured landscaping
5. Footpaths and cycleways from Ermine Street will connect with the network of leisure routes
6. Raised tables or similar traffic calming features will be provided at junctions to slow traffic

6.5.3 Edge Condition Sections

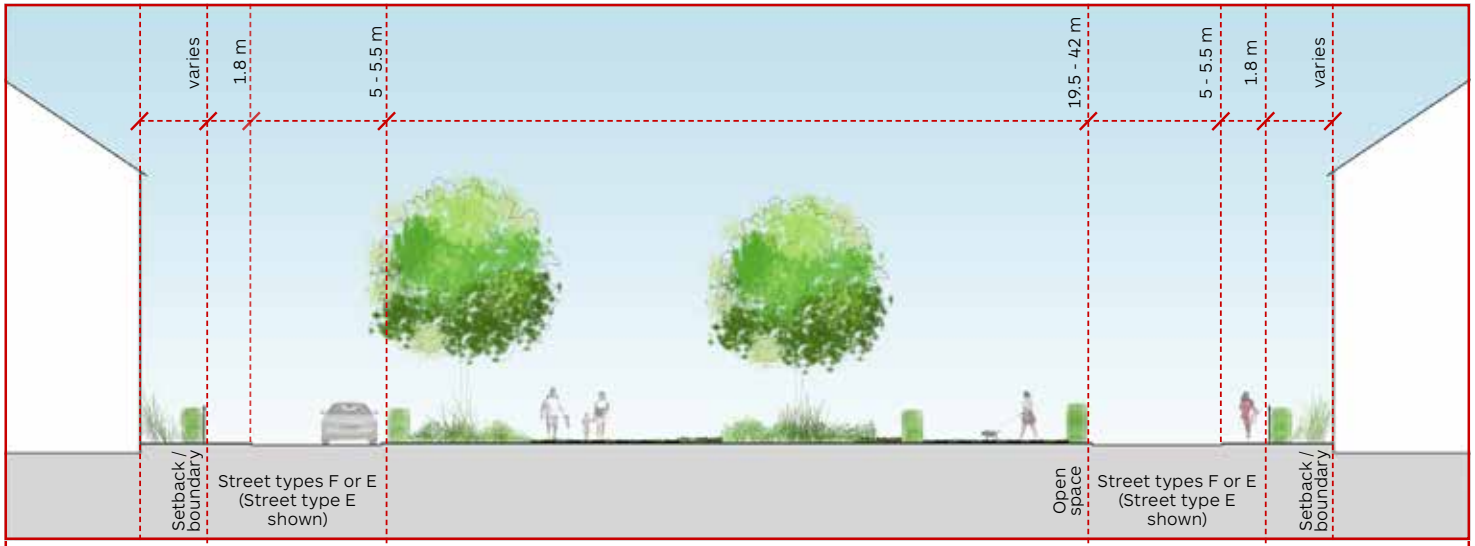
Edge conditions illustrate the relationship between residential development and open space. All residential development edges which directly front open space are marked with an edge condition section on the Regulatory Plan. Residential development will adhere to the principles set out within each relevant section to ensure the appropriate definition is achieved between buildings and primary open spaces.

- Edge A: Linear Park
- Edge B: Cricket Park
- Edge C: Grassland meadows
- Edge D: Woodland Blocks
- Edge E: Ermine Street Linear Park
- Edge F: Ermine Village Gateway
- Edge G: Boundary Edge Planting
- Edge H: Campus Park

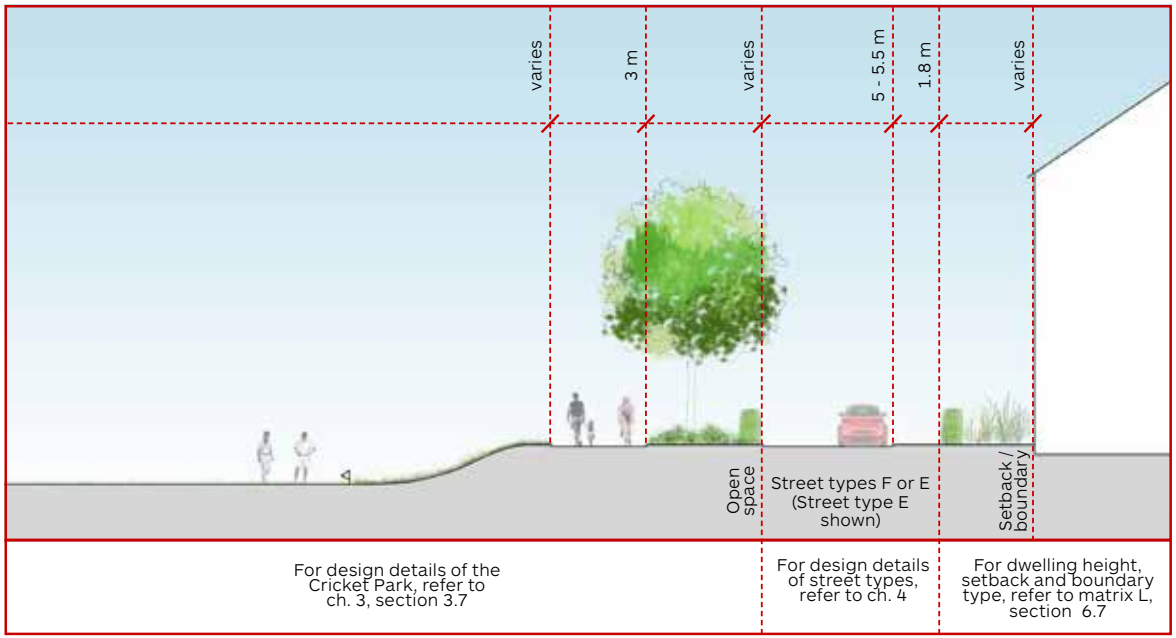
Figure 60: Regulatory plan extract showing location of different edge conditions



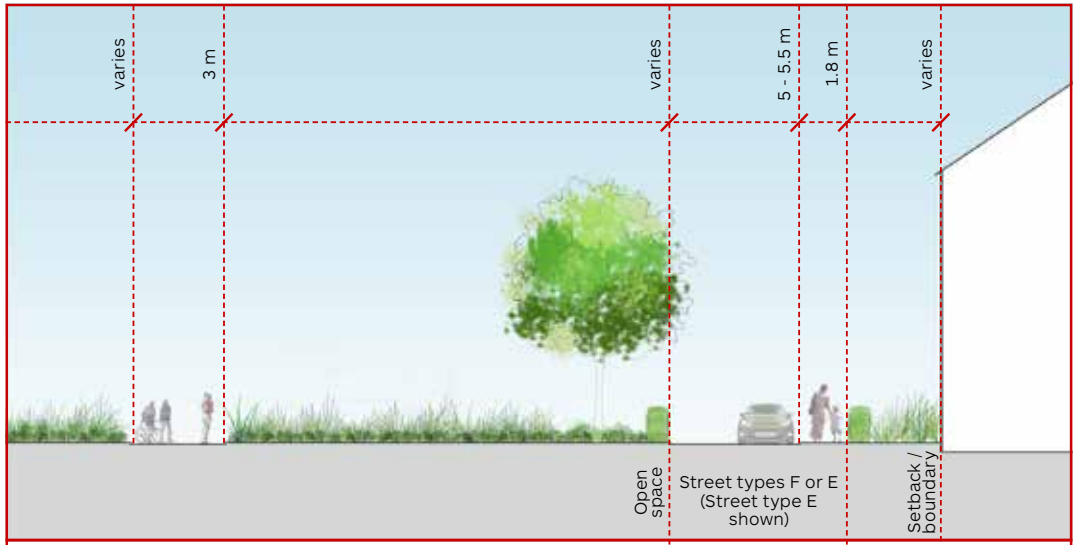
6.5.3.A LINEAR PARK



6.5.3.B CRICKET PARK



6.5.3.C GRASSLAND MEADOWS



For design details of the Grassland Meadows, refer to ch. 3, section 3.12

For design details of street types, refer to ch. 4

For dwelling height, setback and boundary type, refer to matrices E and L, section 6.7

6.5.3.D WOODLAND BLOCKS

For design details of the Woodland Blocks, refer to ch. 3, section 3.3

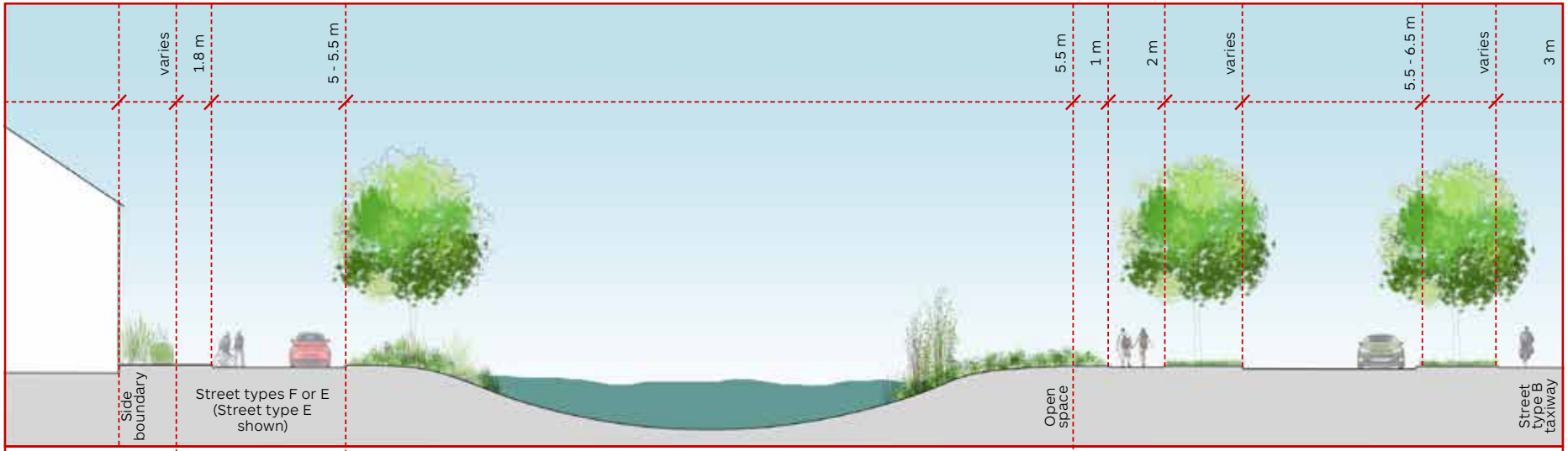
For design details of street types, refer to ch. 4

For dwelling height, setback and boundary type, refer to matrices B, D and K, section 6.7

6.5.3.E ERMINE STREET LINEAR PARK

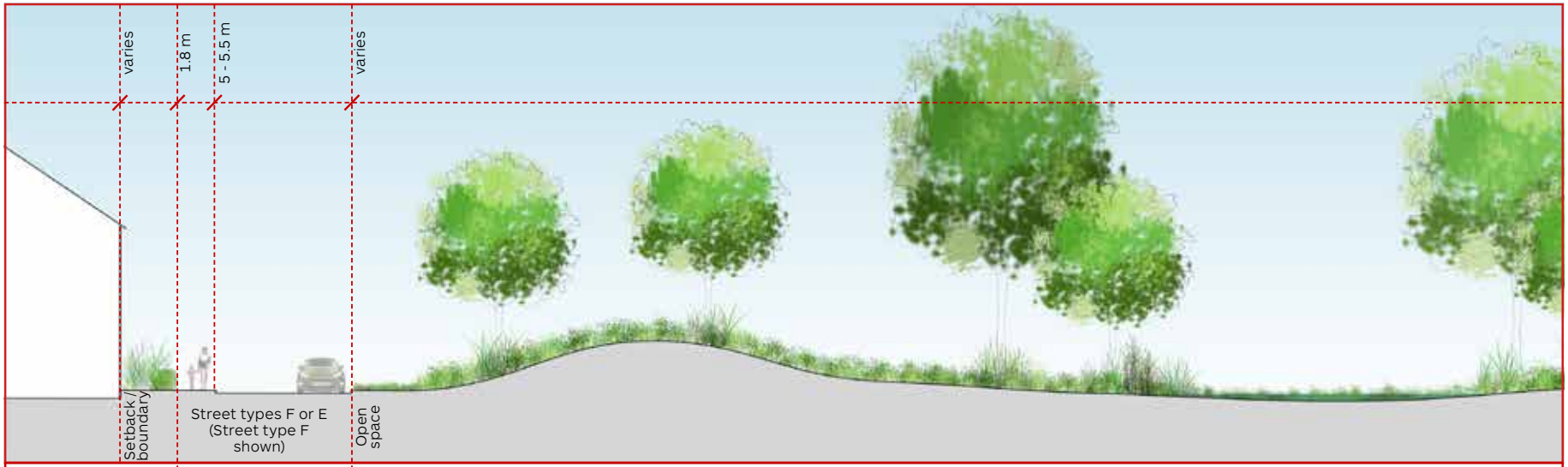
Ermine Street and footway / cycleway	For design details of Ermine Street Linear Park, refer to ch. 3, section 3.11	For dwelling height, refer to character areas section 6.5.4. Side boundaries alongside footpaths min. 1.5m width, planted.

6.5.3.F ERMINE VILLAGE GATEWAY



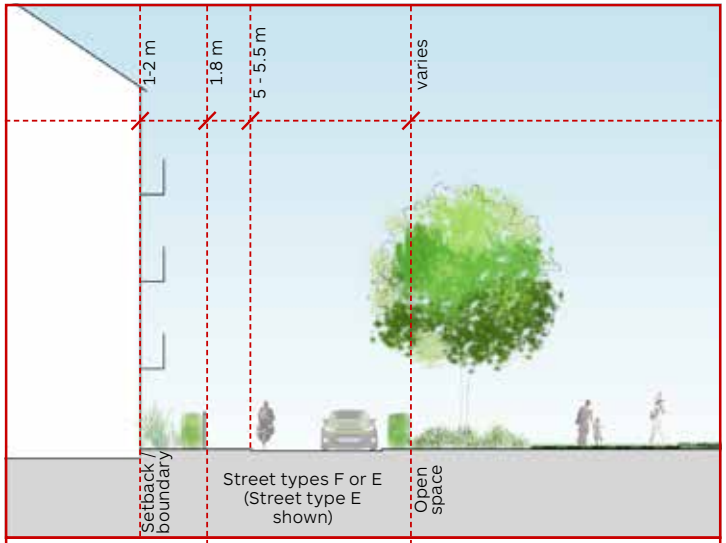
For dwelling height, setback and boundary type, refer to matrix A, section 6.7	For design details of street types, refer to ch.4	For design details of the Phase 1a Gateway, refer to ch.3, section 3.20	For design details of street type B taxiway, refer to ch.4

6.5.3.G BOUNDARY EDGE PLANTING



For dwelling height, setback and boundary type, refer to matrix A, section 6.7	For design details of street types, refer to ch.4	For design details of the south east Boundary Edge Planting, refer to ch.3, section 3.6

G.5.3.H CAMPUS PARK



For dwelling height, setback and boundary type, refer to matrix H, section 6.7	For design details of street types, refer to ch.4	The detailed design of Campus Park will come forward in a future phase

6.5.4 Residential Character and Illustrative Groupings

The residential character evolves from the network of contrasting green spaces and routes within Key Phase 1 and the wider context of Alconbury Weald. The design of residential development which fronts onto the primary open spaces and routes is critical to achieving the character and vision for Key Phase 1.

Figure 6p shows the variation in character across Key Phase 1. This variation in character will be achieved through a careful selection and combination of different dwelling types, boundary types, parking types, building heights, setbacks, materials, the balance of hard and soft landscape, and the amount and character of open space.

There is a transition in character, south to north through Key Phase 1. The Ermine Village character area forms the first phase of development and responds to the neighbouring Stukeleys, effectively establishing another settlement along Ermine Street. The development will grow from this initial phase, gradually changing towards a Formal Urban character, which responds to the Boulevard and the Hub as the centre of activity in Alconbury Weald.

Residential development will accord with the following description of character areas, using the illustrative Groupings as design guidance where appropriate.

Figure 6p: Residential character area plan

RESIDENTIAL CHARACTER AREAS

Proposals for residential development across Key Phase 1 will reflect the following descriptions of character areas according to which area(s) they occupy. Character area boundaries are defined on the Regulatory Plan and shown as a key plan throughout this chapter.

ERMINE VILLAGE

- → Residential development characterised primarily by lower density arrangements of dwellings in generous plots
- → Dwellings linked by garden walls and garages to create enclosure
- → Dwellings within parcels clustered around small courtyards, creating intimate spaces
- → Primarily 2-2.5 storeys, with three storey elements in prominent locations

INFORMAL SUBURBAN

- → Residential development characterised by primarily detached and semi-detached dwellings, with some short rows of terraced housing in appropriate locations.
- → Courts and shared surface streets provide a series of defined community spaces
- → Primarily 2-2.5 storeys, with three storey elements in prominent locations

FORMAL PICTURESQUE

- → Residential development characterised primarily by detached and semi-detached dwellings
- → Dwellings in rows of a similar typology, set the same distance apart to create rhythm and order
- → Planting in front gardens such as hedgerows and trees to create a green, picturesque frontage to the tree-lined street
- → Primarily 2-2.5 storey dwellings, heights used consistently across frontages

FORMAL SUBURBAN

- → Residential development characterised primarily by terraces and semi-detached dwellings
- → Narrow fronted dwellings with regular gaps between dwellings and terraces to create order
- → Consistent setbacks of dwellings create formal frontages to a network of streets and spaces
- → Formal courts and mews create more intimate streets at a lower scale to primary routes
- → Dwellings up to 3 storeys facing primary open spaces and streets

FORMAL PARK SETTING

- → A set piece of grand dwellings, either detached or semi-detached, defining the Cricket Park
- → Dwellings set at consistent spacing with consistent setbacks to create order and formality
- → Formal boundaries to dwellings such as hedges and railings create a relationship with the formal green space
- → Dwellings are three storeys in height

FORMAL URBAN

- → Residential development characterised primarily by terraces, townhouses and apartments
- → Dwellings create near continuous frontages to provide a formality to the streets and spaces
- → Dwellings primarily 3 storeys with apartments up to 5 storeys fronting the Hub and the Campus Park

MIXED USE

- → A mix of uses including dwellings, offices and local facilities with a focus around the mixed use square to create a transition between residential and commercial areas
- → Residential development characterised primarily by terraces townhouses and apartments laid out in near continuous frontages to provide a formality to the streets and spaces
- → Small scale office buildings address the street with parking to the rear
- → Dwellings 3 storey along primary streets with 4 storey apartment blocks around the square

Character Area Key Plan

ILLUSTRATIVE GROUPINGS

Illustrative Groupings enrich character within neighbourhoods and suggest how dwellings, boundary types and parking types can be arranged within a framework of streets and green spaces. Reserved Matters Applications will demonstrate how the relevant Illustrative Groupings have been considered and incorporated within the design.

6.5.4.A RURAL EDGE

Varied and informal frontage addressing informal landscape with wide fronted dwellings and planted front gardens

Ermine Village

6.5.4.B COURTYARDS

Groupings of a variety of dwellings inwardly focussed on a landscaped courtyard to create a feeling of enclosure and community focus

Ermine Village

6.5.4.C INFORMAL STREETS

Informal Suburban

Stepped frontages along streets opening out to green space, dwellings linked by garden walls and garages, addressing both the street and the green space

6.5.4.D CLUSTERS

Informal Suburban

Small groupings of dwellings clustered around a shared court which opens out onto the street or green space

6.5.4.E A-ROUTE FRONTAGE

Formal Picturesque

Consistent frontage of similar typologies to create rhythm, addressing the tree-lined street over short front gardens

6.5.4.F FORMAL SUBURBAN BLOCK

Formal Suburban

Regular arrangement of terraces forming an orthogonal configuration of shared surfaces and tree-lined streets; parking away from the public realm for example, tucked under the dwelling as shown.

6.5.4.G MEWS

Formal Suburban

Regular configuration of terraces addressing streets and green spaces with shared surface mews to the rear providing parking, overlooked by dwellings

6.5.4.H CRICKET PARK FRONTAGE

Formal Park Setting

A set piece of grand dwellings creating a formal frontage through a rhythm of consistent spacing and setbacks, providing a backdrop to the cricket park

6.5.4.I HUB FRONTAGE

Formal Urban

Urban scale apartments overlooking the Hub with formal landscaping, entrances and balconies addressing the public realm, parking to the rear within landscaped courts

Natural surveillance of courts by overlooking from adjoining buildings is encouraged.

Courts can including supporting facilities such as bin and bike stores to increase activity within the space.

6.5.4.J URBAN COURTS

Formal Urban

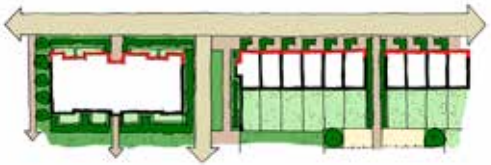
Compact housing set within a regular grid of tertiary streets, with small, intimate courtyards and gardens; lower levels of parking due to proximity to the Hub and public transport routes.

6.5.4.K MIXED USE STREET

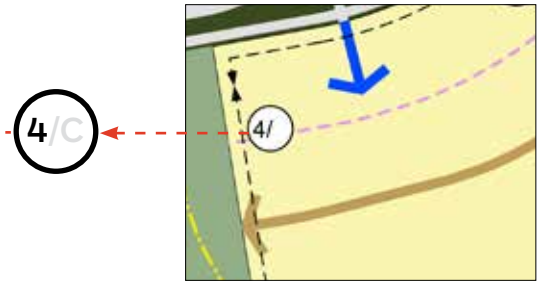
Mixed Use

Formal configuration of terraces and townhouses fronting a tree-lined street, addressing small scaled office buildings, integrating living and working within a shared environment

6.5.5 Frontage Character

FRONTAGE CHARACTER	
	1. Open, staggered frontage to consist of predominantly detached and some semi-detached dwellings of varying size: frontage may include garage rear/flank walls and garden walls. Dwellings may be positioned at varying distances from the edge of the route they face, and at subtly differing angles.
	2. Stepped frontage to consist of predominantly detached, linked detached and semi detached dwellings only. Dwellings to establish a clear building line across pairs/ groups of two or more plots.
	3. Consistent frontage to be formed by dwellings of matching or of similar typology and size, arranged at regular spacing with a consistent set back to create rhythm, order and a strongly defined building line.
	4. Stepped, linear frontage with a high degree of enclosure to consist of semi detached and terraced dwellings. Large Detached dwellings may define corner plots. All car parking to be positioned behind the established building line.
	5. Near continuous formal, linear frontage of predominantly terraced dwellings and apartment blocks, with gaps only for access to parking and pedestrian routes.

Five different frontage characters prescribe the type of dwelling typologies appropriate along a specific parcel edge, and the way in which these typologies will be arranged. Frontage character is prescribed for the edges of all residential development parcels within the Regulatory Plan. This is annotated by a number 1-5 within the circle labelling each edge. The frontage character ranges from informal, to picturesque, to formal and relates closely to the Character Areas. Residential development will adhere to the relevant frontage character as specified on the Regulatory Plan.

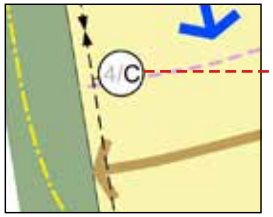


Extract of the Regulatory Plan highlighting the frontage character label

6.5.6 Residential plot components

There are five components which determine the design of a residential plot, as shown in Figure 6q. These residential plot components can be combined in a number of ways to achieve different forms of residential character. A library of these residential plot components is provided in sub chapter 6.6. Reserved Matters Applications will demonstrate compliance with the prescriptions made in sub-chapter 6.7, Typology Matrices.

A set of matrices in sub-chapter 6.7 prescribes specifically how selected plot components are to be configured along labelled edges of residential development on the Regulatory Plan. This is annotated by a letter within the circle labelling each edge. Reserved Matters Applications will demonstrate compliance with all typology matrices applicable to the parcel(s) they cover.



Extract of the Regulatory Plan highlighting the typology matrix label

Refer to matrix **C** in sub chapter 6.7

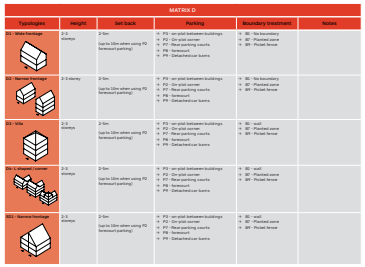
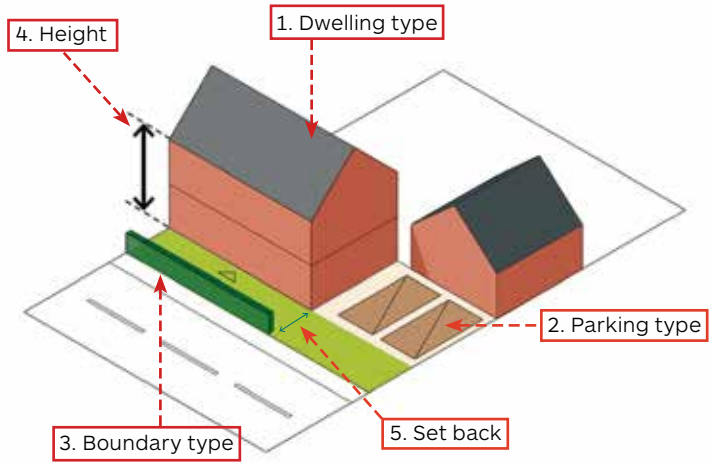


Figure 6q: the five Residential Plot Components



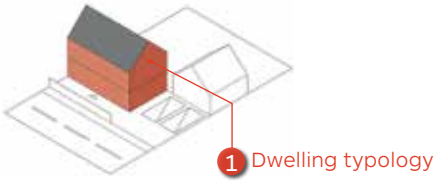
Text within the red boxes explains which residential plot components are appropriate for development which is not covered by an edge label on the Regulatory Plan, i.e. residential development within the middle of parcels.

1. DWELLING TYPOLOGY

There are five groups of dwelling types:

D	Detached
SD	Semi-detached
T	Terraced
U	Urban housing
F	Flats

Within the middle of a residential development parcel, any dwelling typology can be used providing they are permitted within the relevant Character Area. Within the dwelling typology library, each typology is accompanied by a list of character areas within which the typology is NOT permitted. Reserved Matters Applications will not use dwelling types if they are not permitted within the relevant Character Area.

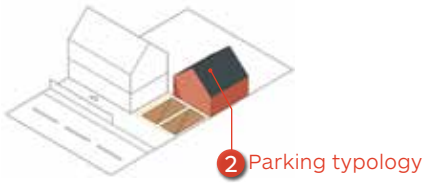


2. PARKING TYPOLOGY

There are eleven forms of parking:

P1 On-plot frontage
P2 On-plot corner
P3 On-plot between dwellings
P4 Courtyard
P5 Mews
P6 Front access drive through
P7 Rear parking courts
P8 Forecourt
P9 Detached car barns
P10 On-street
P11 Basement / semi-basement

Within the middle of the residential parcel, any parking typology can be used providing it is permitted within the relevant Character Area. Within the parking typology library, each typology is accompanied by a list of Character Areas within which the typology is NOT permitted. Reserved Matters Applications will not use parking types if they are not permitted within the relevant Character Area.

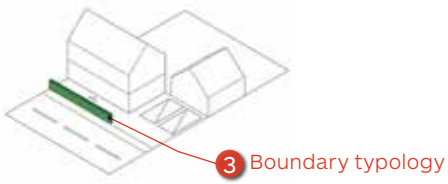


3. BOUNDARY TYPOLOGY

The boundary treatment separating the private and public realm:

B1 No boundary
B2 Urban style railing
B3 Railing on low wall
B4 Railing and hedge
B5 Low wall & ornamental hedge
B6 Ornamental hedge
B7 Planted zone
B8 Wall
B9 Picket fencing

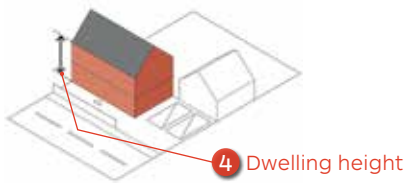
Within the middle of the residential parcel, any boundary typology can be used providing it is permitted within the relevant Character Area. Within the boundary typology library, each typology is accompanied by a list of Character Areas within which the typology is NOT permitted. Reserved Matters Applications will not use boundary types if they are not permitted within the relevant Character Area.



4. DWELLING HEIGHT

The dwelling height is stated as a number (or range) of storeys.

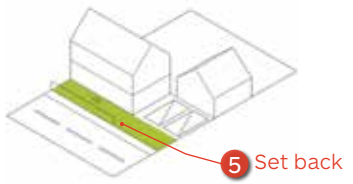
Within the middle of the parcel, the height of dwellings is determined by the description of the relevant Character Area. The dwelling heights will also adhere to the building heights parameter line on the Regulatory Plan.



5. SET BACK

The set back of a dwelling is the distance in metres between the primary frontage of a dwelling and the back edge of footpath / road / public realm onto which the dwelling faces. This space is private to the dwelling and can include a front garden where suitable. The setback distance may be adjusted if required to accommodate visibility splays for safe vehicular movement.

Within the middle of the residential parcel, any setback distance can be used, providing the appropriate character is achieved. Designs will refer the appropriate character described in the Character Areas section and as illustrated in the Illustrative Groupings.



6.6 Residential Components Library

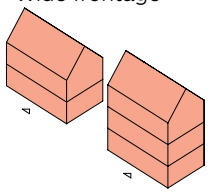
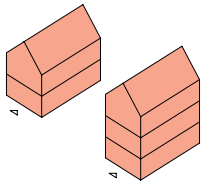
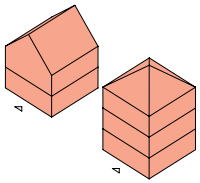
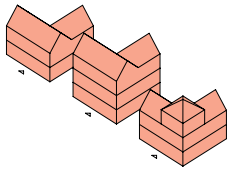
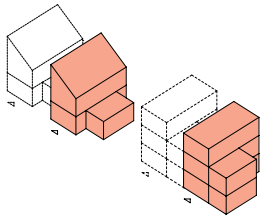
The five residential plot components as introduced in chapter 6.5.6 are set out in more detail within this library. The Typology Matrices in chapter 6.7 specifically prescribe the residential plot components permitted along labelled edges of residential development on the Regulatory Plan. Reserved Matters Applications will adhere to the Typology Matrices in sub-chapter 6.7 and to the descriptions of relevant components set out in the tables featured in this chapter.

6.6.1 Dwelling Typologies

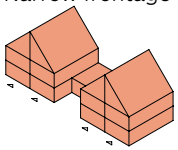
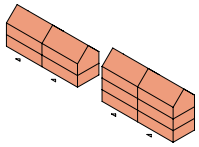
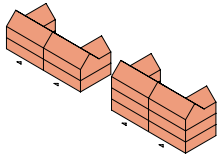
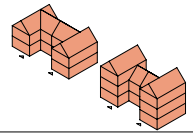
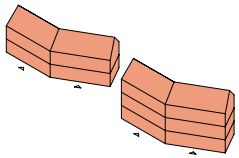
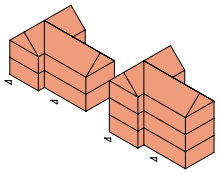
The following table sets out the dwelling typologies for use within Key Phase 1. The Typology Matrices in sub-chapter 6.7 specifically prescribe the dwelling typologies permitted along labelled edges of residential development on the Regulatory Plan. Reserved Matters Applications will adhere to the Typology Matrices in sub-chapter 6.7 and to the descriptions of all permitted dwelling typologies where selected. Dwelling typologies will not be used if they are not permitted within the relevant Character Area.

Figure 6r: Character Area Plan

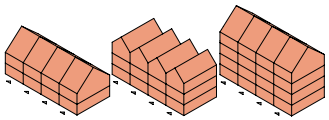
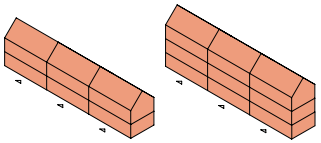
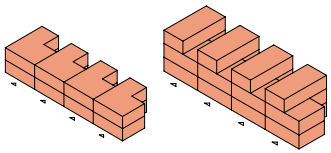
DETACHED DWELLING TYPOLOGIES

Illustration	NOT permitted in these areas:	Notes
D1 - Wide frontage 	☒ Formal Urban ☒ Mixed Use	→ The principal frontage width is greater than the depth of the primary building form. → The principal frontage is more than 8m wide. → The ridge line is parallel to the principal frontage.
D2 - Narrow frontage 	☒ Formal Park Setting	→ The principal frontage width is less than the depth of the primary building form. → The principal frontage is less than 8m wide → The ridge line is perpendicular to the principal frontage.
D3 - Villa 	☒ Ermine Village ☒ Formal Urban ☒ Mixed Use	→ The principal frontage width is between 90-110% of the depth of the dwelling. → The principal frontage is more than 8m.
D4 - L-shaped / corner house 	☒ Formal Urban ☒ Mixed Use	→ The dwelling has two principal frontages at 90 degrees to one another. → Both principal frontages are more than 8m wide.
D5 - Linked detached 	☒ Ermine Village	→ The dwelling comprises a primary form and a secondary linking form. → The volume of the secondary building form is less than 60% of the volume of the primary built form. → When the secondary building form includes a garage, the frontage of the dwelling is more than 7m wide.

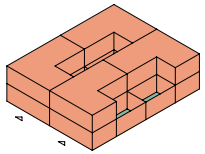
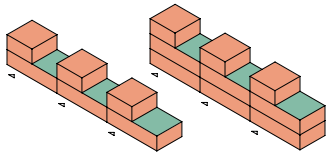
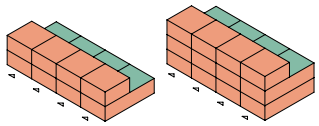
SEMI - DETACHED DWELLING TYPOLOGIES

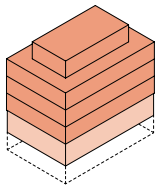
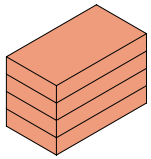
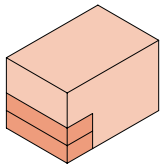
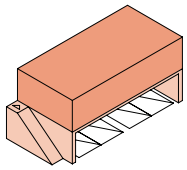
Illustration	NOT permitted in these areas:	Notes
SD1 - Narrow frontage 		→ The principal frontage widths are less than the depth of the primary building forms. → The principal frontages are less than 8m wide. → The ridge line is perpendicular to the principle frontages and forms a combined roof form over the pair of dwellings.
SD2 - Wide frontage 	☒ Formal Suburban ☒ Formal Park Setting ☒ Formal Urban ☒ Mixed Use	→ The principal frontage width is greater than the depth of the primary building form. → The principal frontage is more than 8m wide → The ridge line is parallel to the principal frontage.
SD3 - L-shaped 	☒ Formal Park Setting ☒ Formal Urban ☒ Mixed Use	→ The dwellings have two principal frontages at 90 degrees to one another. → Both principal frontages are more than 8m wide. → Two dwellings are attached to form a U-shape.
SD4 - Inverted L-shaped 		→ The dwellings have two principal frontages at 90 degrees to one another. → Two dwellings are attached to form an H-shape.
SD5 - Cranked 	☒ Formal Picturesque ☒ Formal Suburban ☒ Formal Park Setting ☒ Formal Urban ☒ Mixed Use	→ The principal frontage widths are greater than the depth of the primary building forms. → The principal frontages are more than 8m wide. → The ridge lines are parallel to the principal frontages and are adjoining.
SD6 - T-shaped 		→ The T consists of a wide frontage (D1) and a narrow frontage (D2) adjoined. → The wide frontage unit's principal frontage is more than 8m wide. → The ridge lines are perpendicular to each other. → The dwellings are set perpendicular to each other.

TERRACED DWELLING TYPOLOGIES

Illustration	NOT permitted in these areas:	Notes
T1 - Narrow frontage 	☒ Formal Picturesque ☒ Formal Park Setting	→ The principal frontage widths are less than the depth of the primary building forms. → The principal frontages are less than 8m wide. → Dwellings are combined in groups of 3 or more, with a group of 4 being preferable.
T2 - Wide frontage 	☒ Formal Park Setting ☒ Formal Urban ☒ Mixed Use ☒ Formal Picturesque	→ The principal frontage widths are greater than the depth of the primary building forms. → The principal frontages are more than 8m wide. → The ridge lines are parallel to the principal frontages and are adjoining. → Dwellings are combined in groups of 3 or more.
T3 - Stepped / L-shaped 	☒ Ermine Village	→ The dwelling comprises a primary form and a secondary form. → The volume of the secondary building form is less than 60% of the mass of the primary built form. → When the secondary building form includes a garage, the frontage of the dwelling is more than 7m wide.

URBAN DWELLING TYPOLOGIES

illustration	NOT permitted in these areas:	Notes
U1 - Courtyard 	☒ Ermine Village ☒ Formal Picturesque ☒ Formal Park Setting	→ The principal frontage is more than 7m wide. → Courtyard is created using L-shaped building footprints, connected in back to back arrangements. → Courtyards are more than 4x3m in size.
U2 - Side terrace 	☒ Ermine Village ☒ Formal Picturesque ☒ Formal Park Setting	→ The principal frontage widths are greater than the depth of the primary building forms. → The principal frontages are more than 8m wide. → The primary amenity space for the dwelling is provided as a large terrace at first or second floor level.
U3 - Rear terrace 	☒ Ermine Village ☒ Formal Picturesque ☒ Formal Park Setting	→ The principal frontage widths are less than the depth of the primary building forms. → The principal frontages are less than 8m wide. → The primary amenity space for the dwelling is provided as a large terrace at first or second floor level.

FLATS DWELLING TYPOLOGIES		
illustration	**NOT permitted in these areas:**	**Notes**
F1 - Mixed use flat block 	☒ Ermine Village ☒ Informal Suburban ☒ Formal Picturesque ☒ Formal Suburban ☒ Formal Park Setting	→ The block is at least 3 storeys with a depth of no more than 12m → The internal layout does not include single aspect north facing flats → Parking may be provided in a basement or semi-basement (see P10) → Mixed uses may be provided at ground level → Parking provided at surface level will be subject to the rules set out in section 6.6.2. - P7 Parking Courts
F2 - Typical flat block 	☒ Ermine Village ☒ Formal Picturesque ☒ Formal Park Setting	→ The block is at least 3 storeys with a depth of no more than 12m → The internal layout does not include single aspect north facing flats → Parking may be provided in a basement or semi-basement (see P10)
F3 - Duplex 	☒ Ermine Village ☒ Formal Picturesque ☒ Formal Park Setting	→ A dwelling within a flat block that is arranged over two storeys → A private entrance may be provided directly from the street at ground level → The duplex flat is not single aspect north facing
F4 - Coach house / mews 	☒ Formal Picturesque ☒ Formal Park Setting	→ Accommodation is provided above garages within a mews or parking court arrangement → The flat provides natural surveillance to the mews or court → The flat is no more than one storey → May be paired

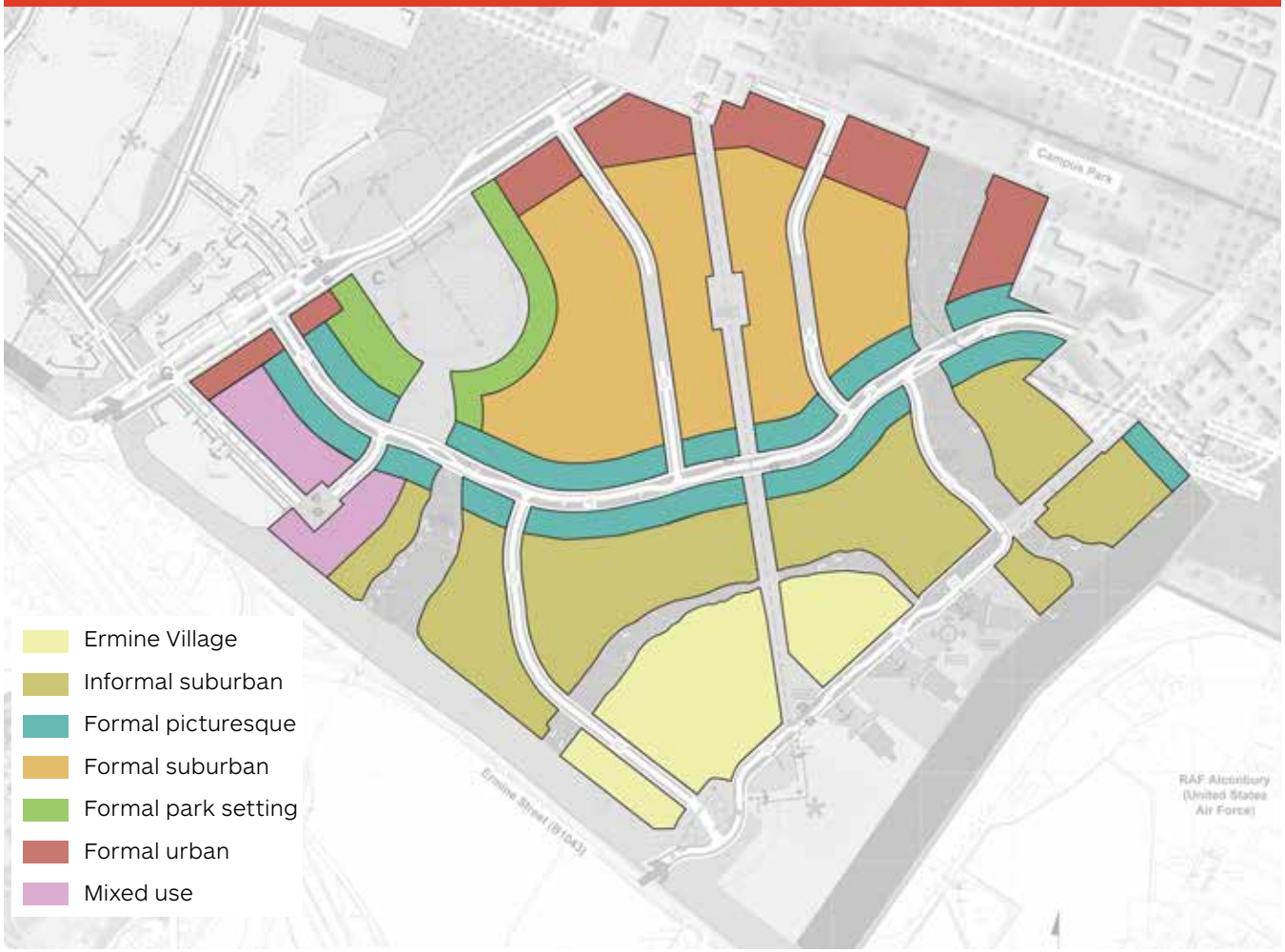
NB: Innovative typologies can be submitted for approval, the typologies in this section give an example of what could be used.

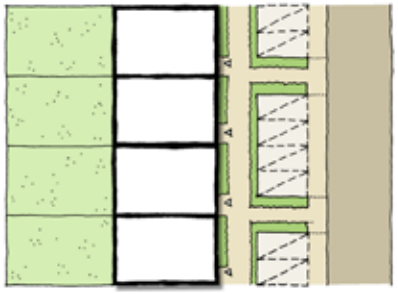
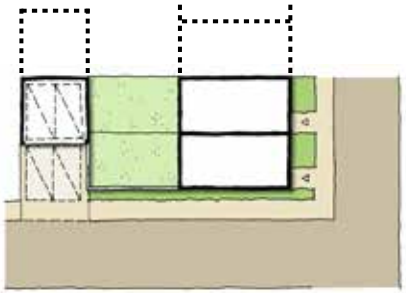
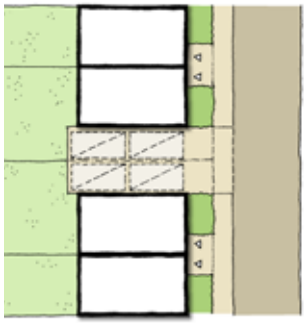
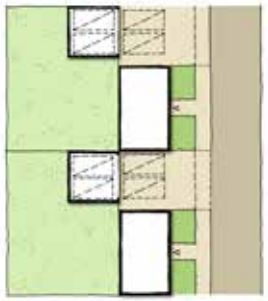
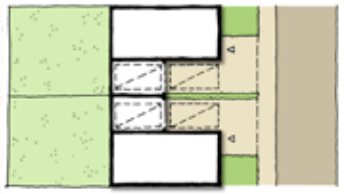
6.6.2 Parking Typologies

The following table sets out the parking typologies for use within Key Phase 1. The typology matrices in chapter 6.7 specifically prescribe the parking typologies permitted along labelled edges of residential development on the Regulatory Plan. Reserved Matters Applications will adhere to the typology matrices in chapter 6.7 and to the descriptions of all typologies selected. Parking typologies will not be used if they are not permitted within the relevant Character Area.

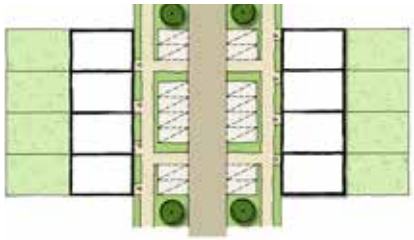
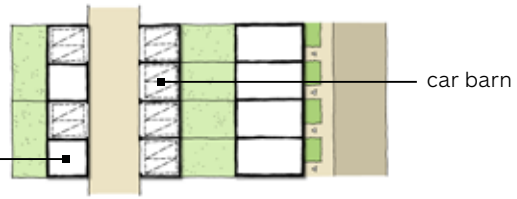
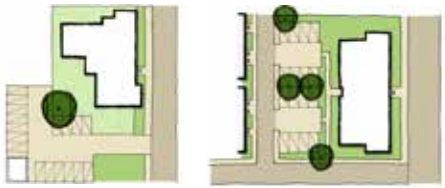
Parking within the development will be designed so as not to dominate the street scene or obstruct movement of pedestrians and cyclists. Therefore, a variety of parking solutions will be used throughout the Phase 1 masterplan.

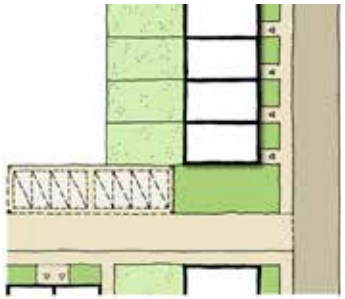
Figure 6s: Character Area Plan



PARKING TYPOLOGIES		
illustration	**NOT permitted in these areas:**	**Notes**
P1 - On-plot frontage 	☒ Formal Park Setting	→ Not to serve more than 8 dwellings on any one side of the street. → A maximum of four spaces in a row separated by landscape. → A minimum landscape break of 1.5m wide to accommodate tree or specimen shrub planting; → This may be omitted only if a large tree is planted in its place, with a limit of 8 spaces in a row. → Shrubs or trees to be positioned to minimise car door damage to plant stems → Medium sized tree species to be planted no closer than 7m to the dwelling. → A hard landscape treatment provides a clear space to readily manoeuvre around the parked cars. → A footpath will be provided between the parking bays and the privacy strip / front garden of properties.
P2 - On-plot corner 		→ A maximum of four spaces (8 with garages). → Enclosure will be provided through the use of brick walls enclosing parking bays.
P3 - On-plot between dwellings 		→ Parking spaces must be set behind the building line. → Spaces will be designed so as not to allow for tandem parking projecting forward of the building line. Alternative layout options:  

PARKING TYPOLOGIES

illustration	NOT permitted in these areas:	Notes
P4 - Courtyard 	☒ Formal Picturesque ☒ Formal Park Setting	→ No more than four spaces before landscaping occurs → A minimum landscape break of 1.5m wide to accommodate a tree or specimen shrub planting; → This may be omitted only if a large tree is planted in its place with a limit of 8 spaces in a row; → The courtyard will be designed as a whole, to create a coherent space. → Hedging and landscape will be used to assist in defining the spaces → The layout of the parking to be formed to create a rhythm to the landscape; → A hard landscape treatment provides a clear space to readily manoeuvre around the parked cars → A footpath will be provided between the parking bays and the privacy strip / front garden of properties.
P5 - Mews 		→ Parking will be overlooked for security through natural surveillance
P6 - Front access drive through 	☒ Formal Picturesque ☒ Formal Park Setting	→ An openable screen or gate with visual permeability must be used to access parking spaces to ensure that gardens are not open to the street → Solid garage doors must not be used for drive through parking spaces (except for a flat over garage where this will be permitted).
P7 - Parking courts  Alternative layouts for apartments: 		→ Courts to serve no more than 12 dwellings. For apartment blocks this may be increased, but courts must to be sensitively designed with a strong framework of landscape planting; → Enclosure will be provided to define the access, through the use of walls → Court will be designed as a whole to create a coherent space → To include an area of space where a medium or large tree can be located in view from the streetscene (and planted no closer than 7 or 10m to the nearest building respectively). → No more than 4 parking spaces before landscaping occurs.

PARKING TYPOLOGIES		
illustration	**NOT permitted in these areas:**	**Notes**
P8 - Forecourt 	☒ Formal Urban ☒ Mixed Use	→ Applies to large detached dwellings only → The front boundary will be walls (this must be complied with, regardless of the permitted boundary typologies set out in typology matrices within section 6.7)
P9 - Detached car barns 		→ No more than eight spaces in a single structure → Natural surveillance required from proximate dwellings
P10 - On-street 		→ A maximum of 2 spaces before landscaping occurs unless located within the mixed use area. → Medium sized tree species to be planted no closer than 7m to the dwelling. → Designed and located to prevent unauthorised parking
P11 - Basement/ semi-basement /podium 	☒ Ermine Village ☒ Informal Suburban ☒ Formal Picturesque ☒ Formal Suburban ☒ Formal Park Setting	→ To be used below apartment blocks only → Must be secured by gates / roller shutter doors → Podium parking with a landscaped deck to be used for apartments only → Covered parking areas must be naturally ventilated and secure

6.6.3 Boundary Typologies

The following table sets out the boundary typologies for use within Key Phase 1. The matrices in chapter 6.7 specifically prescribe the boundary typologies permitted along labelled edges of residential development on the Regulatory Plan. Reserved Matters Applications will adhere to the matrices in chapter 6.7 and to the descriptions of all typologies selected. Boundary typologies will not be used if they are not permitted within the relevant character area.

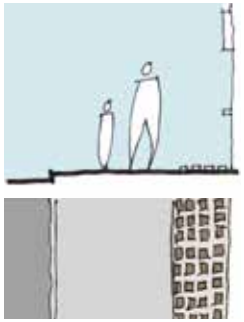
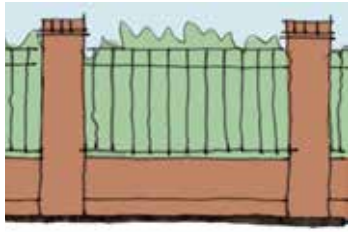
SIDE BOUNDARIES

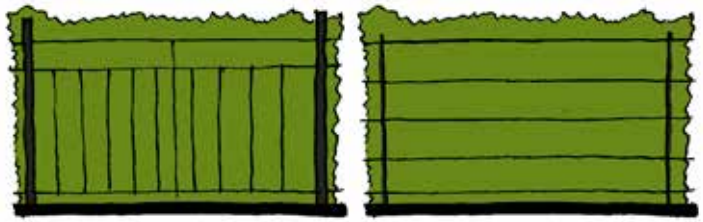
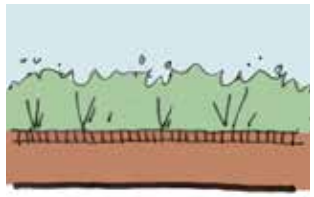
Brick walls will be used along garden boundaries which flank a street, as a continuation of the built form. The wall must be between 1.8-2.1m high. An additional soft verge of 1.5m will be provided in addition to a wall along garden boundaries which flank a footpath/cycleway. This may reduce to 0.5m for footpaths along minor streets and lanes. Timber fencing or walls will be used for side boundaries between gardens.

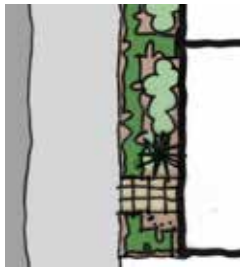
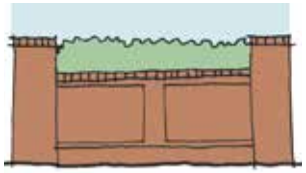
REAR BOUNDARIES

Brick walls will be used along rear boundaries which back onto courtyard parking areas or public realm. The wall will be between 1.8-2.1m high with a semi-permeable section from 1.5m upwards to create a level of surveillance to the public space. Pedestrian access to parking courts via rear boundaries will be provided via gates if the dwelling is allocated parking in this area. Timber fencing or walls will only be used for rear boundaries between gardens.

Figure 6t: Character Area Plan

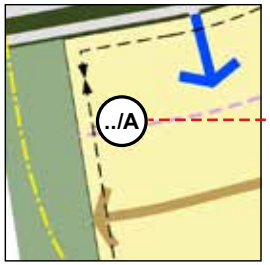
BOUNDARY TYPOLOGIES				
Typologies	**illustration**	**NOT permitted in these areas:**	**Description**	**Notes**
→ B1. No boundary	 Plan	☒ Formal Park Setting	→ Set back is 1m or less (minimum 800mm to be maintained) → Hard surface finish preferable for urban character areas → Material / surface finish should be contrasting to adjoining pavement material to differentiate ownership and demarcate defensible space.	
→ B2. Urban style railing		☒ Ermine Village ☒ Informal Suburban ☒ Formal Picturesque	→ Height – 1.2m max → Set back minimum 1.5m → Black / grey metal, painted → Soft landscape to allow for shrub planting → Contemporary and in character with the street scene → Bow top railings are not acceptable	Boundaries between front gardens of adjacent dwellings to be created through the same design of urban style railing or ornamental hedge
→ B3. Railing on low wall		☒ Ermine Village ☒ Formal picturesque	→ Height – 1.5m max → Set back minimum 1.5m → Up to 500mm high brick wall, 215mm thick. Brick wall with brick piers and coping to match dwelling. → Powder coated black or grey railings → Privacy zone – hard or soft landscape finish to differentiate ownership	Boundaries between front gardens of adjacent dwellings to be created through the same low height brick wall with the same railing OR ornamental hedge

BOUNDARY TYPOLOGIES				
Typologies	**illustration**	**NOT permitted in these areas:**	**Description**	**Notes**
→ B4. Railing & hedge			→ Height – 1.2m max → Set back minimum 1.5m → Black metal painted (or grey) → Clipped hedge of continuous species → Gates to match railings → Black metal painted (or grey) estate rail or vertical rail design	Boundaries between front gardens of adjacent dwellings to be created through same railing and ornamental hedge
→ B5. Low wall & ornamental hedge		☒ Formal Urban ☒ Mixed Use	→ Set back minimum 1.5m → 600mm brick wall with brick coping, clay tiles creasing, bricks to match dwelling → Hedge to grow not more than 900mm high	Boundaries between front gardens of adjacent dwellings to be created through the same design of urban style railing or ornamental hedge
→ B6. Ornamental hedge		☒ Formal Urban ☒ Mixed Use	→ Height – 0.9 / 1.2 m max → Set back minimum 2m → Post and wire fence integral to the hedge while it establishes	Boundaries between front gardens of adjacent dwellings to be created through the same low height brick wall with the same railing OR ornamental hedge

BOUNDARY TYPOLOGIES				
Typologies	**illustration**	**NOT Permitted in areas**	**Description**	**Notes**
→ B7. Planted zone	 Plan		→ Set back is 1.5m or less (minimum 800mm to be maintained) → Height – maximum 600mm → Low clipped hedge with shrub planting → Planted area should be finished with 450mm depth of topsoil to allow for low evergreen shrubs → Grass or gravel or loose materials as surface cover are not acceptable	Boundaries between front gardens of adjacent dwellings to be created through same railing OR ornamental hedge
→ B8. Wall			→ 1100mm high, with upwardly projecting piers → 215mm thick brick wall to match the house wall → Brick capping on clay tile creasing or cast stone coping. → Gates to be steel vertical bars painted black.	Boundaries between front gardens of adjacent dwellings to be created through the same design of urban style railing or ornamental hedge
→ B9. Picket fencing		☒ Formal Picturesque ☒ Formal Suburban ☒ Formal Park Setting ☒ Formal Urban ☒ Mixed Use	→ 900mm high timber, picket style fence, → Stained, or painted white. → Gates to match fencing.	Boundaries between front gardens of adjacent dwellings to be created through the same low height brick wall with the same railing OR ornamental hedge

6.7 Typology Matrices

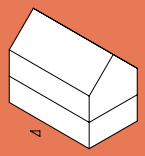
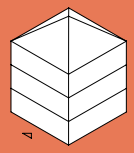
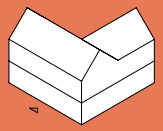
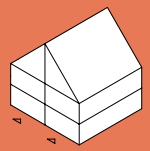
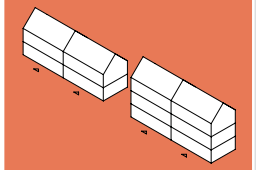
The following matrices specifically prescribe which residential plot components are permitted along labelled edges of residential development on the Regulatory Plan. This is annotated by a letter within the circle labelling each edge. The matrices A-L are set out in this chapter; all Reserved Matters will adhere to the content of the matrices when designing labelled edges of residential development.



Extract of the Regulatory Plan showing the residential edge label

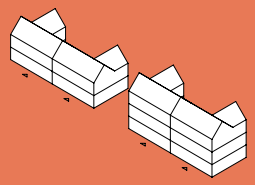
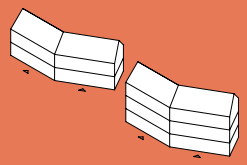
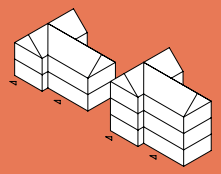
../A

MATRIX A

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D1 - Wide frontage 	2-2.5 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	
D3 - Villa 	2-2.5 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	
D4 - L shaped / corner 	2-3 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD1 - Narrow frontage 	2-2.5 storey	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD2 - Wide frontage 	2-2.5 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	

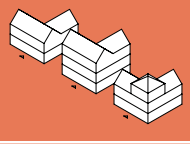
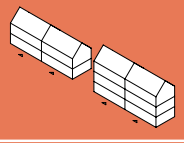
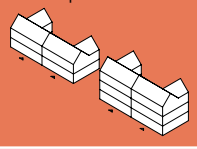
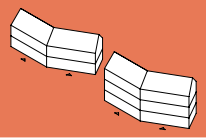
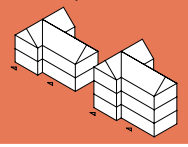
../A

MATRIX A CONTINUED

Typologies	Height	Set back	Parking	Boundary treatment	Notes
SD3 - L-shaped 	2-2.5 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD5 - Cranked 	2-2.5 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD6 - T-shaped 	2-2.5 storeys	1-4m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P8 - Forecourt → P9 - Detached car barns	→ B1 - No Boundary → B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall	

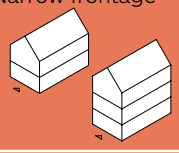
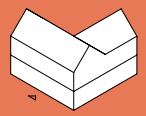
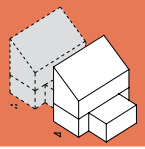
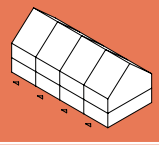
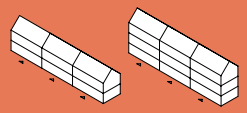
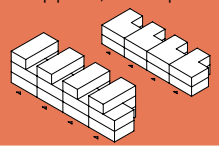
../B

MATRIX B

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D1 - Wide frontage 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	
D3 - Villa 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	
D4- L-shaped / corner 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	
SD2 - Wide frontage 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	
SD3 - L-shaped 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	
SD5 - Cranked 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	
SD6 - T-shaped 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P2 - On-plot corner → P3 - On-plot between buildings → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B6 - Ornamental hedge → B7 - Planted zone → B8 - Wall → B9 - Picket fence	

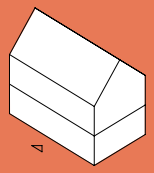
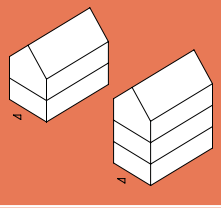
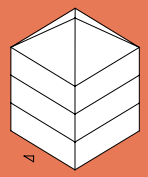
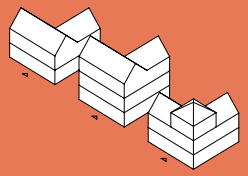
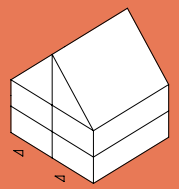
../C

MATRIX C

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D2 - Narrow frontage 	2-3 storey	1-3m	→ P2 - On-plot corner (Only for corner buildings) → P3 - On-plot between buildings	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
D4 - L-shaped / corner 	2-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
D5 - Linked detached 	2-3 storey	1-3m	→ P3 - On-plot between buildings	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
SD1 - Narrow frontage 	2 storey	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear Parking Courts → P9 - Detached car barns	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
T1 - Narrow frontage 	2-3 storey	1-3m	→ P5 - Mews → P7 - Rear Parking Courts → P9 - Detached car barns	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
T2 - Wide frontage 	2-3 storey	1-3m	→ P5 - Mews → P7 - Rear Parking Courts → P9 - Detached car barns	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
T3 - Stepped / L-shaped 	2-3 storey	1-3m	→ P5 - Mews → P6 - Front access drive through → P7 - Rear Parking Courts	→ B1 - No Boundary → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park

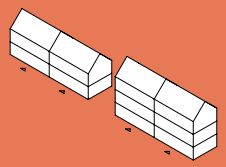
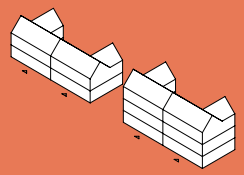
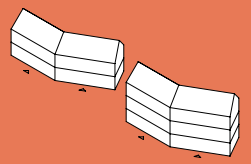
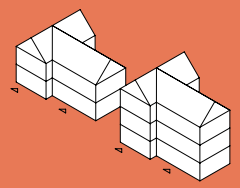
../D

MATRIX D

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D1 - Wide frontage 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
D2 - Narrow frontage 	2-3 storey	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
D3 - Villa 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
D4- L-shaped / corner 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD1 - Narrow frontage 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	

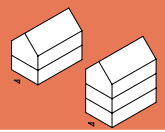
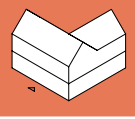
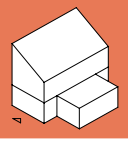
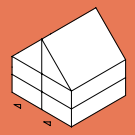
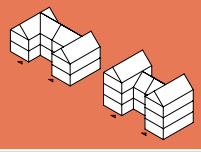
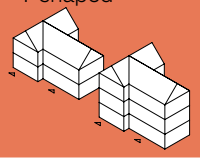
../D

MATRIX D CONTINUED

Typologies	Height	Set back	Parking	Boundary treatment	Notes
SD2 - Wide frontage 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD3 - L-shaped 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD5 - Cranked 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	
SD6 - T-shaped 	2-3 storeys	1.5-5m (up to 10m when using P8 forecourt parking)	→ P3 - On-plot between buildings → P2 - On-plot corner → P7 - Rear parking courts → P8 - Forecourt → P9 - Detached car barns	→ B5 - Low wall and Ornamental hedge → B7 - Planted zone → B8 - Wall	

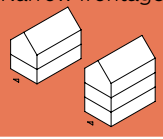
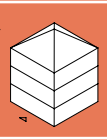
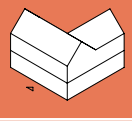
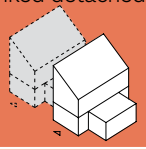
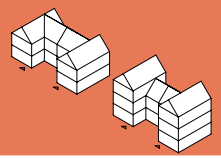
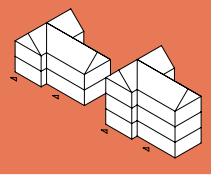
../E

MATRIX E

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D2 - Narrow frontage 	2.5-3 storeys	1-3m	→ P3 - On-plot between buildings	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	
D3 - Villa 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	
D4 - L- shaped / corner 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	
D5 - Linked detached 	2.5-3 storeys	1-3m	→ P3 - On-plot between buildings	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	
SD1 - Narrow frontage 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	
SD4 - Inverted L-shaped 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	
SD6 - T-shaped 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge → B7 - Planted zone	

../F

MATRIX F

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D2 - Narrow frontage 	2.5-3 storeys	1-2m	→ P3 - on-plot between buildings	→ B3 - Railing on low wall → B4 - Railing and hedge	
D3 - Villa 	2.5-3 storeys	1-2m	→ P2 - on-plot corner → P3 - on-plot between buildings	→ B3 - Railing on low wall → B4 - Railing and hedge	
D4 - L shaped / corner 	2.5-3 storeys	1-2m	→ P2 - on-plot corner → P3 - on-plot between buildings	→ B3 - Railing on low wall → B4 - Railing and hedge	
D5 - Linked detached 	2.5-3 storeys	1-2m	→ P3 - on-plot between buildings	→ B3 - Railing on low wall → B4 - Railing and hedge	
SD1 - Narrow frontage 	2.5-3 storey	1-2m	→ P2 - on-plot corner → P3 - on-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and hedge	
SD4 - Inverted L-shaped 	2.5-3 storeys	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and hedge	
SD6 - T-shaped 	2.5-3 storeys	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and hedge	

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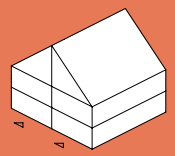
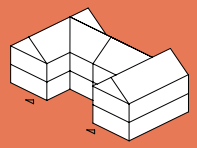
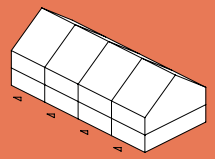
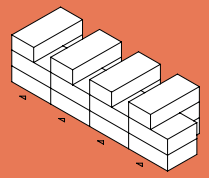
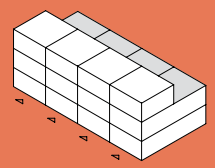
MATRIX G

Typologies	Height	Set back	Parking	Boundary treatment	Notes
SD1 - Narrow frontage 	2.5-3 storeys	1-2m	→ P2 - On-plot corner → P4 - Courtyard	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Linear Park
SD4 - Inverted L-shaped 	2.5-3 storeys	1-2m	→ P2 - On-plot corner → P4 - Courtyard → P5 - mews → P7 - rear parking courts	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park
T1 - Narrow frontage 	3 storeys	1-2m	→ P2 - On-plot corner → P4 - Courtyard → P5 - mews → P7 - rear parking courts	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace
T3 - Stepped/L-shaped 	3 storeys	1-2m	→ P2 - on-plot corner → P3 - on-plot between buildings → P5 - mews → P6 - front access drive through → P7 - rear parking courts	→ B1 -No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ P6 subject to road hierarchy → B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace
U3 - Rear terrace 	3 storeys	1-2m	→ P2 - on-plot corner → P3 - on-plot between buildings → P5 - mews → P6 - front access drive through → P7 - rear parking courts	→ B1 -No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ P6 subject to road hierarchy → B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace

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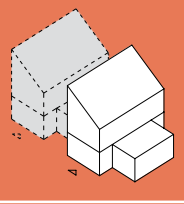
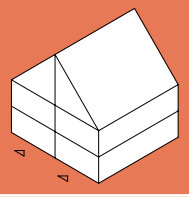
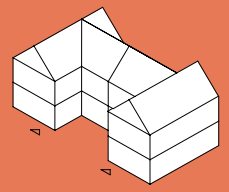
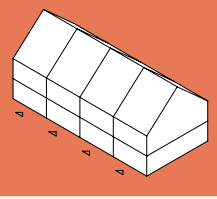
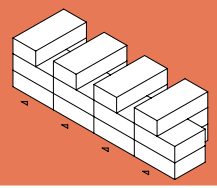
MATRIX H

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D5 - Linked detached 	2.5-3 storeys	1-2m	→ P3 - On-plot between buildings	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 8 units to form terrace
SD1 - Narrow frontage 	2.5-3 storeys	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park
SD4 - Inverted L-shaped 	2.5-3 storeys	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park
T1 - Narrow frontage 	3 storeys	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace
T3 - Stepped/L-shaped 	3 storey	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ P6 subject to road hierarchy → B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace

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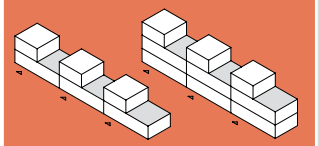
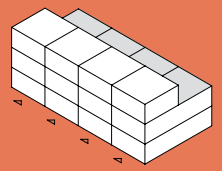
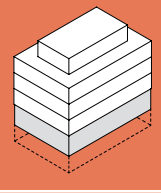
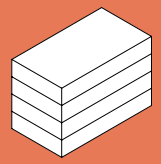
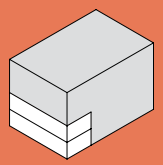
MATRIX H CONTINUED

Typologies	Height	Set back	Parking	Boundary treatment	Notes
U2 - Side terrace 	3 storey	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ P6 subject to road hierarchy → B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace
U3 - Rear terrace 	3 storey	1-2m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ P6 subject to road hierarchy → B1 Boundary Treatment can be applied only when fronting Runway Park → Maximum 4 units to form terrace
F1 - Mixed use flat block 	4-5 storeys see building heights line on regulatory plan	1-2m	→ P7 - Rear parking courts → P11 - Basement/semi-basement	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park
F2 - Typical flat block 	4-5 storeys see building heights line on regulatory plan	1-2m	→ P7 - Rear parking courts → P11 - Basement/semi-basement	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park
F3 - Duplex 	4-5 storeys see building heights line on regulatory plan	1-2m	→ P7 - Rear parking courts → P11 - basement/semi-basement	→ B1 - No Boundary → B2 - Urban Style Railing → B3 - Railing on low wall → B4 - Railing and Hedge → B7 - Planted zone	→ B1 Boundary Treatment can be applied only when fronting Runway Park

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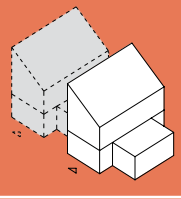
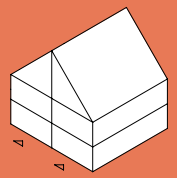
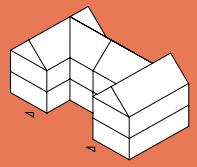
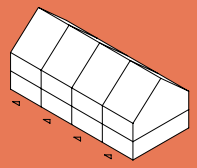
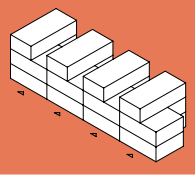
MATRIX J

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D5 - Linked detached 	2.5-3 storeys	1-3m	→ P3 - On-plot between buildings	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	→ Maximum 8 units to form terrace
SD1 - Narrow frontage 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	
SD4 - Inverted L-shaped 	2.5-3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	
T1 - Narrow frontage 	3 storeys	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	→ Maximum 4 units to form terrace
T3 - Stepped/L-shaped 	3 storey	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	→ Maximum 4 units to form terrace

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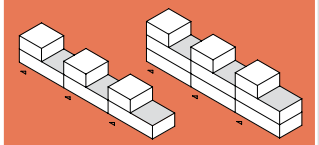
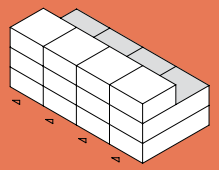
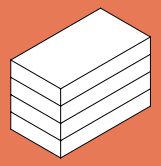
MATRIX J CONTINUED

Typologies	Height	Set back	Parking	Boundary treatment	Notes
U2 - Side terrace 	3 storey	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	→ Maximum 4 units to form terrace
U3 - Rear terrace 	3 storey	1-3m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	→ Maximum 4 units to form terrace
F2 - Typical flat block 	3 storey	1-3m	→ P7 - Rear parking courts → P11 - Basement / semi-basement	→ B3 - Railing on low wall → B4 - Railing and Hedge → B5 - Low wall and Ornamental hedge → B7 - Planted Zone	

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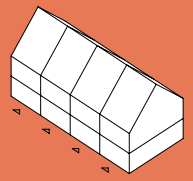
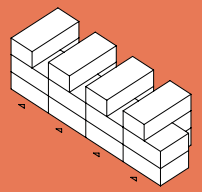
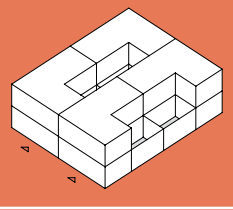
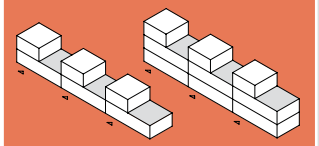
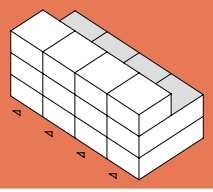
MATRIX K

Typologies	Height	Set back	Parking	Boundary treatment	Notes
T1 - Narrow frontage 	2.5-3 storeys	1-2m	→ P5 - Mews → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban style railing → B3 - Railing on low wall → B4 - Railing and hedge	
T3 - Stepped/L-shaped 	2.5-3 storey	1-2m	→ P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban style railing → B3 - Railing on low wall → B4 - Railing and hedge	
U1 - Courtyard 	2-2.5 storey	1-2m	→ P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban style railing → B3 - Railing on low wall → B4 - Railing and hedge	
U2 - Side terrace 	2-2.5 storey	1-2m	→ P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban style railing → B3 - Railing on low wall → B4 - Railing and hedge	
U3 - Rear terrace 	2-2.5 storey	1-2m	→ P5 - Mews → P6 - Front access drive through → P7 - Rear parking courts	→ B1 - No Boundary → B2 - Urban style railing → B3 - Railing on low wall → B4 - Railing and hedge	

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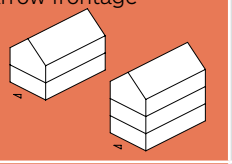
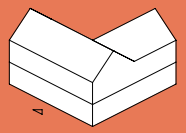
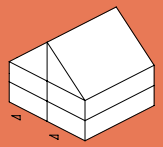
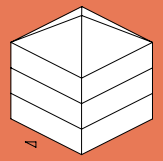
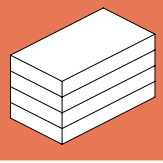
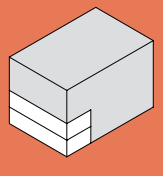
MATRIX L

Typologies	Height	Set back	Parking	Boundary treatment	Notes
D2 - Narrow frontage 	2.5-3 storeys	1-4m	→ P3 - On-plot between buildings → P5 - Mews parking	→ B3 - Railing on low wall → B4 - Railing and hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge	
D4 - L shaped / corner 	2.5-3 storeys	1-4m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews parking	→ B3 - Railing on low wall → B4 - Railing and hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge	
SD1 - Narrow frontage 	2.5-3 storeys	1-4m	→ P2 - On-plot corner → P3 - On-plot between buildings → P5 - Mews parking → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge	
D3 - Villa 	2.5-3 storeys	1-4m	→ P2 - On-plot corner → P3 - On-plot between buildings	→ B3 - Railing on low wall → B4 - Railing and hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge	
F2 - Typical flat block 	4 -5 storeys	1-4m	→ P5 - Mews parking → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge	→ F2 can only be used on the corners adjacent to the Boulevard
F3 -Duplex 	4 -5 storeys	1-4m	→ P5 - Mews parking → P7 - Rear parking courts	→ B3 - Railing on low wall → B4 - Railing and hedge → B5 - Low wall and Ornamental hedge → B6 - Ornamental hedge	→ F3 can only be used on the corners adjacent to the Boulevard

6.8 Residential Density

The density of residential development will vary across Key Phase 1, being at its lowest in the south-east Ermine Village character area, and at its highest in the Formal Urban areas by the Boulevard and the Hub. Across the various character areas the Design Code sets very clear rules as to which housing typologies may be used, and how they may be configured. This is most prescriptive on parcel edges facing streets or spaces, and less prescriptive within parcels. Adherence to the Code will ensure that across the phase an appropriate density of development - and therefore overall number of dwellings - will be achieved.

The description of character areas, frontage characters and typologies prescribed in the typology matrices inform the residential layout across KP1. For example, proposals within the Formal Urban character area will use predominantly terraced dwellings and apartments within a compact urban form. This will result in a higher density of housing and population, close to the Hub and primary public transport links within the Alconbury Weald development.

In contrast, proposals within the Ermine Village character area will use predominantly detached and semi detached dwellings, set within a loose urban form of staggered frontages and larger plots. This will result in a lower density of housing, appropriate to the green context in this part of the KP1 site.

Reserved Matters Applications will follow the coding set out in this chapter in order to achieve the appropriate character and density for KP1.

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CHAPTER 7
Community Uses Built Form

CHAPTER 7: COMMUNITY USES BUILT FORM, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and shown on the Regulatory Plan.
The Compliance Checklist in Appendix 1 presents a complete list of design fix headings from the whole Design Code.

→ **Location of Community Uses** as shown on the Regulatory Plan.

→ **Walkable Neighbourhoods**

→ **Primary School:** the location of the Primary School is fixed on the Regulatory Plan. Design principles as stated in this chapter.

→ **Early Years Provision:** key design principles set.

→ **Community Building:** key design principles set.

→ **Hangars to potentially retain:** location fixed on Regulatory Plan. Design principles as stated in this chapter.

→ **Cricket Pavilion:** location fixed on Regulatory Plan. Design principles as stated in this chapter.

→ **Listed Watch Tower:** location fixed on Regulatory Plan. Design principles as stated in this chapter.

Figure 7a: Community Uses Built Form: Highlighted on the KP1 Regulatory Plan

7.1 Introduction

This section provides design guidance for the community uses of Alconbury Weald KP1 as illustrated in Figure 7a: Community Uses Built Form Highlighted on the KP1 Regulatory Plan. The design guidance for Community uses draws directly on the Alconbury Weald Outline Planning Permission, Parameter Plan and Development Specification in scoping the scale and location of community facilities and a number of spatial proximity principles. The Alconbury Weald Community Facilities Strategy provides further input on the scope of these facilities. The Design & Access Statement Principles refine the approach, particularly in terms of Layout (Chapter 6), Appearance (Chapter 9) and Sustainability (Chapter 13).

There are three key elements of community uses built form for which design principles were established in the Alconbury Weald OPP Design and Access Statement (DAS). Within KP1, these comprise:

→ A Primary School;

→ Local facilities including retail; and

→ Community facilities.

The location of community uses is set out on the Regulatory Plan, also see Figure 7a.

In providing Design Guidance for community uses the following elements are covered in this chapter:

→ Primary School;

→ Early Years Provision;

→ Community Building;

→ Re-use of buildings;

→ Hangars to potentially retain for community uses;

→ Cricket Pavilion in Cricket Park; and

→ Listed Watch Tower (refurbishment potential for a range of uses).

Re-use of Heritage Assets

Spatial Principle SP12 of the OPP DAS promotes the re-use of heritage assets on-site (*within the full OPP Alconbury Weald area*) including:

→ The Grade II* listed Hardened Aircraft Shelters and their setting; and

→ The Grade II listed Watch Office and Briefing Room and open space to enhance its setting.

Within the OPP, flexibility was provided in the new uses of these assets, including for community uses.

Walkable Neighbourhoods

In relation to layout, the OPP Design & Access Statement principles promote the concept of walkable neighbourhoods.

Local neighbourhoods with employment and housing distributed at appropriate densities centred on retail and community facilities including primary schools and cycle hubs to support the concept of walkable neighbourhoods will be promoted.

The detailed design of KP1 of Alconbury Weald must ensure that this concept is promoted, consistent with the OPP Spatial Principles:

→ *The majority of development located within a 5-10 minute walk (400m-800m) of important facilities, and*

→ *Even development on the outer edges of the site to be located within a 15-20 minute walk of key facilities.*

→ Spatial Principle SP14 states that *"The concept of walkable neighbourhoods is facilitated by the following:*

› *At least 80% of homes will be within 800m of schools, retail provision and cultural or social activities.*

› *Traffic Management will include limiting speeds on site to 30mph/20mph with the exception of the dedicated busway as shown on the Parameter Plan.*

› *Footpath /cycle track/bridleway connections will link in with the existing footpath and bridleway network around the site and the historic Public Rights Of Way."*

7.2 Community Uses Built Form Design Guidance

KP1 will provide a flexible, complementary and integrated approach to the delivery of community uses. The principle of sharing uses is imperative in ensuring the most efficient use of community buildings, and in allowing the integration of such uses to serve the occupants of both the residential and commercial areas.

A cluster of community buildings will be located to the south-east of the KP1 area as identified on the Regulatory Plan. A flexible approach will be taken to these community uses which will comprise a primary school, mixed-use facilities, community facilities, and local facilities including retail.

This enables supporting community uses to be grouped together; promoting the concept of walkable neighbourhoods with at least 80% of homes within 800m of the primary school, retail provision and cultural and social activities.

The Hub will come forward in later phases of the development of Alconbury Weald and with it a wider offer of community and retail uses will be accommodated. This will enable all residents to be within walking distance of local community facilities upon completion of KP1 and the Hub.

Community uses will be located within a residential setting. The layout and siting of community uses will not negatively impact on adjacent uses with regards to noise and light pollution.

Primary School

→ The Primary School is to be located in the prominent position at the crossing point of the taxiway and support runway alignments within the residential area of KP1. See location on Regulatory Plan.

→ Building height in this location is limited to 'up to 15m height to ridge' as stated on the OPP Parameter Plan and KP1 Regulatory Plan.

→ The boundary to the school site will provide security whilst also creating a suitable interface with the immediate residential context.

→ The access and parking strategy for the school will be designed in such a way as to minimise impact on the surrounding road network and pedestrian and cycle movements.

→ Pedestrian and cycle movement will be prioritised on entering the school grounds to provide a safe environment for green modes of transport.

→ The school building, grounds, and potentially retained hangar within the school site, have the potential to support community activities out of school hours.

→ The school building will aim to achieve, as a minimum, BREEAM very good.

→ The school design should take advantage of its prominent position at the termination of the vista along the Linear Park (north-south, see section 3.9 of the Design Code). This Linear Park is aligned on the path of the former taxiway.

→ No provision will be provided on the school site for a dedicated community building, however there may be opportunity for dual use of the school building out of school hours.

→ The school building should be positioned to face the end of the linear park, as a visual landmark, facing north towards the Hub.

→ The school building will also be prominent as seen when entering KP1 through the Residential Gateway (see 3.20) from Ermine Street.

→ School playing fields to be positioned at the southern end of the school site, located between Ermine Street and the school building.

→ The design of the Primary School should tie in with the neighbouring public realm, refer to Key Groupings for further guidance on:
  › *Village Green (see 6.5.2.C)*
  › *Ermine Village Gateway (see 6.5.2.E)*

→ Public space should be provided in front of the main entrance to the school, adjacent to the street, as shown on the Regulatory Plan.

Location plan - Primary School extract from Regulatory Plan:

Figure 7b: Community Uses Built Form Precedent Photographs – Primary School

Primary School precedent with public space, Milton Keynes

Primary School precedent with street presence, Milton Keynes

Primary school precedent, Upton, Northampton

Primary School precedent, Ravenswood, Ipswich
– distinctive building on important corner

Primary School precedent, Ravenswood, Ipswich –
street frontage and bus route

Primary School Precedent, Hampton, Peterborough
- clear entrance and neat boundary treatment

Early Years Provision

Early years provision within KP1 is to be accommodated in two forms. Firstly, space has been set aside within the Primary School site. Secondly, early years provision may also take the form of additional private sector provision depending on market demand. Locations for Early Years Provision within KP1 have not been fixed on the Regulatory Plan to allow future flexibility. However, the following criteria will be applied to the consideration of locations for Private Early Years provision:

- → potential reuse of all or part of the Watch Tower building;
- → potential to be located within the Mixed Use area between residential and commercial;
- → sufficient open space;
- → sufficient car parking areas;
- → neighbour sensitivities.

Community Building

KP1 should accommodate a community building such as a community hall. A specific location for a community building has not been fixed at this stage on the Design Code Regulatory Plan. In common with early years provision, this type of community facility could be accommodated in a range of locations, but preferences would be to locate a community building adjacent to other community or mixed use facilities. Possible locations include:

- → associated with the Primary School;
- → part of the potential redevelopment of the Listed Watch Tower Building;
- → located within the mixed use area between the commercial area and residential area, east of the main boulevard entrance;
- → as part of the potential re-use of the existing hangars in proximity to the Primary School.
- → Careful planning and design (e.g. correct storage space, floor type, roof height, lighting) should allow a community building to be suitable for some sports/physical activity, e.g. tumble tots, martial arts, table tennis, pool, short mat bowls etc.

Reuse of Buildings

The potential to reuse buildings as either short term or longer term options exists as a possible option to explore within KP1. Suggestions are set out on the following pages for the potential reuse of important existing buildings including the Watch Tower and also some of the Aircraft Hangars. In addition to these it may be possible to consider the reuse of other existing buildings within the KP1 area for temporary or short term uses – an example may be the potential to reuse existing office space within the mixed use area between the commercial and residential areas.

Figure 7c: Precedent images: early years provision / day nursery & community building

Example of a unit created to provide space for a day nursery

Example of a community building

Figure 7d: Precedent example of reuse of existing buildings

Example of building reuse for training purposes at Alconbury Weald

Figure 7e: Community Uses Built Form Precedent Photographs – Potential reuse of hangars

Hangars potentially retained for community uses

The importance of the history and heritage of Alconbury Weald is a core component of the future design approach for the site. The existing hangar structures, shown on the Regulatory Plan, will be considered for conversion to community uses. Temporary uses within the existing hangar structures will be considered in early phases of development. The scale of the hangars offer a number of opportunities for a range of supporting community uses such as sports facilities and pitches, and a community meeting space. One of the hangars may also have the potential to accommodate a nursery/crèche to provide the co-location of educational uses alongside the primary school.

Potentially Retained Hangars:

- → Location of potentially retained hangars shown on Regulatory Plan.
- → Potential refurbishment of hangars for use as community facilities.
- → Potential uses include indoor events / exhibition space, indoor sports and recreation uses.

For further information regarding the potential for sports in hangars refer to hangar sports accommodation study under NEAP, Section 9.9 Play Provision Strategy.

‹ Location plan - hangars (potential retention), extract from Regulatory Plan (hangars shown in orange on the plan).

Hangars as existing (circled)

Precedent example of re-use of hangars for formal sports

Hangars as existing (circled)

Precedent example of re-use of hangars for wheeled sports

Cricket Pavilion in Cricket Park

The Cricket Pavilion building within the Cricket Park will provide changing rooms and a small meeting space to serve the residential area, local cricket teams, and potentially the commercial area. At the northern most point of the Cricket Park an area for car parking will be located to serve the Cricket Pavilion.

- → Cricket Pavilion location fixed on Regulatory Plan.
- → A high quality design is required for the Cricket Pavilion. A bespoke architectural response is appropriate as the building will be highly visible as a key building in public space, in a prominent location.
- → Access and parking for cricket pavilion fixed on Regulatory Plan.
- → Pavilion to accommodate changing facilities and small meeting place.
- → Pavilion for cricket and community events, associated parking with access from boulevard (park route);
- → Possibility to raise the pavilion above the level of the pitch if required to improve views of play;
- → Design of the pavilion should reference 'Pavilions and Clubhouses' (ECB guidance, 2009)

Location plan - Cricket Pavilion location identified with 'C' icon on this extract taken from the Regulatory Plan.

Figure 7f: Cricket Pavilion precedent photographs

Campbell Park, Milton Keynes

Figure 7g: Cricket Pavilion precedent photographs

Graylingwell Park, Chichester

Listed Watch Tower Building

The existing listed Watch Tower is an important historic building and provides a link to the site's aviation history. The Watch Office and Briefing Room will be re-used and refurbished to accommodate community facilities. This will provide a point of common linkage between the needs of employees and residents at Alconbury Weald.

The Watch Tower Building will be an important landmark, located along Boulevard, between the Boulevard Gateway and the Hub. The quality of the buildings' design should reflect this. The provision of open space in front of the Watch Tower will help enhance the building's setting. Potential new uses for the Watch Tower building, as identified in Chapter 5 (Commercial Built Form), include:

→ A3 Food and Drink, a restaurant or café;

→ D1 Non-residential institutions, for instance a crèche or day nursery; or

→ An alternative D1 use could, for example, be a museum to record the history of the Alconbury site. This would be a valuable community education facility. It may be a temporary use if a permanent alternative facility is provide in future stages of development at Alconbury Weald.

The use of the Watch Tower for a food and drink use would provide a community asset, serving those working in the commercial area as well as new residents of the KP1 area. Watch Tower Green, the Boulevard and Cricket Park will provide an attractive setting.

Figure 7h: Community Uses Built Form Precedent Photographs – Watch Tower

Listed Watch Tower – north west elevation, Alconbury

Listed Watch Tower – south west elevation

Aviation building refurbishment precedent, Ravenswood, Ipswich

Aviation building refurbishment precedent, Ravenswood, Ipswich

The use of part of the listed building as a nursery/ crèche would require a space of 0.3 hectares. A nursery/ crèche use would need to accommodate a spill-out space for children to play, as well as an area for servicing and parking to the rear of the building.

Location plan shows the position of the Watch Tower on Regulatory Plan

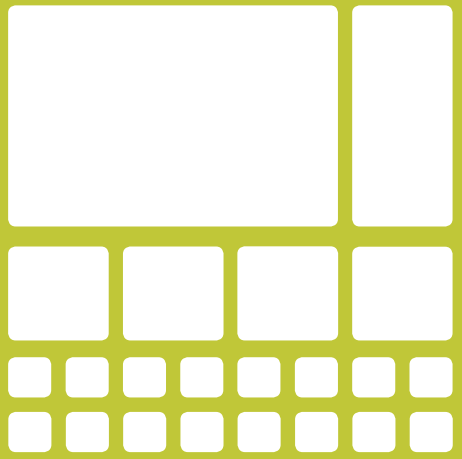
PART C

Detailing the Place

Alconbury Weald

Make|Grow

CHAPTER 8
Detailing the Place



CHAPTER 8: DETAILING THE PLACE, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and shown on the Regulatory Plan.
The Compliance Checklist in Appendix 1 presents a complete list of design fix headings from the Design Code.

→ **8.2 Commercial Built Form detail design considerations including:**

- › **8.2.1 Architectural Principles for Commercial Built Form** – detail design considerations.
- › **8.2.2 Building Features for Commercial Built Form** – detail design considerations.
- › **8.2.3 Materials & Colour for Commercial Built Form**

→ **8.3 Residential Area detail design considerations including:**

- › **8.3.1 Architectural Principles for Residential Built Form** – detail design considerations.
- › **8.3.2 Building Features for Residential Built Form** – detail design considerations.
- › **8.3.3 Materials for Residential Built Form (including mixed use component).**

→ **8.4 Public Realm Palette,** comprising:

- › **8.4.1 Street Design Materials Palette**
- › **8.4.2 Boundary Treatments**
- › **8.4.3 Street Furniture**
- › **8.4.4 Lighting**
- › **8.4.5 Tree Planting Palette & Soft Landscape**
- › **8.4.6 Branding (including signage & typography)**
- › **8.4.7 Public Art**

8.1 Introduction

This chapter sets out a series of principles and rules for the architectural design and materials for built development in KP1 at Alconbury Weald. Guidance is also provided for materials within the public realm. These principles and rules ensure quality, consistency and coherence across the KP1 area. In setting out these principles and rules, this chapter covers:

→ 8.2 Commercial Built Form

→ 8.3 Residential Built Form

→ 8.4 Public Realm

8.2 Commercial Built Form detail design considerations

Design of commercial built form must take account of the following, as set out over subsequent pages:

8.2.1 Architectural Principles for Commercial Built Form:

1. Character, Place Making & Legibility;
2. Prominence;
3. Consideration of Setting;
4. Clean Building Outline;
5. Building Height;
6. Integrated Sustainability;
7. Architectural Family;
8. Flexibility; and
9. Consistent Public Realm Design.

8.2.2 Building Features for Commercial Built Form:

1. External Appearance: Industrial Built Form;
2. External Appearance: Office Built Form;
3. Roofs, Eaves & Ridges;
4. Windows; and
5. Building Entrances.

8.2.3 Materials & Colour for Commercial Built Form

Reference to HDC design guidance for commercial materials and colour.

8.2 Commercial Built Form detail design considerations:

8.2.1 Architectural Principles for Commercial Built Form:

The following architectural principles will be adhered to for commercial built form:

1. CHARACTER, PLACE MAKING & LEGIBILITY:
The commercial area will be characterised by the presence of large functional buildings used for logistics and manufacturing purposes and the layout and design must be in keeping with this scale. The concept should enable safe and convenient movement within the development, it should provide for the co-ordination of building design, materials, colours, hard landscaping, soft landscaping and ancillary features to be attractive and interesting and ensure the inclusion of memorable reference points for movement within the private and public areas.

Precedent - Kings Hill, Kent

2. PROMINENCE:
Activity generating aspects of the commercial buildings, notably office buildings and office elements of R&D and general industrial buildings should be orientated to address the public realm (streets and spaces) with fenestration including entrances, front doors and windows. Conversely back of house servicing should be orientated to address non public rear of plot locations.

Precedent of office elements of commercial unit facing street

3. CONSIDERATION OF SETTING:
Commercial buildings will have a prominent visual impact on site due to the relatively large footprint and height of commercial buildings in comparison to residential development. As such the design of commercial buildings must be carefully considered to ensure the form and massing is appropriate and the external appearance has due consideration for neighbouring land uses.

Precedent - Hatfield Business Park

4. CLEAN BUILDING OUTLINE:
A proliferation of servicing and ancillary structures and plant units both at the scale of the building and the scale of the plot, particularly considering roofscape should be avoided. Storage compounds, plant units, and other such auxiliary features should be positioned to the rear, away from public facing elevations, with appropriate landscape screening. Where plant (such as mechanical engineering features) are required on top of commercial buildings it should be screened with parapets around the eaves of building roofs.

Clean building outline precedent, Oxford Science Park

5. **BUILDING HEIGHT** will not exceed limits identified on the Regulatory Plan, with emphasis in height given to accentuate built form in key locations, on important corners and gateways, as illustrated on the Regulatory Plan. Design of building elevations must be considered with regard to impact on height: building height can be accentuated through use of repeated vertical elements on façades and elevations. Conversely height can be visually suppressed by emphasising horizontal features on façades.

Building Height Precedent - Incubator

6. **INTEGRATED SUSTAINABILITY:** Commercial built form should sensitively integrate sustainability features to address energy, resource and water efficiency. These features may include green and brown roofs, incorporation of solar panels, PV cells, appropriate insulation, efficient lighting and water devices, although these should be carefully positioned.

Precedent of integrating sustainability

7. **'ARCHITECTURAL FAMILY':** Individual commercial buildings are part of a wider 'family' of built form that share some characteristics. Reference can be made between existing and proposed commercial buildings with the opportunity to take design cues from existing built form. Scale of built form can also be considered within relative 'families', ranging from smaller features such as the Gatehouse(s), larger scale buildings such as the Incubator Unit (which takes cues from the Parachute Tower), through to the largest scale of buildings including existing hangars and proposed larger footprint, general industrial and research & development buildings.

'Architectural family' for gatehouse and Incubator, at Alconbury Weald: similar design & appearance.

8. **FLEXIBILITY:** commercial building design must take account of the need for future flexibility in use, particularly in the interior design and layout of space.

9. **CONSISTENT PUBLIC REALM DESIGN:** commercial buildings have a relatively large plot coverage (in comparison to residential) and the wider plots need to be carefully planned to ensure all features within the curtilage of individual plots (such as footways, parking, service yards, storage) are designed to a consistently high standard and relate in specification and appearance to neighbouring plots.

High quality landscape design for public & private realm between plots.
Precedent - Cambourne Business Park

8.2.2 Building Features for COMMERCIAL Built Form:

The following principles relating to commercial building design issues will be adhered to:

1. External Appearance - Industrial & Storage built form

› The Huntingdonshire Design Guide identifies the following techniques which should be employed to improve the general appearance of industrial and storage buildings:

› *The use of 'L' or 'T' shaped floor plans to break up the apparent mass of the structure.*

› *The use of multispan buildings to reduce the overall roof height, and create a more interesting roofscape.*

› *Adding prominent and carefully-detailed elements to the façade, such as entrance lobbies and canopies.'*

› *The commercial area will incorporate such architecture features to improve the appearance of industrial and storage areas. The use of landscaping will also help establish an attractive setting for the commercial buildings.*

Precedent - architecturally interesting industrial unit, Milton Keynes

› *Elevations will be punctuated with a range of sectional overhead loading and access doors to suit individual tenant requirements. Doors and dock sheltered openings will be set within a plinth zone designed to withstand or be protected from increased levels of impact damage and toned to integrate with the components at the base of the building and reduce the overall visual mass of the structure.*

› *Cladding at higher levels will require less protection and can be constructed of less durable and lighter coloured metal cladding materials. Elevations may be divided horizontally above the door zone reducing the overall scale of the elevations. Individual tenant operational requirements for canopies over docking vehicles will provide additional modelling to the elevations.*

› *Exposed rainwater pipes, panel joints and other vertical features will be considered to reduce the horizontal extent of any elevation and provide points of visual reference.*

Precedent Flat Roof Industrial Unit, Knowlhill

2. External appearance of Office Built Form

› For visual and security reasons, ancillary office components will normally face the street or public realm. Offices will be designed to maximise the use of natural ventilation and light through a limitation of depth, and for this reason may project out from the main building envelope. Ultimately office configurations will be a response to operating requirements of the building occupier.

› Freestanding office 'pods' may also be provided for larger buildings.

› Environmental features will be considered wherever practical. These may include pre-fabrication, incorporation of photo-voltaics on roofs and within cladding. Green roofs will be considered where practical.

› Glazing will be provided to all floors of the offices. Entrance doors for staff and visitors may either be combined or separated to suit the operational requirements of the offices.

› Routes to the offices from the car park and footpaths will be defined to provide safe and clearly identified points of access.

Precedent, Incubator, Alconbury Weald

3. Roofs, Eaves and Ridges

- Flat or mono-pitch roofs preferred for buildings facing the boulevard (Framing the Street employment scenario area) – to maintain consistency in design approach with the Incubator building.
- Roof pitch for all other locations to be considered on a plot by plot basis, although the preference is for shallow pitches. The Metric Handbook states factors that favour the flat or low pitch roof:
  - *"Column pitch can be wide;*
  - *They are more adaptable to a change of use or changes dictated by new processes;*
  - *They are more suitable for the installation of services such as cooled air".*
- Green roofs, brown roofs and PV panels may be used with incorporation of appropriate parapet to eaves.
- In response to local design guidance (Huntingdonshire Design Guide), roofs will be kept simple in form:
- *Roof form and skyline will be considered and coherent.*
- *Roof planes set at low pitches will generally be specified with roof lights to provide natural light to warehouse and manufacturing areas.*
- *Any roof mounted plant will require screening behind parapet walls, or integrated within office or warehouse components to maintain uncluttered horizontal roofscapes.*
- *Roof cladding materials will normally be light in colour and finished in non-reflective coatings although the feasibility of "green roofs" will be considered.*
- *The use of contrasting coloured rain water goods and external ducting will only be permitted where it forms a key component in the architectural design of the building or assist with the legibility of the area.*

4. Windows

- Large windows and / or curtain walls of floor to ceiling glazing to be encouraged for office buildings and office elements of industrial buildings to maximise inter-visibility between the built form and adjacent public realm, and to seek to maximise natural light penetrating into office elements.
- Larger footprint commercial buildings may use strips of glazing to articulate façades.
- Dark colour palette for fenestration frames preferred.
- Narrow frames encouraged for windows and doors, with reference to the historical precedents.
- Bris soliel encouraged to provide solar shading to large areas of glazing and visual interest to external appearance.

Precedent, Cambourne

5. Building Entrances

- Employee and visitor entrances to be clearly identified and prominently located to relate to public realm.
- Loading and service access entrances to be located discretely to rear of buildings away from prominent frontages.
- Dark colour palette for fenestration frames preferred with the potential exception of main entrance doors which may be accentuated with use of bright or contrasting colour.
- Main entranceways / doors to be articulated with distinctive built form, use of colour or projecting form.

Precedent, Corby Enterprise Centre

Precedent, Oxford Science Park

8.2.3 Materials & Colour for Commercial Built Form:

Commercial built form external appearance should be informed by a complementary choice of material palette to ensure continuity in appearance across the commercial area.

The Huntingdonshire Design Guide (Huntingdonshire District Council, 2007) provides the following design guidance for materials and colour which is applicable to the design of commercial buildings at Alconbury Weald:

"There is a wide range of pre-coloured cladding materials used for industrial and storage buildings. These can have an immense, and often highly damaging, impact on the landscape and townscape, sometimes over several miles. Bright colours tend to look brash and can appear very dated after a few years; they can also fade unsatisfactorily.

Materials:

As a general principle materials should give an attractive appearance and weather well. Traditional materials characteristic of the district such as brick, stone and timber can produce buildings that are durable, good-looking and which sit comfortably within their surroundings..

High quality contemporary materials such as masonry block work, glazing systems and profiled sheeting can be suitable in many places, but careful attention to building design and the potential impact upon the site's surroundings is important. The building's appearance should complement its landscape setting and/or the character of surrounding development.

So far as possible, the materials used should promote sustainable forms of construction. This means favouring materials that have low embodied energy as well as being durable. 'Embodied energy' is the energy consumed in the production, transportation and construction process.

Using locally-sourced natural materials is one way of reducing embodied energy, and is also likely to assist the promotion of local distinctiveness in new development. Recycled materials can also help to conserve resources, and their use is encouraged where possible.

Colour:

The choice of colour and materials should allow the development to sit comfortably within its surroundings. For this reason bright, intense colours tend to be inappropriate. Similarly, large and brash signage can appear intrusive and should be avoided.

Limiting the colour palette used to different shades and textures of the same colour (or similar, complementary colours) helps to give a cohesive appearance and a more refined image. Similarly, a limited and complementary range of materials and colours should be used within groups of buildings.

Texture rather than contrasting colours can be used to help break up large areas of wall; for instance, by using different profiles of sheeting, of the same colour.

Dark colours can be used to help reduce the apparent scale of a structure, whereas light and bright finishes will make a building appear larger and more conspicuous. This is a particularly important consideration with roofs, which tend to reflect more light than the walls. Choosing a roof colour which is darker than the walls can help to limit visual impact and settle a building into its surroundings.

However, it is crucial to study the site's backdrop and key vantage points when making decisions. For example, dark earthy tones may be most appropriate where a building will be seen against a countryside backdrop, whereas a pale grey may be less obtrusive when the building or roof is viewed against the sky."

Source: Part 5, Industrial & Storage Buildings, Huntingdonshire Design Guide, HDC, 2007.

8.3 Residential Area

This section sets out a series of principles and rules for the architectural design and detailing of residential buildings. These principles and rules will ensure quality, consistency and coherence prevails across the Key Phase 1 site. The diagram below introduces each part of this section in a step by step process:

Step 1: 8.3.1 Architectural Principles

A series of principles establish the architectural composition of groups of dwellings and individual dwellings, within a carefully considered layout.

Step 2: 8.3.2 Building features

A series of rules prescribe the detailed design of key building features:

1. Walls
2. Rainwater goods
3. Chimneys and Vents
4. Doors & entrances
5. Dormer windows
6. Bay windows
7. Windows
8. Roofs and eaves
9. Porches
10. Balconies

Step 3: 8.3.3 Building Materials

A series of materials principles and palettes prescribe which materials are appropriate for residential character areas and how they will be applied.

8.3.1 Architectural Principles for Residential Built Form

1. Recognisable Form

→ Proposals will follow the gradation from urban to rural built form as demonstrated in the Character Areas plan. This will be achieved by using appropriate and recognisable forms which relate to the relevant character.

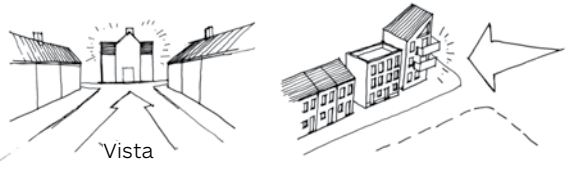
2. Silhouette

→ Dwellings will create unified and articulated silhouettes through repetitive roof forms within terraces and groupings of dwellings. This can be achieved, for example, through the use of chimneys or gables.

3. Landmark

→ Landmark buildings will:
  → mark the end of vistas or long views
  → address prominent corners
  → frame key views

→ A landmark building can demonstrate key features such as projecting bays, large window openings, balconies and expressive roof forms.



4. Aspect & Orientation

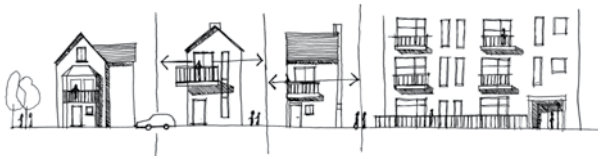
→ Dwellings will maximise the potential for roof pitches to face south.

→ Where possible, dwellings will maximise potential for south / south west facing habitable rooms.

→ Dwellings will show consideration of solar shading principles to provide a comfortable habitable environment.

5. Animate Frontage Addressing the Public Realm

→ Dwellings which front the public realm will maximise the potential for active frontages and provision for balconies.
→ This will provide natural surveillance and assist in creating animation along the street scene.



6. Express Individuality of linked & terraced dwellings

→ Dwellings which form part of a terrace or grouping of buildings will express individuality through celebrating entrances and openings.
→ This can also be achieved, for example, through alternating features such as projecting elements or set back elements within the composition of a group of linked dwellings.

7. Create Order & Unity

→ Variety will be achieved through handed, framed and repeated elements but groupings of dwellings forming street scenes must achieve order and unity within their overall layout and composition.

8. Celebrate Entrances

→ Entrances to dwellings will add definition and create interest to the front elevation.
→ Entrances will be provided with some form of shelter.

Double height porch & loggia with gable highlighting entrance

Porch 'cut-out' of plan to create interest & 'protection' and provide shelter at entrance

9. Clarity and Rationale

→ Dwellings will match the description of their typology as set out in sub chapter 6.6.
→ Dwellings will utilise simple forms and masses both individually and within a grouping of buildings.
→ Dwelling features will be simple and expressive of the purpose they serve, e.g. usable balconies.
→ The use of materials will clearly demonstrate a rationale and may distinguish key elements of the dwelling such as projecting bays.

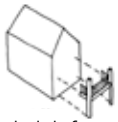
Simple wide fronted units with subsequent elements e.g. garage, bay etc.

Gable used to provide shelter to Loggia and bay

Timber balcony unifies different fenestration

Simple vertical fenestration detailing

Simple Window Palette; Used to form other elements



Simple brick form with clip on elements – Bay, porch, chimney, loggia

8.3.2 Building features for residential built form

The following rules and principles relating to building features within residential built form will be adhered to.

1. Walls

- → A maximum of two materials can be chosen for exterior walls of any given building. A single material is preferable.
- → Generally only one brick colour / type is to be used on any building (except where a contrasting blue/grey brick is used as a plinth level, up to a maximum of eight brick courses)
- → When using render, only one render colour will be used on a single dwelling/apartment building.
- → Brick detailing will be simple and match the main brick colour.
- → Copings to parapet walls will be detailed to prevent staining of facades by water flow from the top of that parapet.

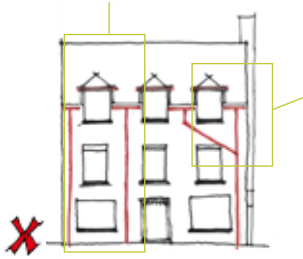
2. Rainwater goods

- → Rainwater goods will not detract from the overall composition of the building elevation or street elevation.
- → Rainwater goods including guttering and rainwater pipes will preferably be black in colour or a brushed metal finish (such as Lindab or similar).

The visual impact of any rainwater goods must be minimised so as not to detract from the overall composition of the elevation.

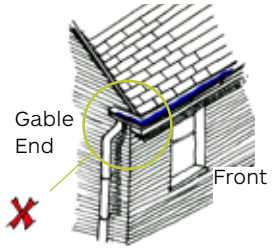
UNACCEPTABLE DESIGN DETAILS:

Rainwater downpipes dominating the composition of the elevation due to ill consideration of dormer windows



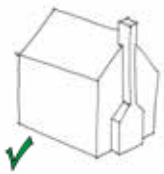
Rainwater downpipes diagonally crossing the building elevation

The positioning of downpipes on gable ends connecting to gutters on front elevation will not be permitted

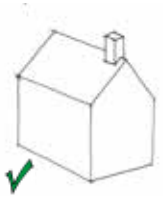


3. Chimneys and Vents

- → Chimneys and vent stacks will match the primary elevation material.
- → Chimneys will be placed symmetrically to the ridgeline.
- → Chimneys should rise well above the roof.
- → Lead, zinc and metal may be used.
- → Chimneys on end elevations should connect to the ground.



Chimneys need to be appropriately proportioned and detailed.

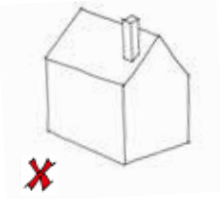


Chimneys symmetrically positioned on ridgeline.

UNACCEPTABLE DESIGN DETAILS:

- → Chimneys, the sole purpose of which is decorative, will not be permitted.
- → The use of GRP will not be permitted.

Chimney inappropriately articulated on gable end



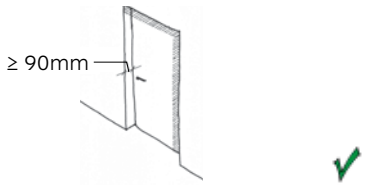
Chimney positioned asymmetrically to ridge.

4. Doors and Entrances

- → All front doors will be recessed a minimum of 90mm from the brick / finished face.
- → All garage doors will be recessed to a minimum of 90mm from the brick / finished face.
- → High quality, robust doors will be used.
- → If the door does not contain any glazed aperture, then this should be incorporated elsewhere immediately adjacent to or above the main entrance to the dwelling.

Building Thresholds:

- → Material consistency required to avoid too many contrasting materials in a small area.
- → Changes in levels should be managed appropriately.



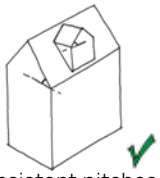
Depth of recess from face of building elevation to face of door to be maximised

UNACCEPTABLE DESIGN DETAILS:

- → uPVC doors will not be permitted on elevations which are apparent from the public realm.

5. Dormer windows

- → Dormer windows will be integral to the composition of the main facade in terms of design and positioning.
- → Dormer windows will maintain overall vertical proportions, i.e. be taller than they are wide.
- → The number and proximity of dormers which break the eaves line will be limited to prohibit unnecessary rainwater goods within the building elevation.
- → GRP roofing will not be permitted.
- → Gabled / hipped dormers will use a consistent pitch and material to that of the main roof.
- → Hipped dormers will be carefully detailed to avoid oversizing of ridge tiles and hip tiles.
- → Flat roof dormers will use standing seam lead, zinc or copper roof materials.

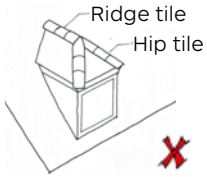


Consistent pitches

Dormers will be designed to avoid interruption of eaves.

Dormer windows need to complement, and align with, the fenestration of the facade.

UNACCEPTABLE DESIGN DETAILS:



Ridge and hip tiles that are disproportinately large are not acceptable

6. Bay windows

- → Bay windows are appropriate if considered as part of the whole elevation.
- → No GRP roofing to bay windows will be used.
- → Frame members and corner posts should be carefully considered to ensure they are neither too bulky nor too flimsy.

Bay windows designed as part of overall composition of elevation.

PITCHED ROOF BAY WINDOWS:

- → The roofing material of bay windows needs to match the selected material of the main roof.

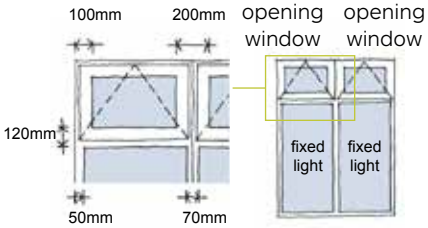
FLAT ROOF BAY WINDOWS:

- → The roofing material of flat roof bay windows will be standing seam lead, zinc or copper.

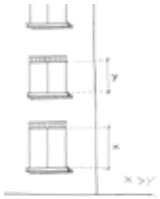
7. Windows

- → Colour, thickness of frame, quality and design of windows must be consistent on all elevations of a dwelling/apartment building.
- → All windows will be recessed a minimum of 90mm from the face of the building elevation.
- → Ground level fenestration should be distinctly taller than fenestration on above levels.
- → The size of glazed openings in the Formal Urban and Formal Suburban areas will be maximised and the number of mullions and transoms minimised.

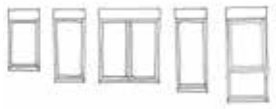
Consistent windows across elevations ✓



Maximum frame dimensions ✓

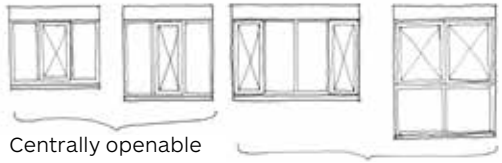


Ground Level openings will be taller than those on upper floors ✓



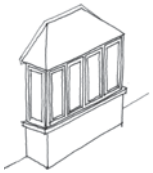
Simple, vertical fenestration ✓

SYMMETRICAL WINDOW CONFIGURATIONS



Centrally openable

Symmetrically openable ✓

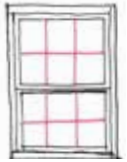


Repeated vertical windows make up composite elements. ✓

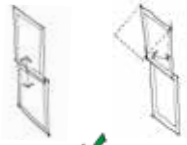
UNACCEPTABLE DESIGN DETAILS:

Inconsistent window treatment on different elevations ✗

Asymmetrically openable window configurations ✗



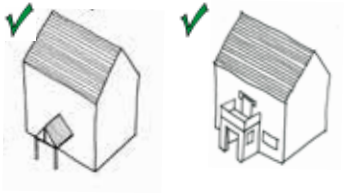
Decorative sub-division of window panes, or "Georgian bars" are not permitted ✗



Decorative sash windows are not permitted ✓ ✗

8. Porches

- → Porches will be designed as integral to the overall composition of the elevation.
- → Porches will be sufficiently deep to provide shelter.
- → Flat roof porches will have a roof finish of lead, zinc or copper standing seam.
- → Pitched roof porches will match the materials used on the roof of the dwelling.
- → Glazed porches are acceptable.
- → Porches can be formed by a recessed entrance within the primary elevation.



Entrances will be celebrated and designed as integral to the elevation and porches will provide sufficient shelter.

UNACCEPTABLE DESIGN DETAILS:

- → GRP roofs to porches will not be permitted
- → Porches will be designed so as not to dominate the building.
- → Small scale porches that provide insufficient shelter will not be permitted.

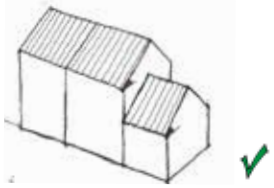
solid

decorative, built porches are not permitted.

9. Roofs, eaves and verges

- → Roof pitches will be between a minimum of 37.5 degrees and maximum of 52 degrees.
- → The roof pitch will be of a consistent angle along a terrace or group of buildings.
- → Roofs to garages will be pitched.
- → Flat roofs will be concealed behind a parapet, or will be designed to project significantly beyond the face of the building, with the depth of fascia and profile of leading edge carefully detailed.
- → Green roofs are encouraged.

All terraces will have consistent roof pitch



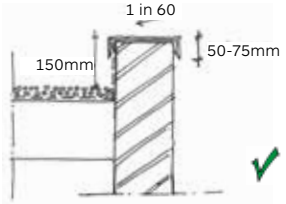
EAVES:

- → Eaves will be clipped / parged or use a shallow depth black fascia/barge board.

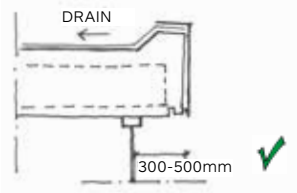
Clipped / parged eaves

Shallow, black fascia / barge board on eaves

FLAT ROOFS:



Flat roof concealed behind parapet



Overhanging flat roofs that are carefully detailed are acceptable

VERGES:

- → Verges will be clipped / parged, parapet or use a shallow depth black fascia/barge board.

Clipped / parged verge

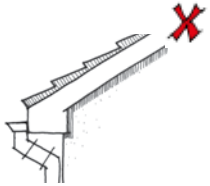
Parapet verge

Shallow, black fascia / barge board on verge

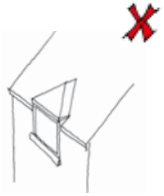
UNACCEPTABLE DESIGN DETAILS:

- → Inconsistent roof pitch along a frontage and / or connected dwellings will not be permitted.
- → There will be no mix of both hips and gables on any single building.
- → Eaves will not be repeatedly interrupted by dormer windows creating facades cluttered with downpipes.
- → Boxed eaves will not be permitted.
- → White UPVC will not be permitted for roof and eaves details.
- → Concrete tiles will not be permitted.

Inconsistent roof pitches along terrace



Boxed eaves are not permitted



The interruption of eaves by dormer windows should be minimised

10. Balconies

- → Balconies will be integral to the composition of the main facade in terms of design, positioning and materiality.
- → Balconies will be appropriately sized as usable outdoor space.
- → External load bearing structures for the support of balconies are only permitted in the case of 2-storey dwellings. Their selection needs to demonstrate a clear design rationale so as to ensure that they complement the elevation's composition.

Balcony design will be integral to the composition of elevation

Cantilevered balconies for multi-storey buildings are acceptable.

Appropriately sized inset balconies are also acceptable.

UNACCEPTABLE DESIGN DETAILS:

- → External load bearing structures for the support of balconies of multi-storey buildings.

8.3.3 Materials for residential built form

An index of permitted materials has been selected for the residential built form within Key Phase 1 covering walls, roofs, windows and balconies. This is shown on the following page. From this, a palette of a select few materials has been specified for each Character Area, to ensure that neighbourhoods within Key Phase 1 have their own identity whilst reading coherently within the wider development. All proposals will demonstrate adherence to the Material Application Principles set out on this page. Certain materials will be seen across all Character Areas.

Reserved Matters Applications will only use materials specified in the relevant Character Area palettes. A proposed materials specification will be submitted with each Reserved Matters Application, along with samples, for approval by HDC.

Certain locations within the development could support the introduction of contrasting, 'code-breaking' architecture, where a design rationale is developed for a particular building or cluster of buildings. This may extend to the introduction of materials not permitted elsewhere in that character area. Reserved Matters Applications including 'code-breaking' elements must include design justification for those elements.

Material Application Principles

The following principles for the application of materials will be adhered to throughout Key Phase 1:

1. Proposals are to demonstrate consistency in material selection and usage, utilising only materials specified* in the relevant Character Area palette(s);

2. Parcels for Reserved Matters Applications which cover more than one Character Area will demonstrate a carefully considered transition between differing materials palettes;

3. Where materials for individual buildings that contrast with materials of neighbouring buildings are proposed, an accompanying design justification will be submitted as part of the Reserved Matters Application;

4. Materials will be consistent along a row of terraced dwellings or linked dwellings, including dwellings linked by garages;

5. No more than two materials will be used across walls of any given dwelling or block, and where this includes coloured render only one colour will be used.

6. Generally only one brick colour / type is to be used on any building (except where a contrasting blue/grey brick is used as a plinth level, up to a maximum of eight brick courses)

7. Proposals will be required to demonstrate consistency of material selection for buildings on both sides of streets, either where a street passes through the parcel itself, or where the parcel faces another completed / consented parcel across a street.

** Marker buildings or 'code breaker' buildings may feature materials from outside the relevant palette, but will require the submission of specific design justification for approval by HDC/U&C.*

MATERIALS INDEX FOR RESIDENTIAL BUILT FORM

1. WALL MATERIALS

BRICK:


1.1 cambridge mix


1.2 red


1.3 buff


1.4 buff - multi

RENDER:


1.5 white


1.6 ochre


1.7 rose


1.8 oxblood red

WEATHERBOARD:


1.9 black timber


1.10 stained, natural colour

METAL:


1.11 cladding: any colour

CURTAIN WALL:


1.12 dark grey / black capping

CLADDING:


1.13 Panelised cladding

2. ROOF MATERIALS

PLAIN CLAY TILE:


2.1 dark red


2.2 cambridge mix


2.3 grey

CLAY PANTILES:


2.4 cambridge mix


2.5 dark red

SLATE:


2.6 natural or reconstituted

STANDING SEAM:


2.7 metal

FLAT ROOF:


2.8 single ply

3. WINDOW COLOURS


3.1 natural


3.2 green - grey


3.3 dark grey


3.4 white

4. PROJECTING, INSET AND JULIET BALCONY MATERIALS

TIMBER:


4.1 white


4.2 stained, natural

METAL:


4.3 powder coated / painted steel

GLASS:


4.4 laminated, toughened

The following principles of material usage will apply to each Character Area as summarised below. Details of each Character Area's material palette follow on the next pages:

Figure 8a: Character Area Plan

- Ermine Village
- Informal Suburban
- Formal Picturesque
- Formal suburban
- Formal Park Setting
- Formal Urban
- Mixed Use

ERMINE VILLAGE:

- → A variety of materials will be employed across the Ermine Village character area, with brick as the predominant material to houses. Render or black weatherboarding may also be employed as primary wall materials.
- → Materials selected for walls will be used to create consistency along streets, along built form fronting spaces, and across groupings of dwellings around spaces - whereby the primary walling material is employed across at least 80% of the dwellings in that identifiable area.
- → Outbuildings (including garages) will either utilise the same primary wall material as the dwelling with which they are associated, or black weatherboarding;
- → At least 80% of buildings will use clay tiles for roofs; up to 20% may employ pantiles or slate.
- → Outbuildings (including garages) will either utilise pantiles or the same primary roof material as the dwelling with which they are associated.

INFORMAL SUBURBAN

- → Any bricks from the materials index may be used, however: 90% of all buildings facing primary streets, secondary streets, and primary open spaces will use buff / 'buff multi' / 'Cambridge mix' brick as the primary wall material. Along these edges, up to 10% may use render, black / natural weatherboarding, or red brick as a primary wall material;
- → Outbuildings (including garages) will either utilise the same primary wall material as the dwelling with which they are associated, or weatherboarding;
- → All buildings with buff / 'buff multi' / 'Cambridge mix' brick as the primary wall material will use dark red clay tiles or pantiles as their roof material; 'Cambridge mix' tiles may also be used on buildings featuring render or weatherboarding as their primary wall material.
- → Outbuildings (including garages) will use the same roof material as the dwelling with which they are associated.

FORMAL PICTURESQUE

- → At least 90% of buildings will use red brick as the primary wall material: up to 10% may employ render, weatherboarding, or 'Cambridge mix' brick as a primary wall material;
- → Outbuildings (including garages) will either utilise the same primary wall material as the dwelling with which they are associated, or weatherboarding;
- → At least 90% of buildings will use dark red clay tiles or pantiles for roofs; up to 10% may employ 'Cambridge mix' tiles or slate;
- → Outbuildings (including garages) will either utilise pantiles or the same primary roof material as the dwelling with which they are associated.

FORMAL SUBURBAN

- → Any bricks from the materials index may be used, however: along all primary streets, secondary streets, and primary open spaces all buildings will use buff/buff multi/'Cambridge mix' brick, render, or weatherboarding as the primary wall material;
- → Outbuildings (including garages) will either utilise the same primary wall material as the dwelling with which they are associated, or render / weatherboarding;
- → All buildings with buff / 'buff multi' / 'Cambridge mix' brick as the primary wall material will use slate or standing seam metal as their roof material on pitched roofs; red clay tiles may be used elsewhere;
- → Outbuildings (including garages) will use the same roof material as the dwelling with which they are associated.

FORMAL PARK SETTING

- → All buildings, including outbuildings and garages, will use buff/ 'buff multi' / 'Cambridge mix' brick as the primary wall material;
- → All buildings will use slate as their roof material.

FORMAL URBAN

- → Any wall material from the materials index may be used except 'Cambridge mix' / buff multi brick, and natural weatherboarding. Note that curtain walling systems, panelised cladding systems, buff brick and black weatherboarding may be used;
- → Outbuildings (including garages) will either utilise the same primary wall material as the dwelling with which they are associated, or black weatherboarding;
- → All buildings with buff brick as the primary wall material will use slate as their roof material; metal standing seam roofing and red clay tiles / red pantiles may be used in other instances;
- → Outbuildings (including garages) will use the same roof material as the dwelling with which they are associated.

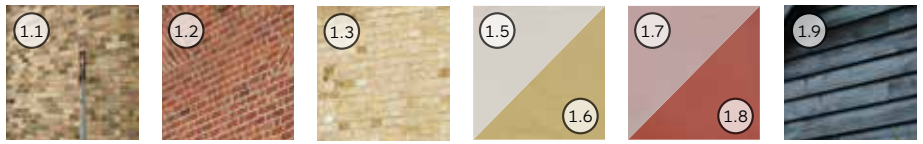
MIXED USE

- → Any wall material from the materials index may be used except 'Cambridge mix' / 'buff multi' brick, and untreated weatherboarding . Note that curtain walling systems, panelised cladding systems, buff brick and black weatherboarding may be used;
- → Ground floor elevations to mixed use buildings are to employ a high proportion of glazing where they face the public realm, i.e. glass is to be the predominant material at street level;
- → Outbuildings (including garages) will either utilise the same primary wall material as the dwelling with which they are associated, or black weatherboarding;
- → All buildings with buff brick as the primary wall material will use slate as their roof material; metal standing seam roofing and red clay tiles / red pantiles may be used in other instances;
- → Outbuildings (including garages) will use the same roof material as the dwelling with which they are associated.

1. WALL

2. ROOF

ERMINE VILLAGE



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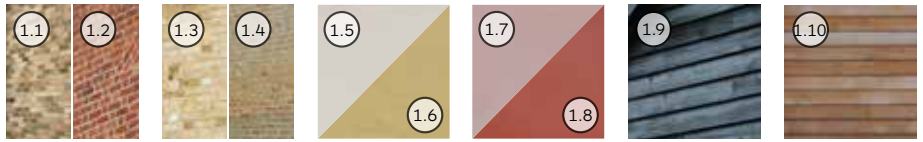
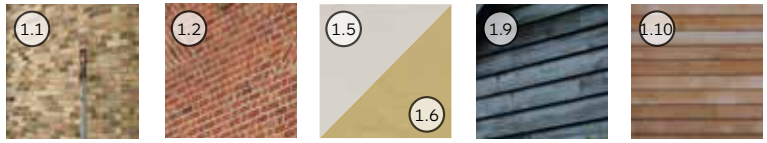
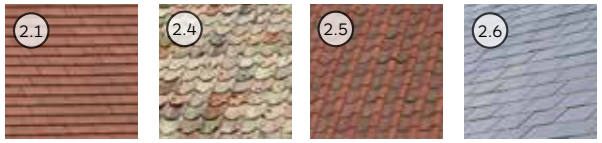


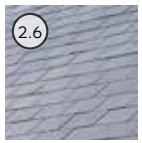
FORMAL PICTURESQUE





FORMAL SUBURBAN

FORMAL PARK SETTING



FORMAL URBAN

MIXED USE

3. WINDOW

4. PROJECTING, INSET, JULIET BALCONIES

ERMINE VILLAGE

INFORMAL SUBURBAN

FORMAL PICTURESQUE

FORMAL SUBURBAN

FORMAL PARK SETTING

FORMAL URBAN

MIXED USE

8.4 Public Realm Palette

Design of the public realm must take account of the following, as set out over subsequent pages:

8.4.1 Street Design Materials Palette

General Principles

Clear design of surface materials is vital to give a simple, uncluttered appearance to the public realm. Equal importance shall be given to the appropriateness of the materials in regard to place making and their long-term performance. Some general principles which should apply across the whole of the KP1 Design Code area are:

→ Use of a simple, restrained and uncluttered palette of materials, with key elements and materials in common to ensure a consistent approach throughout the KP1 areas.

→ Subtle variations in surface materials in respect of their colour, colour mix, dimensions, laying pattern and finish should be used where possible, within the following materials palettes to respond to residential character areas, employment typologies and local vernacular.

→ A limited use of colour, texture and unit size should be used to help define the use of various spaces, for example using paving in roadways to identify pedestrian priority.

→ Specification of simple, robust materials to fit their intended purpose.

→ Consideration shall be given to their ease of repair and long term maintenance requirements.

→ Care and attention to detail in design and implementation is important in achieving a good quality public realm.

→ Streets and spaces should be designed in accordance with the relevant regulations and best practice guidance concerning accessbility. Particular attention should be paid to the design of, and interfaces between, surfaces, edge types and street furniture, in order to promote access for all and to provide a safe, welcoming and legible environment.

The carriageways, paved area, kerbing detail, etc. associated with the Alconbury Weald development will be designed to comply with the requirements and standard details provided within Cambridge County Council's Housing Estate Road Construction Specification - June 2013. Where higher quality / non standard items of infrastructure are being provided, a bespoke engineering solution will be design and agreed with CCC.

See Street Design Materials Palette table on following pages for further guidance.

Street Design Material Palette					
Street Type:	**Carriageway**	**Kerbs**	**Shared Footway/Cycletrack**	**Crossing points**	**Raised Junctions**
Boulevard	Bituminous surface	Charcon wide top conservation kerb (125mm kerbface) or similar with 255mm wide Charcon Classic channel block or similar	Bituminous surface with Precast Concrete (PCC) kerb edging. Black coloured surface course (for consistency with constructed section of boulevard).	100x200x80mm Charcon Stonemaster block pavers or similar	N/A
Street Type A	Bituminous surface	Charcon wide top conservation kerb (125mm kerbface) or similar with 255mm wide Charcon Classic channel block or similar	Bituminous surface with PCC kerb edging. Black coloured surface course (for consistency with constructed section of boulevard).	100x200x80mm Charcon Stonemaster block pavers or similar	As per page 229
Street Type B	Bituminous surface *Potential option for granite setts to replace road markings*	Precast concrete (PCC), or Charcon Countryside square kerb, or similar (125mm kerbface)	Bituminous surface with PCC kerb edging. Black coloured surface course (for consistency with constructed section of boulevard).	100x200x80mm Charcon Stonemaster block pavers or similar	As per page 229
Street Type C	Bituminous surface	Precast concrete (PCC), or Charcon Countryside square kerb, or similar (125mm kerbface)	Bituminous surface with PCC kerb edging. Black coloured surface course (for consistency with constructed section of boulevard).	100x200x80mm Charcon Stonemaster block pavers or similar	As per page 229
Street Type D: Commercial Area Service Route	Bituminous surface	Precast concrete (PCC) square kerb, (125mm kerbface)	Bituminous surface with PCC kerb edging. Black coloured surface course (for consistency with constructed section of boulevard).	N/A	N/A
Street Type E: Minor Routes (residential tertiary)	Bituminous surface, or Bituminous surface with exposed aggregate (Charcon supercolour exposed / heritage surface course - as CCC Housing Estate Road Construction Specification, or similar)	Precast concrete (PCC), or Charcon Countryside square kerb, or similar (typical 125mm kerbface, or lower with agreement of CCC)	Bituminous surface with PCC kerb edging. Black coloured surface course (for consistency with constructed section of boulevard).	100x200x80mm Charcon Stonemaster block pavers or similar	As per page 229
Street Type F: Minor Routes (residential tertiary)	Shared Carriageway/Footway/Cycletrack: Bituminous surface; or bituminous surface with exposed aggregate (Charcon Supercolour Exposed / Heritage surface course or similar); or concrete block paving (Charcon Stonemaster or similar, typically 200x100x80mm and permeable /impermeable to suit surface water drainage strategy)	Precast concrete (PCC), or Charcon Countryside square kerb, or similar Low / flush to carriageway edges and flush / none within carriageway	Shared Carriageway/Footway/Cycletrack: Bituminous surface; or bituminous surface with exposed aggregate (Charcon Supercolour Exposed / Heritage surface course or similar); or concrete block paving (Charcon Stonemaster or similar, typically 200x100x80mm and permeable /impermeable to suit surface water drainage strategy)	100x200x80mm Charcon Stonemaster block pavers or similar	N/A

Street Design Material Palette - continued from previous page

Street Type	Primary Shared Surface Areas:	Secondary Shared Surface Areas (to be used as accent / feature surfacing only):	Kerbs / Edges:	Drainage channels:
Tertiary Streets as Spaces *(see section 4.4 Tertiary Streets as Spaces for further details).*	Bituminous surface, bituminous surface with exposed aggregate (Aggregate Industries Supercolour Exposed / heritage surface course or similar), or; concrete block paving (Charcon Stonemaster, typically 200x100x80mm or similar and permeable / impermeable to suit surface water drainage strategy)	Concrete block paving to compliment primary shared surface materials (Charcon Stonemaster typically 300x200x80mm or 200x100x80mm or similar and permeable / impermeable to suit surface water drainage strategy), or granite setts, or resin bound surfacing (Addaset Resin Bound Surfacing or similar)	Charcon Countryside square kerb, or similar, laid flush / with low upstand, granite setts or concrete block paving to compliment primary shared surface materials	Granite setts, or concrete block setts (Charcon Stonemaster 100x100x80mm or similar)

Crossing Points:

- → Tactile paving should be buff coloured at uncontrolled crossing points and when used as a 'warning' tactile surface. Unless otherwise agreed with the Local Authority.
- → Red coloured tactile paving at controlled crossing points (Zebra, Toucan, etc.).

Raised Table Junctions:

- → Marshalls 'Speedcheck Concrete Starter Block Ramp System' or equivalent to form the top and bottom of the ramp;
- → Flexible bituminous construction (blacktop) between the top and bottom kerbs (a bitumous surface is the best surface for road markings to adhere to);
- → A 'block paved area', or bituminous surface with exposed aggregate, to form the table top of the ramp.
- → Ramps to be formed with wide top conservation channel blocks (or similar) and Marshall speedcheck systems (or similar).

Leisure Routes: footways, cycle tracks within Green Infrastrucutre

Subject to detail design, and agreement with local planning authorities, detail design considerations for leisure routes include:

- → Surface: bitumous surface, bonded gravel or self binding gravel.
- → Edging: concrete or timber edging.
- → Width: subject to detail design but minimum of 3m if shared footway / cycle track.

8.4.2 Boundary Treatments

B1 - No Boundary

→ Set back is 1m or less (minimum 800mm to be maintained)
→ Hard surface finish preferable for urban character areas
→ Material / surface finish should be contrasting to adjoining pavement material to differentiate ownership and demarcate defensible space

B2 - Urban style railing

→ Height – 1.2m max
→ Set back minimum 1.5m
→ Black / grey metal, painted
→ Soft landscape to allow for shrubs planting
→ Contemporary and in character with the street scene
→ Bow top railings are not acceptable

B3 - Railing on low wall

→ Height – 1.5m max
→ Set back minimum 1.5m
→ Up to 500mm high brick wall. Brick wall with brick piers and coping to match dwelling
→ Powder coated black or grey railings
→ Privacy zone – hard or soft landscape finish to differentiate ownership

B4 - Railing and hedge

→ Height – 1.2m max
→ Set back minimum 1.5m
→ Black metal painted (or grey)
→ Clipped hedge of continuous species
→ Gates to match railings
→ Railings to be horizontal estate rail design, or vertical railing design

B5 - Low wall and ornamental hedge

→ Set back minimum 1.5m
→ 600mm brick wall with brick coping, clay tiles creasing, bricks to match dwelling
Hedge to grow not more than 900mm high

B6 - Ornamental hedge

→ Height – 0.9 / 1.2 m max
→ Set back minimum 2m
→ Post and wire fence integral to the hedge while it establishes

B7 - Planted zone

→ Set back is less than 1.5 m (minimum 800mm to be maintained)
→ Height – maximum 600mm
→ Low clipped hedge with shrub planting
→ Planted area should be finished with 450mm depth of topsoil to allow for low evergreen shrubs
→ Grass or gravel or loose materials as surface cover are not acceptable

B8 - Wall

→ 1100mm high, with upwardly projecting piers
→ 215mm thick brick wall to match the house wall
→ Brick capping on clay tile creasing or cast stone coping.
→ Gates to be steel vertical bars painted black.

B9 - Picket fencing

→ 900mm high timber, picket style fence,
→ Stained or painted white.
→ Gates to match fencing.

Side Boundaries

→ Brick walls will be used along garden boundaries which side on to a street, as a continuation of the built form.
→ The wall must be between 1.8-2.1m high and finished in materials to match the house.
→ An additional soft verge of a minimum of 1m will be provided in addition to a wall along garden boundaries which side on to a footpath or cycle track.
→ The inclusion of planting, such as climbers, is encouraged to soften walls and provide visual variety and contrast.
→ Timber close board fencing or walls will be used along side boundaries between gardens.

Rear Boundaries

→ Brick walls will be used along rear boundaries which back onto courtyard parking areas.
→ The wall will be between 1.8-2.1m high, finished in materials to match the house, and with a semi-permeable section from 1.5m upwards.
→ The semi-permeable section (approx. 300mm) should use metal railings.
→ Pedestrian access to the courts will be provided via gates if the dwelling is allocated parking in this area.
→ Timber fencing or walls will only be used along boundaries between gardens.

Boundary Type B1 - No boundary

Boundary Type B2 - Urban Style Railing

Boundary Type B3 - Railing on low wall

Boundary Type B4 - Railing and hedge

Boundary Type B5 - Low wall and ornamental hedge

Boundary Type B6 - Ornamental hedge

Boundary Type B7 - Planted zone

Boundary Type B8 - wall

Boundary Type B9 - Picket fence

Side Boundary with planted zone

Side fence between gardens

8.4.3 Street Furniture

General Principles

The public realm can get very cluttered, congested and obstructed if street furniture is not selected and located with care. Some general principles which should apply across the whole of the KP1 Design Code area are:

- → Reduction of street furniture to a minimum by good design, to reduce street clutter.
- → Locate signs, traffic signals and street furniture onto existing lamp columns, posts or buildings where appropriate.
- → The location of furniture should not impede pedestrian or cyclist movement.
- → Along streets all furniture should be located in an established 'furniture corridor' between the kerb edge and the footway/cycle track.
- → Potential to reuse materials gained from site clearence should be considered: for instance crushed concrete could be used in gabion mesh baskets to create edging, bollards etc.

Seating

- → Seat heights and back rests should be designed for comfortable use by all.
- → Seats should be provided with arm rests which assist the elderly and disabled.
- → Seating should be provided every 50m along main pedestrian routes.
- → Designs should allow ease of maintenance and be resistant to vandalism.
- → Concealed ground fixings should be used.
- → Simple, quality and context sensitive designs should be employed.
- → An off-the-peg product with a variety of seat types in the same family would provide flexibility in use and location of seating while maintaining a consistent appearance across the KP1 development.
- → Timber elements should be FSC certified.
- → Note: HDC standard bench specification: Furnitubes Eastgate seat (EA6 with black ends).

Litter Bins

- → To be provided along streets, pedestrian routes and spaces.
- → Located near bus stops and seating.
- → Must take account of the street cleansing regime.
- → Incorporate separate recycling and general litter receptacles.
- → Robust, functional and fireproof.
- → Capacity to take account of intensity of use.
- → Litter bins to be black.
- → Note: HDC standard bench specification: Glasdon Neapolitan (black with gold logo)

Dog Bins

- → To be provided along leisure routes and public open spaces.

Cycle Stands

- → A simple hoop (Sheffield Stand) design should be used for practical use by cyclists and to allow the frame to be directly locked to the rack.
- → Stainless steel to be used to present the best visual appearance after sustained use.

Street trees, tree pits and tree grills

- → Detailed specification and design will be required as appropriate at detailed stages of design (e.g. Reserved Matters Applications).
- → Designers to consider future adoption of trees - whether they are located within private or public realm.

Knee Rail

- → Knee rails (morticed design) are an appropriate boundary edge treatment to define some open spaces.

Bollards

- → Timber bollards would suit both rural and more urban settings and would work equally well within the streetscape and green infrastructure areas. Timber bollards:
  - › Offer flexibility in terms of size and the integration of features such as reflective strips, signage, etc and can be specified as removable or hinge down versions.
  - › They should be specified in one consistent profile, preferably min. 150mm square with pointed top.
  - › Supplied as FSC certified hardwood for durability.
  - › Sizes may vary depending on application, i.e. standard 1.0-1.2mm high in streets and parking areas, 500mm where used as edge protection to verges or public open space.
- → An alternative bollard could be gabion mesh/ basket bollards that use crushed concrete gained in site clearance.

Bus Shelters

- → High quality design.
- → Include cycle stands and bins to be accommodated in close proximity to bus shelters.

Signage

- → Street nameplates: to be attached to walls, railings, fencing, buildings, as default.
- → Other signage should be carefully considered and where possible be mounted on buildings, walls, railings to reduce street clutter.
- → Signage should be designed to use a consistent style and typography, refer to 8.4.6 Branding.

Street Furniture Precedent Photographs

Stainless steel 'Sheffield Type' cycle stand

Precedent bus shelter, with seating and cycle stands (Source: Woodhouse)

Example seating precedents include Calma seating range by DW Windsor (simple, elegant and versatile)

Gabion mesh bollards could use crushed concrete gained from site clearance (source: Furnitubes)

Timber bollards offer versatility in terms of size and the possible integration of signage

Manufacturers examples shown are purely illustrative.

8.4.4 Lighting

General Principles

- → Lighting should emphasise the links between areas.
- → Lighting should contribute to the safety of all highway users by providing an appropriate level of lighting that will minimise the incidence of night time accidents.
- → Lighting should contribute to personal security, and the perception of personal security, for all pedestrians during the hours of darkness.
- → White light should be specified to create a safe and well lit environment.
- → Energy efficient LED technology should be employed along minor streets and pedestrian routes.
- → Feature lighting should be considered to enliven public spaces.
- → Lighting levels shall reflect the hierarchy of streets and spaces, guiding pedestrians along well-connected routes.
- → The day time appearance should be optimised by using a design approach that is sympathetic to the human scale and that locates columns with respect to all users.
- → Lighting should avoid light pollution.
- → The overall lighting design shall create visual interest through contrast in lighting levels and highlight key landmarks where appropriate.
- → Luminaires should be simple, elegant and contemporary.
- → Scale of column and luminaire should fit the scale of the street in which it is used.
- → Columns shall be located in the 'furniture corridor' along streets.
- → Lighting attached to buildings is a solution that should be explored to help reduce 'street clutter'.
- → Positioning of lighting must not compromise tree and shrub planting areas.

Street Lighting

The column type and luminaire for the Boulevard has already been installed as part of the enabling works. For consistency and ease of maintenance the same lighting should also be used the continuation of the boulevard and for Street Types A to D within the KP1 development.

White light to provide a safe welcoming environment

Lighting for lower order streets and Public Realm Lighting

Lower order streets (Street Type E & F) and footpath/cycle routes within the wider public realm should be lit by lower 4-6m columns to provide a more human scale. Opportunities for use of LED technology with a slightly different family of luminaires from that used in the streets should be realised as a way of introducing a more energy efficient fitting with fully controllable dimming and switching capabilities.

Lighting example, precedents shown DW Windsor, other similar makes may be appropriate subject to agreement with Local Authority and Master Developer.

On plot and Public Realm Lighting

Supplier: DW WIndsor

Luminaire: Monaro LED II

Column height: 4-6m

Colour: Powder coated medium grey (RAL7037)

Street Lighting

Supplier: DW WIndsor

Luminaire: Evora

Column height: 8-10m

Colour: Powder coated medium grey (RAL7037)

8.4.5 Tree Planting & Soft Landscape for Streets:

Boulevard
- → Trees to be planted at regular spacing as set out by the enabling works.
- → Single species trees with a regular form - Tilia cordata 'Greenspire'.
- → Grass verges seeded and managed to incorporate clover and other flowering varieties.
- → Central median seeded and managed to incorporate species rich grassland.

Type A Street
- → Medium to large trees planted in a regularly spaced avenue on both sides of the street.
- → A limited range of species is proposed planted in single species groups to provide some variation along the length of the street.
- → Change in species to coincide with breaks or punctuation points in the street, where it crosses woodland blocks and the north-south linear park.
- → Grass verges seeded and managed to incorporate clover and other flowering varieties.

Type B Street
- → Medium to large trees planted in a regularly spaced avenue on both sides of the street, or medium to small trees planted in groups of single species.
- → A range of species is proposed to provide a varied tree stock, thereby ensuring more flexibility in coping with tree failures or disease, offering greater visual interest and enhancing bio-diversity.
- → Grass verges seeded and managed to incorporate clover and other flowering varieties.

Type C Street
- → Small to medium trees planted on one or both sides of the street planted in small groups or short single species avenues.
- → Species to consist of native species or native hybrids which establish a transition from the adjacent open space/woodland blocks while providing enhanced visual amenity value next to residential properties.
- → Grass verges seeded and managed to incorporate species rich grassland.

Type D Street
- → Formal tree planting in grass verge.
- → Regulating spacing in wider 4m verge, strong formal setting of commercial area.
- → Potentially more occasional spacing of groups of trees in verge on opposite side of street.
- → Grass verges seeded and managed to incorporate species rich grassland.

Type E Street
- → Small to medium trees planted informally as single specimens or in small groups.
- → Occasional planting beds containing a mix of shrub and herbaceous planting.
- → Opportunities to incorporate rain gardens as part of the local SuDS strategy.

Other species may be used in consultation with Local Planning Authority.

Planting Palette Precedent Photographs:


Tilia cordata 'Greenspire'
(Boulevard Trees)


Liquidamber styraciflua
(Street Type A)


Tilia tomentosa "Brabant'
(Street Type A)


Corylus colurna
(Street Type A)


Lirodendron tulipifera
(Street Type A)


Carpinus betulus
'Hornbeam (Street Type A)

Planting Palette Precedent Photographs continued overpage

Note: other species may be used in consultation with the Local Planning Authority.

Planting Palette Precedent Photographs

Prunus avium ‘Plena’
(Street Type B and C)

Acer campestre ‘Elsrijk’
(Street Type B and C)

Prunus ‘Sunset Boulevard’
(Street Type B and E)

Sorbus aucuparia
(Street Type B, C and E)

Sorbis aria
(Street Type B, C & E)

Pyrus ‘Chanticleer’
(Street Type B and E)

Tilia cordata ‘Rancho’
(Street Type B)

Betula pendula
(Street Type C)

Acer campestre ‘Elsrijk’
(Street Type D)

Quercus robu
(Street Type D)

Opportunities to
incorporate SUDs
(Street Type E)

Occasional planting beds
(Street Type E)

Grass verges incorporating
clover and other
flowering species

Note: other species may be used in consultation
with the Local Planning Authority.

8.4.6 Branding (including Signage and Typography)

All signage and typography must correspond with the design guidelines set in the Alconbury Weald branding guidance (prepared by Northbank on behalf of the master developer Urban&Civic). Common branding and appearance of signage and typography for all commercial plots and buildings is important to help create a common sense of identity.

The branding guidelines should be used to inform the appearance of:
→ Signage for plots;
→ Signage for buildings;
→ Orientation signage and welcome boards;
→ Street name signage;
→ Way-finding signage;
→ Plot numbering.

For further information regarding the branding guidelines contact the master developer.

Signage attached to buildings is a solution that should be explored to help reduce 'street clutter'.

Precedent examples of the use of the approved branding and typography on site at Alconbury Weald.

8.4.7 Public Art

Public art will be employed as part of the approach to creating a legible development layout. This may include a suitable commemorative artwork to recognise the sacrifice made by military personnel over the years from the Airfield.
(OPP Design & Access Statement).

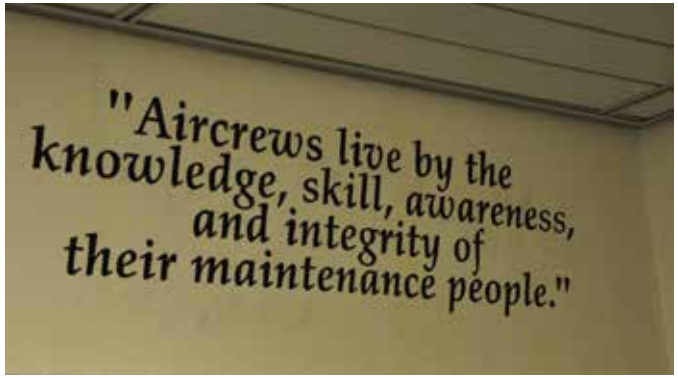
Public art will be considered within the design of the landscape and public spaces and opportunities may include:

- → **Heritage:** Public art should, wherever possible, make reference to the rich heritage of Alconbury Weald. The former airfield activities provide many points of reference for art work including the iconic typography and murals painted on runways and building elevations. It may be possible to mark the location of specific features related to former airfield activities with some form of public art 'marker' in ether the public realm or with custom made signage for buildings.
- → **Landscape:** Creating features within the green infrastructure through planting, landforms, signage (including possibly locating past heritage features) and street furniture.
- → **Play:** Play space design to create added visual and tactile interest.
- → **Key Public Spaces:** Public art installations in important public spaces, potentially in relation to community facilities (for instance the Watch Tower Building, Cricket Park, Primary School) these spaces will be focal points for public activity or meeting places.
- → **Key Buildings:** It may be possible to integrate features into the detailed building design – for instance providing heritage references on new buildings that are located on, or close to, the location of the site specific heritage features that are to be removed.

Precedent: mural artwork, Alconbury.

Precedent of aviation themed railings, Ravenswood, Ipswich.

Precedent of public art incorporation with play facilities.



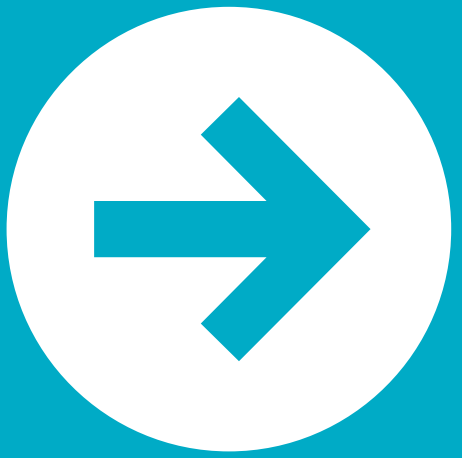
Precedent: hertiage artwork, Alconbury.

Precedent of aviation themed artwork, Ravenswood, Ipswich.

Precedent of public art railings, Primrose Lane, Huntingdon.

PART D

Technical



Alconbury Weald

Make|Grow

CHAPTER 9
Technical Details

CHAPTER 9: TECHNICAL STANDARDS, MANDATORY DESIGN FIXES

The mandatory design fixes are set out below and shown on the Regulatory Plan. The Compliance Checklist in Appendix A1 presents a complete list of design fix headings from the whole Design Code.

→ **9.1 Environmental Standards**

→ **9.2 Private Amenity Space (Residential)**

→ **9.3 Parking Provision**

→ **9.4 Household Utilities Accommodation**

→ **9.5 Site wide Utilities Accommodation**

→ **9.6 Plot based Bin Storage Solutions (Residential)**

→ **9.7 Water Management: Drainage Approach & SuDS**

→ **9.8 Ecological Enhancement**

→ **9.9 Play Provision & Strategy**

9.1 Environmental Standards

Development will be one stage ahead of Building Regulations at any given time with no specific obligation to achieve named standards including:

→ Code for Sustainable Homes (or equivalent)
→ Passivhaus
→ BREEAM

Development proposals will be encouraged and expected to incorporate energy and water efficient design considerations into design proposals for plots and buildings (for instance SuDS, Green / Brown Roofs, Solar Orientation for solar gain) but the specific proposals will be assessed on a plot by plot basis.

Reference should be made to the approved KP1 Sustainability Statement for specific standards / targets.

9.2 Private Amenity Space (Residential)

Private amenity space will be provided appropriate to the dwelling it serves. As a minimum, dwellings will be expected to have direct access to private amenity space according to their size and likely number of occupants, as below:

→ Detached or semi-detached family homes with three or more bedrooms must have gardens capable of comfortably accommodating outdoor seating for the family, space for children's play, planting beds, space for drying clothes, and room to unobtrusively accommodate a shed or greenhouse.

→ Where area for covered bin and bike storage is to be accommodated within private garden areas it must be in addition to the minimum areas quoted in Figure 9a, and must be directly accessible from the street serving the property.

→ Compact two- and three-bedroom houses should have sufficient ground-level private amenity space to accommodate activities of a couple or young family.

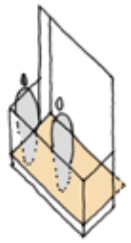
→ Courtyards and upper level terraces will be considered to contribute towards the requirements of private amenity space.

→ If apartments are provided without sufficient amenity space directly accessible from the dwelling then communal gardens, private to the block, may be considered to make up the shortfall.

Figure 9a: Minimum standards for amenity space provision guidance

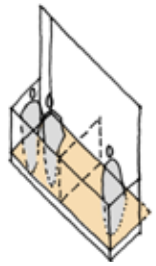
Apartments

1 BED/ 2 PERSON



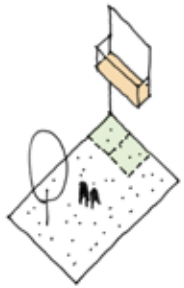
5 sqm — Private Balcony

2 BED/ 3 PERSON



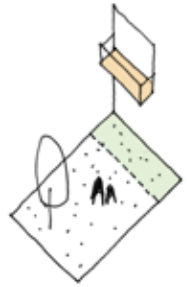
6 sqm — Combination of Private Balconies

2 BED/ 4 PERSON



8 sqm — 6sqm of private balconies & 2sqm communal space

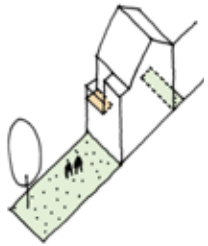
3 BED/ 5 PERSON



10 sqm — 6sqm of private balconies & 4sqm communal space

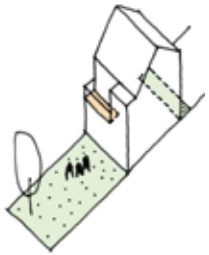
Houses

2 BED/ 3/4 PERSON



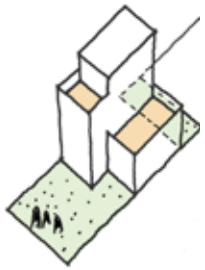
35 sqm — front/back/ side gardens & terraces

3 BED/ 4/5 PERSON



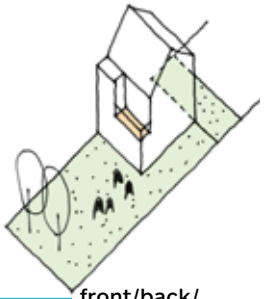
50 sqm — front/back/ side gardens & terraces

4 BED/ 6/7 PERSON



60 sqm — front/back/ side gardens & terraces

5 BED/ 7/8 PERSON



80 sqm — front/back/ side gardens & terraces

→ *Note: the quantity of private amenity space listed in Figure 9a may comprise of private amenity space provided in: back gardens, front gardens, roof terraces / roof gardens and balconies.*

9.3 Parking Provision

Parking provision should accord with HDC guidance, as follows:
HDC do not have specific, quantitative, parking standards, but development proposals are expected to provide a suitable amount of parking as part of the design process. Further detail is provided in the following extract from the current Draft Local Plan.
The use of the emerging Draft Local Plan policies for development management purposes, to supersede the previous Development Management DPD, was endorsed by HDC in May 2013.

Parking extract from HDC Draft Local Plan

"Parking Provision
A proposal will be supported where it incorporates appropriately designed vehicle and cycle parking with a clear justification for the level of provision proposed, having regard to:

a. the potential to increase the use of alternative transport modes including public transport, walking and cycling;
b. highway safety;
c. servicing requirements;
d. the needs of potential users; and
e. the amenity of occupiers of nearby properties.

Parking provision should be considered as an integral part of the design process and its impact on the surrounding townscape and landscape minimised.

Reference should be made to the Cambridgeshire Design Guide and the Huntingdonshire Design Guide or successor documents and to the Lifetime Homes standard.

Parking facilities may be shared where location and patterns of use permit. Careful consideration will be given to the siting and design of garaging, responding to the character and appearance of the area.

Minimum levels of car parking for disabled people as set out in national guidance will be required."

Residential parking – further information:

For residential development adequate car parking is important. A combination of allocated and unallocated spaces can provide flexibility in providing appropriate levels of car parking, as identified in Residential Car Parking Research, DCLG, (2007) and Car Parking, What Works Where, English Partnerships (2006).

Recommended levels of car parking and design considerations for homes are set out in the Cambridgeshire Design Guide (2007). Residential parking is required to meet the design criteria set out in the Lifetime Homes standard as detailed in Quality of development.

Parking design should make reference to the guiding principles of car parking as set out in Car Parking, What Works Where, English Partnerships (2006).

Further guidance for residential parking is provided in Design Code Residential Chapter 6, see 6.6.2 Parking Typologies: in this section of the Design Code a series of appropriate parking solutions are provided, alongside guidance on how these solutions will be utilised.

Residential Garages

→ Minimum internal clear width as follows:
  • 3.3m if cycle storage is to the side of garage
  • 3.03m if cycle storage is to rear of garage.
→ Minimum internal clear length: 6m
→ Additional length preferable to provide sufficient space to allow options for storage of bicycles and bins.
→ Reference should also be made to the HDC design guidance for residential garage design.

Other Car Parking Measures

A number of innovative measures may be considered on-site to offer choice to residents regarding parking. These innovative measures could include:

→ for local retail, employment and leisure facilities, the car parking provision will also include allocated spaces for electric vehicles (including charging points) and car club vehicles;
→ the potential to de-couple parking for high-density residential areas to encourage house buyers to make a separate decision making process regarding whether they require a car parking space with discounted prices for home-owners with hybrid or electric vehicles. Car parking spaces could be bought either via a one-off payment or leased with an annual payment;
→ tight controls on parking around the schools on-site.

Cycle Parking – Residential

Residential cycle storage standards:

→ Residential cycle parking should be covered and secure.
→ Storage space or systems to accommodate a minimum of two cycles per dwelling; and
→ A minimum of one cycle per bedroom for dwellings of two bedrooms and above.
→ Residential cycle parking may be provided within a garage as long as there remains sufficient space for a car.

Precedent of covered, overlooked and secured cycle parking

Cycle Facilities - for commercial premises and community/public buildings:

→ Secure cycle parking should be provided adjacent to public buildings and in the key public spaces.
→ Cycle parking should be located to be well overlooked by the front (active frontages) of adjacent buildings, preferable close to front doors and entrances.
→ Secure and covered cycle parking provision should be made for commercial premises.
→ Visitor cycle parking should be provided close to entrances, larger provision of secure cycle parking for staff may be located to the side or rear of plot.
→ In line with national cycle parking design guidance issued by national body Sustrans, commercial premises and community uses / public buildings should provide the following facilities for cycling:
  • secure bike parking;
  • showering facilities;
  • lockers to store gear; and
  • basic equipment to borrow bike locks, lights and emergency waterproofs.

Precedent of cycle parking at entrance for public facilities

Cycle Parking at Bus Stops

To support the use of public transport secure cycle parking should be provided adjacent to bus stops in the form of cycle stands to lock bicycles to, so that onward journeys can then be continued using public transport. See 8.4.3 Street Furniture for related guidance.

Precedent of cycle parking at bus stop, (source Woodhouse)

9.4 Household Utilities Accommodation

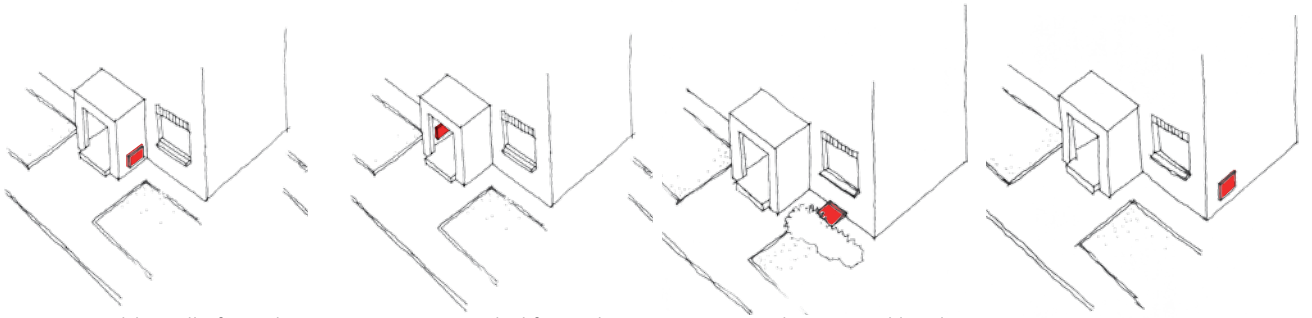
The installation of household utilities infrastructure will not compromise the visual quality of the dwelling and street scene. The following principles will be adhered to:

- → Gas meter boxes will not be visible from the public realm. This will be achieved through locating boxes on side elevations or within recessed entrances where possible; or through screening boxes with planting.
- → Pipes, flues and vents will be architecturally integrated and will align with adjacent façade features.
- → Pipework and cables will be hidden from view from the public realm.
- → Photo-voltaics and/or solar thermal panels, where provided, will be installed to the rear of the property, unless this severely affects the performance of the PV's. Discrete systems will be used so as to not detract from the overall appearance of the dwelling and street scene.
- → For detached, semi-detached and end of terraced properties, meters will be located on side or rear elevations, not front elevations.

Positive measures must be introduced to conceal meters and housings associated with incoming services (electric, gas, broadband network terminations points etc.) from view from the public realm. Such measures will include:

- → Positioning of meters on flank or rear elevations on all detached, linked and semi-detached houses wherever practicable;
- → Positioning of meters as close to ground level as is practicable;
- → (where positioning of meters on front elevations is unavoidable) screening of meters by dense planting of sufficient height, sufficiently close to the apparatus it is intended to screen;
- → Selection of colours to minimise visual impact and contrast with the face of building against which they are positioned.

Figure 9b: Acceptable meter location examples



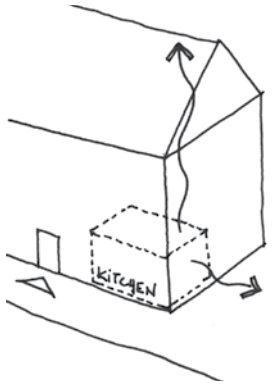
Meter on side wall of porch

Meter concealed from view within porch

Accessed at ground level behind low level planting

On side elevation of dwelling

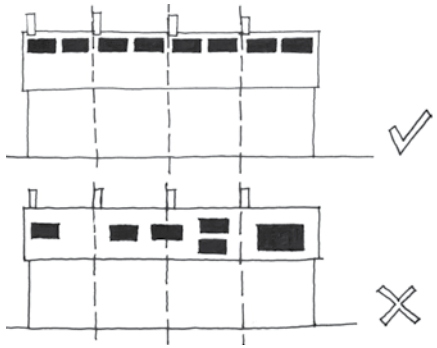
Figure 9c: Pipes, flues and vents



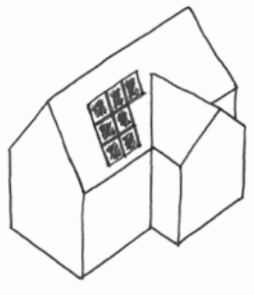
When the kitchen is located at the front of the dwelling, vents will need to be on side elevations. In the case of terraced houses vents should exhaust through the roof.

When the kitchen is located at the rear of the dwelling, vents should exhaust to the back of the house.

Figure 9d: Photovoltaics and solar thermal panels



The installation of Photovoltaics must be designed into the elevation and consistent along any terrace or group of buildings on street.



"Stepped" configurations of photovoltaics will not be permitted.

9.5 Site Wide Utilities Accommodation

Principles

The following principles will be adhered to:

→ Utility systems will be installed in service corridors within the adoptable highway wherever possible (see Figure 9e);
→ Substations must not be located on site edges so as to maximise the number of dwellings served;
→ Substations, water pumping stations and gas governors must be constructed in materials which match the adjacent built form. These buildings will be located on a vehicular accessible route and will be designed to blend in with the surrounding residential built form in terms of materials, a landscape buffer will be provided between a substation and a parking bay;
→ Substation buildings will not be attached to residential dwellings and must be integrated within the alignment of surrounding walls; and
→ All utilities to be located outside of play areas.
→ The location of all electricity substations, water pumping stations and gas governors will be well considered so as not to be located in prominent locations that detract from the street scene. These buildings will be enclosed within well designed outer structures.
→ Street lighting and associated underground cabling must not compromise tree and shrub planting areas.

Substations & Gas Governors

An indication of potential locations for electricity substations and gas governors is shown in Figure 9f - Indicative substations and gas governors location plan. These locations are indicative and subject to detailed design.

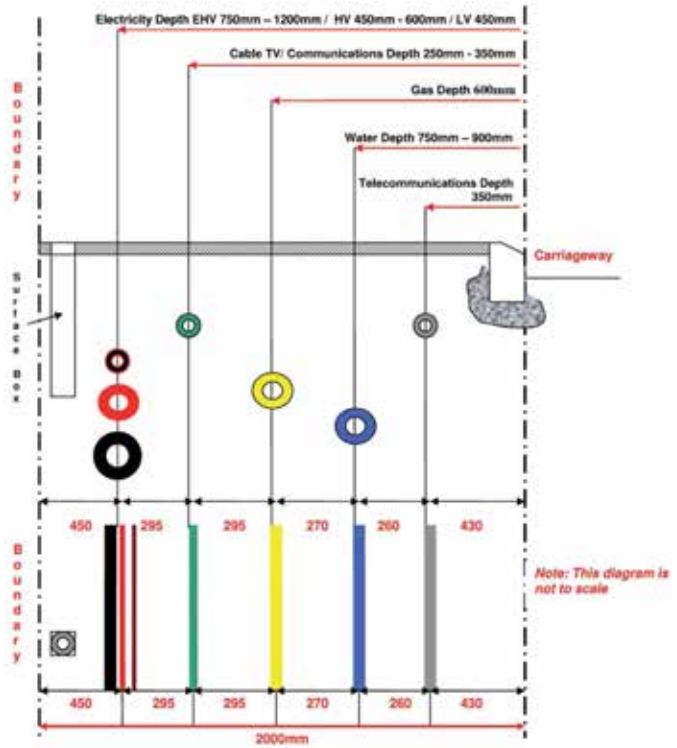
These have been located purely to ensure coverage of KP1 with a Low Voltage network, based on a 200m radius from each substation. The location and number may alter depending upon loads, housing density, etc.

The employment area may require additional substations but this will be dependent upon building type, size, usage, etc. However, it is anticipated that the larger buildings will have individual substations within plant rooms / service areas, etc.

Substations & Gas Governors

→ Each substation will require an area of 5m x 4m with access onto the public highway for standard GRP housings and more for brick built units.
→ An area of 6m x 4m would be required for a new gas governor.
→ It is anticipated that the existing gas governor will be replaced with a new governor and that another will be provided at the entrance to the residential development.
→ The gas governor will need to be located near Ermine Street as this is where the existing gas main is located.
→ If above ground governors are required, material for the housing of the gas governor must compliment the material palette of adjacent development.
→ Dependent upon the delivery of the Enterprise Zone, there may be a requirement for an additional governor at the main entrance to the scheme.

Figure 9e: Services within the street corridor

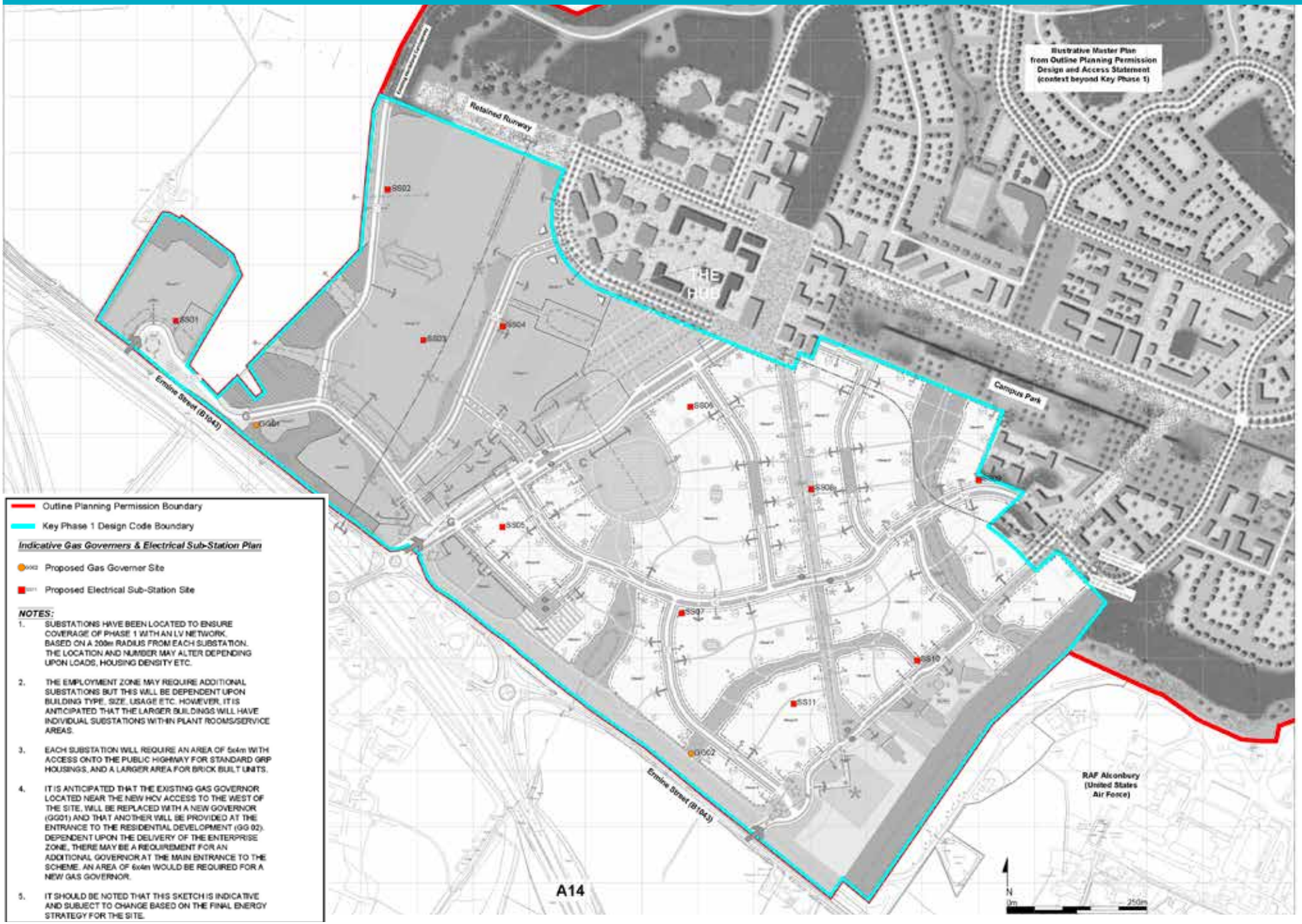


(Source: The National Joint Utilities Group)

Telecommunication Utility Boxes

→ Consider the potential to locate telecommunication infrastructure below ground to avoid need for above ground box - i.e. use of an 'ironhole' inspection cover instead.
→ If an above ground box is required its positioning must be considerate, conscious of surrounding public realm, landscape and built context.

Figure 9f: KP1 - Indicative substation and gas governor location plan



Outline Planning Permission Boundary

Key Phase 1 Design Code Boundary

Indicative Gas Governers & Electrical Sub-Station Plan

Proposed Gas Governer Site

Proposed Electrical Sub-Station Site

NOTES:

1. SUBSTATIONS HAVE BEEN LOCATED TO ENSURE COVERAGE OF PHASE 1 WITH AN LV NETWORK, BASED ON A 200m RADIUS FROM EACH SUBSTATION. THE LOCATION AND NUMBER MAY ALTER DEPENDING UPON LOADS, HOUSING DENSITY ETC.
2. THE EMPLOYMENT ZONE MAY REQUIRE ADDITIONAL SUBSTATIONS BUT THIS WILL BE DEPENDENT UPON BUILDING TYPE, SIZE, USAGE ETC. HOWEVER, IT IS ANTICIPATED THAT THE LARGER BUILDINGS WILL HAVE INDIVIDUAL SUBSTATIONS WITHIN PLANT ROOMS/SERVICE AREAS.
3. EACH SUBSTATION WILL REQUIRE AN AREA OF 5x4m WITH ACCESS ONTO THE PUBLIC HIGHWAY FOR STANDARD GRP HOUSINGS, AND A LARGER AREA FOR BRICK BUILT UNITS.
4. IT IS ANTICIPATED THAT THE EXISTING GAS GOVERNOR LOCATED NEAR THE NEW HCV ACCESS TO THE WEST OF THE SITE, WILL BE REPLACED WITH A NEW GOVERNOR (GG01) AND THAT ANOTHER WILL BE PROVIDED AT THE ENTRANCE TO THE RESIDENTIAL DEVELOPMENT (GG 02). DEPENDENT UPON THE DELIVERY OF THE ENTERPRISE ZONE, THERE MAY BE A REQUIREMENT FOR AN ADDITIONAL GOVERNOR AT THE MAIN ENTRANCE TO THE SCHEME. AN AREA OF 6x4m WOULD BE REQUIRED FOR A NEW GAS GOVERNOR.
5. IT SHOULD BE NOTED THAT THIS SKETCH IS INDICATIVE AND SUBJECT TO CHANGE BASED ON THE FINAL ENERGY STRATEGY FOR THE SITE.

9.6 Plot Based Bin Storage solutions – residential

The storage and collection of household waste will be integral to the layout of all development so as not to detract from the quality of the built environment. All household waste storage and collection facilities will comply with Building Regulations H6 and the RECAP Waste Management Design Code SPD, adopted by Cambridgeshire County Council in February 2012. Most importantly, the following points will be adhered to:

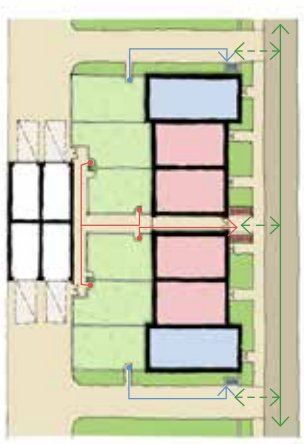
- → Bins will be stored out of sight from the public realm during non collection days. To achieve this, appropriately sized storage facilities will be provided, which are easily accessible for users during non collection days.
- → Accessible routes will be provided for occupants to wheel bins to collection points during collection day.
- → Collection points will be located within close proximity to the public realm for ease of collection.
- → Collection points will be located in a shaded position, away from windows and in a well ventilated area.

The following configurations (see Figure 9g) adhere to the above regulations and therefore will be used as a guide for the collection and storage of household waste.

Key:
- route to collection points (no more than 25m)
- collection points
- refuse collectors walking route
- refuse collection vehicle route

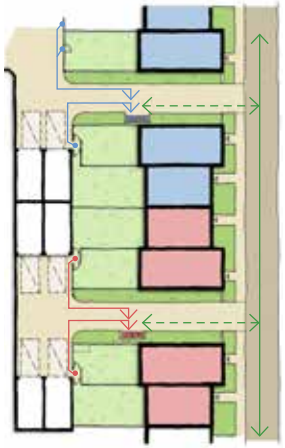
Figure 9g: Indicative bin storage

EXAMPLES OF BIN STORAGE:



Ginnel access design

(access route through terrace)



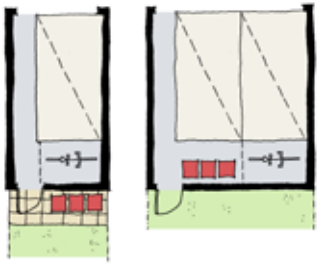
Side / rear access design

(access route to side of homes)

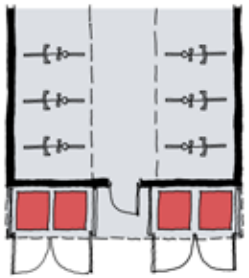
→ Terraced dwellings can store bins within private amenity space, to be wheeled to a designated collection point on collection day. Collection points must be easily accessible, yet discretely screened from the street.

→ Car barns can provide bin storage areas at the rear of the shelter, to be wheeled to the street front on collection days.

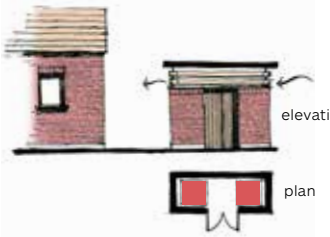
EXAMPLES OF BIN STORAGE:



→ Garages for dwellings can also provide a storage area for bins, or bins can be stored against a wall on a paved area within the private amenity space.



→ Apartment blocks will be provided with communal bins which can be stored as part of the bike store within the grounds of the apartment block. Entrances to stores will not face the public realm or building entrance.



→ Enclosed structures for the storage of refuse need to be well ventilated and to provide shade.

→ Their appearance needs to be in keeping with the adjacent buildings that they serve in terms of design and materiality.

Residential Bin Storage Precedents:

Precedent of bin storage, incorporated into residential design scheme at Primrose Lane, Huntingdon

Precedent of bin storage, incorporated into residential design scheme at Primrose Lane, Huntingdon

Precedent image of bins dominating the streetscene in a scheme that may have insufficient bin storage.

9.6.2 Commercial Bin Storage

All commercial plots and units should incorporate appropriate facilities for refuse and recycling.

Commercial plots will make provision for self-contained refuse compounds that are:
→ well screened;
→ safe;
→ secure; and
→ accessible.

The detailed design of commercial bin storage will need to be considered as individual proposals are brought forward.

Commercial bin storage prescedent: secure and screened.

9.7 Water Management: Drainage Approach & SuDS

The approach for KP1 water management is established in the Supplementary Water Management Strategy (SWMS), a site wide strategy (SWS) supplement submitted as part of the Key Phase Framework.

An overview of key issues follows, with illustration in Figure 9h Indicative Water Management Plan. For further detail please refer to the Supplementary Water Management Strategy (SWMS) report.

Drainage and SuDS is considered across land uses and illustrated in Figure 9h. The strategy for KP1 SuDS includes provision for SuDS features in:

- → Strategic Green Infrastructure as also illustrated in Chapter 3, Green Infrastructure (see 3.3 - 3.7, 3.9 - 3.11)
- → Movement (Chapter 4), potential to consider small scale SuDS in highway landscape strips where possible in accordance with appropriate guidance, and section 4.4.
- → Commercial (Chapter 5), including 5.5.3, 5.6.
- → Residential.

Design guidance for strategic water management across KP1 area:

The water management strategy for KP1 of Alconbury Weald, is aimed at providing sufficient attenuation to restrict the surface water runoff to the greenfield rate while increasing the quality of the runoff.

This will be achieved through a mix of sustainable drainage systems (or SuDS) measures as well as traditional piped drainage. The general strategy has been agreed with the Environment Agency and other key stakeholders, through the outline planning process for the wider development.

With KP1, it is proposed that the existing outfall locations will be reused, while the catchments may vary from the existing catchments, the net contributions to Ripton Brook and Alconbury Brook will be maintained.

A 'management train' will be used to mimic natural catchment drainage processes as closely as possible. This will treat surface water runoff close to where it falls, passing the runoff from one SuDS feature to another improving the quality of runoff.

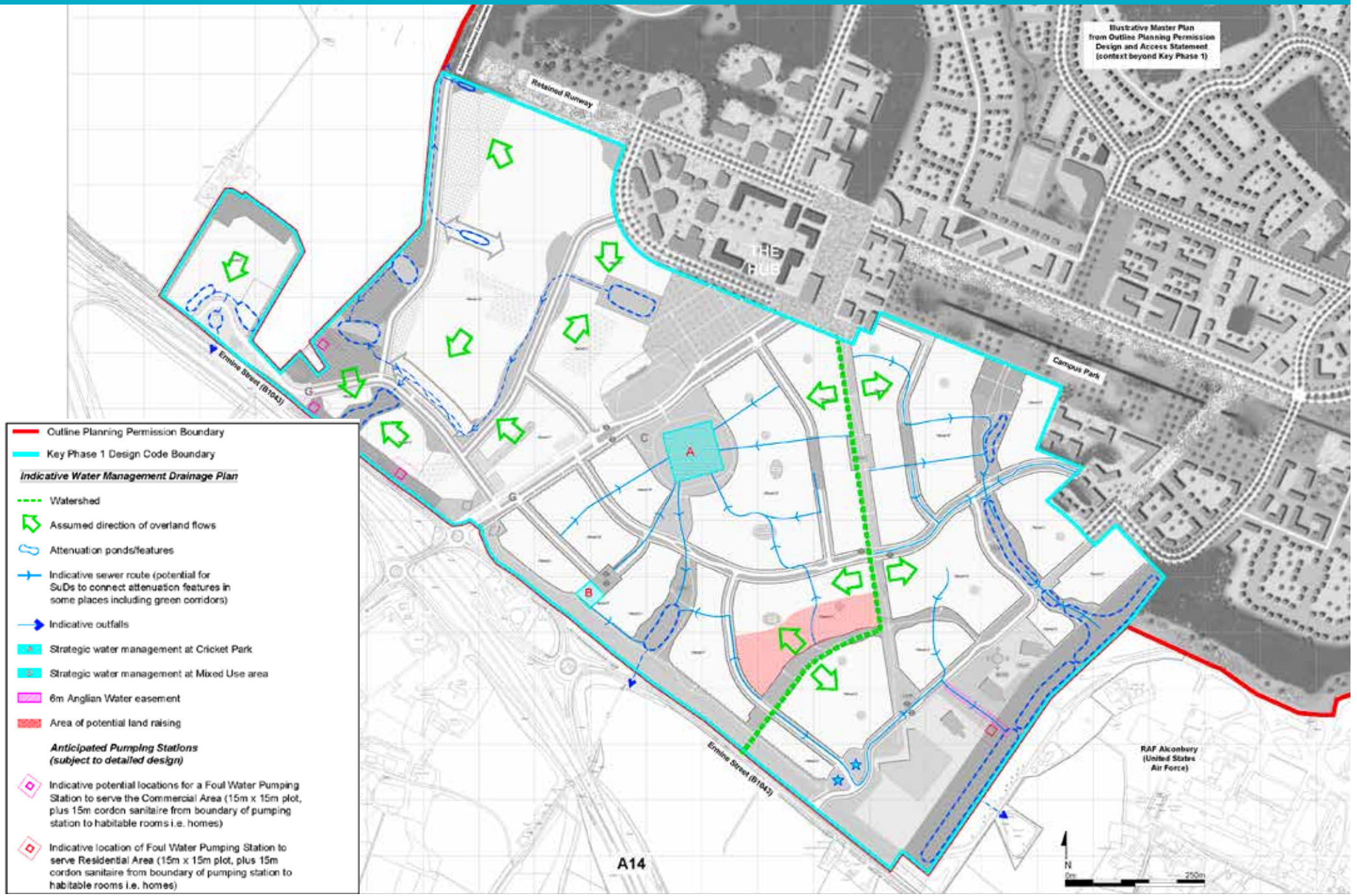
As the site is relatively flat, it is expected instead of using pipes in some locations, swales and ditches will be used to convey water to allow the lengths of drainage pipes /sewers to be minimised. The site will drain to attenuation features before discharging to the outfalls.

Potential to consider small scale SuDS in highway landscape strips where possible in accordance with appropriate guidance "Water Sensitive Urban Design.

Whilst storage volumes for SuDS facilities are fixed the location and nature of storage will be subject to detail design.

The indicative KP1 water management strategy is illustrated in Figure 9h: Indicative Water Management Plan, see next page.

Figure 9h: Indicative Water Management Plan



Sustainable Drainage Systems (SuDS)

SuDS are surface water drainage systems which aim to minimise development impacts on the quantity and quality of run-off, whilst maximising amenity and biodiversity. The SuDS features on site can be implemented in a range of scales depending on the space available.

Further SuDS guidance:

Design proposals should make further reference to best practice documents including:

SuDS related policy / guidance:

- → The SuDS manual – CIRIA – 2007 CIRIA C697
- → Health and safety principles for SuDS: framework and checklists CIRIA RP992 The SuDS Manual Update
- → National Planning Policy Framework (March 2012) and associated online guidance
- → Water Framework Directive (2000/60/EC) (2000)
- → Flood and Water Management Act (2010)
- → National Standards for Sustainable Drainage (December 2011)
- → Interim Code of Practice for Sustainable Drainage Systems, (2004)
- → RoSPA Safety at Inland Water Sites (1999)

Particularly regarding biodiversity:

- → Sustainable drainage systems: Maximising the potential for people and wildlife (WWT & RSPB)
- → Delivering biodiversity benefits through green infrastructure 3011 CIRIA C711

SuDS Precedents:

Balancing ponds can be landscaped to create structures that appear natural and offer an amenity value for the local community.

SuDS features such as balancing ponds and swales can be planted with grasses and other vegetation to provide a level of pollution control and treatment for smaller storm events.

Rainwater harvesting could retain surface water and in addition reduce the volume of clean water used across the development.

Maintenance and Management

Long term management of surface water drainage assets is essential. SuDS require maintenance in the same way as other drainage systems. The surface water drainage features will either be adopted or maintained by a management company.

Water Efficiency Measures

As a minimum for the efficient use of water, new dwellings should comply with the Building Regulations part G. Where practicable developers should look to better the regulations requirements to ensure that Alconbury Weald remains an exemplar development. This will be achieved by, but is not limited, to the below criteria:

- → All new dwellings and buildings are to be fitted with water meters and water efficient fixtures and fittings.
- → Potable water limited to 110l/head/day or less where appropriate
- → Provision of secondary, non-potable water supply network internally, utilising either rainwater or grey water harvesting, within buildings for irrigation and other non-potable uses, where appropriate and feasible.

Rainwater Harvesting

Detailed design proposals for residential and commercial land uses should take account of the land take required for rainwater harvesting.

SuDS Precedents:

Permeable paving can be provided on parking or other paved areas within the development.

Where storage capacity is limited, the use of swales and attenuation ponds could be enhanced by the addition of a modular storage to maximise drainage/ storage potential.

It will be possible for areas of permanent water to be kept in balancing ponds and wetlands to create habitats and encourage biodiversity while attenuating water in more extreme events.

Smaller scale features can be used within the development.

9.8 Ecological Enhancement

ENHANCEMENT THROUGH GREEN INFRASTRUCTURE

Habitat Creation

It is the intention of the development to increase the biodiversity and habitat creation across the site through the delivery of the network of green infrastructure components as described in Chapter 3. The Green Infrastructure components comprise a range of landscape typologies which will provide a variety of new habitats such as:

- → Dense, and impenetrable woodland blocks
- → Open, varied and dynamic woodland habitats, incorporating a mosaic of woodland glades
- → Species rich grassland
- → Amenity grassland
- → Wet/dry swales and channels
- → Permanent water bodies
- → Grass verges incorporating clover and other flowering species

Species selection shall favour native trees and shrubs of local provenance. However, fruiting or flowering, ornamental, non-native species can also provide a good source of food and nectar, and should also be considered in more formal, manicured situations.

Birds

A range of bird boxes shall be incorporated within the development; these will include models suitable for swift (Apus apus), and house sparrow (Passer domesticus) and will be situated in appropriate locations within the built development to maximise probability of use, for example:

- → Positioning will avoid bird boxes on south facing walls exposed to strong sunlight;
- → Swift boxes will be at least two storeys or greater above the ground.

Bees

The orchard provides the opportunity for incorporating bee hives and to provide suitable habitat to encourage and sustain local bumblebee and wild bee populations.

Bats

Bat boxes will be incorporated within development. Bat boxes will be of a type suitable for pipistrelle bats (Pipistrellus spp.) and positioned beneath the eaves of suitable buildings and at various building aspects, in order to provide a variety of roosting opportunities.

Invertebrates

Incorporating invertebrate habitat either through the creation of suitable natural habitat and/or through the construction of 'insect hotels' should be considered. Man-made 'insect hotels' would be ideally located to compliment other adjacent uses and as an educational resource such as within community allotments or adjacent to other community facilities.

Bat boxes on buildings

Bat boxes on existing trees

Man-made 'insect hotels' for a variety of invertibrates

Swift boxes on buildings

Bee hives for honey production and pollination

9.9 Play Provision Strategy

Play Space Provision

Quantum of Play Space Required

Play space provision within the development will need to be delivered in line with the Outline Planning Permission Development Specification Spatial Principles SP5 to SP8. That is to say "All development will be within....800m of either an equipped play area or natural play opportunity..." furthermore "At least 2.12ha of land per 1000 population will be provided for useable, informal green space and play facilities incorporating 0.8ha of land for play facilities per 1000 population".

Guidelines set out in the Fields in Trust (FIT) Planning and Design for Outdoor Sport and Play (2009) document suggests that the play facilities should be distributed with 0.25ha per 1,000 population allocated to equipped and designated play space and 0.55ha per 1,000 population comprising casual/informal play space.

Therefore overall play space provision within KP1, based on the current predicted population of 3,262, would be 2.61ha. If the FIT guidance is applied literally then of this 2.6ha, 0.81ha would need to be equipped and designated play and 1.8ha casual informal play space. But it should be noted that considerable areas of formal open space are provided in other areas of the OPP, beyond KP1, and that KP1 is part of this much wider scheme.

Play Space Typologies

FIT play space typologies are defined as follows:

Local Area for Play (LAP)
A small area of open space specifically designated and primarily laid out for very young children to play close to where they live i.e. within 1 minute walking time.

Local Equipped Area for Play (LEAP)
An area of open space specifically designated and laid out with features including equipment for children who are beginning to go out and play independently close to where they live, usually within 5 minutes walking time.

Neighbourhood Equipped Area for Play (NEAP)
The NEAP is an area of open space specifically designated, laid out and equipped mainly for older children but with play opportunities for younger children as well. Located within 15 minutes walk from home, the NEAP is sufficiently large to enable provision for play opportunities that can not be provided within a LAP or LEAP.

Play Space Accessibility

The FIT recommendations also provide guidance on Accessibility Benchmark Standards or distance thresholds to set the catchment area for each type of play space. These are summarised in the table (right).

Summary

It has been suggested by HDC that the strict application of the FIT guidance in other local schemes has not delivered the type of integrated and quality play experience envisaged for Alconbury Weald.

Nevertheless the guidance does provide a starting point for suggesting how the play space provision might be distributed across the KP1 site to establish an accessible network of play experiences which combines both informal playable landscapes and more formal equipped play areas.

Accessibility Benchmark Standards for Children's Playing Space

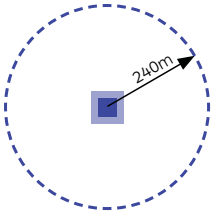
Type of Space	Distance Criteria (metres) Walking Distance	Straight Line Distance
Local areas for play or 'door-step' spaces – for play and informal recreation (LAPs)	100	60
Local equipped, or local landscaped, areas for play – for play and informal recreation (LEAPs)	400	240
Neighbourhood equipped areas for play – for play and informal recreation, and provision for children and young people (NEAPs)	1000	600

Local Equipped Area for Play

min. 400sq.m activity zone

min. 10m buffer zone

240m straight line catchment area



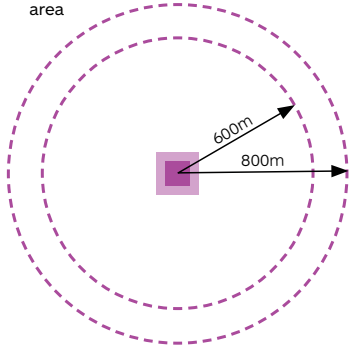
Neighbourhood Equipped Area for Play

min. 1000sq.m activity zone

min. 30m buffer zone

600m straight line FIT catchment area

800m straight line HDC catchment area



The accessibility benchmark standards have therefore been applied to KP1 to understand the optimum distribution of play space and in particular understand where LEAPs and NEAPs would best be located (see Figure 9i).
The following sections provide guidance on the strategy for provision of LAPs LEAPs and NEAPs within the KP1 masterplan.

Figure 9i: Play Space (NEAP and LEAPs) Catchment Areas

Key:
See key within the text on the previous page: this provides details for NEAP and LEAP walking distances, activity zones and buffer zones.

Local Area for Play (LAP)

Definition

Local Areas for Play (LAP) or Doorstep Play Spaces are defined in the Field in Trust (FIT Planning and Design for Outdoor Sport and Play guidelines (2009) as *"a small area of open space specifically designated and primarily laid out for very young children to play close to where they live…The LAP requires no play equipment as such, relying more on demonstrative features indicating that play is positively encouraged."*

Key characteristics and features identified in the FIT guidance:

- → Intended primarily for children up to age 6;
- → Within 1 minute walking distance of home;
- → Recommended min. activity zone of 100sq.m;
- → A landscape buffer zone of min. 5m between activity zone and nearest dwelling;
- → Primarily consists of playable landscape features but some low key play equipment may also be incorporated;
- → Best positioned beside a well used pedestrian route and accessible without the need to cross busy roads.

Strategy for LAP provision at Alconbury Weald

The objectives for play provision for 0-6 year-olds include:

- → Integration of play provision within the overall open space strategy, recognising that play can take place in a variety of settings and may or may not involve equipment;
- → Provision for opportunities for play to occur within the whole environment that a child occupies: through, for example, shared surface treatments which encourage outdoor play and social interaction;
- → Ensuring well-defined and overlooked 'playable routes' along linear green spaces and key pedestrian connections;
- → Exploring opportunities to introduce natural elements linked to the landscape context.

Distribution of Doorstep (LAP) Play

In line with the strategy of integrated, playable landscape it is not intended to strictly define locations for LAPs within the parameter plan. The focus for delivering doorstep play should be within the multi-functional green infrastructure of linear parks, woodland belts, etc. Rather than a series of defined play spaces the approach should seek to create a more seamless linear play experience along these routes.

In addition to the informal green space areas, doorstep play should also be incorporated into the incidental open space and pocket parks located within the residential plots, as identified on the Regulatory Plan. (ref. also Section 3.16)

Natural play elements

Mounded landform

Combined equipment and natural features

Play-on-the-way features

Local Equipped Area for Play (LEAP)

Definition

Local Areas for Play (LAP) or Doorstep Play Spaces are defined in the Field in Trust (FIT Planning and Design for Outdoor Sport and Play guidelines (2009) as *"a small area of open space specifically designated and primarily laid out for very young children to play close to where they live...The LAP requires no play equipment as such, relying more on demonstrative features indicating that play is positively encouraged."*

Key characteristics and features identified in the FIT guidance:

- → An area of open space specifically designated and laid out with features and equipment for children who are beginning to go out and play independently but close to home;
- → Within 5 minutes walking distance of home;
- → Recommended min. activity zone of 400sq.m;
- → A landscape buffer zone of min. 10m between activity zone and nearest dwelling (20m where facing a habitable room);
- → A stimulating and challenging play experience including play equipment, naturally landscaped areas and adequate space for informal kick about and/or 'chase' type games;
- → A recommended minimum of 6 play experiences;
- → Ancillary features such as seating, litter bins and possibly fencing incorporated.
- → Best positioned beside a well used pedestrian route and accessible without the need to cross busy roads.

Strategy for LEAP provision at Alconbury Weald

A total of 4 LEAPs have been positioned to provide an even distribution of play within the recommended catchment area of 240m. This would be in excess of the 800m catchment area defined in the Development Specification, however a strategy of smaller more evenly distributed equipped play spaces would be preferable to providing one larger area which meets the minimum 800m catchment area.

The play spaces should be carefully integrated into their specific setting and should seek to provide a balance between natural play experiences and more formalised pieces of equipment.

Combined equipment and natural features

Sensitively designed and integrated play equipment

Sensitive separation of street and play space

Active, linear play

Neighbourhood Equipped Area for Play (NEAP)

Definition

Neighbourhood Equipped Areas for Play (NEAP) are defined in the Field in Trust (FIT Planning and Design for Outdoor Sport and Play guidelines (2009) as *"an area of open space specifically designated, laid out and equipped mainly for older children but with play opportunities for younger children as well...the NEAP can provide a greater variety of opportunity for both active and passive play. It can provide play equipment, and a hard surfaced area for ball games, or wheeled activities ...It may provide other facilities such as a ramp for skateboarding, a rebound wall, and a shelter for meeting and socialising."*

Key characteristics and features identified in the FIT guidance:

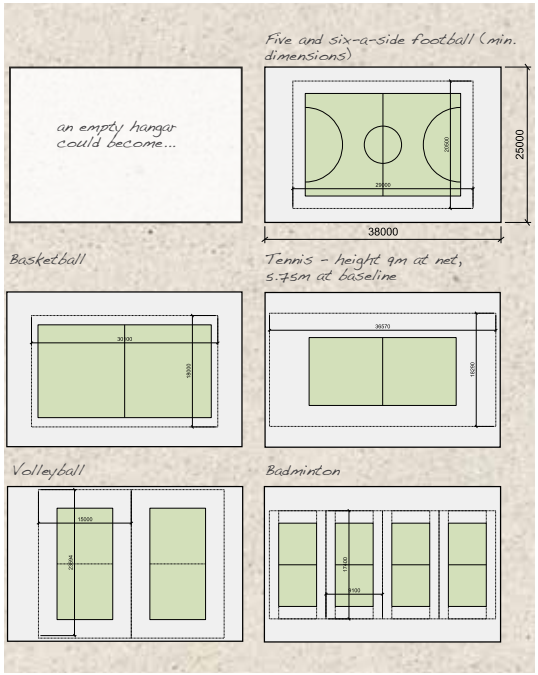
- → Intended primarily for older children of relative independence, who have freedom to range further from home;
- → Within 15 minutes walking distance of home;
- → Recommended min. activity zone of 1000sq.m (incl. a hard surfaced area of at least 465sq.m);
- → A landscape buffer zone of min. 30m between activity zone and nearest dwelling (a greater distance may be required for purpose-built skateboard facilities);
- → A stimulating and challenging play experience including play equipment, naturally landscaped areas and adequate space for informal kick about and/or 'chase' type games;
- → A recommended minimum of 9 play experiences;
- → Ancillary features such as seating, litter bins, cycle parking and possibly fencing incorporated.
- → Best positioned beside a well used pedestrian route.

Strategy for NEAP provision at Alconbury Weald

The preferred location for a NEAP would be to the south of the phase 1 masterplan in the area of the existing hangars. This would be within 600m of the majority of development and provide sufficient space to establish a high quality and varied "destination" play space.

An inset study of this area has been prepared on the following page to establish one possible arrangement for this space including the re-use of two existing hangars to provide additional play and sport provision.

Other community uses could also be accommodated in this area to provide a facility with cross-generational appeal.



Study to show how existing hangar buildings could accommodate various sports

Re-use of hangars for formal sports

Play equipment and complementary support facilities

Re-use of hangars for wheeled sports

NEAP and Formal Sports / Open Space Provision

The inset study (right) identifies opportunities for accommodating a Neighbourhood Equipped Play Space (NEAP) and Formal Sports/Open Space in and around the existing hangars. In addition, an analysis of the adjacent proposed Primary School site assesses potential locations for sports turf pitches as a shared community facility.

Key opportunities for the area around the hangars include:

- → Provision of a high quality NEAP for older children including the potential re-use of the northern most hangar to provide a covered wheeled sports/skate park. External equipped play spaces are indicated to the south, allowing for a combination of naturally landscaped play areas and hard surfaced areas to provide a range of play experiences;
- → Within the middle hangar a range of sport courts could be accommodated (see inset study on previous page). Adjacent and connected to the hangar there would be sufficent space to incorporate a double MUGA;
- → In support of the formal play and sports facilities, areas have also been identified for potential car parking and other community uses (allotments, community orchard).

Within the Primary School site one full size football pitch could be accommodated along the southern edge.

For related content, also refer to:

- → Chapter 3, section 3.18 *Landscape between Community Uses*; and
- → Chapter 7, including *Hangars potentially retained for community uses*.

Inset Study

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APPENDICES

APPENDIX 1

Compliance Checklist

Alconbury Weald – Key Phase One Design Code Compliance Checklist

This Design Code Compliance Checklist will be completed and submitted with all Reserved Matters Planning Applications.

Tick boxes as appropriate: Yes ☑ No ☐ N/A ☐

REGULATORY PLAN

	Are proposals compliant? Yes	No	N/A
Proposals have referred to the Regulatory Plan	☐	☐	☐
Submitted material includes a layout plan that is in accordance with the Regulatory Plan (proposal overlaid on Regulatory Plan)	☐	☐	☐

Reserved Matters Application details:

Phase	
Parcel reference	
Developer	
Design team	

Notes:

Wherever 'No' is answered to any compliance question, an explanatory statement justifying non-compliance is required.

Explanatory statements will be submitted in support of the completed Compliance Checklist.

PART A: BACKGROUND

1. Introduction

	Are proposals compliant?	Yes	No	N/A
	Compliance with Code:			
	Does the proposal fully comply with the code?	☐	☐	☐
	If the above is answered '**No**', has a statement of justification been provided?	☐	☐	☐
1.8	Have 'Code Breaker' elements been included in the proposals?	☐	☐	☐
	If the above is answered '**Yes**', has a statement of justification been provided?	☐	☐	☐

2. Context

	Yes	No	N/A
Applicant has read and fully understood the contents of this chapter.	☐	☐	☐

PART B: SPATIAL

3. Green Infrastructure Design Fixes

Are proposals compliant?	Yes	No	N/A
Location of green infrastructure components as illustrated in the Regulatory Plan	☐	☐	☐
3.3 Woodland Blocks	☐	☐	☐
3.4 Permeable Woodland	☐	☐	☐
3.5 Woodland Links	☐	☐	☐
3.6 Boundary Edge Planting	☐	☐	☐
3.7 Cricket Park	☐	☐	☐
3.8 Watch Tower Green	☐	☐	☐
3.9 Linear Park (north – south)	☐	☐	☐
3.10 Linear Park (east – west)	☐	☐	☐
3.11 Ermine Street Linear Park	☐	☐	☐
3.12 Grassland Meadows	☐	☐	☐
3.13 Poplar Park	☐	☐	☐
3.14 Allotments	☐	☐	☐

continued on next page...

PART B: SPATIAL

3. Green Infrastructure Design Fixes

Are proposals compliant?

continued from previous page...

	Yes	No	N/A
3.15 Community Orchards	☐	☐	☐
3.16 Residential Pocket Parks	☐	☐	☐
3.17 Commercial Pocket Park	☐	☐	☐
3.18 Landscape between Community Infrastructure	☐	☐	☐
3.19 Boulevard Gateway	☐	☐	☐
3.20 Residential Gateway	☐	☐	☐

4. Access & Movement Design Fixes

Are proposals compliant?

	Yes	No	N/A
Location of access components as illustrated in the Regulatory Plan.	☐	☐	☐
4.2 Site Access Points	☐	☐	☐
4.3 Street Hierarchy	☐	☐	☐
Design of Streets: accord with the street type tables and street type sections	☐	☐	☐
4.4 Tertiary Streets as Spaces	☐	☐	☐
4.5 Access to Minor Routes and Plots	☐	☐	☐
4.6 Design of crossroads	☐	☐	☐
4.7 Service Access & Parking for Community Facilities	☐	☐	☐
4.9 Cycle & Pedestrian Network	☐	☐	☐
4.10 Access for All	☐	☐	☐

5. Commercial Built Form Design Fixes

Are proposals compliant?

	Yes	No	N/A
Location of access components as illustrated in the Regulatory Plan.	☐	☐	☐
5.3 Extent & Rules	☐	☐	☐
5.5.1 Framing the Street (Employment Typology)	☐	☐	☐
5.5.2 Reinforcing Hubs	☐	☐	☐
5.5.3 Set in the Landscape	☐	☐	☐
5.6 Commercial Area common parts infrastructure	☐	☐	☐

6. Residential Built Form Design Fixes

Are proposals compliant?

	Yes	No	N/A
Location of residential development parcels as shown on the Regulatory Plan.	☐	☐	☐
6.2 Plot Layout Rules	☐	☐	☐
6.5 Residential Layout Design, including:			
6.5.1 Minor streets and informal green spaces	☐	☐	☐
6.5.2 Key groupings	☐	☐	☐
6.5.3 Edge condition sections	☐	☐	☐
6.5.4 Residential Character Areas	☐	☐	☐
6.5.5 Frontage Character	☐	☐	☐
6.5.6 Residential plot components	☐	☐	☐
6.6 Residential Components Library, including:			
6.6.1 Dwelling Typologies	☐	☐	☐
6.6.2 Parking Typologies	☐	☐	☐
6.6.3 Boundary Typologies	☐	☐	☐
6.7 Typology Matrices	☐	☐	☐

7. Community Uses Built Form Design Fixes

Are proposals compliant?

	Yes	No	N/A
Location of Community Uses as shown on the Regulatory Plan.	☐	☐	☐
Walkable Neighbourhoods	☐	☐	☐
Primary School	☐	☐	☐
Early Years Provision	☐	☐	☐
Community Building	☐	☐	☐
Hangars to potentially be retained	☐	☐	☐
Cricket Pavilion	☐	☐	☐
Listed Watch Tower	☐	☐	☐

Continued on next page...

PART C: DETAILING THE PLACE

8. Detailing the Place Design Fixes

Are proposals compliant?

	Yes	No	N/A
8.2 Detailed design considerations, including:			
8.2.1 Architectural Principles for Commercial Built Form	☐	☐	☐
8.2.2 Building Features for Commercial Built Form	☐	☐	☐
8.2.3 Materials & Colour for Commercial Built Form	☐	☐	☐
8.3 Detailed considerations for Residential Area including:			
8.3.1 Architectural Principles for Residential Built Form	☐	☐	☐
8.3.2 Building Features for Residential Built Form	☐	☐	☐
8.3.3 Materials for Residential Built Form, including Mixed Use component	☐	☐	☐
8.4 Public Realm Palette, comprising:			
8.4.1 Street Design Materials Palette	☐	☐	☐
8.4.2 Boundary Treatments	☐	☐	☐
8.4.3 Street Furniture	☐	☐	☐
8.4.4 Lighting	☐	☐	☐
8.4.5 Tree Planting Palette & Soft Landscape	☐	☐	☐
8.4.6 Branding (including signage & typography)	☐	☐	☐
8.4.7 Public Art	☐	☐	☐

PART D: TECHNICAL

9. Technical Details Design Fixes

Are proposals compliant?

	Yes	No	N/A
9.1 Environmental Standards	☐	☐	☐
9.2 Private Amenity Space (residential)	☐	☐	☐
9.3 Parking Provision	☐	☐	☐
9.4 Household Utilities Accommodation	☐	☐	☐
9.5 Site Wide Utilities Accommodation	☐	☐	☐
9.6 Plot based Bin Storage solutions (residential)	☐	☐	☐
9.7 Water Management: Drainage Approach & SuDS	☐	☐	☐
9.8 Ecological Enhancement	☐	☐	☐
9.9 Play Provision & Strategy	☐	☐	☐

APPENDIX 2

KP1 Illustrative Master Plan

KP1 Illustrative Master Plan

The Illustrative Master Plan presents a vision of the proposed development of KP1: it creates a more detailed plan that illustrates one way in which the Regulatory Plan can be used to inform a master plan scheme.

The Illustrative Master Plan also acts as a proving plan that has tested the design guidance established in the Design Code and Regulatory Plan by using it to draw up an example full scheme layout.

The KP1 Illustrative Master Plan is presented opposite in Figure A2a.

Figure A2a: KP1 Illustrative Master Plan

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APPENDIX 3

List of Figures

Alconbury Weald
Make|Grow

KEY PHASE 1
Design Code

www.alconbury-weald.co.uk