Development Brief

Slate Meadow

February 2018

WYCOMBE
DISTRICT COUNCIL

Contents

Figures

Figure A (opposite page) Aerial view of the site

1 Introduction

1.0 Introduction

This Development Brief has been prepared for Wycombe District Council to review the context, setting and character of the land at Slate Meadow, Bourne End and to use the findings to guide residential development on the site.

The brief has been prepared with the benefit of input from Buckinghamshire County Council and specialist technical and professional advice. Conclusions are drawn with the presentation of a set of development principles and guidelines. Each is framed to respond to a combination of contextual and site wide analysis, inputs from the appointed Liaison Group and the community workshop and public consultation exercises held on 14th March 2015 and from the 8th to the 9th September 2017 respectively.

The Slate Meadow Liaison Group (combination of elected Councillors, members of the public and technical advisors) was established in February 2015 to help facilitate the process. The work of the Liaison Group, together with stakeholder and public consultation and visioning exercises has provided a solid platform from which to generate a development framework for Slate Meadow.

The Liaison Group has worked with the Council and the Developers to guide and inform the content of the brief. However members of the group do not agree with a number of the conclusions reached within the document.

Figure 1.1 Site context and ownership plan

Slate Meadow covers an area of approximately 10 hectares and is located six miles south-east of High Wycombe, in the parish of Bourne End.

KEY

- Croudace Strategic
- Wycombe District Council
- Avant Homes
- Third party

1.1 Land ownership

The site is loosely comprised of four parcels of land – each is under separate control. Figure 1.1 refers.

With separate controlling interests, it is important that the site be assessed and planned as a whole to ensure a truly responsive solution. To this end Avant Homes and Croudace, that control the two largest parcels of land with development potential, completed and signed a Planning Performance Agreement (PPA) with the Local Planning Authority on 5th October 2015.

1.2 The Purpose & Structure of the Brief

Once adopted by the Council this brief will form part of the planning policy base that will be used, alongside national planning policy (NPPF) and exiting and emerging local plans, to assess the merits of applications made to the Council for the development of the site. The aim is to:

- Set out the vision for and key objectives of the development;
- Identify key constraints and opportunities that will influence development and the approach to resolving competing interests/issues; and
- Establish a robust and comprehensive design approach that integrates the site into its surroundings.

To meet these aims the brief is structured as follows:

- Section 1 : Introduction and Planning Policy;
- Section 2 : Site Context and Analysis;
- Section 3 : Vision & Design Response; and
- Section 4 : Development Framework;

1.3 Vision and Development Objectives

Having regard to planning policy and the outcome of public workshops, the following vision was agreed for the site in the Planning Performance Agreement (PPA) and forms the starting point for this brief.

"A development which respects the separate identities of Bourne End and Wooburn, which is socially, economically and environmentally sustainable and which enables new and existing residents to enjoy a high quality of life."

It is expected that this vision will be further iterated following analysis and assessment work, and will inform the objectives also agreed in the PPA, including:

1. To maintain the separate identities of Bourne End and Wooburn;
2. To provide open space;
3. The provision of open space to achieve biodiversity and recreational value, and to contribute to the separation of Bourne End and Wooburn;
4. For the site as a whole to at least maintain the current biodiversity interest of the site;
5. To enhance the River Wye and its corridor;
6. To achieve a mix of house types;
7. Pedestrian and transport links to local facilities including open space, schools and health facilities;
8. To encourage health and wellbeing;
9. To deliver energy efficiency; and
10. To deliver on and off-site infrastructure, directly related to the needs of the development, and viable and deliverable ways to secure its provision.

1.4 Key Issues

As agreed in the Planning Performance Agreement between the developers and the Council, in order to realise the vision and development objectives for Slate Meadow the following issues must be resolved to enable permission to be granted for residential development of the site:

1. The form of development so that it maintains the separate identities of Wooburn and Bourne End;
2. The quantum of development;
3. Access(es) to the site;
4. The location of the village green, and the relationship of the development to it, and/or its possible relocation;
5. Landscape and visual impact including views to and from the adjacent Local Landscape Area;
6. Relationship with the recreational use of the former railway line adjacent to the site;
7. Ecological impact and opportunities for ecological enhancement through the development;
8. Ensuring flooding issues are fully addressed, through layout and/or mitigation, and that the river corridor is enhanced for recreational and biodiversity benefits;
9. Review the potential to resolve school drop off congestion for the adjacent school;
10. Agreement as to the most appropriate mechanism for the collection of developer contributions and the delivery of infrastructure (s106 / CIL, including modification of the CIL Reg 123 list); and
11. Identification of deliverable and viable off site highways improvements that are directly related to the development of the site, and their impact on the character of the area. Consider an active travel plan strategy, and public transport improvements.

These issues will be further refined through the process of producing the brief.

1.5 Planning policy and principles

Planning Policy and Principles

This development brief provides supplementary planning guidance to the development plan and the National Planning Policy Framework (NPPF) to support and guide the development of Slate Meadow. The following policy review is not exhaustive - it serves only to highlight the main points for consideration.

The Development Plan for High Wycombe District comprises following the following documents: -

- Wycombe Development Framework Core Strategy adopted 2008;
- Saved, extended and partially retained policies from the Wycombe District Local Plan to 2011; and
- Wycombe District Delivery and Site Allocations Plan (2013)

Policy CS8 'Reserve Location for Future Development' of the adopted Core Strategy identifies five sites for future development: Slate Meadow being one of those. The Policy identifies that prior to any of these sites being developed, there is a need to have adequate infrastructure in place to support any development and this includes sustainable transport modes. The brief explores the infrastructure needs to support development of the site in securing housing growth.

When adopted, the new Local Plan will update and replace the current Core Strategy as well as the saved Local Plan policies and a small number of policies in the Delivery and Site Allocations plan. The document is scheduled for adoption in 2018.

In support of the 'development plan' the Council has published a range of Supplementary Planning Documents (SPD) that provide in depth policy guidance on specific issues including for example developer contributions, transport and community facilities. All SPD's are available on the Council's website www.wycombe.gov.uk

Of particular relevance in setting the guiding principles for the development of Slate Meadow is the Council's Residential Design Guidance SPD, adopted June 2017.

Figure 1.2 Site location aerial

2 Site analysis and Context

2.0 Introduction

This section of the brief considers the wider context of Slate Meadow and identifies the specific characteristics of the site and its surroundings that have the potential to directly or indirectly influence the design solution for the site. A factual appraisal of each identified area of influence is presented. Conclusions are drawn through the identification of 'key points' that should be taken forward to inform the principles and objectives to support the creation of a development framework for the site.

The following areas of interest have varying degrees of influence on the design process - all are important:

- Topography;
- Historic Context and Local Character;
- Transport and Movement;
- Services and Facilities;
- Green Infrastructure;
- Landscape and Visual Context;
- Ecology;
- Water Environment;
- Arboriculture;
- Recreation;
- Village Green; and
- Utilities.

Each topic is summarised diagrammatically at the end of each section: 'key points' are highlighted in bullets. These inform the opportunity and constraint diagrams, which conclude the Section.

2.1 Site Context

Slate Meadow sits on the eastern edge of the historic hamlet of Bourne End (see Figure 1.1), which has grown from a few homes in the mid 19th century to now form part of a Parish of some 11,000 residents. The area is comprised of Well End, Bourne End, Wooburn Town and Wooburn. All benefit from and support the commercial centre located at The Parade in Bourne End.

Slate Meadow lies between Bourne End and Wooburn, immediately north of the River Wye and south of the former High Wycombe to Maidenhead railway line. The former railway provides an important edge to the north-western boundary of the site. Beyond the dismantled railway line, the land is steeply sloping and rises to a level some 100 metres AOD. It is identified as a Local Landscape Area and comprises open grassland with mature hedgerows and fields.

The steep slope combined with the 'hard' edge of the former railway line, creates a sense of containment to the northern area of site with the River Wye defining the south-eastern edge. It forms a clear boundary between the site and the grass verge adjacent to Brookbank. The river and associated grassland form a green corridor between Brookbank and Stratford Drive and create an attractive feature of the area.

The site is surrounded by residential development on three sides. To the north east the site is adjoined by medium density 'estate' housing, which is serviced off Stratford and Orchard Drives. St Paul's Church of England Primary School lies directly opposite the site on Stratford Drive. Residential areas to southeast of the site exhibit much lower densities with significant tree cover. Grange Drive and Brookhouse Drive are characterised by larger detached properties set within generous sylvan plots, beyond which the treed valley side rises.

The south-western boundary of the site adjoins properties that front onto Cores End Road. Here, the character is more varied with some medium to high density housing from the nineteenth century interspersed with more recent high density housing, comprising terraced homes and apartments: most notably in the area of Frank Lunnon Close. More details are set out later in this section.

2.2 The Site

The site is comprised of three fields, aligned loosely with ownership (Figure 1.1) The south-western field has areas of scrub in the south-eastern part. A thin hedgerow forms the boundary with the other two fields, this delineates the Ward boundary. Both of these areas are laid to grass, with the larger portion that adjoins Stratford Drive and the River Wye, being used to graze horses. The north-western field is broadly rectangular in shape and is a designated village green.

A number of unofficial footpaths and desire lines cross the site from Cores End Road to Stratford Drive. To the northeast, a public footpath runs between the dismantled railway and the site boundary – walkers appear to generally divert through the village green instead of remaining on the footpath. A further public footpath follows the site boundary in the northwest corner. There is a gated entrance to the paddock in the south-eastern corner of the site, off Stratford Drive, just north of its junction with Orchard Drive.

KEY

Site boundary
Urban areas
Railway/Station
River Wye
30m 100m
Topography

Figure 2.1 Site and topography context

1876

1925

Figure 2.2 Historic maps 1876-1977

1977

2.3 Historic Context

The site originally formed part of the rural landscape surrounding Bourne End (Figure 2.2), a small hamlet probably providing workers for Cores End Farm and the nearby paper mills (Gunpowder Mill and Princes Mill) on the River Wye. The meadows were subject to the Parliamentary Enclosure Act and were enclosed during the 19th century (recorded in the 1st edition OS map). These historic field boundaries are still visible today and are important historic features which support the majority of the mature vegetation on the site.

Brookbank, bordering the south of the site, provided a link from Bourne End to the settlements of Wooburn Green, Beaconsfield and East Wycombe. Brookbank remained undeveloped until after the 1960s when a number of homes in very large plots were developed to the south, accessed from Brookhouse Drive (via Kiln Lane) and Grange Drive (Figure 2.2). The rear garden boundaries of these houses back onto Brookbank, providing a dense informal vegetative boundary to the south of the road, hiding the homes from the street and reinforcing the perception that there is a gap between Bourne End and Wooburn Green. As the local area developed, this site has remained an undeveloped green space between Bourne End and Wooburn Green.

The north-western boundary of the site is defined by a section of the former High Wycombe to Maidenhead railway line and its spur line that linked Loudwater and Bourne End. The line was constructed in the 19th century and provided connections between Buckinghamshire and the Thames Valley. It formed the original High Wycombe to London line.

The nine kilometre stretch between High Wycombe and Bourne End was closed in 1970. The section of former railway to the north west of Slate Meadow remains undeveloped and provides an important safe pedestrian link to the formal footpaths to the west and east of the site. The District and County Councils are currently in the process of seeking to have the track bed designated as a bridle/cycleway.

Key Points: Historic Context

- Hedgerows are important historic features of the site and in part delineate the Ward boundary; and
- The site functions as a gap between developed areas, a function which will need to be retained to some degree as the site is developed.

2.4 Settlement Character

The general characteristics of built form in the vicinity of Slate Meadow vary greatly, with medium to high density forms of housing from the mid to late nineteenth century defining the major routes along Cores End Road to the west of the site and at the junction of Cores End Road and Brookbank. Behind this 19th century housing is high-density houses and apartments constructed in the 1980's.

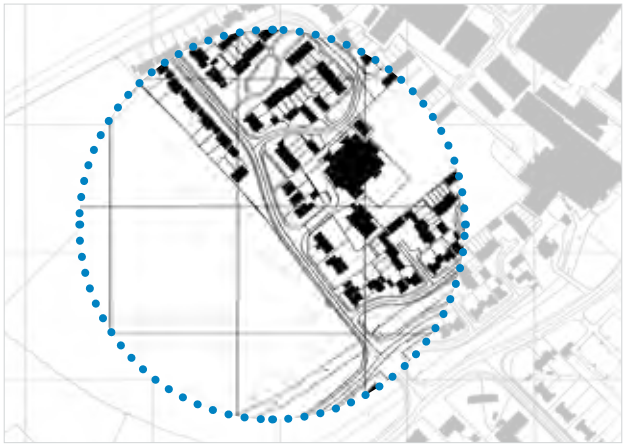
On the opposite, eastern side of the site the area is characterised by medium density estate type housing. These areas contain a very limited amount of robust structural planting. To the south of Brookbank the properties are larger, detached and set in generous sylvan plots with very low plot coverage (the amount of built area in a residential plot). There is a variety of built form comprising apartments, detached villas, semi-detached and terraced homes. However, consistent components exist across the building typologies, including heights of predominantly two storeys, and building depths of 8-10m.

Set out below is a more detailed description of the local characteristics and building themes of the surrounding area by reference to: -

- Stratford Drive;
- Cores End Road;
- Frank Lunnon Close; and
- Willows Road.

Each description draws out the key elements from the following themes: -

- main building period;
- typical street frontage /building line and plot boundaries;
- public realm details and/or landscape;
- parking arrangements;
- housing typologies (detached, terraced);
- typical plot coverage, heights and densities;
- predominant building materials; and
- general or distinctive architectural details.



Stratford Drive

- Directly to the east of the site providing access to houses constructed in 1960s and onwards;
- Semi-detached and detached brick dwellings, of 1.5 and 2 storeys, set back from the street with varying front garden lengths and boundaries comprising low brick walls and mature hedges;
- Building materials are generally light and dark brown buff brick with some red brindles, concrete roof tiles, and white painted fittings;
- Densities are approximately 30 dwellings per hectare (dph) adjacent to the site, varying from 15dph for the large plots at southern end of Stratford Drive to 40dph in Orchard Drive (where there is a mix of smaller units); and
- Car parking is a mixture of on-plot parking at 15 dph, and on-street parking, or grouped in rear parking courts as density rises to 40 dph.




Cores End Road

- Buildings fronting Cores End Road are predominantly two-storey mid-Victorian with gabled roofs with windows close to the low eaves;
- Dwellings are generally set close to the road or within 4-5m, and mainly of red and buff brindles with plain clay tiles and slate roofs; however there is also brick and flint (e.g. Princes Terrace) and painted render;
- Densities are similar to those seen in many burgage plot developments, at about 50dph, although this is reduced by the occasional larger buildings set in big plots (e.g. Wyebridge House and the former pub), which reduce overall densities to about 35dph;
- Parking is often on hard standing in front of the properties, or where they are set further back, on driveways. However at higher densities this results in front gardens devoid of planting, giving a very harsh appearance to the street; and
- Dwellings front onto the street and back onto the River Wye, precluding any public benefit from the river.

Frank Lunnon Close

- Backland infill behind the original historic plots fronting Cores End Road;
- Constructed after 1970 and comprising of two-storey housing grouped into terraces of varying lengths and small blocks of apartments oriented in different directions;
- Small open front gardens laid to grass, overlooking parking courts, with small rear gardens generally unable to support structural planting;
- Construction is of orange brindles, weatherboarding and concrete tiles;
- Robust planting is provided by the street trees which punctuate the parking areas and incidental green spaces. A number of these properties face onto the western edge of the Slate Meadow site, albeit separated from the open part of the site by garden planting and some more mature trees. Densities are in the order of 60dph; and
- Behind Eastern Drive, Woodbury Close draws the brick and flint theme from Princes Terrace at Cores End Road and Princes Court through to the western edge of the site.






Willows Road

- Constructed to serve new homes built in the 1960s and completed during the 1970s;
- Mixture of detached and terraced two-storey brick properties with integral garages, some of which are now converted and parking is provided on front gardens that are now hard standing;
- With most boundary hedges and much of the front gardens, and rear gardens too small to support robust tree planting, the development appears hard and sparse;
- To the north / off Eastern Drive, groups of quirky, architecturally interesting two storey brick dwellings with flat roofs set around a green square, adjacent to footpaths which have become overgrown with mature landscape; and
- The density of both areas is about 30dph, a density at which parking is provided either on the frontage of the house, in garage courts, or on-street.

Key Points: Residential Character

- Housing neighbouring the site has been constructed over a wide period of time and ranges from the Victorian terraces of Cores End Road to the very large detached properties of Brookhouse Drive;
- Buildings are predominantly 2 storeys, with some 1.5 and 2.5 storey development;

- Surrounding development densities typically range from 30 dwellings per hectare (dph) to 60dph;
- Building materials are predominantly orange and brown brick, with concrete and clay roof tiles, and some slate;
- Stringcourses, contrasting window surrounds, bay windows and chimneys are common to older properties in the area. Newer properties exhibit no consistent distinctive themes;
- Streets vary in function, with variable building lines, boundary treatments, public realm materials and planting;
- Street enclosure is not related to road hierarchy. front-to-front distances of properties generally range from 15m to about 25m;
- Parking is provided by a combination of on plot at lower densities, and off-plot (in parking courts) or on street. At higher densities over-reliance on on-plot parking can result in a harsh appearance with little planting to the fronts of properties.
- Parking is provided by a combination of on plot at lower densities, and off-plot (in parking courts) or on street. At higher densities, on-plot parking is congested;
- Medium to higher density housing areas are less able to support robust structural planting within individual plots than the low-density housing. Higher density development is more reliant on planting in public spaces and outside the developed area.

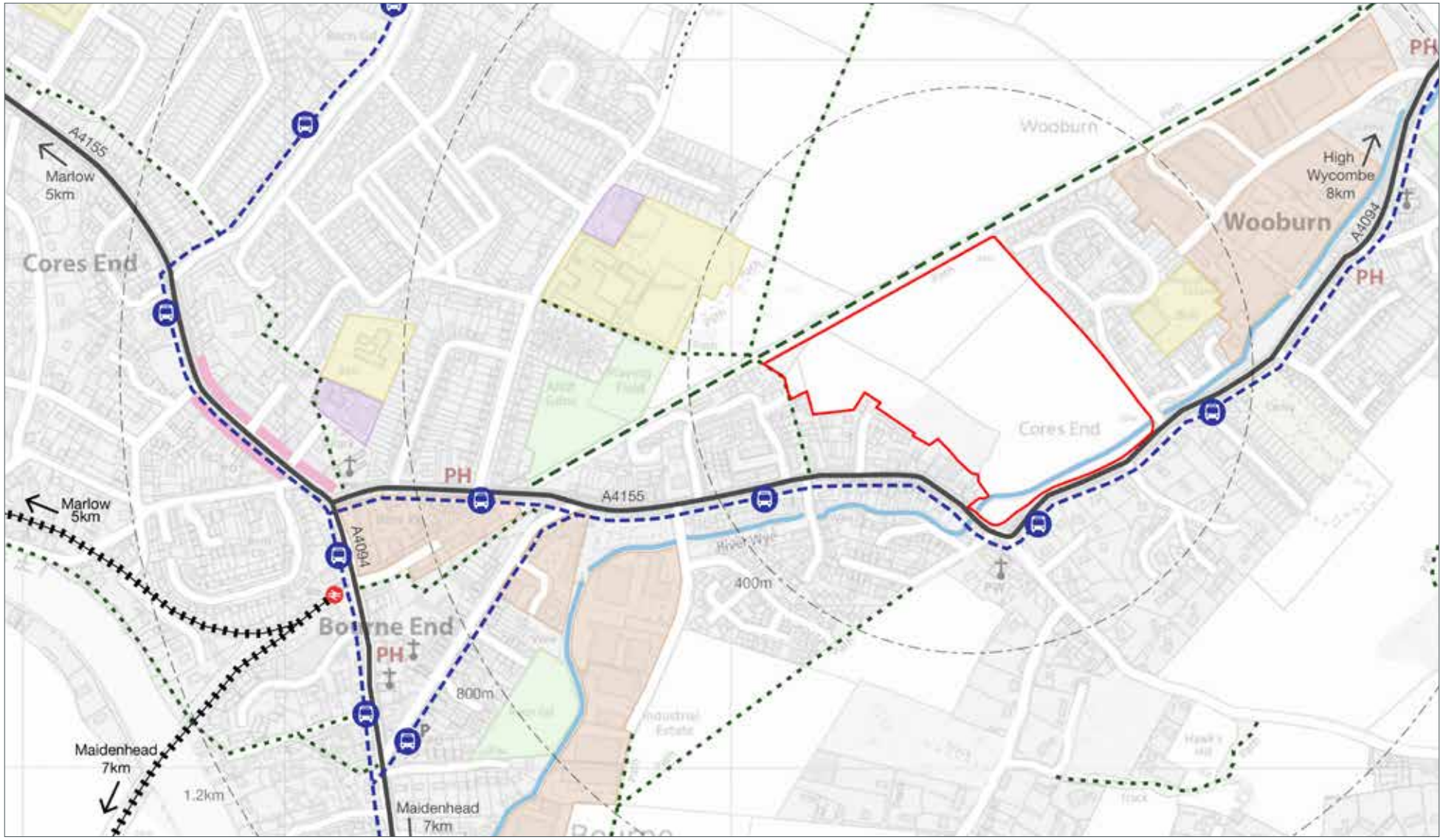


Figure 2.3 Transport, movement and services plan

KEY

- Site boundary
- Main vehicular routes
- Railway/Station
- Bus routes/Bus Stop
- Public Right of Way
- Disused railway
- Urban area
- Town Centre (The Parade)
- Education
- Employment
- Leisure/Community
- Public open space

2.5 Access, Transport and Movement

The infrastructure and access arrangements for Slate Meadow include vehicular access and movement, public transport infrastructure (buses/trains) and cycling and pedestrian movements. All have a close relationship with services and facilities in the vicinity of the site: i.e. how easy is it to travel to key facilities such as schools, shops and so on. In view of this the transport and movement considerations are presented alongside Services and Facilities.

Figure 2.3 presents and overview of the key facilities and their relationship with the main movement corridors.

2.5.1 Transport Aims for Slate Meadow

In site specific terms the Wycombe Reserve Sites Infrastructure Plan sets out a potential transport package for reserve development sites within High Wycombe - section 7.10 of this document sets out the Transport Package for the Slate Meadow and includes the following:

- Connecting with and upgrading the bridleway on the disused railway line to facilitate cycling to Bourne End;
- Review on-street parking provision along A4094;
- Design features to manage speeds and improve pedestrian environment;
- Review accessibility of bus stop and consider provision of real time passenger information;
- Potential revisions to Stratford Drive junction including form of Pedestrian Crossing;
- No vehicular through-route;
- School Drop-Off Facility;
- Investment to improve quality and frequency of the existing up to 30 minute bus services;
- Improved provision for right turning movements along A4094; and
- Contribution towards the implementation of an A40 congestion relief package.

2.5.2 Public Transport and Highway Network

Bourne End is connected to nearby built-up areas through the highways network, including good bus services linking directly to High Wycombe, Beaconsfield and Marlow (Figure 2.3), and access to the M40 within 4km. Bus routes run adjacent to the site along Brookbank, where bus stops are also located, including a bus stop by the footpath to the rear of 1 Brookhouse Drive.

Bourne End Train Station provides local connections to Marlow (25 minutes) and Maidenhead, which provides links to Paddington. The Train Station lies to the west of the site, within 1 kilometre.

2.5.3 Site Access Arrangements

Vehicular access to the site is currently via an unmade, gated field entrance off Stratford Drive. Unofficial and unmade footpaths cross the village green to Bourne End, following desire lines.

Vehicular access can be potentially provided into the site at a number of locations. The primary access to the site is likely to be from Stratford Drive. Options for access to the west include off Eastern Drive or Frank Lunnon Close. Whilst both Eastern Drive and Frank Lunnon Close access options are viable, both are physically constrained. There are other factors such as landscape and ecological considerations that would need to be overcome to support the use of either access.

2.5.4 St Paul's Primary School Access

Various options to improve the circulation and traffic around the primary school have been explored through the design process in conjunction with technical highway consultants and the County Council as Highway Authority. Whilst it is recognised that there is an existing issue with too many parents driving their children to school, the addition of specific 'parent' parking would potentially encourage parents to drive, increase the impact of parent parking and result in inefficient use of land. The County has confirmed that it would accept some additional visitor parking provision in the new development, in close proximity to the school, capable of providing additional school drop-off parking whilst also benefiting the new residents.

Site access from Stratford Drive looking south west

2.5.5 Public Rights of Way / Footpaths

The site offers an opportunity to provide pedestrian and cycle connections, linking properties to the south and east of the site to the network of footpaths that extend from its the northern edge, along the disused railway to east and west, and to the wider countryside. In particular the site offers the opportunity to improve off-road links between residential areas and the shops, services, and schools which serve them.

2.6 Services and Facilities

The locational advantage of the site is highlighted by the walk isochrones (400, 800, and 1200 metres) on Figure 2.4. Local Schools, sports facilities, employment and retail centres at Millboard Road / Wessex Road and The Parade respectively, are highlighted together with access routes to the train station, and bus and footpath networks. The full context is presented in a combination of Figures 2.3 and 2.4. The latter identifies local amenities and services.

Key Points: Services and Facilities

- Key facilities are within walking distance. Reinforce access on foot and by bicycle to shops, employment, recreation community facilities; and
- Schools: Improve and reinforce safe pedestrian access; consider options to improve drop-off collection arrangements for schools.

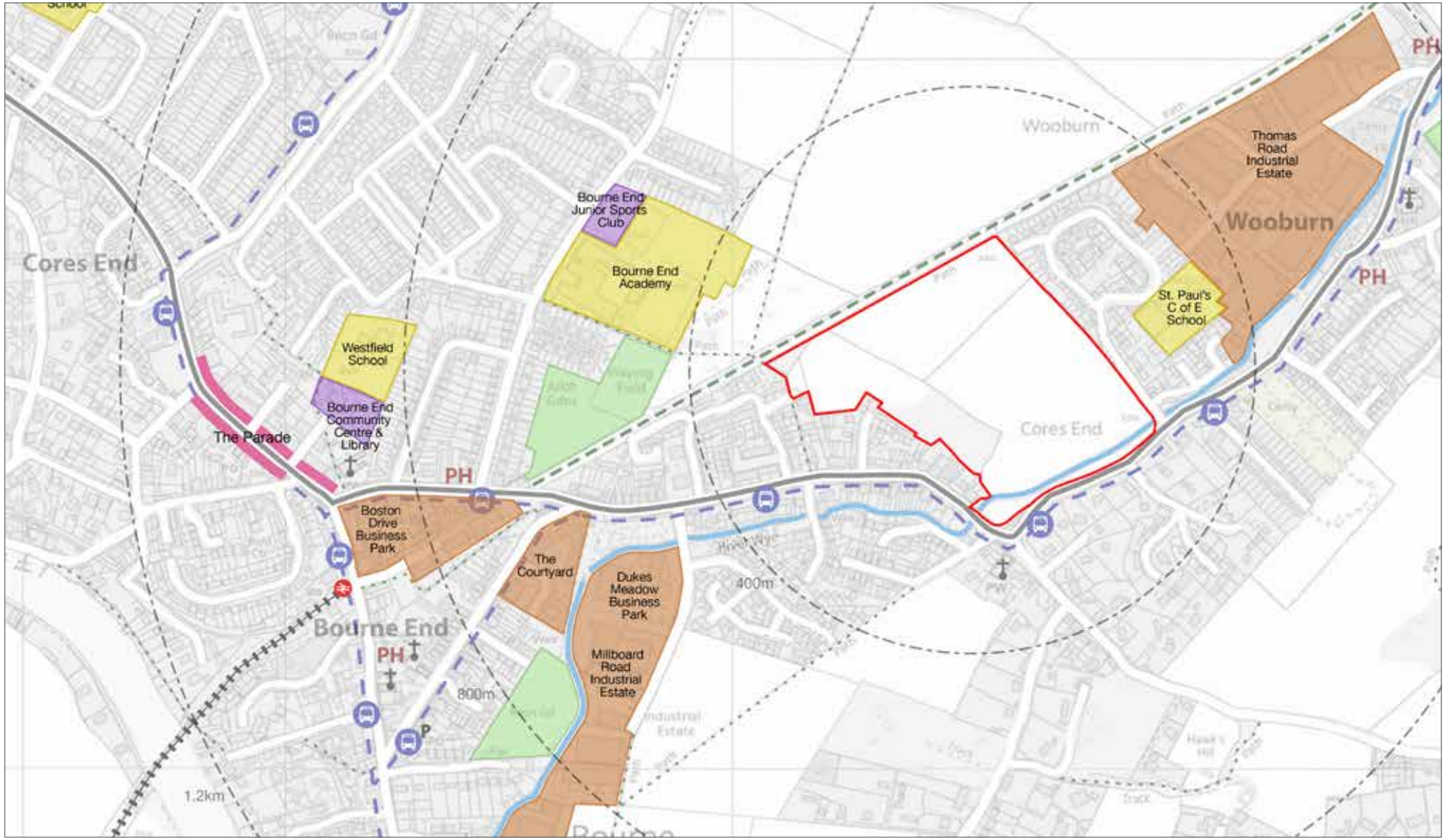
Key Points: Transport and Movement

- **General**: the site can be most readily accessed from Stratford Drive, but will need to have regard to the St. Paul's C of E Combined School and associated travel and parking pressures (scope for new development to include on-street parking intended to minimise congestion currently caused by inappropriate parking);
- **General**: potential second access from Eastern Drive or Frank Lunnon Close;
- **General**: the site lies between residential areas and a variety of shops, services and schools, and is therefore ideally placed to link with and improve the local movement network;
- **General**: proposals will need to demonstrate appropriate means to prevent parking/turning in areas of public open space;
- **Rail:** promote improved sustainable links to Bourne End train station;
- **Road:** make provision for off-site highway improvements to minimise traffic impacts;
- **PRoW:** seek improvements to the footpath network and promote links to surrounding areas.

Bourne End Academy

The Parade, Bourne End

Millboard Road Industrial Estate



KEY

- Site boundary
- Main vehicular routes
- Railway/Station
- Bus routes/Bus Stop
- Public Right of Way
- Disused railway
- Urban area
- Town Centre (The Parade)
- Education
- Employment
- Leisure/Community
- Public open space

Figure 2.4 Local amenities and services plan

2.7 Green Infrastructure

Green Infrastructure is a broad category that covers all green and blue (water) spaces in and around the built environment as well as features such as street trees. The emphasis in this brief is on the strategic landscape setting and character of the site; the ecological interests on the site and in its vicinity, including the wider and local water environments of the River Wye corridor.

2.7.1 Strategic Landscape and Visual Context

The site lies within the 'Chilterns' National Character Area, close to the 'Thames Valley' to the east and the Chilterns Area of Outstanding National Beauty (see Figure 2.5). At a district scale the site is characterised as a 'Settled River Valley', extending to the north east along the River Wye valley.

To the south of the site and east of Bourne End to Wooburn Green beyond the floor of the valley, lies an 'Area of Attractive Landscape' a key feature of which are the 'important and prominent hillsides, overlooking both the River Thames and the River Wye'. To the north of the site on the sloping valley sides lies a designated 'Local Landscape Area' which also allows views over the site.

The Landscape Guidelines within WDLCA aim to: 'Conserve views from each side of the Wye Valley, across the valley to wooded and farmed slopes'.

Key Points: Strategic landscape and visual context

- The site can be readily viewed from higher ground from both the southeast and northwest; and
- The colour palette for the development needs to relate to the visual context.

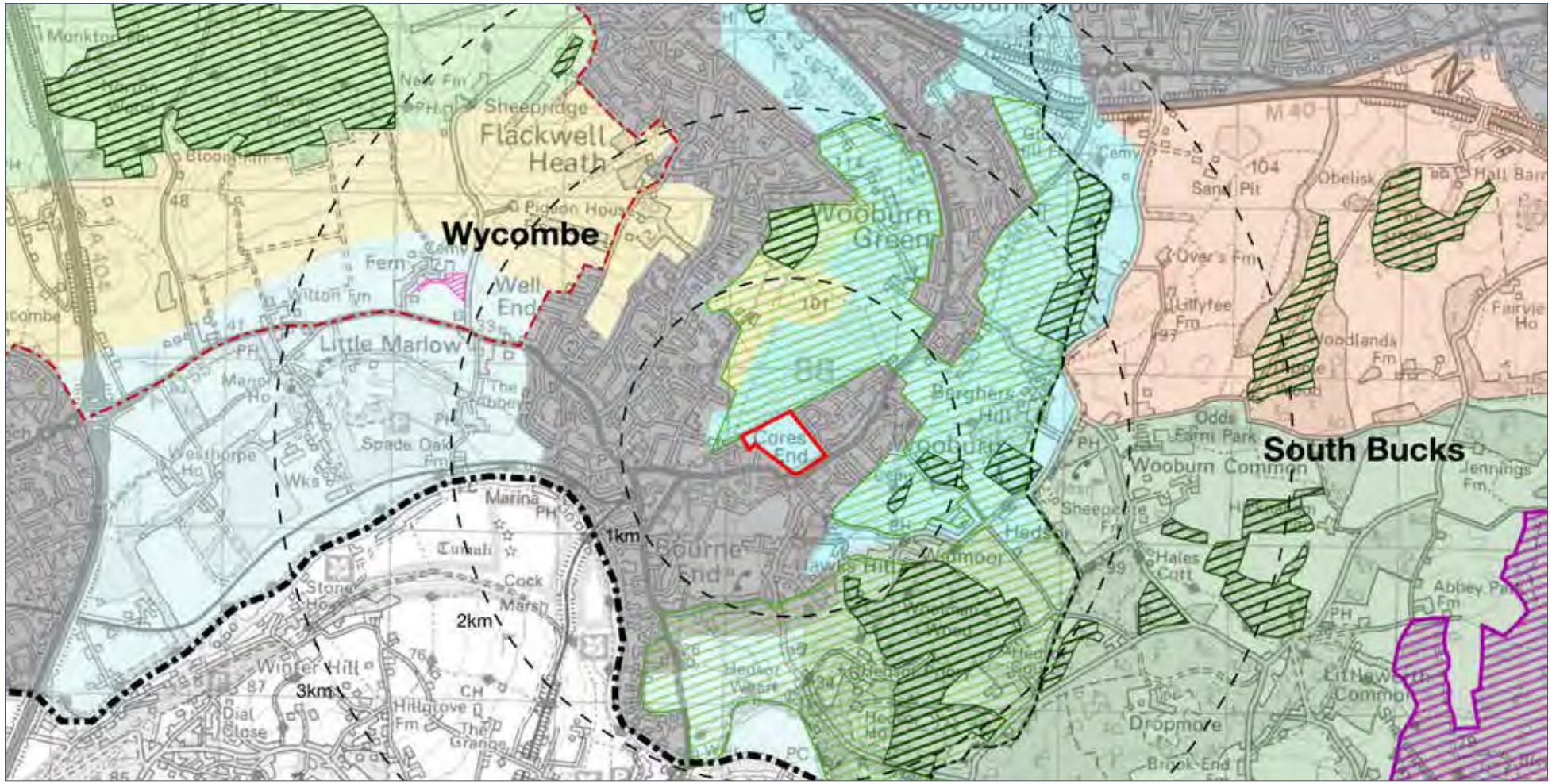


Figure 2.5 Site topography and context

KEY

- Site boundary
- Buckinghamshire Country Boundary
- Settlements
- Area of Outstanding National Beauty
- Local Green Belt
- Ancient Woodland
- Site of Special Scientific Interest (SSSI)
- Burham Beeches Special Area of Protection (SAC)

Buckinghamshire Landscape Character Assessment

- Rolling Farmland
- Settled River Valley
- Valley Slope
- Mixed Use Terrace
- Wooded Terrace
- Floodplain

View north from south bank of River Wye

View north east along disused railway

View south west on existing village green

2.7.2 Local Landscape and Visual Context

Slate Meadow is visually enclosed to the east and west by the existing residential buildings, which are generally two-stories high, and with garden vegetation and occasional trees on the site's boundary (Figure 2.6). The north-western and southern boundaries are more strongly vegetated, bordering the disused railway line and River Wye respectively.

The belt of vegetation to the north-western edge of the site extends into the small-triangulated cluster of protected trees which lie within the site A public footpath, which is promoted as a 'Nature Walk' by Wooburn Parish Council runs through the protected woodland and continues parallel to the former railway through the existing village green within the site.

Within the site, historic hedgerows and ditches divide the land into three parcels. The boundary between the large southeastern field, and the village green consists of a ditch and a sporadic hedgerow. There is a similar sparse hedgerow between the south-western parcel and the south-eastern field and minimal woody vegetation within the south-eastern field, which is currently grazed by horses.

There are a limited number of mature trees on the site; these could help to provide structure to the new development.

Topography

From a cursory inspection of the site from public vantage points the land appears flat. However, more detailed appraisal through topographical survey confirms that the land falls away from its highest points on the eastern boundary with Stratford Drive and on the south eastern field (aligned roughly with Avant Homes ownership) to the lowest points of the site on its western side.

The sites generally flat topography combined with its open nature provides opportunities for views out in many directions, allowing an appreciation of the setting enclosed by both built form and the valley sides.

Key Points: Local Landscape and Visual Context

- The hedgerows are an important historic character and ecological feature of the site;
- Existing trees on the site are particularly important due to their relatively few numbers;
- An appreciation of the rural valley setting can be had in views from the valley floor, including from the village green, various desire lines, PRoW, Brookbank and the riverside;
- Valley sides provide relative visual enclosure from wider landscape to NE and SE;
- The site is enclosed further by residential development to east and west which foreshortens views and contains them to within the site boundary; and
- Existing ditches provide a drainage structure for the site.

KEY

- Site boundary
- Existing development
- Public Right of Way
- Disused railway
- Views into site
- Views out of site
- Edge of built form
- Village Green
- Existing Vegetation
- Tree Preservation Order (TPO) adjacent to site
- Approximate break in slope
- Direction of slope

Figure 2.6 Landscape and Visual Context

2.7.4 Ecology

No designated ecological sites were identified within the boundary of Slate Meadow; however, several nationally and locally designated sites were identified nearby (see Figure 2.5).

Records of protected and notable species for a 2km buffer area were sought from BMERC. Although none were recorded on the site, several protected and notable species were recorded within 2km. The absence of records for this site does not necessarily indicate total absence of the species. Species data obtained from BMERC can be found in the Ecological Desk Study (July 2013, June 2016).

A Tree Preservation Order (TPO) covers several trees (T1-T9) within the triangular area of broadleaved woodland in the northwest corner of the site. In addition to this, the River Wye extends along the south-east boundary of the site. The current state of the river and its environment is poor and should be improved.

An extended Phase 1 survey (July 2013, June 2016) identified a mosaic of different habitats present within the site including good and poor semi-improved grassland; broadleaved woodland; species poor hedgerows; scattered standard trees; tall ruderal vegetation and scrub. The majority of these habitat types, such as improved and poor semi-improved grassland and scrub in themselves are common and widespread throughout the UK.

Species-specific surveys were undertaken throughout 2016 to establish the potential for the presence of reptiles, badgers, bats and breeding birds. The reptile surveys confirmed an exceptional population of slow worms and a good population of common lizard. Badgers, too, were recorded on the site with active and outlying setts identified in Figure 2.7.

A total of eight bat species were recorded using the site for commuting and foraging. Activity was dominated by common pipstrelles, soprano pipistrelles and noctule bat: three of the most common UK bat species. Recordings of bats and transect lines area also highlighted in Figure 2.7.

A breeding bird survey undertaken in June 2016 confirmed that the site comprised of three different habitats: a large horse grazed field to the south-east of the site; 'the village green' area of tussocky grassland with scattered immature trees to the north; and mixed woodland edge habitat with overgrown scrub habitat to the west. The village green area is considered to provide suitable habitat for skylarks and Red Kites, and whilst not identified on site are considered likely to be nesting nearby.

Appropriate mitigation will need to be carefully developed for each area of identified ecological interest and will along with other opportunities and constraints be used to inform the design process.


View south west along disused railway

Type of habitat	Possible species supported/species recorded
Rough semi-improved grassland	reptiles (slow worm), ground nesting birds, amphibians
Tall ruderal vegetation	reptiles, ground nesting birds (skylark), small mammals
Scrub	reptiles (slow worm), ground nesting birds (skylark)
River Wye fringe	reptiles, amphibians, small mammals
Broadleaf woodland	breeding birds, dormice, small mammals
Mature trees	breeding birds
Shrubs	breeding birds, small mammals
Species-poor hedgerows	breeding birds, ground nesting birds, amphibians, small mammals

Figure 2.7 Site ecology plan

KEY

- SI Species rich neutral semi-improved grassland
- SI Grazed neutral semi-improved grassland
- SI Ungrazed neutral semi-improved grassland
- Dense continuous scrub
- Scattered trees
- River Wye
- Amenity grassland verge
- Woodland stands/ mature hedgerow
- T1 Ecological target notes
- T4 High Bat Potential Tree
- Bat transect lines

Key Points: Ecology

- The village green is important due to its inherent ecological value and as potential receptor;
- There are a number of important ecological corridors across the site these include hedges and ditches;
- The corridor along the rail line, linked to the river corridor by tree-lined hedgerows are both important bat foraging routes;
- The lack of artificial light supports bat foraging corridors;
- Semi-improved grassland, tall ruderal vegetation and scrub are important habitats for a variety of species;
- Woodland, mature trees and scrub are important to support breeding birds;
- TPO'd trees should be retained, unless a tree survey indicates otherwise;
- The river and its bank are significant ecological corridors which are currently poor quality and require enhancement; and
- Consideration should be given to bats, breeding birds and other ecological constraints in the future preparation of planning applications for the site.

2.7.5 Blue-green corridor

Slate Meadow lies within a valley and borders the River Wye and the resulting water regime and blue infrastructure is intrinsically linked to both the green infrastructure and any potential development of the site.

Topographically the lowest point of the site is to the south west and the gently sloping nature of the site means approximately 25% of the whole site of Slate Meadow lies within Flood Zone 2. These areas serve as water attenuation areas in periods of high rainfall and extreme river flow, with existing ditches aiding drainage. An associated band of scrub vegetation and mature hedgerow demarcates this area, forming an important ecological corridor along the western edge of the site, linking the River Wye corridor to the village green, disused railway corridor, and habitats beyond.

Key Points: Blue-green corridor

- The western edge of the site lies within Flood Zone 2 and acts as an important natural water attenuation area;
- It acts as a key ecological corridor, linking habitats in the River Wye corridor to the disused railway corridor, village green and habitats beyond; and
- It also offers the opportunity for an enhanced and maintained wildlife corridor with increased public access, and increased ecological value.

Figure 2.8 Blue-green corridor

2.7.6 Open Space

Although Slate Meadow is identified for development, the land currently functions as an undeveloped gap between the built-up areas of Bourne End and Wooburn Green. The north/south visual and physical link between the river corridor to the south-east and the rising landscapes to the north-west were key points that arose out of public consultation, along with the aim of maintaining the separation between Bourne End and Wooburn Green.

In addition to the visual function, this currently undeveloped site also provides important amenity and leisure space serving the surrounding residential areas, with informal paths supplementing the village green. Furthermore the undeveloped space also provides valuable habitat to a variety of species.

A proportion of the undeveloped area of the site is also within the floodplain and will continue to be important in terms of water management. Development on this site will increase the leisure, ecological and hydrological pressure on the remaining undeveloped area.

As identified in Figure 2.5, site topography and context, the Burnham Beeches Special Area of Conservation (SAC) lies within 2 km of Slate Meadow. The introduction of a new population could place additional recreational pressure on the SAC unless appropriate alternative provision is made.

The amount, type, quality and accessibility of open space that is provided on Slate Meadow will be important to minimise the need to travel to Burnham Beeches. The open space provision should be in addition to the village green, which is already public open space. All types of space on the site would benefit from a management and maintenance package to improve and maintain the quality and value of the spaces and seek to improve public use.

Key Points: Public Open Space

- Undeveloped areas of the site are multi-functional in terms of leisure ecology and hydrology;
- As the amount of undeveloped space on the site is reduced, these functions may conflict with one-another if not designed appropriately;
- In particular additional households may increase recreational pressure on the Burnham Beeches SAC;
- New open spaces will need to be designed to integrate with both the village green and the river corridor and to improve amenity and protect the ecological interests on the site; and
- Provide drainage and water storage areas that also function as amenity areas and enhance wildlife habitats.

View north east from River Wye

Figure 2.9 Public open space

2.7.7 Village Green

Careful consideration has been given to the benefits and drawbacks of retaining the village green in-situ, and working with the existing village green designation, or the more bold approach of relocating the village green. Both options have advantages and disadvantages. These elements are highlighted in Figure 2.11 and are set out below:

Retention of the Village Green:

- Retains existing area of ecological interest; bat foraging and bird nesting remain in situ;
- Maintains current provision for informal play;
- More easily enables the retention of existing historic field boundaries;
- Avoids provoking considerable local opposition to moving the Green;
- Avoids the legislative difficulty of moving the village green; and
- Maintains the village green on higher ground with less chance of flooding.

Relocation of the Village Green:

- Would enable a larger more central open space access and alternative separation between Bourne End and Wooburn Green;
- Would increase potential for natural surveillance of the village green.

For the purposes of maintaining a more visible separation between Bourne End and Wooburn Green, it might be beneficial to move the village green to the centre of the site. However ecological studies, set out in section 2.7.4 have identified the ecological importance of the village green; and public consultation has identified a strong local feeling that the village green should remain in its current location. The significance of ecological interest on the village green and the strength of public opinion has supported the conclusion that the green would best be retained in situ and "supported" by the provision of further integrated public open space(s).

Key Points: Village Green

- Village green contributes to the visual separation between the settlements of Bourne End and Wooburn; and
- The village green is a multi-functional open space providing both amenity to residents and valuable ecological habitat to a number of species.

KEY

Potential development
Back fences
Frontage
River Wye
Green wedge
Proposed footpaths
Existing public footpaths
Existing village green

Figure 2.10 Village green - retention and relocation options

Existing village green

2.8 Flooding, Drainage and Surface Water

An understanding of the water and flood regime of Slate Meadow is central to the creation of a truly responsive and safe living environment on the site and the protection (and if possible improvement) of conditions in nearby Bourne End. The importance of this has been highlighted in discussions with the Liaison Group.

Existing Environment Agency flood maps for the area suggest that parts of the site are within fluvial flood zones 2 and 3, where residential development may sometimes be considered to be inappropriate (see figure 2.11). This principle is in line with the requirements of the NPPF whereby all development should be planned to avoid increased vulnerability to the range of impacts arising from climate change and by making it safe without increasing flood risks elsewhere. Whilst the Environment Agency maps provide a helpful starting point they are over 10 years old. The Agency itself recognises that the River Wye mapping is out of date and is planning to produce new maps, based on more up to date modelling techniques. However, this is still some way into the future. HR Wallingford therefore undertook a comprehensive review of the hydrology of the River Wye and developed a new river model, centred on Slate Meadow at a far greater level of detail and accuracy. This modelling work, approved by the Environment Agency in September 2016, is displayed in figure 2.12 (predicting flooding for a 100 year plus climate change event).

Wallingford's assessment presents an accurate model of areas at risk from flooding, being identified as flood zones 2 (medium probability - having between a 1 in 100 and 1 in 1000 years annual probability of river flooding), and 3a (high probability of flooding). The vast majority of the site lies within flood zone 1 with the lowest probability of flooding (less than a 1 in 1000 year annual probability of flooding), Figure 2.12 refers. At a local level there has been a flooding incident as recently as February 2014, downstream of Slate Meadow, with the closest areas of flooding at Cores End Road. The Buckinghamshire County Council flood investigation report concluded that the drainage system infrastructure did not have sufficient capacity to cope with extraordinarily high rainfall and possibly high groundwater levels. Indeed, in such circumstances local drainage circumstances are unlikely to have sufficient capacity to cope. The situation was exacerbated by obstructions to existing drains and culverts.

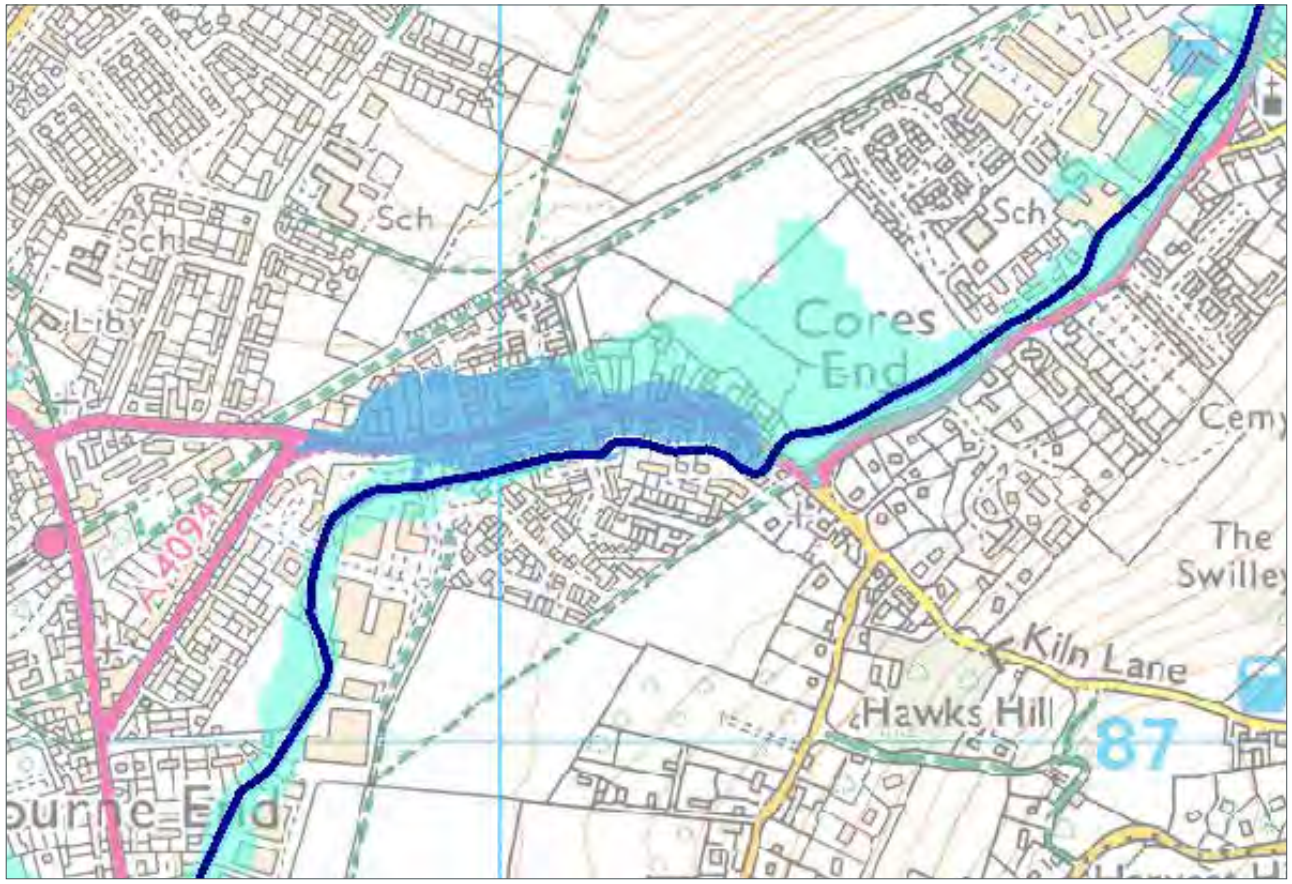


Figure 2.11 Environment Agency published flood mapping

Flood Zone 2

Flood Zone 3

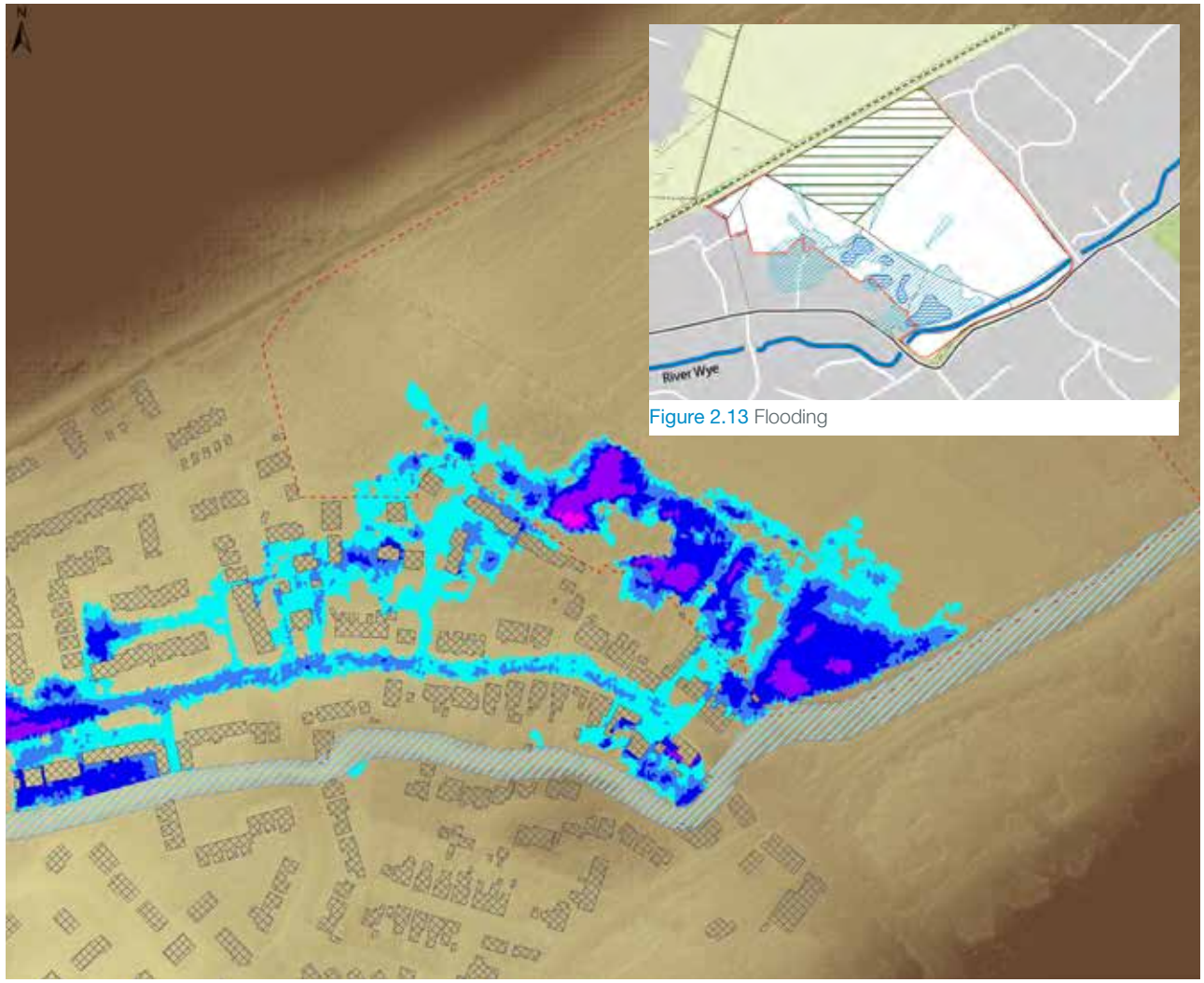


Figure 2.13 Flooding

Figure 2.12 Flood mapping carried out by HR Wallingford and approved by the Environment Agency - September 2016

River corridor	Flood depth (m)	Flood depth (m)	0.201 - 0.400	Ground level Value	
Buildings		0.001 - 0.100	0.401 - 0.600		
Site boundary		0.101 - 0.200	0.601 - 1.000		

Key Points: Flooding, Drainage and Surface Water

- The vast majority of the site lies within Flood Zone 1 (<1 in 1000 year annual probability);
- Approximately 25% of the overall site area is in Flood Zone 2;
- A very small part of the site is in Flood Zone 3a (approximately 2%);
- None of the site is in Flood Zone 3b (the functional flood plain on a 1 in 20 year event); and
- A flood risk assessment will be required to demonstrate that the development will be safe over its lifetime and that flood risk will not be increased, and if possible reduced elsewhere as a result of the development;
- Development should be located predominantly within Flood Zone 1 the sequential approach to development on the site will be required;
- There may be potential for some development in Flood Zone 2. Any development impacting this Flood Zone must provide mitigation measures to provide sustainable flood compensation; and
- If possible, take the opportunity to reduce the impact of the site upon flooding in the local area, either by increasing the storage capacity of the site above that required by the development or by reducing the runoff rates from the site or a combination of the two.

2.9 Utilities and Services

A baseline infrastructure assessment of existing utility and drainage services within Slate Meadow and the area immediately surrounding the site was undertaken in March 2007 and updated in 2016. The assessment examines the utility, water and wastewater requirements, generated by the development of the site.

There are several aspects of infrastructure over which the Council has no immediate control. These include utility companies, doctors and the National Health Service. All have their own forward plans for utility delivery. The Council informs these service providers regarding plans for development in the area and this is then fed into their forward plans.

Foul Water: The sewerage undertaker for Slate Meadow is Thames Water Utilities Ltd. Thames Water has stated that the planned upgrade for the Little Marlow Sewage Works will be incorporated into the Company's 2020 programme. Thames Water has stated that existing infrastructure can cope with developments that come forward before 2020: and has confirmed that its existing capacity and infrastructure is capable of accommodating Slate Meadow and the other the reserve sites.

There are several aspects of infrastructure over which the Council has no immediate control. These include Utility companies, doctors and the National Health Service. All have their own forward plans for Utility delivery. The Council informs these service providers regarding plans for development in the area and this is then fed into their forward plans.

Topographical information on ordnance survey plans confirms that the site is relatively flat. Cover levels shown on the Thames Water sewer records of manholes in the roads in the vicinity of the site suggest that there is a general fall towards the southwest corner of the site.

Surface Water: The surface water strategy is subject to detailed geotechnical survey/assessment of ground conditions. The preference is for an integrated SuDS system that incorporates surface water attenuation in the form of swales and ponds. Otherwise storm water will be discharged to suitable watercourses in a manner that is carefully managed in a matter that is carefully managed in accordance with EA requirements.

Gas: There are no existing gas mains located within the site. Low pressure mains are located in Stratford Drive to the east of the site, Brookbank to the south of the site and Cores End Road to the east of the site.

Electricity: There are a number of high voltage cables (11kV) located within the site. These are generally located towards the boundaries of the site, with the exception of a cable that runs parallel to the existing field boundary that crosses the site in a southwest to northeast direction. An underground low voltage cable lies to the south and runs parallel to the River Wye.

Telecommunications: No British Telecom (BT) apparatus is located within the boundary of Slate Meadow. Apparatus is located within Stratford Drive, Brookbank and Cores End Road on the east, south and west sides of the site respectively.

Health Care Provision: Developers will be required to contribute towards the provision of medical/clinical infrastructure through the payment of CIL contributions.

Key Points: Utilities

- There is capacity in the water and foul water infrastructure to accommodate additional development on the site; and
- There are no major constraints on the development in terms of utilities - a range of existing gas, electricity and telecommunication utilities (allowing for broadband connection to the site) are located close to the site on Stratford Drive, Brookbank and Cores End Road.

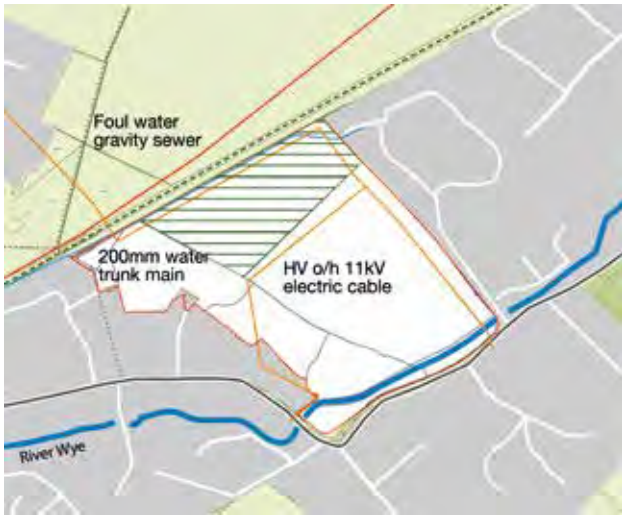


Figure 2.14 Utilities within the site context

2.10 Key Issues arising out of Public Consultation

The principles of the brief have been informed by key stakeholders and the wider community through an initial Public Workshop held by AR Urbanism in March 2015 and, then more recently through public exhibition held by the Local Planning Authority with the assistance of the landowners on 8th and 9th September 2017. The responses to the initial workshop and the exhibition have helped to frame the development principles for the site and the creation of a site wide masterplan.

The key points of broad agreement that arose from each exercise are summarised below.

Workshop: 14th March 2015

Although participants in the workshop expressed a very clear view that they did not wish the site to be developed, they agreed to undertake a masterplanning exercise in the event that the site did have to come forward for development. The following points are a summary of the principles established in that masterplanning exercise:

- Protect the location of the village green, and keep it the same size or bigger;
- Address traffic/parking issues near the school;
- Preserve views across the site, maintain the separation between Bourne End and Wooburn and to provide an ecological corridor;
- Do not build in the Southern area close to the river (this area has to be preserved because of flooding issues and its ecological value);
- Ideally distribute access to development to spread traffic impact on existing network, but

Figure 2.15 Public consultation photos

many of the potential access points were seen as inappropriate due to high volumes of existing on street parking, narrow carriageways, school drop off, and other constraints; and
- Don't have a road that links across the site.

Development should:

- Take place along the Western and/or Eastern edges;
- Take into account vehicular access difficulties due to the narrowness and traffic on the existing streets;
- Minimise the impact on views across the site and upon wildlife;
- Respect densities of surrounding neighbourhoods; and
- Consider using brick and flint in some of the new housing.

Slate Meadow Liaison Group Meeting: 17th October 2016

Key issues of planning and community interest included flooding and ecology and were therefore discussed with the Liaison Group. A group workshop was held regarding the Village Green and the impact of development on views.

On 17th October 2016 HR Wallingford presented a comprehensive review of the hydrology of the River Wye and its influence on Slate Meadow. Details of the accompanying hydraulic modelling report and its submission to the Environment Agency for review in June 2016 were presented. HR Wallingford explained that the Agency confirmed its acceptance of the modelling parameters, methodology and conclusions on 7th September 2016, formally advising that '... the modelling has been re-reviewed and has been deemed acceptable'. The importance of wider flooding issues, including ground water and surface water was also discussed.

Kember Loudon Williams, planning consultants, further updated the Group on all matters, but with particular reference to the work undertaken on ecology, village green, highways and design.

Public Consultation and Exhibition

A public consultation exercise was undertaken on the draft development brief between 21st August and the 2nd October 2017.

The local community and stakeholders were notified of the consultation exercise by a wide variety of means including, inter alia, notifications by email and letter, presentational flyers and notifications and updates through the Council's website. Drop in exhibitions were held locally at St Dunstan's Church Hall on the 8th and 9th September - the events were well attended.

Approximately 230 consultation responses were received. Each has been carefully reviewed and summarised in the Council's Consultation Feedback Report, which contains recommendations for changes and updates to be made to the brief.

The changes have been incorporated within this revised brief.

2.11 Constraints and Opportunities

This section compares the issues and opportunities, before identifying the component parts of structure and the different land-uses, and sets out how each will tie into the development framework for the site. This constraints and opportunities section of the brief responds positively to the identified constraints to minimise harm through design and/or mitigation, and seeks to enhance the identified opportunities.

The findings from the analysis earlier in this section are illustrated in Figure 2.16. The constraints plan demonstrates issues that could have the potential to limit the extent and/or form of the proposed development.

Key Points: Constraints

- The existing community is opposed to relocating the village green;
- Development will increase pressure on retained open spaces, open spaces will need to be carefully designed to accommodate a number of different, potentially conflicting functions;
- Reduced land available for ecological habitats, retained habitats will need to be protected and enhanced;
- High visibility from raised valley sides, increasing the importance of roofscape and planting within the developed area;
- The site has areas that will flood in extreme events and development will reduce permeable areas, measures are required to ensure that development and storm water attenuation are within areas with a probability of flooding of less than 0.1%;
- Existing trees and hedgerows, those of ecological value will need to be retained and enhanced or replaced as appropriate as part of a comprehensive Green Infrastructure;
- Limited options for vehicular access to the site, the main vehicular access will need to be from the south-east of the site, off Stratford Drive;
- Access from Eastern Drive or Frank Lunon Close is constrained by width of the streets, on-street parking, and ownership issues;
- Pre-existing constrained access to St. Paul's Primary School and associated congestion and vehicular issues;
- Visually and ecologically sensitive landscape alongside the River Wye, a buffer of at least 10m from the northern bank top will need to be provided; and
- Consideration of outlook and privacy of properties which may back-on to the new development.

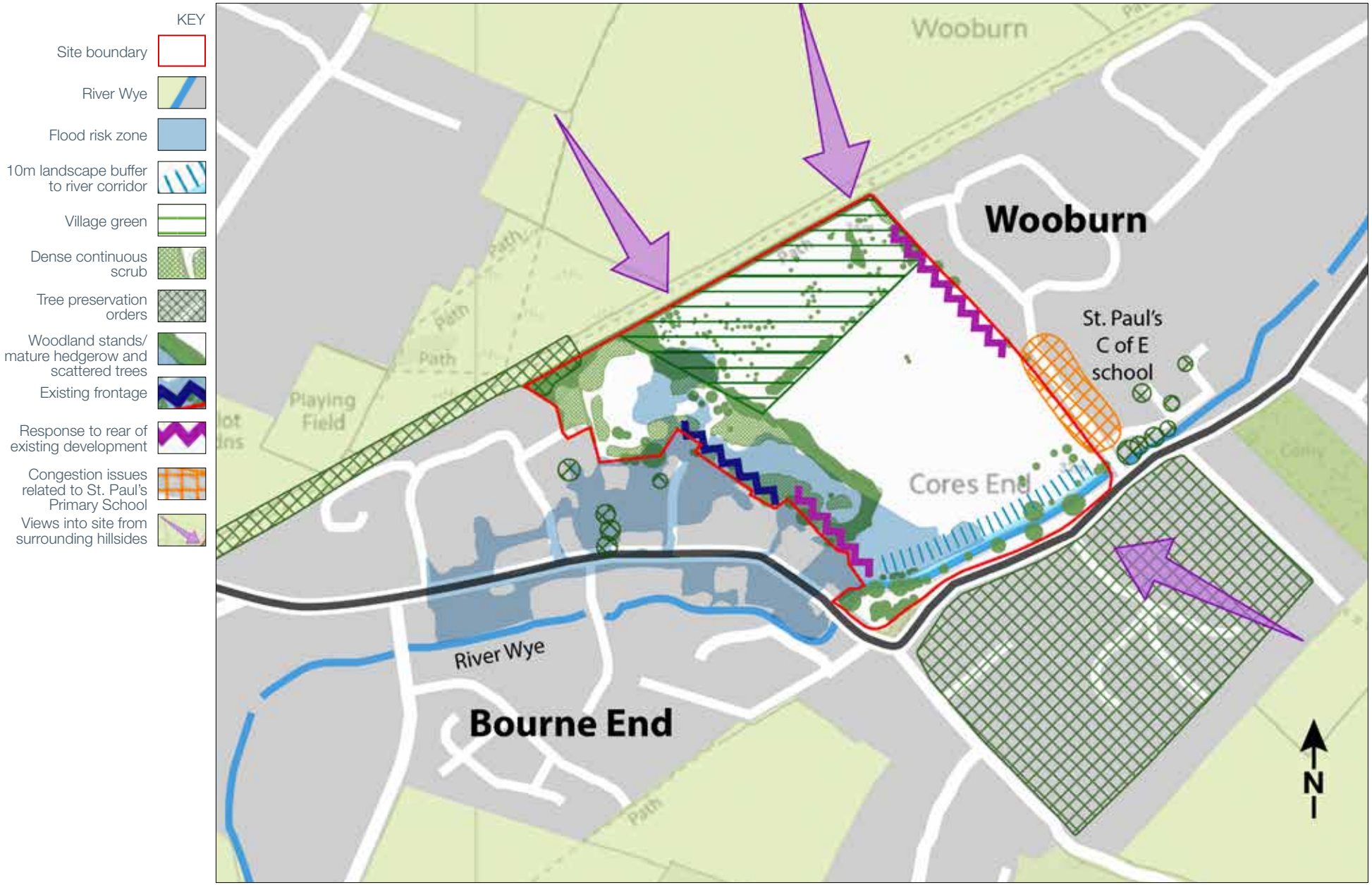


Figure 2.16 Constraints plan

2.11.1 Opportunities

Figure 2.17 illustrates some of the opportunities the proposed development could make to the existing community and context.

Key Points: Opportunities

- Take advantage of the village green and open space requirement to maintain a gap between Bourne End and Wooburn Green, allowing views to be retained across and from the site;
- Create a distinctive new high quality development as there is no overriding architectural idiom in the surrounding area to constrain the design approach;
- To build up to three stories towards the 'back' of the site (overlooking the village green). Taller buildings may be acceptable in key locations to emphasise important spaces or features, but will be subject to a rigorous assessment to ensure that the acknowledged importance of the landscape and visual qualities of the site and its surroundings are not harmed;
- Establish a more positive relationship with the river by ensuring buildings and public spaces positively engage with it;
- Improve pedestrian and cycle network through the site, linking existing and new residential areas to the wider urban and rural areas, including surrounding facilities and schools, and the rural footpath network;
- Enhance the multi-functional capacity of open spaces on the site, improving existing ecological habitats, providing appropriate public access and recreational opportunities and interpretation boards to assist understanding of the importance and interest of habitats surrounding the development area;
- Integrate sustainable urban drainage systems within the new development to provide storm water attenuation whilst doubling as new habitat and leisure space;
- Utilise streets for parking and robust tree and shrub planting, to enable higher densities to be successfully accommodated within parts of the site;
- On street parking provision will also ease congestion at peak hours when parents drop off children at the St. Paul's Primary School;
- Take advantage of existing hedgerows, trees and ditches where appropriate to support ecology, maintain a link to the historic character of the site, and improve and mitigate the development; and
- If possible, take the opportunity to reduce the impact of the site upon flooding in the local area, either by increasing the storage capacity of the site above that required by the development or by reducing the runoff rates from the site or a combination of the two.

KEY

- Site boundary
- Existing development
- River Wye
- Potential development areas
- Key development frontage to village green (up to 3 storeys)
- Key development frontage to River Wye
- Village green
- Habitat enhancement to multi-functional amenity areas incl. water attenuation
- Potential vehicular access points
- Existing and potential pedestrian access
- Potential pedestrian connection
- Existing public right of way
- Potential school drop off point
- Opportunity to retain views to wider countryside

Figure 2.17 Opportunities plan

2.12 Conflict Resolution

The vision objectives detailed previously reflect the aspirations for the site. These aspirations could lead to potential conflict between competing aims for the site. These issues are listed below.

2.12.1 Housing need vs Status Quo

Resolution
There is often tension between the need and benefit of providing new homes to support growth, address affordability and provide social housing and retaining things as they are: in this case leaving Slate Meadow as an area of open landscape.

However, it is important to bear in mind that Slate Meadow has been identified as a reserve site for development for over twenty years. The need for new homes within the District is considerable and Slate Meadow is now required to meet housing demand - the Council approved its release for development in November 2014.

It is essential that the right balance is struck between delivering new homes and protecting the key characteristics of the site. This brief has undertaken an exhaustive appraisal to identify the important aspects of the site and its surroundings that should be protected, retained, improved and/or supported through development.

It is considered that the right balance can be met through the retention of identified interests and the provision of new homes to meet identified local need.

2.12.2 North-western housing v open space

Resolution
The opportunity to include the north western corner of Slate Meadow for residential development. This is on the basis that this area lies beyond the floodplain, may be accessed from Cores End Road (no through route required), and would increase housing numbers on the site.

Development in this area has been discounted on the basis that, whilst the vehicular access is workable it is heavily constrained and the value of providing additional open space in this part of the site are considered more beneficial to the community; it would reduce pressure on Burnham Beeches SAC and provide a valuable opportunity to connect/link the open spaces to the south of the site with the village green.

2.12.3 Ecology vs. Public Use of Public Open Spaces

Resolution
Ecological interests have been identified on the village green area and within the western section of the site, and must be protected. This must be balanced against the acknowledged benefits of improved and more intensive public use of open space that will result from the development.

The most sensitive areas will need to be carefully managed and a scheme developed in the form of raised boardwalks through/over new eco/wetland/ flood attenuation areas to limit inappropriate access. This will limit disturbance and improve biodiversity whilst providing amenity and educational opportunities.

Western development option

2.12.4 Flooding and Public Open Space

Resolution

For the majority of the year Slate Meadow is unaffected by ground/floodwaters. At times of high rainfall river water and surface water collects in the lower areas of the site to the west generating an obvious impediment to users of the open space.

By embracing this conflict/constraint and creating a wetland area with raised boardwalks over the lowest parts of the site, access may be maintained throughout the year, even when the ground is wet.

This approach has the added benefit of protecting the ecological interest and maintaining the landscape character and open views of the hills/landscape to the north.

2.12.5 School Parking vs. Efficient use of land

Resolution

The stated desire of the local community for the development of Slate Meadow to address the conflict between highway safety in and around Stratford Drive and Brookbank is noted. Observations have confirmed considerable pressure on circulation; parking and the free flow of traffic at school pick up and drop-off times. Pedestrian/vehicular conflicts are evident too.

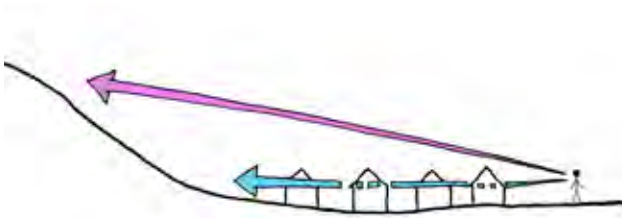
In principle car-parking facilities could be provided. However, considerable resistance has been encountered from Buckinghamshire County Council, as Highway Authority, to providing dedicated school parking, as this would encourage more parents to drive. In view of this consideration will be given to the provision of dual-use on-street parking.

2.12.6 Location & Form of Development vs. Need to Retain Key Views

Resolution

To minimise conflict the location of new houses on Slate Meadow must respond to the identified constraints and opportunities and the acknowledged need and importance of retaining key views through the site: particularly maintaining “the visual connection” between the river corridor and the raised landscapes to the north.

The height of all new buildings and the gaps/spaces between them should be carefully managed to ensure that views of the landscape beyond can be achieved between buildings and along new streets. The width and orientation of new streets/roads will need to be carefully designed to allow for such views.



Maintain views through the site and to valley sides beyond

2.12.7 Access and Highway Capacity

Resolution

The provision of houses on Slate Meadow will have an impact on the local highway network. In view of this primary junction capacity assessments have been undertaken. These indicate that a primary vehicle access could be provided from Stratford Drive to accommodate the whole development site. To complement this a secondary vehicle access could be provided from Frank Lunnon Close or Eastern Drive. This would open the potential to introduce a limited number of new houses on the western side of the site: the Cores End side.

Whilst this approach would maximise the number of houses on site, this needs to be balanced against the limited capacity and constrained nature of Eastern Drive and Frank Lunnon Close: neither have the capacity to serve many homes and the addition of further houses has the potential to detract from the amenities of existing properties.

In addition, the western portion of the site has the highest concentration of ecological interest and is extremely important in maintaining the strategic landscape gap between Bourne End and Woburn, together with maintaining the visual/physical link with the village green and the countryside beyond. The public open space has an additional strategic importance in mitigating the impact on Burnham Beeches SAC through increased visitor numbers.

On balance, therefore, conclusions have been drawn that one vehicular access be provided from Stratford Drive to serve the whole development and that no development be introduced on the western section.

3.0 Development Objectives

The constraints, opportunities and issues identified in Sections 1 and 2 are underpinned by a combination of technical and professional assessment, input from stakeholders (including the Slate Meadow Liaison Group), and the refinement and response to issues that arose out of public consultation and conflict resolution. All are important and have helped to inform the 'key issues' identified at the end of each preceding topic area.

The identified key issues have supported the preparation of a set of development objectives for the site. These are set out within this section as a means to achieve the following vision for the site:

The site should be developed to respond to the ecological, hydrological and landscape constraints through the creation of multi-functional spaces that maintain the separation between Wooburn and Bourne End are well integrated with high-quality housing to meet the amenity needs of the community, delivering a truly distinctive and sustainable neighbourhood.

The development will provide a variety of house types and tenures to meet the housing needs of the local community. Affordable homes will be carefully integrated into the development. New and existing residents will benefit from improvements to the existing network of public rights of way facilitating safer and more pleasant pedestrian and cycle access to facilities in Bourne End, the Train Station and local schools to secure maximum benefit from the locational advantage of the site.

All new and existing residents in the vicinity of the site will benefit from direct and easy access to a network of well-designed and integrated open spaces, which in combination will provide recreational and amenity benefits, whilst sensitively supporting the ecological and hydrological functions currently on the site. The new areas of public open space will integrate with the existing village green to ensure that the separate identities of Bourne End and Wooburn are preserved.

In the round the development will be socially and environmentally sustainable and enable new and existing residents to enjoy a high quality living environment. The headings overleaf reflect key areas of consideration and set the broad principles for development in this location.

HOUSING

01. Make best use of the site for housing development whilst responding to environmental and other constraints.

GREEN INFRASTRUCTURE (GI)

02. Integrate GI within the site to maximise benefits to people and wildlife. GI should be multi-functional network of GI links and hubs, which are optimised for their connected and functional nature where possible, and have regard to: -

- Ecology;
- Water;
- Recreation; and
- Landscape.

03. Incorporate GI into the built environment and provide for its long-term management and maintenance

ECOLOGY

04. Provide a measurable gain in net biodiversity through the following: -

- Retention of village green for informal recreation and as a wildlife habitat;
- Enhancement of existing wildlife habitats; and
- Mitigation and longer-term management and maintenance of ecological interest.

WATER

05. Give special attention to the River Wye and the water environment by ensuring that ecological enhancements and informal recreational activity are incorporated into a comprehensive network of SuDS measures which should be used for flood risk mitigation.

LANDSCAPE

06. Maintain a visible separation between the settlements of Bourne End and Wooburn Green.

07. Retain the village green in situ to contribute towards the undeveloped gap between settlements.

08. Maintain an understanding and appreciation of the wider valley setting to contribute to the sense of place.

09. Retain existing good quality mature trees where possible, and supplement these with additional tree planting.

10. Ensure the development and, in particular, the roofscapes do not detract from the enjoyment of views across the sites from the valley sides.

PLACEMAKING (layout and built form)

11. Streets blocks and houses should be laid out and designed in such a way to maximise opportunities for views out of the site and across the site from the river to important landscape features.

12. Streets will need to be carefully designed to fulfil a number of functions including access and parking, tree planting and other GI features.

13. New development should relate well to existing houses and features adjacent the edges of the site. Development blocks will be designed to complement existing development, providing secure rear gardens and public spaces that are overlooked by active frontages.

APPEARANCE

14. Minimise roof sizes by keeping building spans narrow and avoiding crown roofs.

15. The material palette should be compatible with the surrounding built and natural environment, avoiding bright or reflective materials.

ACCESS & MOVEMENT

16. Provide vehicular access into and through the site in way which links and integrates effectively and appropriately with the existing network, minimising impact on existing residents and the surrounding highway network, including easing congestion associated with St Pauls C of E Combined school.

17. Maximise the motor-free movement and informal recreation value of the site by ensuring pedestrian and cycle connections are high quality, and provided at the most logical locations.

18. Deliver transport infrastructure improvements on and off site that are in line with the requirements of the Wycombe Reserve Sites Infrastructure Delivery Plan (IDP) (June 2016), or provide reasoned justification for any deviations from the IDP.

The delivery of these development principles has been determined through analysis of the site and surroundings, and is explained in further detail in relation to the proposed Development Framework in the figures that follow.

Figure 3.1 Development objective diagrams

Figure 3.1 Housing

Figure 3.2 Green infrastructure

Figure 3.3 Green infrastructure and ecology

3.1 Housing

Objective 1

This site is allocated to provide housing to meet the need in the District. Housing will be provided in the south-eastern part of the site, as access is more readily available from Stratford Road, and development here will avoid the floodplain and village green to the north.

The amount of housing on this site needs to be balanced between the need to reduce the demand for housing on other greenfield sites in the district, the need to respond to environmental and ecological requirements, and consideration of the natural and built character of the surrounding area.

3.2 Green Infrastructure

Objective 2

Wherever possible, Green Infrastructure should be designed to provide multiple benefits except where this would create direct conflicts e.g. between sensitive wildlife and people. The IDP required contributions from the developer to off-site facilities by legal agreement. However the site has potential to provide high quality open space that integrates public access with ecological and wildlife management. If an appropriate scheme on site is brought forward then the strategic open space requirements will be satisfied within the site.

There is an opportunity for areas to the west of the site, that provide water storage areas in periods of high rainfall, to be enhanced for wildlife whilst also providing access for the public. This access will be designed to allow public use, without harming identified wildlife or ecological interests. Pedestrian routes would also need to be designed so that at least one connection to the west is possible during rainfall events (e.g. a boardwalk over flood storage areas).

It is important that open spaces required as part of the development of the site are located and designed in such a way that they not only fulfil their primary green infrastructure roles for recreational, ecological, or flood management purposes, but also maximise the contribution they make to the maintenance of a gap between the settlements – matters highlighted in community consultation. The layout should seek to ensure there is a positive relationship between the new residential development and the existing and new open spaces through clear and attractive definition of space and overlooking from active frontages.

The protection and enhancement of green infrastructure and the links between them will include:

- The river channel and its buffer areas of at least 10m on both sides and include some variation;
- The boundary with the disused railway corridor as an important recreational and wildlife link along with a parallel vegetated and ecologically rich edge to this side of the site;
- The band of scrub vegetation which runs broadly west to south through the site and acts as both a hub and a link between the river and the old railway corridor and habitats beyond. Part of the enhancement of this area needs to be through its

extension across the currently open grass area to ensure there is a linkage to the river corridor; and
- The Village Green which has both species rich grassland and a mosaic of scrub, and hedgerows, both of which provide valuable links for wildlife between the river and band of scrub, and the rail line all mentioned above.

Objective 3
Green Infrastructure elements shall be included within the built form of the development at house and street level. Elements should include some or all of: -

- Substantial street and garden trees;
- Natural SuDS features;
- Planting beds;
- Green roofs;
- Green walls; and
- Grey water harvesting.

A strategy to provide for the long term maintenance and management of these features will be required to be submitted with the planning application.

3.3 Ecology
Objective 4
The site will be planned so that areas of ecological importance are protected, enhanced, expanded and linked, resulting in an overall measurable improvement in the ecological value of the site.

Protection, enhancement and buffering of legally protected and priority species and habitats, along with other habitats of ecological value on and adjacent to the site, must take place. New habitats will be created and connections will be made, around and as part of the development. In order to achieve this:

- A buffer to the river of at least 10 metres will be retained without any vehicular access, parking or development and enhanced for wildlife;
- A substantial and continuous wildlife corridor will be retained, enhanced and maintained along the western (Cores End Road) side running from the river corridor to the disused railway line;
- The village green will remain in its current location, as it's ecological value has matured over many years and it is more efficient to protect and enhance it rather than try to recreate it elsewhere; and
- Trees, which make important visual and ecological contributions to the site should be retained, (or replaced and supplemented where appropriate).


Figure 3.4 Water

A formulae will be used to quantify the value of what is being lost and gained (e.g. Environment Bank's or Warwickshire CC's, until Bucks system is in place) with the aim of showing that there is an overall net gain resulting in the development. The measurable net gain is expected to be significant and there are expected to be other substantial benefits that cannot be quantified by a formulae (e.g. street trees, green walls, green roofs).

3.4 Water
Objective 5
The water environment, including the River Wye, is an important feature on this site.

Special attention will need to be given to the River Wye to incorporate ecological and informal recreation enhancements are incorporated:

- The river channel will require a buffer of at least 10m on both sides from the top of the bank and include some variation;
- The buffer will not include vehicular access, parking or development and will be enhanced for wildlife;
- Measures will be required to secure restoration of the river to a more natural and ecologically healthy environment, through:
  - planting of locally native species of UK genetic provenance;
  - creation of meanders within its current straight channel ;
  - incorporation of other features such as berms and flow deflectors to maintain river quality; and
  - enhancements to the river bed.
- A comprehensive Sustainable Drainage network will relate to and support the River Wye, and will include ponds, swales, scrapes, ditches and wetland areas which should be retained, enhanced and maintained as a substantial wildlife corridor for ecological value and informal recreation.
- SuDS should be integrated with green areas on the site, and in particular SuDS in hard areas can be linked to soil volumes used for tree pits (to attenuate flows, clean water and irrigate trees. The trees in turn provide aesthetic landscape

value, pockets of habitat and climate change mitigation).

- Carefully managed pedestrian access could be encouraged to these areas through the use of boardwalks or similar: providing access and educational benefit, whilst protecting the identified ecological interest.

3.5 Landscape

Objective 6

Ensure a visually-meaningful gap between the built-up areas of Bourne End and Wooburn by retaining the area along the western edge of the site undeveloped, for use as ecological recreational and water-management purposes, and maintaining the Village Green as existing as part of the gap.

Objective 7

Retain the village green in-situ. It is acknowledged that the village green has the potential to make a greater contribution visually and physically to the maintenance of a gap between settlements by being relocated along the western side of the site and incorporated into the wider open space. However, public consultation has identified a preference to keep the village green where it is, retaining physical and ecological/habitat contributions.

The development layout must ensure there is scope for views of the village green through the development from the front of the site (and from within the developed area) so there is a sense of the open space to the rear of the site.

Objective 8

To maintain an appreciation of the wider setting it will be important to identify locations from where the valley setting can be appreciated both to the north and south, and retain a selection of these viewing opportunities around the developed area, open space and riverside.

Figure 3.5 Landscape

Objective 9

Although there is a lack of mature trees on the site this can be addressed by the retention and protection of exiting trees and the provision of a high quality planting scheme throughout the site, including robust street tree planting in the developed area in streets and public spaces.

Objective 10

To ensure the development does not detract from views, architectural design should ensure that roof forms are simple and proportionate to the small-scale residential nature of the development and the surrounding area; large or contrived roof forms, including crown roofs, would be both incongruous with the surrounding area and highly visible in views and should not be used.

Figure 3.6 Placemaking

Material and colour selection for the development should be made with reference to the colour palate found in the local built and natural environment with an aim to minimise any disruptive impact on views.

3.6 Placemaking

Objective 11

Views across the site are very important in terms of local character. Therefore building heights should be no greater than 2 storeys along the river frontage, rising up to 3 storeys to the north overlooking the village green. Elsewhere taller buildings may be acceptable in key locations to emphasise important spaces or features, but will be subject to assessment to ensure that the landscape and visual qualities of the site and its surroundings are not harmed. This should be informed by modelling work demonstrating the retention of views from the river bank over roofs to the hill beyond. As much as possible streets should be aligned to allow views along them to the village green and the valley landscapes beyond.

Objective 12
The streets will be relied upon to fulfil a number of functions. However successful delivery will depend to a great extent on the detailed design. Proposals for the site will need to include sufficient information to clearly demonstrate that streets can successfully fulfil their numerous functions including movement, parking, GI and utilities.

Objective 13
Development of the site should complement the existing development surrounding the site by responding to exposed backs of properties,which back onto the site enhancing privacy and amenity of private amenity spaces to the rear. This is done by placing new development in a back-to-back relationship with existing development. Care should also be taken to establish a positive relationship with properties which front onto the site.

Development on the site will also need to relate well to the River Wye by retaining a meaningful open-space/ buffer along the river frontage with new homes set behind this buffer and facing onto it.

3.7 Appearance

Objective 14
To ensure that roofs are proportionate and attractive, particularly when viewed from above roofspans should be no greater than 9m with a 45 degree roof pitch. Wider spans may be acceptable at a lower pitch. Complicated or crown roofs should be avoided. Buildings with larger internal area can be achieved through 'T' or 'L' shaped building footprints.

Objective 15
The materials palate should reflect good quality materials found in the local area to support and enhance the sense of place. Overly bright or reflective materials should be avoided.

3.8 Access and Movement

Objective 16
To access the site in a way that integrates effectively with the existing network and minimises impact, the primary access to the site should be taken off Stratford Drive. Every effort should be made to avoid duplicating road infrastructure. The ditch along the north eastern edge is not so ecologically significant that it should dictate the layout of the site; required drainage can be secured in such a way to allow dwellings along this frontage to gain access from and integrate with Stratford Drive.

The layout should be designed with parking streets (i.e. streets which provide the unallocated parking required to serve the development) which will more flexibly meet the needs of future residents whilst assisting in dealing with the school parking issues as periods of lower demand from residents correlate with periods of higher demand from School traffic.

A vehicular route will not be provided through the site linking Bourne End and Wooburn Green, as this is likely to have a negative impact on the sense of separation between the two areas, and would lead to increasing vehicle movements through surrounding residential areas

Objective 17
New pedestrian and cycle routes should be provided along desire lines, and should be convenient, safe and attractive to encourage of sustainable modes of transport.

Figure 3.7 Access and Movement

Recreation and access will be informal in nature and must be designed to ensure conflicts are avoided e.g. between public access and wildlife sensitive to disturbance. Where practical, cycle links should be provided within and be part of the overall GI system.

It is expected that there will be most demand relatively east to west (i.e. to and from the school, and to and from the town centre) so there should be appropriate link(s) serving this desire line.

4 Development Framework

4.0 Introduction

The analysis of the site presented in Section 2 highlights the particular characteristics and context of Slate Meadow that both support and constrain development. The implications of introducing new houses on the visual amenities of the area, ecology and wildlife, highway infrastructure, flood profiles, private and public land interests, together with the acknowledged need to look after and maintain the site, all play a role in defining the development objectives identified in Section 3.

The combination of the development objectives and detailed technical and character analysis, underpinned and supported by stakeholder and community inputs and detailed discussion with site owners, provides the basis of a rationale for the development framework for the site as set out in this Section. This framework comprises a series of strategies that together form the basis for development that will meet the aspirations for the site.

The Development Framework set out the structure for development, including the location of access points, development blocks and green infrastructure.

KEY

- Green space
- Green gap
- Developable area
- Key boundaries
- Views
- Links

4.1 Development Concept

The development concept is based on green infrastructure (GI) framing development. Figure 4.1 identifies the key conceptual elements of the proposals: -

- A primary north south corridor that provides a key GI link incorporating drainage areas, ecological habitat enhancement, public access, a 'settlement gap' and visual link through the site;
- A secondary east-west GI link through the development area, linking open spaces and drainage hubs with the wider GI;
- A secondary north-south visual link;
- Ditch and SuDS along the southern edge of the village green;
- A further east-west GI link along the river corridor, providing access and ecological enhancements, linking to the wider GI on- and off-site; and
- Development framed by the GI network, on land avoiding the village green and floodplain.

Figure 4.1 Development Concept Diagram

4.2 Development Framework

The development framework has been driven to a great extent in response to a number of constraints including ecology, flooding, access and the retention of the village green in its current location. These factors have focused development on the south eastern side of the site. Figure 4.2 demonstrates key elements of the framework:

- Retention of the existing village green in the north of the site, with greater scope for amenity and ecology through improved access, surveillance and links to the wider movement network, and improved links to other ecological areas on the site;
- A substantial green corridor linking the River Wye corridor to the south of the site to the disused railway line and village green in the north east. The developed area integrates with the open space network through the provision of an integrated network of green spaces, street trees, SuDS and key frontages facing substantial open spaces;
- The retention of important visual sightlines from the River Wye corridor to the hills beyond the site's northern edge; and
- A development area that balances housing provision with the need to respond sensitively to the character of its context including respecting existing frontages and development form.

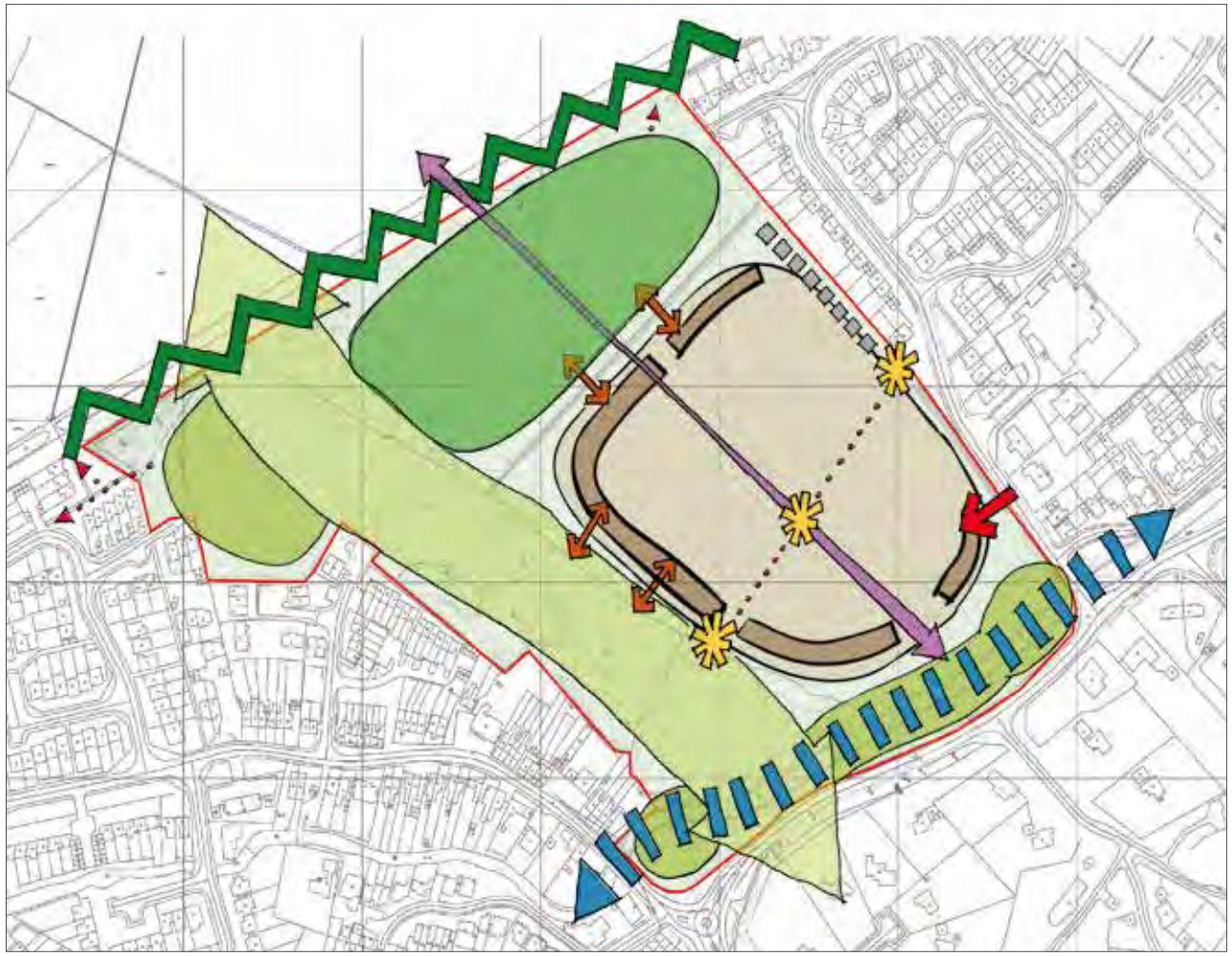


Figure 4.2 Development Framework plan

KEY

- Development area
- Key building frontages
- Back to back development
- Village green
- Green spaces
- Green corridor
- Indicative nodal spaces
- Disused railway buffer/ boundary and links
- River Wye corridor
- Informal movement and links
- Connections
- Vehicular access
- Key views

Figure 4.3 Green Infrastructure framework plan

KEY

- Development area
- Village green
- Green spaces
- Green corridor/ visual gap
- Green links/potential SUDs corridor
- Indicative nodal spaces
- Disued railway buffer/ boundary and links
- Existing vegetation
- Potential SUDs network
- River Wye corridor
- Area of floodplain to remain undeveloped/ ecological area

4.3 Green Infrastructure

The green infrastructure on the site will provide for: -

- Provision of floodplain;
- Protection and enhancement of wildlife habitats;
- Provision of floodplain in extreme rainfall events;
- A landscape setting to the development; and
- Green corridors that link with the network of green infrastructure surrounding the site.

The main components of green infrastructure that inform development on the site are strategic landscape context, established structural landscape features, the floodplain, and water environment together with the village green, the River Wye and local landscape features. The 1 in 1000 year floodplain (i.e. the area that currently has a probability of 0.1% or less of flooding) is considered, together with the village green in Figure 4.3. The Figure identifies how the floodplain and ecological areas can be combined with other elements on the site to provide a gap between the built development in Bourne End and that in Wooburn Green.

Direct strategic views of the valley side to the north will be maintained from the riverside and Brookbank. The hillside will provide an important landscape backdrop and further visual connections will be provided from within the development.






4.3.1 Sustainable Urban Drainage (SuDS)

Surface waters (including groundwater) will drain across the site from the north-east generally towards the west/south-west. Drainage swales within the site will assist in carrying the surface water towards attenuation areas adjacent to the floodplain. Surface and ground waters will be addressed within a detailed Flood Risk Assessment that will be submitted in support of a planning application. These water regimes are distinct from fluvial flood waters, which arise when the River Wye exceeds its capacity. This is addressed in section 2.8 of the brief.

The surface and ground waters will be accommodated in ponds, some of which will be seasonal (semi-permanent) and some permanent, providing visual amenity and habitat enhancements. During storm events they will provide water attenuation before the managed discharges of storm water into the existing floodplain/River Wye. Where appropriate storm water can also be infiltrated into the ground. The latter will carefully be controlled with the input of the Environment Agency.

Within the green corridor linking the River Wye corridor to the disused railway line and village green will be additional features, which act as part of a comprehensive drainage network given the flood-sensitivity of the site.

The SuDS regime will be in accordance with the SuDS management train, reducing impermeable areas, maximising infiltration and utilising on-site management before using other drainage measures.

Top: Aspirational photos for the wetland areas of the site
Middle/Lower: Photos of the river within the Slate Meadow site

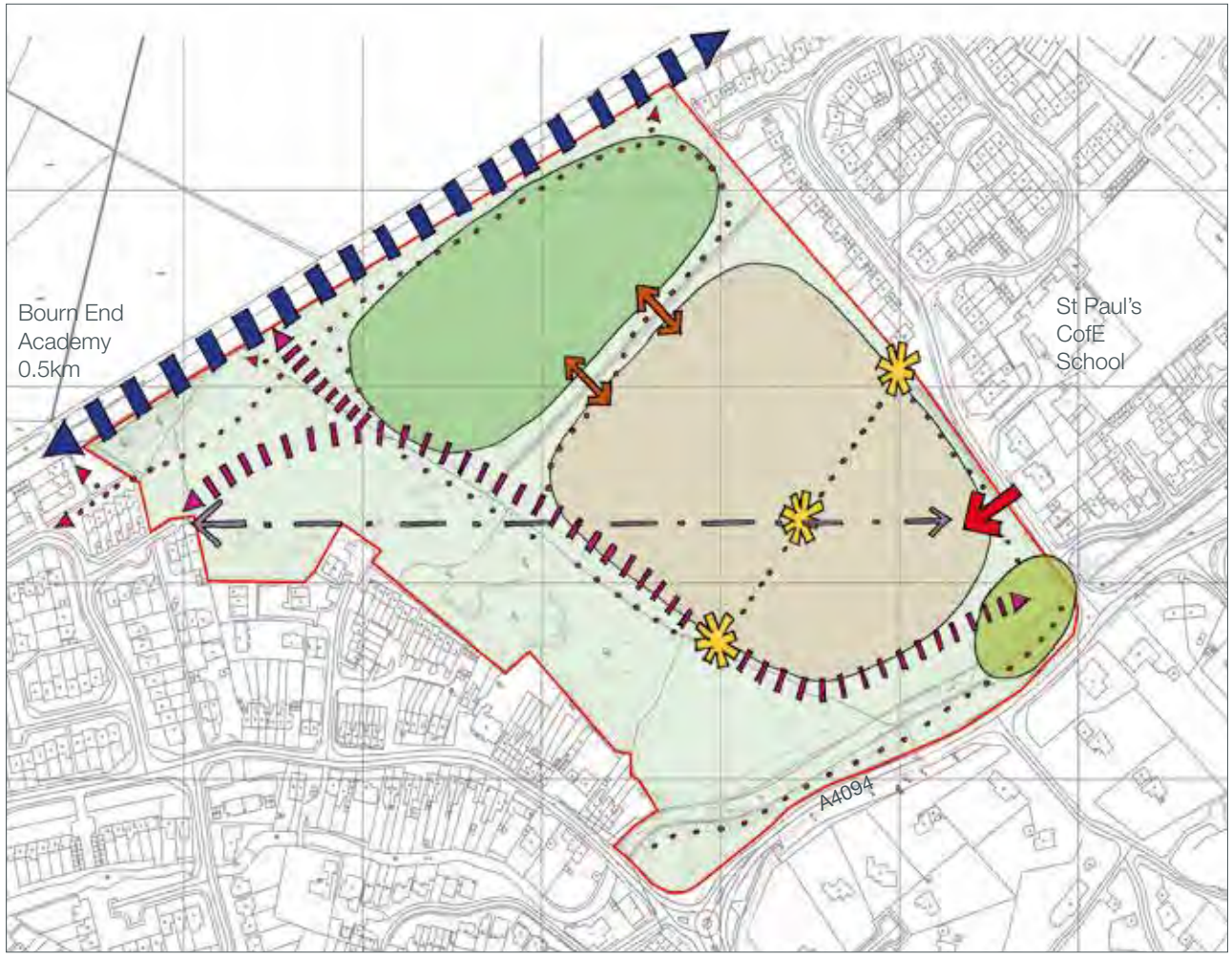


Figure 4.4 Movement framework plan

KEY

- Development area
- Village green
- Green spaces
- Indicative nodal spaces
- Disused railway/PRoW and wider network
- Movement desire line
- Primary movement (pedestrians and cycle)
- Informal movement and links
- Connections
- Vehicular access

4.4 Movement and Connectivity

The development of this site offers an opportunity to provide pedestrian and cycle links to the C of E St Paul's combined (primary) school from residential areas to the west of the site. In a similar way residential areas to the east of the site can become better connected to the Bourne End Academy.

The disused railway line plays a key part in this footpath/cycle connectivity, and connections from the route can be made to the south-eastern corner of the site, linking it to residential areas and the primary school. The disposition of development and open space as shown in the concept plan means that footpaths provided along the edges of the development, will be set adjacent to green spaces but also overlooked by development, providing both security and amenity.

Footpath and cycle links as highlighted will also provide connectivity for pedestrians and cyclists to the bus network, at Town Lane / the A4094.

One access junction will be provided for vehicles from Stratford Drive. There will be no vehicular connectivity through the site.

Streets will be designed in order of priority for pedestrians, cyclists and vehicles, focusing on the quality of place rather than the movement of traffic. Where traffic levels are low, which is likely to be on most of the streets within the development, shared streets will be encouraged, where pedestrians are considered as the main active user. Streets will not be provided just for vehicles rather, provision will be made for within the streets for pedestrians and cyclists, tree planting, SuDS, utilities and vehicles, including on-street parking.

4.5 Scale and Massing: Height and Density

The character of development, heights and density, have been discussed in Sections 2 and 3. Heights are predominantly 2-storey, and densities vary from about 15 dwellings per hectare (dph) to 60dph. The new homes on Slate Meadow will also be predominantly 2 storey, with potential for occasional 2.5 and 3 storey elements. Densities to the blocks adjacent to Stratford Drive will be lower, in order to complement the existing character of adjacent housing. Elsewhere (see Figure 4.5) there is potential for higher densities.

Buildings will generally be of a similar scale to existing residential properties, with plan depth and width ranging from 4.5m to 10m. Where buildings have larger plan depths, roofs will use smaller spans in order to minimise their impact. Complicated roof forms will be avoided. Some buildings could be provided in semi-detached and terraced forms, reflecting those in the surrounding streets as set out in the character appraisal in this Brief.

Residential Development

The site will make provision for up to 150 dwellings in the broad location identified in the Development Framework highlighted in Figure 4.2. Unless it can be demonstrated that this site requires a different mix of dwelling sizes, types and tenures, these will be required to be in line with local policy. Similarly affordable housing provision will be expected to be on-site and in line with local policy.

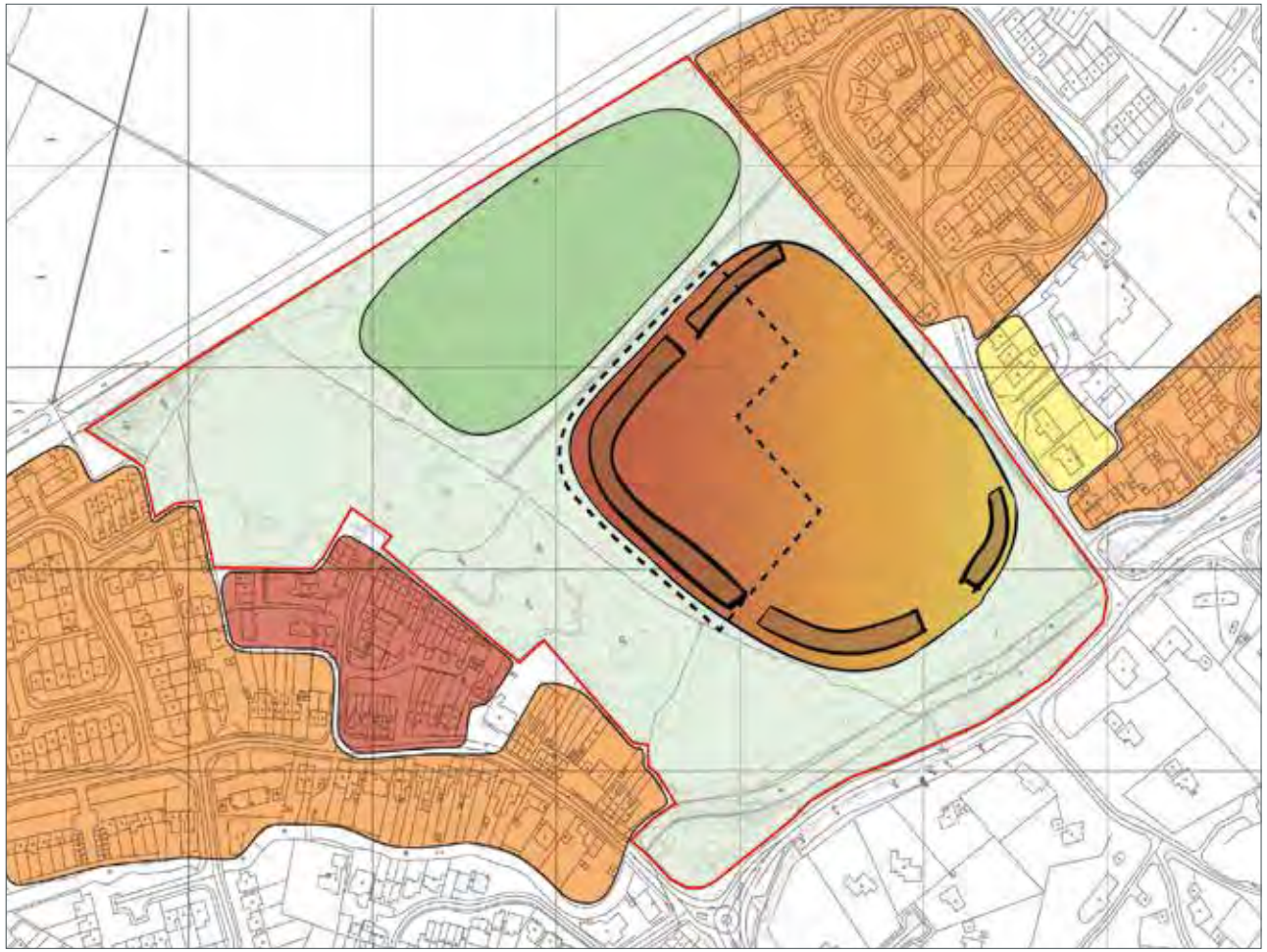


Figure 4.5 Density and Heights framework plan

KEY

- Slate Meadow Site
- Development area
- High density (up to 60dph)
- Medium density (up to 40dph)
- Low density (up to 20dph)
- Village green
- Key development edge
- Heights will be predominately 2 storey with the potential for some 2.5 and 3 storey elements to the centre and in the northern third. Buildings in the southern third and fronting Brookbank will be 1.5 to 2 storey

4.6 Community and Education

Pre-School and Primary School

Financial contributions will be required towards the provision of additional facilities at nearby pre-school and primary school facilities, likely to include the St Paul's Primary School.

Secondary Education

Financial contributions will be required towards the provision of additional facilities at the Bourne End Academy.

Open Space, Sports and Play-space

Open space will be provided in a number of forms. Open space to the south of the site will comprise a buffer without development of at least 10m from the northern edge of the bank top of the river. The footpath access adjacent to the bank will provide an attractive route overlooking this open space, and will link in to the 'ecology trail'.

Rather than providing for off-site strategic open space and a NEAP – as indicated in the IDP – an ecology trail will be developed with routes through the areas to the west and north-west of the built development, using board walk access to secure access even during flood events. This is an excellent opportunity to also provide an interpretation area, identifying ecology and habitats around the site. A play area should also be developed to LAP standards.

The village green will remain as an area where ecology will be protected and for informal recreational use. Payments towards enhancing ecological benefits of this land, and for its use for recreation. Recreation and enhancements to ecological habitats across the site will need to be designated so that recreational benefits do not reduce opportunities for ecological enhancement.

4.7 Transport Measures

The Stratford Drive/Brookbank T-junction currently operates over capacity and is likely to require junction improvements. An assessment in relation to the site access into the site from Stratford Drive was carried out by WYG Transport in January 2015 and confirms that a T-junction is suitable to serve up to 200 residential units. A secondary access to the site is not necessary. Any application will need to be accompanied by a Transport Assessment that covers the impact of the development on the local road network and the improvements required by the Infrastructure plan.

Development will be based around a legible street hierarchy. Shared order streets should be implemented where appropriate, and will include provision for pedestrians and cyclists, tree planting, SuDS, utilities and vehicles, including on-street parking. Parking will be prohibited on green spaces, and will include sufficient on-plot provision

School Drop-off facilities

Unallocated parking spaces near the primary access to the site off Stratford Drive will help to resolve drop off congestion to St. Paul's School. As well as providing visitor parking for the development it should also help to improve traffic flow around the Stratford Drive/ Brookbank junction.

Given that the brief seeks to provide additional parking within the site for parents dropping off and picking up children from St Paul's school, road crossing improvements will be implemented to include a dropped kerb and improved signage.

Off-site road improvements

The Wycombe Reserve Sites Infrastructure Plan sets out a potential transport package for reserve and developments sites. Section 7.10 of this document sets out the Transport package for Slate Meadow and includes the following:

- Review on-street parking provision along A4094;
- Design features to manage speeds and improve pedestrian environment;
- Connecting with and upgrading the bridleway on the disused railway line to facilitate cycling to Bourne End;
- Review accessibility of bus stop and consider provision of real time passenger information;
- Investment to improve quality and frequency of the existing up-to-every 30 minute bus services;
- Improved provision for right turning movements along A4094;
- Contribution towards the implementation of an A40 congestion relief package; and
- In addition the developers will be expected to demonstrate in their Transport Assessment that they have assessed peak time traffic flows at right turn junctions.

4.8 Services and Utilities

The Wycombe Reserve Sites Infrastructure Plan places responsibility on developers to fund studies in order to demonstrate that there is adequate capacity both on and off site to serve the development and that it would not lead to problems for existing users.

A baseline infrastructure assessment of existing utility and drainage services within Slate Meadow and the areas immediately surrounding the site was undertaken in March 2007 and updated in 2016. Detailed in Section 2.9, it confirms that there is capacity in the water and foul water infrastructure to accommodate additional development on the site and a range of existing gas, electricity and telecommunication utilities are located in close proximity.